

State of New Mexico  
Energy, Minerals and Natural Resources Department

Susana Martinez  
Governor

David Martin  
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 8-15-14

Well information;

Operator Burlington, Well Name and Number Cooper # 3F

API# 30-045-35586, Section 6, Township 29 NS, Range 11 EW

Conditions of Approval:

(See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☐ Hold C-104 for directional survey & "As Drilled" Plat
- ☐ Hold C-104 for NSL, NSP, DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
  - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
  - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
  - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☒ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ☒ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ☒ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
- ☒ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

NMOCD Approved by Signature

10-23-2014  
Date

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

FEB 15 2014

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> RE-ENTER		5. Lease Serial <b>SF-078813</b>	
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well		6. If Indian, Allottee or Tribe Name	
Other: _____		7. Unit or CA Agreement Name and No. <b>NMN M-73640-DK</b>	
2. Name of Operator <b>Burlington Resources Oil &amp; Gas Company</b>		8. Lease Name and Well No. <b>Cooper 3F</b>	
3. Address: <b>PO Box 4289, Farmington, NM 87499</b>	3a. Phone No. (include area code) <b>(505) 326-9700</b>	9. API Well No. <b>30-045-35586</b>	
4. Location of Well (Report location clearly and in accordance with Federal requirements)*  At surface <b>Unit J (NW/SE), 1915' FSL &amp; 1885' FEL</b> Latitude <b>36.752748 (NAD 83)</b> Longitude <b>108.030365 (NAD 83)</b> At BHL <b>N/A</b> Latitude <b>N/A</b> Longitude <b>N/A</b> <b>OIL CONS. DIV DIST. 3</b> <b>OCT 22 2014</b>		10. Field and Pool or Exploratory <b>Basin DK/Blanco MV</b>	
		11. Sec., T., R., M., on Block and Survey or Area Suf: <b>Sec. 6, T29N, R11W</b> BHL: <b>N/A</b>	
		12. County or Parish <b>San Juan</b>	13. State <b>New Mexico</b>
14. Distance in miles from Nearest Town <b>6 miles from Aztec</b>	15. Distance from Proposed Location to Nearest Property or Lease Line: <b>1885'</b>	16. Acres in Lease <b>617.80</b>	
17. Acres Assigned to Well.: <b>307.12 Acres - S/2 Sec. 6</b>	18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this lease <b>259' from Cooper 7 (PC/FC)</b>	19. Proposed Depth <b>6517'</b>	
20. Rotary or Cable Tools <b>Rotary</b>	21. Elevations (DF, FT, GR, Etc.) <b>5752'</b>	22. Approx. Date Work will Start	

23. Proposed Casing and Cementing Program

See Operations Plan attached

24. Authorized by:

*Arleen White*

Arleen White (Staff Regulatory Tech)

*8/15/14*

Date

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY: \_\_\_\_\_

*[Signature]*

TITLE \_\_\_\_\_

*AFM*

DATE \_\_\_\_\_

*10/21/14*

Archaeological Report attached

Threatened and Endangered Species Report attached

A gas recovery unit may or may not be used on this location.

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C Section 1001, makes 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 presentations as to any matter within its jurisdiction.

Example Master Plan Type **3**

Bond Numbers NMB-000015 and NMB-000089

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

**NMOC**  
**OPERATOR**

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

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

**DISTRICT I**  
1025 E. French Dr., Hobbs, N.M. 88240  
Phone: (505) 623-3101 Fax: (505) 623-0789

**DISTRICT II**  
Oil Co. Plaza C., Artesia, N.M. 88210  
Phone: (505) 748-1023 Fax: (505) 748-9789

**DISTRICT III**  
1000 E. Drake Rd., Aztec, N.M. 87410  
Phone: (505) 634-3173 Fax: (505) 634-3173

**DISTRICT IV**  
1220 E. E. French Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3460

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 1, 2011

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit one copy to appropriate  
District Office

AUG 15 2014

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-35586	<sup>2</sup> Pool Code 72319 / 71599	<sup>3</sup> Pool Name BLANCO MESAVERDE / BASIN DAKOTA
<sup>4</sup> Property Code 18498	<sup>5</sup> Property Name COOPER	<sup>6</sup> Well Number 3F
<sup>7</sup> ORD No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	<sup>9</sup> Elevation 5752'

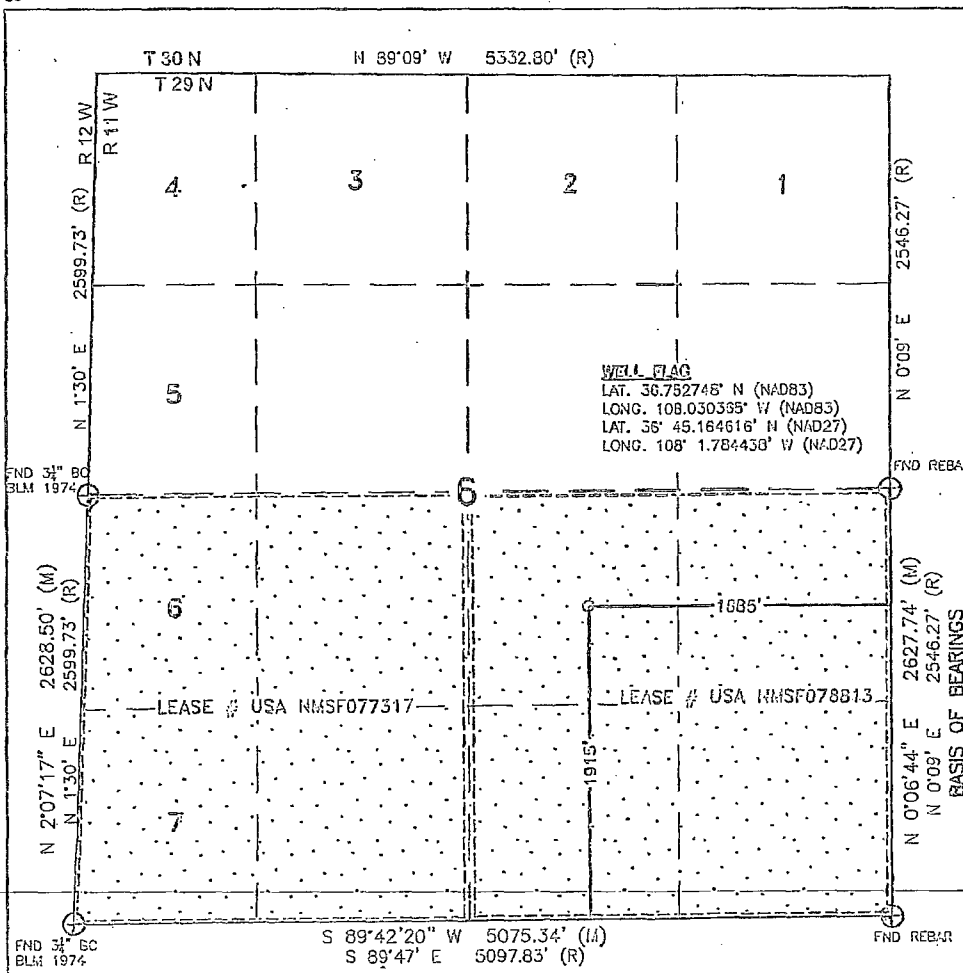
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Foot from the	North/South line	Foot from the	East/West line	County
J	6	29N	11W		1915'	SOUTH	1885'	EAST	SAN JUAN

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Foot from the	North/South line	Foot from the	East/West line	County
<sup>12</sup> Dedicated Acres 307.12 ACRES - S/2 SEC. 6			<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No. OIL CONS. DIV DIST. 3		

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



<sup>17</sup> OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Patsy Clugston* 5/19/14  
Signature Date  
Patsy Clugston  
Printed Name

E-mail Address

<sup>18</sup> SURVEYOR CERTIFICATION

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.

APRIL 23, 2014  
Date of Survey  
Signature and Seal of the Surveyor  
*David Russell*  
REGISTERED PROFESSIONAL LAND SURVEYOR  
10201  
DAVID RUSSELL  
Certificate Number 10201

# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

COOPER 3F

DEVELOPMENT

Lease:		AFE #: WAN.CDR.4008				AFE \$:	
Field Name: SAN JUAN		Rig: Pushing Rig		State: NM	County: SAN JUAN		API #:
Geologist:		Phone:		Geophysicist:		Phone:	
Geoscientist:		Phone:		Prod. Engineer:		Phone:	
Res. Engineer:		Phone:		Proj. Field Lead:		Phone:	
<b>Primary Objective (Zones):</b>							
Zone	Zone Name						
RON	BLANCO MESAVERDE (PRORATED GAS)						
FRR	BASIN DAKOTA (PRORATED GAS)						
<b>Location:</b> Surface		Datum Code: NAD 27				<b>Straight Hole</b>	
Latitude: 36.752744	Longitude: -108.029741	X:	Y:	Section: 06		Range: 011W	
Footage X: 1885 FEL	Footage Y: 1915 FSL	Elevation: 5752	(FT)	Township: 029N			
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2016		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 5767 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
NACIMIENTO	0	5767		<input type="checkbox"/>			Surface geology
Surface Casing	200	5567		<input type="checkbox"/>			12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 112 cuft. Circulate cement to surface.
OJO ALAMO	597	5170		<input type="checkbox"/>			
KIRTLAND	720	5047		<input type="checkbox"/>			
FRUITLAND	1323	4444		<input type="checkbox"/>			Possible Gas
PICTURED CLIFFS	1926	3841		<input type="checkbox"/>			
LEWIS	2102	3665		<input type="checkbox"/>			
HUERFANITO BENTONITE	2623	3144		<input type="checkbox"/>			
CHACRA	2960	2807		<input type="checkbox"/>			
UPPER CLIFF HOUSE	3519	2248		<input type="checkbox"/>			Gas
MASSIVE CLIFF HOUSE	3620	2147		<input type="checkbox"/>	459		Gas
MENEFEE	3668	2099		<input type="checkbox"/>			
Intermediate Casing	3818	1949		<input type="checkbox"/>			8 3/4" Hole. 7", 23/20 ppf, J-55, LTC/STC Casing. Cement with 860 cuft. Circulate cement to surface.
POINT LOOKOUT	4284	1483		<input type="checkbox"/>			
MANCOS	4641	1126		<input type="checkbox"/>			
UPPER GALLUP	5529	238		<input type="checkbox"/>			
GREENHORN	6257	-490		<input type="checkbox"/>			
GRANEROS	6312	-545		<input type="checkbox"/>			
TWO WELLS	6352	-585		<input type="checkbox"/>	1631		Gas
PAGUATE	6437	-670		<input type="checkbox"/>			
CUBERO	6487	-720		<input type="checkbox"/>			Est TD 30' below the top of Cubero. Est bottom perf 15' below the top of Cubero depending on sand development.
Total Depth	6517	-750		<input type="checkbox"/>			6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC /BTC casing. Cement w/ 361 cuft. Circulate cement a minimum of 100' inside the previous casing string.
ENCINAL	6543	-776		<input type="checkbox"/>		188	

PROJECT PROPOSAL - New Drill / Sidetrack

COOPER 3F

DEVELOPMENT

Reference Wells:		
Reference Type	Well Name	Comments

Logging Program:	
Intermediate Logs:	<input type="checkbox"/> Log only if show <input type="checkbox"/> GR/ILD <input type="checkbox"/> Triple Combo

TD Logs:	<input type="checkbox"/> Triple Combo <input type="checkbox"/> Dipmeter <input type="checkbox"/> RFT <input type="checkbox"/> Sonic <input type="checkbox"/> VSP <input type="checkbox"/> TDT <input checked="" type="checkbox"/> Other
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Mud log from 100' above the Upper Gallup to TD. Mud loggers will call final TD. Plan on completing top 15' of Cubero depending on sand development.

Additional Information:					
Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks

E. All construction materials will consist of native borrow and subsoil accumulated during road construction. If additional fill or surfacing material is required, it will be obtained from existing permitted or private sources and will be hauled in by trucks over existing Resource roads to the area.

F. For well pad cut and fill see Sheet F.

G. As determined during the onsite on 6-11-14, the following best management practices will be implemented:

1. Drainage will be diverted around well; draining to corner 6 silt trap
2. Storage of topsoil will be around well pad in construction area
3. Evasive weeds will be sprayed before construction.
4. Paint will be Juniper Green
5. Low Profile equipment will be used.

H. Construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, hydraulic mulcher, chippers and dozer. Construction of the resource road and well pad will take approximately 2 to 4 weeks.

I. The resource road and well pad are on lease so no additional ROW will be required.

J. Construction contractors will call New Mexico One-Call (or equivalent) to identify the location of any marked or unmarked pipeline or cables located in proximity to the proposed resource road and well pad at least two working days prior to ground disturbance.

K. All operations will be conducted in such a manner that full compliance is made with the applicable laws and regulations, the Application for Permit to Drill, and applicable Notice(s) to Lessees.

## ✓ VII. Methods for Handling Waste

A. Cuttings, Drilling Fluids, and Flowback Water - The drill cuttings, drill water and completion fluids will be placed in a lined reserve pit. The pit will be lined with 20m gage pit liner. The reserve pit will be

✓ fenced on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out. The free fluids will be removed after completion or may be trucked and reused in drilling operations or trucked to an approved disposal facility as indicated in Burlington Resources Drilling / Workover Pit Closure Procedure dated June 28, 2013 on file at the NMOCD office in Aztec, NM.

B. Garbage and other waste material - garbage, trash and other waste materials will be collected in a portable, self-contained and fully-enclosed trash container during drilling and completion operations. The accumulated trash will be removed, as needed, and will be disposed of at an authorized sanitary landfill. No trash will be buried or burned on location.

C. Sewage - self-contained, chemical toilets will be provided for human waste disposal. The toilet holding tanks will be pumped, as needed, and the contents thereof disposed of in an approved sewage disposal facility. The toilets will be onsite during all operations.

D. Immediately after drilling and completing activities have ceased, all debris and other waste materials not contained in the trash containers will be cleaned up and removed from the well location.

## VIII. Ancillary Facilities

A. The proposed areas and access roads listed below could be utilized for staging of construction, drilling, and completion equipment to facilitate drilling operations. Additionally, staging could occur, within the permitted right-of-way, along the route shown on Sheet B and described on Sheet C. Staging could take place when the rig moves in or off location. Any proposed temporary use area will be returned to same or better condition than before operations began and will comply with the BLM FFO Bare Soil Reclamation Procedures.

1. Cooper #11 - UL N, 1140' FSL & 1450' FWL, Section 06, T29N, R11W (on lease)
2. Cooper # 3 - UL L, 1650' FSL & 990' FWL, Section 06, T29N, R11W (on lease)

## IX. Well Site Layout

A. The proposed well pad layout is shown on Sheet G. Cross sections have been drafted to visualize the planned cuts and fill across the location. Refer to Section VI for construction materials and methods.

**BURLINGTON RESOURCES OIL & GAS COMPANY LP**

**COOPER #3F**

**1915' FSL & 1885' FEL**

**LOCATED IN THE NW/4 SE/4 OF SECTION 6,**

**T29N, R11W, N.M.P.M.,**

**SAN JUAN COUNTY, NEW MEXICO**

**DIRECTIONS**

- 1) FROM POST OFFICE IN AZTEC, NM, TRAVEL SOUTH ON HWY 560 3.1 MILES TO DIRT ROAD ON RIGHT.
- 2) TURN RIGHT AND TRAVEL ROAD 3.2 MILES.
- 3) TURN LEFT AND GO 0.1 MILES TO WHERE ACCESS IS FLAGGED ON THE RIGHT.

WELL FLAG LOCATED AT LAT. 36.752746° N, LONG. 108.030365° W (NAD 83).

