

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

MAR 08 2010

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK ^{and Management}
Farmington Field Office

1a. Type of Work DRILL	5. Lease Number SF-078880 Unit Reporting Number NMNM-78383 D	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP	7. Unit Agreement Name Canyon Largo Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name RCUD MAR 23 '10 OIL CONS. DIV. DIST. 3	
4. Location of Well Surf: Unit E(SWNW), 2128' FNL & 746' FWL Bottomhole: Unit H(SENE), 2265' FNL & 280' FEL Surf: Latitude: 36.401081° N (NAD83) Longitude: 107.532361° W Bottomhole: Latitude: 36.400803° N (NAD83) Longitude: 107.535846° W	10. Field, Pool, Wildcat Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) E SH - Sec. 13, T25N, R7W BH - Sec. 14, T25N, R7W API # 30-039- 30949	
14. Distance in Miles from Nearest Town 75 miles / Bloomfield	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 280'	17. Acres Assigned to Well 320.00 E/2 - DK 414	
16. Acres in Lease 2,560.00	 H₂S POTENTIAL EXIST	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 329' from Canyon Largo Unit 242 (PC)	20. Rotary or Cable Tools Rotary	
19. Proposed Depth 7334'	22. Approx. Date Work will Start	
21. Elevations (DF, FT, GR, Etc.) 6835' GL	23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Crystal Tafoya</u> Crystal Tafoya (Regulatory Technician)	Date <u>3/8/2010</u>	

PERMIT NO.

APPROVAL DATE

APPROVED BY [Signature] TITLE AFM

DATE 3/19/2010

Archaeological Report attached

Threatened and Endangered Species Report attached

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

MAR 31 2010

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

Hold C.104

for Directional Survey
and "As Drilled" plan

NMOC D 10

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
GENERAL REQUIREMENTS

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

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, 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 & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 7 Copies

Fee Lease - 3 Copies

MAR 08 2010

Bureau of Land Management ☒ AMENDED REPORT
Farmington Field Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30949		² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 6886	⁵ Property Name CANYON LARGO UNIT		⁶ Well Number 431F
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		⁹ Elevation 6835

¹⁰ SURFACE LOCATION

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	13	25-N	7-W		2128	NORTH	746	WEST	RIO ARRIBA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	14	25-N	7-W		2265	NORTH	280	EAST	RIO ARRIBA

¹² Dedicated Acres 320.00 (E/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

16		17 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 pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Crystal Tafoya 5/22/09</i> Signature Crystal Tafoya Printed Name Regulatory Technician Title and E-mail Address May 22, 2009 Date	
		18 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. Date of Survey: 4/28/09 Signature and Seal of Professional Surveyor: Certificate Number: NM 11393	

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

CANYON LARGO UNIT 431F

DEVELOPMENT

Lease:		AFE #: WAN.CDR.9090				AFE \$: 1,371,628.22	
Field Name: SAN JUAN		Rig: XXX 2011 Holding Rig #1		State: NM	County: RIO ARRIBA	API #:	
Geologist:		Phone:		Geophysicist:		Phone:	
Geoscientist:		Phone:		Prod. Engineer:		Phone:	
Res. Engineer:		Phone:		Proj. Field Lead:		Phone:	
Primary Objective (Zones):							
Zone	Zone Name						
FRR	BASIN DAKOTA (PRORATED GAS)						
Location: Surface Datum Code: NAD 27 Directional							
Latitude: 36.401070	Longitude: -107.531755	X:	Y:	Section: 13		Range: 007W	
Footage X: 746 FWL	Footage Y: 2128 FNL	Elevation: 6835	(FT)	Township: 025N			
Tolerance:							
Location: Bottom Hole Datum Code: NAD 27 Directional							
Latitude: 36.400792	Longitude: -107.535240	X:	Y:	Section: 14		Range: 007W	
Footage X: 280 FEL	Footage Y: 2265 FNL	Elevation:	(FT)	Township: 025N			
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2011		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6850 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks	
Surface Casing	200	6650	☐			200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.	
OJO ALAMO	2008	4842	☐				
KIRTLAND	2142	4708	☐				
FRUITLAND	2366	4484	☐			Possible Gas	
PICTURED CLIFFS	2708	4142	☐				
LEWIS	2793	4057	☐				
HUERFANITO BENTONITE	3077	3773	☐				
CHACRA	3526	3324	☐				
UPPER CLIFF HOUSE	3887	2963	☐				
MASSIVE CLIFF HOUSE	4238	2612	☐				
MENEFEE	4321	2529	☐				
Intermediate Casing	4470	2380	☐			8-3/4" hole. 7" 23 ppf, J-55 LTC Casing. Circulate cement to surface. Cement with 1047 cuft.	
POINT LOOKOUT	4944	1906	☐			GAS	
MANCOS	5247	1603	☐				
UPPER GALLUP	6033	817	☐				
GREENHORN	6911	-61	☐				
GRANEROS	6964	-114	☐				
TWO WELLS	7004	-154	☐	2794		Gas; Est. Top Perf - 7005 (-156)	
PAGUATE	7073	-223	☐				
UPPER CUBERO	7116	-266	☐				
LOWER CUBERO	7140	-290	☐				
OAK CANYON	7197	-347	☐				

PROJECT PROPOSAL - New Drill / Sidetrack

CANYON LARGO UNIT 431F

DEVELOPMENT

ENCINAL	7209	-359	☐	Est. Btm Perf - 7249 (-400) based on offset wells
BURRO CANYON	7255	-405	☐	
MORRISON	7307	-457	☐	TD - 125' below T/ENCN
Total Depth	7334	-484	☐	6-1/4" hole, 4-1/2" 11.6 ppf, L-80/J-55 LTC casing. Cement with 394 cuft. Circulate cement a minimum of 100' inside the previous casing string..

Reference Wells:		
Reference Type	Well Name	Comments
Production	Canyon Largo 242	25N 7W 13 NE SW NW
Production	Canyon Largo 431	25N 7W 14 NE SW NE
Production	Canyon Largo 255E	25N 7W 13 NW NW
Production	Canyon Largo 255	25N 7W 13 SW NE SW

Logging Program:	
Intermediate Logs:	☐ Log only if show ☐ GR/ILD ☐ Triple Combo

TD Logs:	☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☐ TDT ☒ Other
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Cased Hole GR / CBL

Mudlog from 100' above top of GRHN to TD - mudlogger will call TD. Check for possible Burro Canyon pay.

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

ConocoPhillips or its affiliates

Planning Report

Database: EDM Central Planning Company: ConocoPhillips SJB Project: San Juan Basin - New Mexico Wells Site: Other Named Wells Well: Canyon Largo #431F Wellbore: Principal Wellbore Design: Plan #1	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:	Well Canyon Largo #431F RKB @ 6850.0ft (Original Well Elev) RKB @ 6850.0ft (Original Well Elev) True Minimum Curvature
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Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,318.1	7,140.0	Lower Cubero		0.00		
7,089.1	6,911.0	Greenhorn		0.00		
7,294.1	7,116.0	Upper Cubero		0.00		
7,387.1	7,209.0	Encinal		0.00		
7,375.1	7,197.0	Oak Canyon		0.00		
3,183.4	3,077.0	Huerfano Bentonite		0.00		
3,668.1	3,526.0	Chacra		0.00		
7,182.1	7,004.0	Two Wells		0.00		
7,433.1	7,255.0	Burro Canyon		0.00		
2,030.1	2,008.0	Ojo		0.00		
5,425.1	5,247.0	Mancos		0.00		
5,122.1	4,944.0	Point Lookout		0.00		
4,415.5	4,238.0	Mass. Cliffhouse		0.00		
7,142.1	6,964.0	Graneros		0.00		
4,498.9	4,321.0	Menefee		0.00		
6,211.1	6,033.0	Upper Gallup		0.00		
4,055.6	3,887.0	Upper Cliffhouse		0.00		
7,251.1	7,073.0	Paguate		0.00		
2,174.3	2,142.0	Kirtland		0.00		
2,416.1	2,366.0	Fruitland		0.00		
7,485.1	7,307.0	Morrison		0.00		
2,785.2	2,708.0	Pictured Cliffs		0.00		
2,876.9	2,793.0	Lewis		0.00		

REFERENCE INFORMATION

RKB @ 6850.0ft (Original Well Elev)
Ground Elevation 6835.0
Reference Lat: 36° 24' 3.853 N
Reference Long: 107° 31' 54.321 W

Project: San Juan Basin - New Mexico Wells

Site: Other Named Wells

Well: Canyon Largo #431F

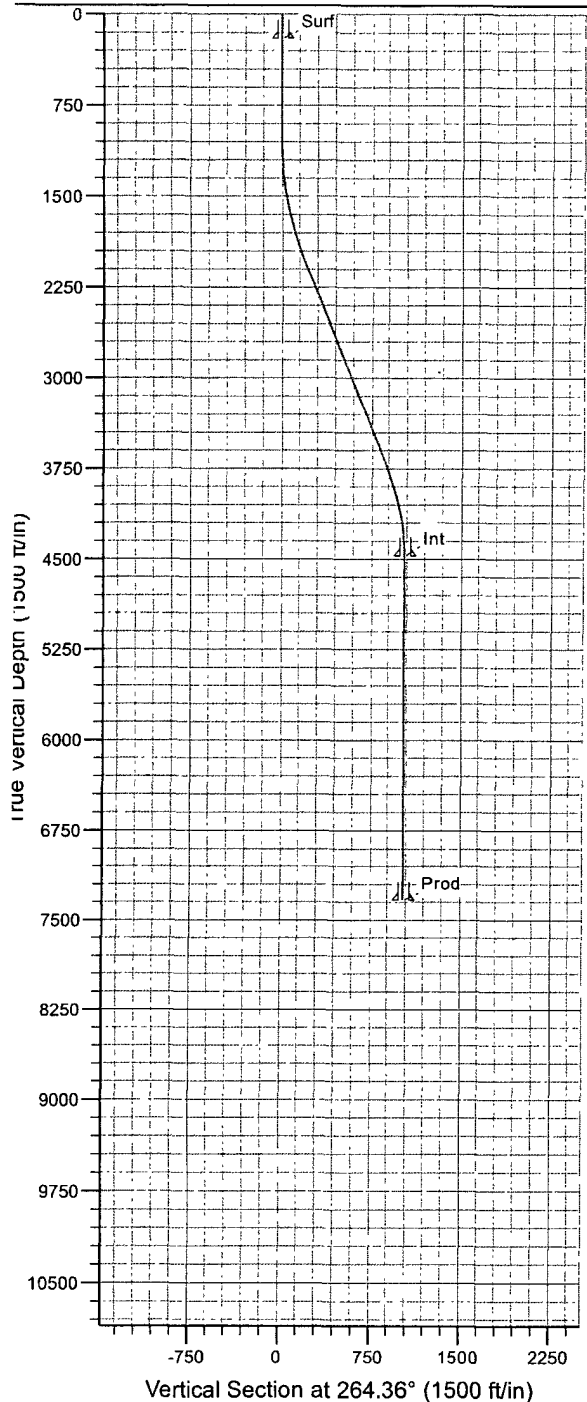
Wellbore: Principal Wellbore

Design: Plan #1

ConocoPhillips

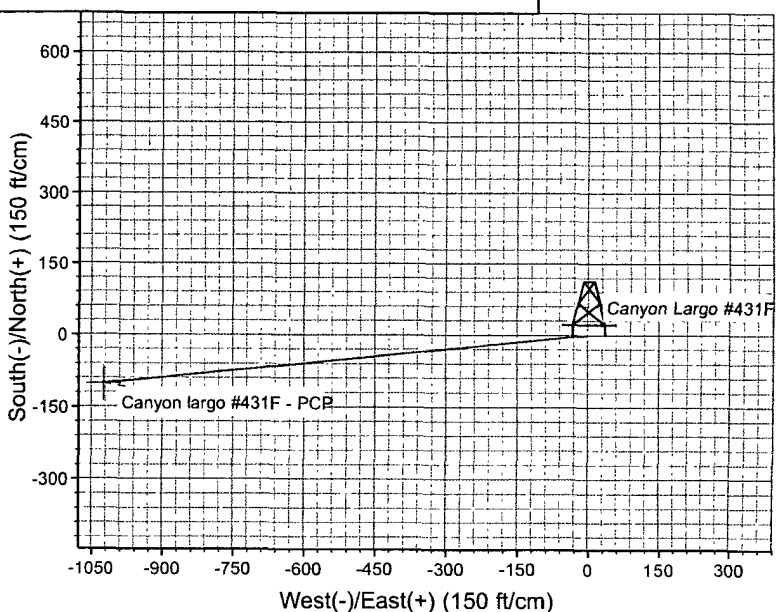
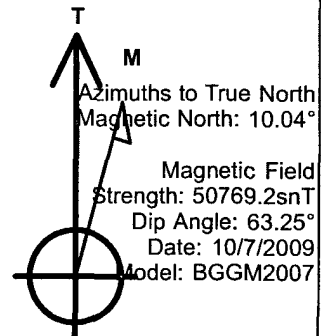
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	2105.1	22.10	264.36	2077.9	-20.7	-209.5	2.00	264.36	210.5	
4	3911.3	22.10	264.36	3751.4	-87.4	-885.8	0.00	0.00	890.1	
5	4648.1	0.00	0.00	4470.0	-101.2	-1025.5	3.00	180.00	1030.5	Canyon Largo #431F - ICP
6	7511.1	0.00	0.00	7333.0	-101.2	-1025.5	0.00	0.00	1030.5	Canyon largo #431F - PCP



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1935.0	2030.1	Ojo
2069.0	2174.3	Kirtland
2293.0	2416.1	Fruitland
2635.0	2785.2	Pictured Cliffs
2720.0	2876.9	Lewis
3004.0	3183.4	Huerfano Bentonite
3453.0	3668.1	Chacra
3814.0	4055.6	Upper Cliffhouse
4165.0	4415.5	Mass. Cliffhouse
4248.0	4498.9	Menefee
4871.0	5122.1	Point Lookout
5174.0	5425.1	Mancos
5960.0	6211.1	Upper Gallup
6838.0	7089.1	Greenhorn
6891.0	7142.1	Graneros
6931.0	7182.1	Two Wells
7000.0	7251.1	Paguate
7043.0	7294.1	Upper Cubero
7067.0	7318.1	Lower Cubero
7124.0	7375.1	Oak Canyon
7136.0	7387.1	Encinal
7182.0	7433.1	Burro Canyon
7234.0	7485.1	Morrison



BURLINGTON RESOURCES OIL & GAS COMPANY LP

CANYON LARGO UNIT #431F

2128' FNL, 746' FWL

SECTION 13, T-25-N, R-7-W, N.M.P.M.

RIO ARriba COUNTY, NEW MEXICO

NAD 83 LAT.: 36.401081°N LONG.: 107.532361°W

ELEV.: 6835 NAVD88

NO NEW ACCESS

FROM THE INTERSECTION OF HWY. 550 AND HWY. 64:

- GO 54.5 MI. SOUTH ON HWY. 550 TO COUNSELORS, NM. "STOP & GO" STORE.
- TURN LEFT ON C.R. 403 GO NORTHERLY THROUGH ESCRITO CANYON FOR 9.3 MI., PAST CELLULAR TOWER. ENTER CANYON LARGO.
- GO NORTHWESTERLY THROUGH CANYON LARGO FOR 4.4 MI. TURN LEFT INTO ROCKHOUSE CANYON.
- GO SOUTHWESTERLY FOR 1.1 MI. TURN RIGHT AT INTERSECTION.
- GO 1.6 MI. UP ONTO CIBOLO MESA STAY RIGHT, THEN TURN LEFT AT INTERSECTION.
- GO 2.5 MI. NORTHWESTERLY, TURN RIGHT AT INTERSECTION.
- GO 0.9 MI. AND TURN LEFT.
- GO 0.8 MI. STAY TO RIGHT TO AN EXISTING BROG CANYON LARGO UNIT #242, THE BROG CANYON LARGO UNIT #431F IS CO-LOCATED THERE.