# **UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT**

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK om 1a. Type of Work 5. Lease Number SF-078877 DRILL RECEIVED Unit Reporting Number NM NM ~678383 070 FARMINGTON HIM 6. If Indian, All. or Tribe 1b. Type of Well GAS 2. Operator 7. Unit Agreement Name BURLINGTON RESOURCES Oil & Gas Company Canyon Largo Unit 3. Address & Phone No. of Operator 8. Farm or Lease Name PO Box 4289, Farmington, NM 87499 Canyon Largo Unit 9. Well Number #286E RCVD NOV21'06 (505) 326-9700 <del>OI</del>L CONS. DIV. 10. Field, Pool, Wildcat 4. Location of Well DIST. 3 Basin Dakota 1220' FSL, 1175' FEL 11, Sec., Twn, Rge, Mer. (NMPM)
Latitude 36° 19.4017'N, Longitude 107° 25.9300'W Sec. 11, T24N, R06W API # 30-049-039-29976 14. 12. County 13. State Distance in Miles from Nearest Town 65 miles to intersection Hwy 64 & 550 Rio Arriba NM 15. Distance from Proposed Location to Nearest Property or Lease Line 1175' 16. Acres in Lease 17. Acres Assigned to Well E/2 320 acres 18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 2004 19. **Proposed Depth** 20. Rotary or Cable Tools 6603' Rotary 21. Elevations (DF, FT, GR, Etc.) 22. Approx. Date Work will Start 6423' GR 23. Proposed Casing and Cementing Program See Operations Plan attached 24. Authorized by Regulatory PERMIT NO. **APPROVAL DATE** APPROVED BY Archaeological Report attached

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

Threatened and Endangered Species Report attached NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

NMOCDA

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make the form of the section 1001, makes it a crime for any person knowingly and willfully to make the jurisdiction.

United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

This action is subject to technical and procedural regions and procedural regions. procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3185.4

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District I PO Box 1980, Hobbs, NM 88241-1980 State of New Mexico Energy, Minerals & Natural Resources Department Form C-102 Revised February 21, 1994 Instructions on back

District II PO Drawer DD, Artesia. NM 88211-0719

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

East/West line

District III 1000 Rio Brazos Rd., Aztec, NM 87410

Sect ion

UL or lot no.

12 Dedicated Acres

DK 320.0 ac E2

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe. NM 87504-2088

AMENDED REPORT RCVD NOV21 OF OIL CONS. DIV.

DIST. 3

County

District IV PO Box 2088, Santa Fe. NM 87504-2088

Township

WELL LOCATION AND ACREAGE DEDICATION PLAT

North/South line

<sup>14</sup> Consolidation Code

Feet from the

<sup>15</sup> Order No.

'API Number			Pool Code		ie	³Pool Name				
30-039-	-039- 29976 71599 Basin Dakota									
*Property	Code	*Property Name					*Well Number			
6886		CANYON LARGO UNIT 286E					286E			
'OGRID	No.	*Operator Name						°Elevation		
14538	BURLINGTON RESOURCES OIL & GAS COMPANY, LP						6423			
<sup>10</sup> Surface Location										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	st line	County
Р	11	24N	6W		1220	SOUTH	1175	EA	ST	RIO ARRIBA
		11 E	Bottom	Hole L	ocation	If Different	From Surf	ace		

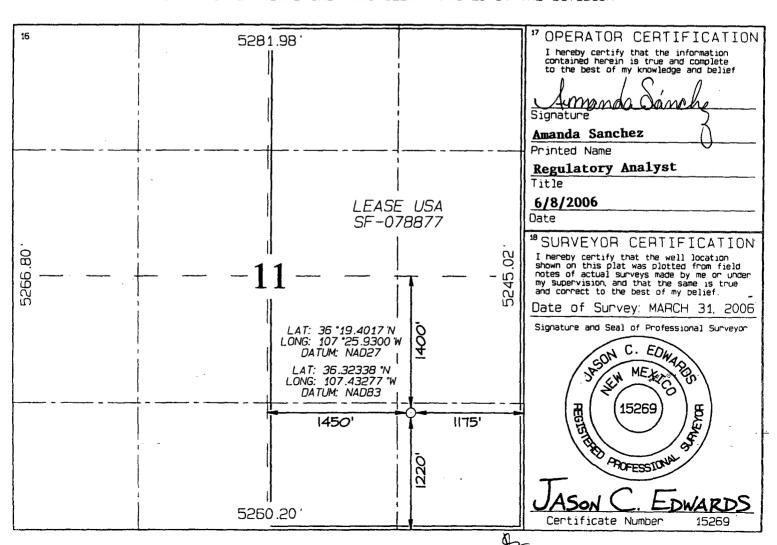
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

Feet from the

<sup>13</sup>Joint or Infill

Lot Ide

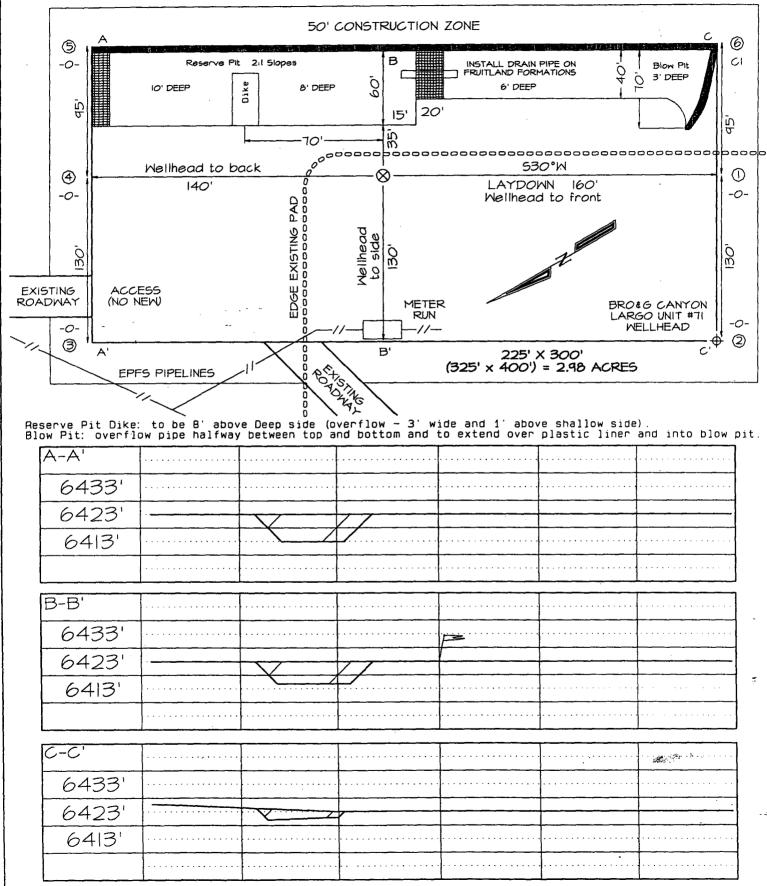
Range



Submit 3 Copies To Appropriate District Office	State of New Mexico	Form C-103				
District I Energy, Minerals and Natural Resources		May 27, 2004				
1625 N. French Dr., Hobbs, NM 88240 District II		WELL API NO. 30-039- 29976				
1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION DIVISION	5. Indicate Type of Lease				
District III	1220 South St. Francis Dr.	STATE FEE				
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 87505	6. State Oil & Gas Lease No.				
1220 S. St. Francis Dr., Santa Fe, NM 8750		SF-078877				
	ES AND REPORTS ON WELLS TO DRILL OR TO DEEPEN OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name				
DIFFERENT RESERVOIR. USE "APPLICATIO	N FOR PERMIT" (FORM C-101) FOR SUCH	Canyon Largo Unit				
PROPOSALS.)  1. Type of Well:		8. Well Number				
Oil Well Gas Well X	Other	286E				
2. Name of Operator		9. OGRID Number				
3. Address of Operator	URCES OIL & GAS COMPANY LP	14538 10. Pool name or Wildcat				
	EET, FARMINGTON, NM 87402	Basin Dakota				
4. Well Location Unit Letter P : 1	220 feet from the South line and	1176 foot from the Foot live				
Unit Letter P : 1 Section 11	220 feet from the South line and Township 24N Rng 6W	1175 feet from the <u>East</u> line NMPM County Rio Arriba				
	Elevation (Show whether DR, RKB, RT, GR, etc.)					
Pit or Below-grade Tank Application	or Closure	<b>Δ2c'C'</b>				
Pit type New Drill Depth to Groundwa	<u></u>	>1000' Distance from nearest surface water				
Pit Liner Thickness:	mil Below-Grade Tank: Volume	bbls; Construction Material				
12. Check A	Appropriate Box to Indicate Nature of No	tice. Report or Other Data				
NOTICE OF IN		SUBSEQUENT REPORT OF:				
PERFORM REMEDIAL WORK	PLUG AND ABANDON REMEDIA					
TEMPORARILY ABANDON PULL OR ALTER CASING		ICE DRILLING OPNS. P AND A DEMENT JOB				
	_					
OTHER: New Drill X 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.						
New Drill, <del>Unlined</del> :						
New Dilli, Chilling.						
	nstruct a new drilling pit and an associated vent/flare					
	new drilling pit and vent/flare pit will be an unlined	pit as detailed in Burlington's Revised Drilling / NMOCD office. A portion of the vent/flare pit will be				
		Burlington Resources anticipates closing these pits				
according to the Drilling / Workover Pit Closure Procedure dated August 2, 2004 on file that the NMOCD office.						
		-				
I hereby certify that the information abo	we is true and complete to the best of my knowledge	and helief I further certify that any nit or helow-				
	ed according to NMOCD guidelines, a general permit					
C Den . O	Park	<del></del>				
SIGNATURE C	TITLE R	egulatory Analyst DATE 6/22/2006				
• •	i Clark E-mail address: <u>iclark@</u>	br-inc.com Telephone No. 505-326-9701				
For State Use Only	A METHER	SAS INSPECTOR, DIST. & MOV 2 0 200e				
APPPROVED BY	TITLE	DATE DATE				
Conditions of Approval (if any):						
a V r	respirate procedures	ned we closed according to				
~/-/-	apprejurate procesures.					

BURLINGTON RESOURCES OIL & GAS COMPANY, LP CANYON LARGO UNIT #286E, 1220' FSL & 1175' FEL SECTION 11, T24N, R6W, NMPM, RIO ARRIBA COUNTY, NM GROUND BLEVATION: 6423' DATE: MARCH 31, 2006

LATITUDB: 36.32338° N LONGITUDB: 107.43277° W



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

## OPERATIONS PLAN

Well Name: Canyon Largo Unit #286E

Location: 1220'FSL, 1175' FEL, Section 11, T-24-N, R-06-W

Rio Arriba, New Mexico

Latitude 36° 19.4017', Longitude 107° 25.9300'

Formation: Basin Dakota

Elevation: 6423'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	1625′	
Ojo Alamo	1625′	1687'	aquifer
Kirtland	1687'	1960'	gas
Fruitland	1960′	2080′	
Pictured Cliffs	2080'	2172'	gas
Lewis	2172′	2427'	gas
Huerfanito Bentonite	2427'	2896′	gas
Chacra	2896′	3590'	gas
Cliff House	3590′	3657 <i>'</i>	
Menefee	3657′	4255'	gas
Point Lookout	4255'	4547′	gas
Mancos	4547′	5347′	gas
Gallup	5347′	6297′	gas
Greenhorn	6297'	6357'	gas
Graneros	6357'	6392'	gas
Two Wells	6392′	6503′	
Upper Cubero	6503 <i>'</i>	6530′	
Lower Cubero	6530 <b>′</b>	6564′	
Oak Canyon	6564′	6603′	
Encinal	6603′	6603′	gas
TD	6603′		

### Logging Program:

Mud Logs/Coring/DST -

Mud logs - none

Coring - none

DST - none

Open hole - none

Cased hole - Gamma Ray - surface to TD

### Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 320'	Spud MUD/Air/Air Mist	8.4-9.0	40-50	no control
320'- 6603'	LSND	8.4-9.0	30-60	no control

# Casing Program (as listed, the equivalent, or better):

<u> Hole Size</u>	Depth Interval	Csg.Size Wt.	Grade
12 1/4"	0' - 320'	8 5/8" 24.0#	J-55
7 7/8"	0' - 6603'	4 1/2" 10.5#	J-55

**Tubing Program:** 0' - 6603' 2 3/8" 4.7# J-55

# BOP Specifications, Wellhead and Tests:

# Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, BOPE and casing will be tested to 600 psi for 30 minutes.

### Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, BOPE and casing will be tested to 1500 psi for 30 minutes.

## Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

### Completion Operations -

7 1/16" 2000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

### Wellhead -

 $8 \ 5/8$ " x 4 ½" x 2 3/8" x 2000 psi tree assembly.

### General

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drill crew.
- All BOP tests & drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

# Cementing:

8 5/8" surface casing conventionally drilled Cement with 321 sacks Type III cement with 0.25 pps Celloflake, 3% calcium chloride.
(200% excess, bring cement to surface). Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60 degrees F. prior to nipple up of BOPE.
Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

4 1/2" Production Casing Two Stage - Stage collar set @ 4105'. First Stage: Lead with w/275 sacks Premium Lite HS FM cmt w/0.25 pps celloflake, 0.3% CD-32, 6.25 pps LCM-1 and 1% FL-52. Second Stage: 443 sacks Premium Lite cmt w/3% calcium chloride, 0.4% metasilicate, 0.25 pps celloflake, 5 pps LCM-1 and 0.4% FL-52. (2226 cu ft - 50% excess, circulate to surface, run CBL/temperature survey if cement is not circulated to surface.)

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every fourth joint off bottom, to the base of the Ojo Alamo @ 1687'. Two turbolating centralizers at the base of the Ojo Alamo 1687'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

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# Special Drilling Operations (Air/Mist Drilling):

The following equipment will be operational while air/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.

# Special Drilling Operations (Air/Mist Drilling):

- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

# Additional Information:

- The Dakota formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal 300 psi Pictured Cliffs 600 psi Mesa Verde 700 psi Dakota 2500 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The east half of Section 11 is dedicated to the Dakota formation.
- This gas is dedicated.

$\rightarrow$	
Drilling Engineer	Date

# Drilling Rig Choke Menifold Configuration 2000 pel System

**Burlington Resources** 

2000 psi System Drilling Rig

ADD FLOOR

POUR BATT

BUT OF THE 2

ROTATING HEAD.

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Choke manifold installation from Burlace Casing Point to Total Depth. 2,000psl working presente equipment with two chokes.

Figure #3

4-20-01

Figure #1

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sure double gate BOP to be equipped with blind and e rams. A stripping head to be installed on the top of Sparationa. 7-1/16" bore, 2000 pel minimum working pressure or greater excluding 600 pel stripping head. Minimum BOP installation for all Completion/Works he BOP. All BOP equipment is 2000 pel worlding

Figure #2

Blowout preventor equipment (BOPE) tests must be performed using an appropriately sized test plug. The BOPE test must be performed and recorded using a test pump, calibrated test gauges and a properly calibrated strip or chart recorder. The test must be recorded in the driller's log and will include a low pressure test requirement of 250 psig held for five minutes and a high pressure test requirement held for ten minutes as described in Onshore Order No. 2 or otherwise authorized in the Application for Permit to Drill (APD). A successful BOPE test using a test plug is considered when no pressure drop occurs over the duration of the test. Test gauges and recorders must be of the proper range and resolution commensurate with the authorized test pressure. Where intermediate casing strings are used, only one BOPE test will be necessary contingent upon the test being conducted to the highest approved test pressure to which the BOPE will be exposed. Casing pressure tests must be held for 30 minutes with no more than a 10 percent pressure drop during the duration of the test.