

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2006 AUG 2 PM 2:50	Lease Number NMNM-03187
1b. Type of Well GAS	RECEIVED 070 FARMINGTON NM	Unit Reporting Number
2. Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Lambe	
	9. Well Number #1E	
4. Location of Well Unit M (SWSW), 1220' FSL, 1125' FWL Latitude 36° 52.8154'N Longitude 107° 53.5150'W	10. Field, Pool, Wildcat Basin Dakota	
	11. Sec., Twn, Rge, Mer. (NMPM) Sec. 21, T31N, R10W	
	API # 30-045-33881	
14. Distance in Miles from Nearest Town 6.8 miles to Aztec, NM	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1125'		
16. Acres in Lease	17. Acres Assigned to Well 318.860 W/2	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 54' - Lambe #7		
19. Proposed Depth 7435'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6135' GL	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Amanda Sanchez</u> Regulatory Analyst	<u>8-2-06</u> Date	

PERMIT NO.	APPROVAL DATE
APPROVED BY: <u>[Signature]</u>	TITLE <u>AFM</u> DATE <u>8/8/06</u>

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.

NMOC

DISTRICT II
1301 West Grand Avenue, Artesia, N.M. 88210

OIL CONSERVATION DIVISION

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

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045- 33881		² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 28917	⁵ Property Name LAMBE		⁶ Well Number 1E
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP		⁹ Elevation 6135'

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
M	21	31-N	10-W	13	1220'	SOUTH	1125'	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no. M	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹⁰ Dedicated Acres DK 318.860ac W2			¹¹ Joint or Infill		¹² Consolidation Code		¹³ Order No.		

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

18

LOT 4

LOT 3

LOT 2

LOT 1

LOT 5

LOT 6

LOT 7

LOT 8

21

LAT: 36°52.8154' N.
LONG: 107°53.5150' W.
NAD 1927

LAT: 36.880260' N.
LONG: 107.892536' W.
NAD 1983

N 01° 41' 22" E
2633.69'

LOT 12

LOT 11

LOT 10

LOT 9

1125'

1220'

LOT 14

N 89° 31' 19" E
2865.64'

LOT 13

LOT 15

LOT 16

USA NM-03187

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 interest or a working interest in the well under a pooling agreement or a compulsory pooling order heretofore entered by the Division.

Joni Clark
Signature

Joni Clark
Printed Name


Sr. Regulatory Specialist

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.

6-29-06
Date of Survey

Date of Survey _____
Signature and Seal of Professional Surveyor: _____



 Certificate Number 15703

Office

Energy, Minerals and Natural Resources

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

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

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 ☐ Gas Well ☒ Other

2. Name of Operator

BURLINGTON RESOURCES OIL & GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter M : 1220 feet from the South line and 1125 feet from the West line
 Section 21 Township 31N Rng 10W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

7208'

Pit or Below-grade Tank Application

☐ or Closure ☐

7200'

Pit type

New Drill

Depth to Groundwater

>100'

Distance from nearest fresh water well

>1000'

Distance from nearest surface water

<1000'

Pit Liner Thickness:

n/a

mil

Below-Grade Tank:

Volume

bbls;

Construction Material

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

☐

OTHER:

New Drill

☒**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.

New Drill, Unlined:

Burlington Resources proposes to construct a new drilling pit and an associated vent/flare pit. Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and vent/flare pit will be an unlined pit as detailed in Burlington's Revised Drilling / Workover Pit Construction / Operation Procedures dated November 11, 2004 on file at the NMOCD office. A portion of the vent/flare pit will be designed to manage fluids, and that portion will be unlined, as per the risk ranking criteria. Burlington Resources anticipates closing these pits according to the Drilling / Workover Pit Closure Procedure dated August 2, 2004 on file at the NMOCD office.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE

TITLE

Regulatory Analyst

DATE

7/25/2006

Type or print name

Joni Clark

E-mail address:

jclark@br-inc.com

Telephone No.

505-326-9700

For State Use Only

APPROVED BY

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 3

DATE

AUG 10 2006

Conditions of Approval (if any):

SECTION 21, T31N, R10W, NMPM, SAN JUAN COUNTY, NM
GROUND ELEVATION: 6135', DATE: JUNE 15, 2006

BLOW PIT: OVERFLOW PIPE 4' ABOVE BOTTOM OF BLOW PIT.



BURLINGTON RESOURCES OIL & GAS COMPANY LP
 LAMBE 1E, 1220' FSL & 1125' FWL
 SECTION 21, T-31-N, R-10-W, NMPM, SAN JUAN COUNTY, NM
 GROUND ELEVATION: 6135', DATE: JUNE 15, 2006

ELEV. A'-A

CL

6155							
6145							
6135							
6125							

ELEV. B'-B

CL

6155							
6145							
6135							
6125							

ELEV. C'-C

CL

6155							
6145							
6135							
6125							

NOTE: VECTOR SURVEYS LLC IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
 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: LAMBE 1E
Location: 1220' FSL & 1125' FWL, Section 21 T31N R10W
San Juan County, New Mexico

Formation: Basin Dakota
Elevation: 6135' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	1490'	
Ojo Alamo	1490'	1532'	aquifer
Kirtland	1532'	2604'	gas
Fruitland Coal	2604'	2880'	gas
Pictured Cliffs	2880'	3040'	gas
Lewis	3040'	3593'	
Huerfanito Bentonite	3593'	3948'	
Chacra	3948'	4621'	gas
Massive Cliff House	4621'	4718'	gas
Menefee	4718'	5120'	gas
Massive Point Lookout	5120'	5426'	gas
Mancos Shale	5426'	6406'	
Upper Gallup	6406'	7120'	gas
Greenhorn	7120'	7174'	gas
Graneros	7174'	7225'	gas
Two Wells	7225'	7317'	gas
Paguate	7317'	7353'	gas
Cubero	7353'	7435'	gas
Total Depth:	7435'		gas

Logging Program:

Mud Logs/Coring/DST

Mud logs - none
Coring - none
DST - none
Open hole - none
Cased hole - Gamma Ray, CBL - surface to TD

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0 - 120'	Spud MUD/Air/Air Mist	8.4 - 9.0	40 - 50	no control
120' - 3140'	LSND	8.4 - 9.0	30 - 60	no control
3140 - 7435'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

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

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3140'	7"	20#	J-55
6 1/4"	0' - 7435'	4 1/2"	10.5#/11.6#	J-55

Tubing Program:

<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
0' - 7435'	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 -

9 5/8" x 7" x 4 1/2" 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:

9 5/8" surface casing -

Pre-Set Drilled - Cement with 23 sx Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (38 cu ft of slurry, bring cement to surface) Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface.

Conventionally Drilled - Cement with 88 sx Type III cement with 0.25 pps Celloflake, 2% CaCl. (113 cu ft of slurry, 200% excess, bring cement to surface) Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under 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. Test casing to 600 psi for 30 minutes.

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

7" intermediate casing -

Lead with 278 sacks Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sacks Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (124 cu ft 50% excess to circulate to surface). WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage -

Stage collar set 300' above the top of the Fruitland. First stage: Lead w/30sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss. Tail w/90 sxs Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: 241 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (701 cu ft - 50% excess to circulate to surface).

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo @ 1532'. Two turbolating centralizers at the base of the Ojo Alamo @ 1532'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Casing -

Pump 281 sxs Premium Lite HS FM w/0.25 pps celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss, 6% gel, 7 pps CSE (557 cu.ft., 30% excess to achieve 100' overlap in 4-1/2" x 7" annulus). WOC a minimum of 18 hrs prior to completing.

Cementing:

9 5/8" surface casing -

Pre-Set Drilled - Cement with 23 sx Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (38 cu ft of slurry, bring cement to surface) Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface.

Conventionally Drilled - Cement with 88 sx Type III cement with 0.25 pps Celloflake, 2% CaCl. (113 cu ft of slurry, 200% excess, bring cement to surface) Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under 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. Test casing to 600 psi for 30 minutes.

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

7" intermediate casing -

Lead with 278 sacks Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sacks Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (124 cu ft 50% excess to circulate to surface). WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage -

Stage collar set 300' above the top of the Fruitland. First stage: Lead w/30sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss. Tail w/90 sxs Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: 241 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (701 cu ft - 50% excess to circulate to surface).

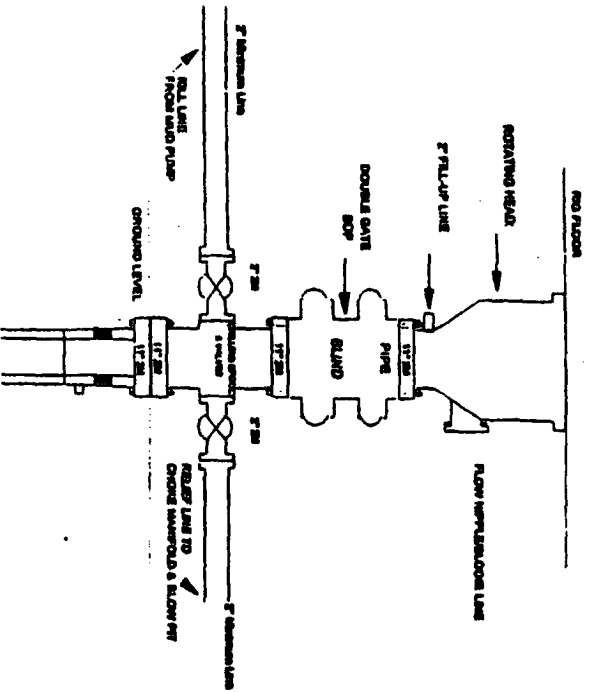
Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo @ 1532'. Two turbolating centralizers at the base of the Ojo Alamo @ 1532'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Casing -

Pump 281 sxs Premium Lite HS FM w/0.25 pps celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss, 6% gel, 7 pps CSE (557 cu.ft., 30% excess to achieve 100' overlap in 4-1/2" x 7" annulus). WOC a minimum of 18 hrs prior to completing.

Burlington Resources

Drilling Rig 2000 psi System



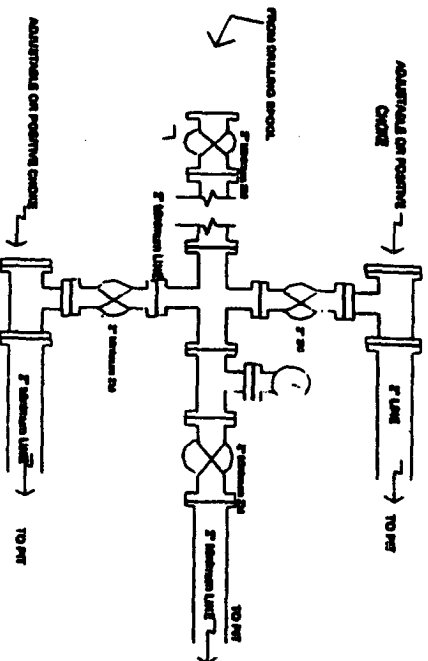
BOP Installation from Surface Casing Point to Total Depth. 11" Bore for 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi rating head on top of ram preventer. All BOP equipment is 2,000 psi working pressure.

Figure #1

4-20-01

BURLINGTON RESOURCES

Drilling Rig Choke Manifold Configuration 2000 psi System



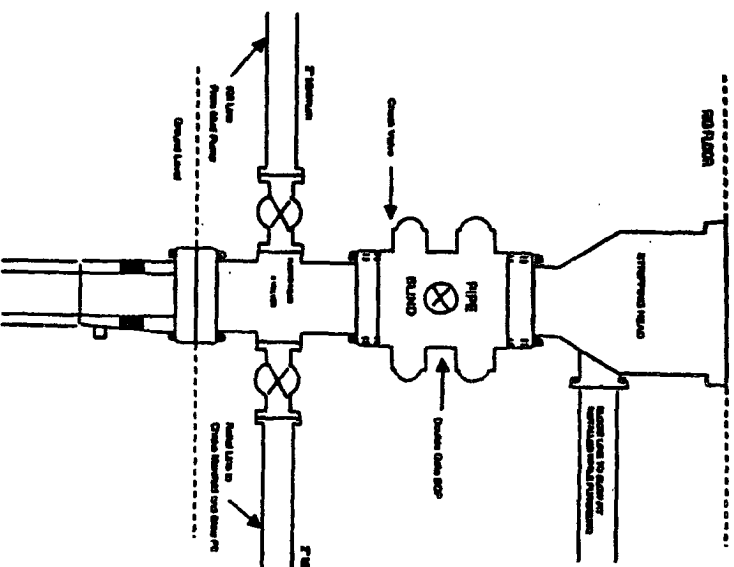
Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

BURLINGTON RESOURCES

Completion/Workover Rig BOP Configuration 2000 psi System



Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi stripping head.

Figure #2

4-20-01