

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number SF-080117 Unit Reporting Number NMNM-078394A	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator <b>BURLINGTON</b> RESOURCES Oil & Gas Company LP	7. Unit Agreement Name Huerfanito Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number #176	
4. Location of Well Unit N (SESW), 1085' FSL & 1690' FWL,  Latitude 36° 32.5140'N Longitude 107° 45.6348'W	10. Field, Pool, Wildcat Basin Fruitland Coal  11. Sec., Twn, Rge, Mer. (NMPM) N Sec. 26, T27N, R9W API # 30-045-33605	
14. Distance in Miles from Nearest Town 32 miles from Bloomfield, NM	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1085'	17. Acres Assigned to Well 320 W/2 FC	
16. Acres in Lease	20. Rotary or Cable Tools Rotary	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 497' - Huerfanito Unit 48	22. Approx. Date Work will Start	
19. Proposed Depth 2393'		
21. Elevations (DF, FT, GR, Etc.) 6340' GL		
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Melanie Thompson</u> Regulatory Compliance Associate III	Date <u>2/8/06</u>	

PERMIT NO.

APPROVAL DATE

APPROVED BY D. Manley

TITLE AFM

DATE 3/6/06

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.

This well is NOT in the HPA area.

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

This action is subject to review and approval pursuant to 43 CFR 3165.4

NMOCDB

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

DISTRICT II  
811 South First, Artesia, N.M. 88210

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

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045 33605		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 7138	*Property Name HUERFANITO UNIT		*Well Number 176
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP		*Elevation 6340'

<sup>10</sup> Surface Location

UL or lot no. N	Section 26	Township 27-N	Range 9-W	Lot Idn	Feet from the 1085'	North/South line SOUTH	Feet from the 1690'	East/West line WEST	County SAN JUAN
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no. N	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
*Dedicated Acres FC 320 ac W2			*Joint or Infill		*Consolidation Code		*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

16

USA SF-078356-A			
USA SF-080117		26	
1690'		1085'	
LAT: 36°38.5140' N. LONG: 107°45.6348' W. NAD 1927		S 89°-21'-45" E 5246.57'	

<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

*Patsy Clugston*  
Signature

Patsy Clugston  
Printed Name

Sr. Regulatory Specialist  
Title

01/25/06  
Date

<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.

Date of Survey 1-23-06

Signature and Seal of Professional Surveyor:

*Glen W. Russell*  
Certificate Number 15703

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

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

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

WELL API NO.

30-045- 33605

5. Indicate Type of Lease

STATE ☐

FEE ☐

6. State Oil & Gas Lease No.

SF-078356

7. Lease Name or Unit Agreement Name

Huerfanito Unit

8. Well Number

176

9. OGRID Number

14538

10. Pool name or Wildcat

Basin Fruitland Coal

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 N : 1085' feet from the North line and 1690' feet from the West line  
Section 26 Township 27N Range 9W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
6340'

Pit or Below-grade Tank Application

☐ or Closure ☐

Pit type New Drill Depth to Groundwater >100 Distance from nearest fresh water well

>1000' Distance from nearest surface water

Pit Liner Thickness:

12

mil

Below-Grade Tank:

Volume

bbbls;

Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

TEMPORARILY ABANDON ☐

PULL OR ALTER CASING ☐

PLUG AND ABANDON ☐

CHANGE PLANS ☐

MULTIPLE COMPL ☐

OTHER:

New Drill

☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

COMMENCE DRILLING OPNS. ☐

CASING/CEMENT JOB ☐

ALTERING CASING ☐

P AND A ☐

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, Lined:

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 will be a lined 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 lined 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

*Philana Thompson*

TITLE

Regulatory Associate II

DATE

2/3/2006

Type or print name

Philana Thompson

E-mail address:

pthompson@br-inc.com

Telephone No.

505-326-9530

For State Use Only

APPROVED BY

*[Signature]*

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 10

DATE

MAR 08 2006

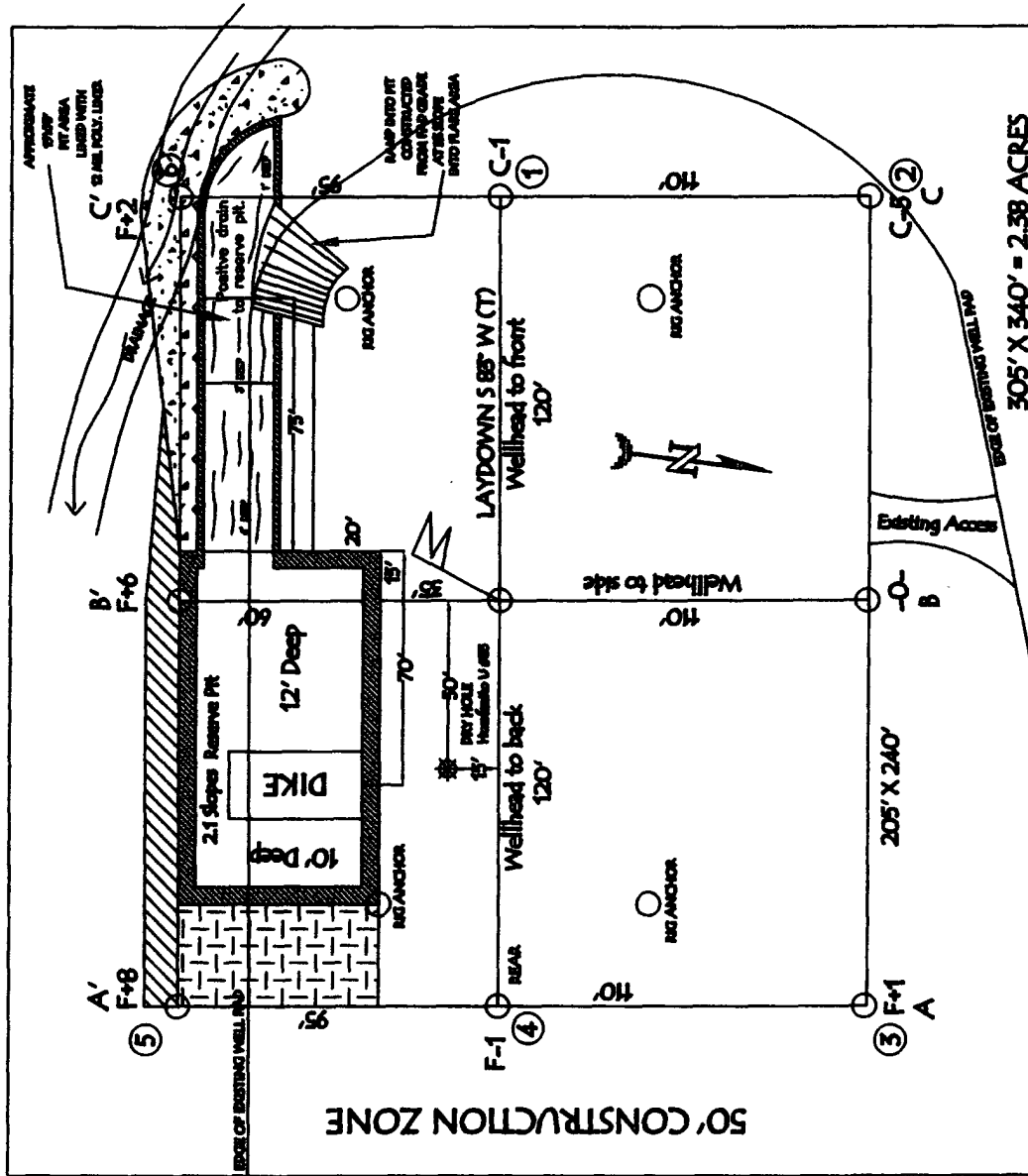
Conditions of Approval (if any):

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**NOTE: VECTOR SURVEYS 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.**

BURLINGTON RESOURCES OIL & GAS COMPANY LP  
HVERFANITO UNIT 176, 1085' FSL & 1690' FWL  
SECTION 26, T-27-N, R-9-W, NMPM, SAN JUAN COUNTY, NM  
GROUND ELEVATION: 6340', DATE: DECEMBER 14, 2005



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 5' WIDE AND 1' ABOVE SHALLOW SIDE).

NOTE: VECTOR SURVEYS 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.

LATITUDE: 36° 52.5140'N LONGITUDE: 107° 45.6348'W NAD27

**OPERATIONS PLAN**

**Well Name:** Huerfanito Unit #176  
**Location:** Unit N (SESW) 1085' FSL & 1690' FWL, Section 26, T27N, R9W  
 San Juan County, New Mexico  
 Latitude 36° 32.5140'N; Longitude 107° 45.6348'W  
**Formation:** Basin Fruitland Coal  
**Elevation:** 6340' GR

<b>Formation:</b>	<b>Top</b>	<b>Bottom</b>	<b>Contents</b>
Surface	San Jose		
Ojo Alamo	1336'		
Kirtland	1468'	2048'	gas
T/Fruitland	2048'		gas
B/Fruitland	2191'		gas
Pictured Cliffs	2193'		
<b>Total Depth</b>	<b>2393'</b>		

**Note:** The Total Depth for this well is into the Pictured Cliffs interval, but currently only have plans to complete the Fruitland Coal interval. We could in the near future perforate/stimulate the Pictured Cliffs interval, but only would once Regulatory approval was asked for and received.

**Logging Program:** None

**Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis. Fluid Loss</u>
0- 120'	Spud/Air/Air Mist	8.4-8.9	40-50 no control
120-2393'	Non-dispersed	8.4-9.5	30-60 no control

**Casing Program:**

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
8 $\frac{3}{4}$ "	0 - 120'	7"	20.0#	J-55
6 $\frac{1}{4}$ "	0 - 2393'	4 1/2"	10.5#	J/K-55

**Tubing Program:**

0 - 2393'	2 3/8"	4.7#	J-55
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**Float Equipment:** 7" surface casing - guide shoe. Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - float shoe and float collar on bottom. Centralizers run every third joint above shoe to the base of the Ojo Alamo @ 1468'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1468'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

**Wellhead Equipment:** 7" x 4 1/2" x 2 3/8" x 11" 2000 psi xmas tree assembly.

February 6, 2006

**Cementing:**

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

7" surface casing - Cement with 42 sx Type III cement with 0.25 pps Celloflake, 3% CaCl. (54cu ft of slurry @ 1.28 yield). 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. **WOC until cement establishes 250 psi compressive strength prior to NU of BOPE.**

4 1/2" production casing - Cement with 115sx (244cu ft of slurry @ 2.13 yield) Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack celloflake, 0.4% FL-52, & 0.4% SMS. Tail with 90sx (124cu ft of slurry @ 1.38 yield) Type III cmt with 1% calcium chloride, 1/4#/sack Celloflake and 0.2% FL-52. Total of 368 cf - 50% excess to circulate to surface.

**BOP and tests:**

Surface to TD - 11" 2000 psi (minimum double gate BOP stack (Reference Figure #1 and #2). Prior to drilling out surface casing, test ~~rams~~ <sup>BOPE</sup> to 600 psi/30 min.

Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 1500 psi/30 min.

From surface to TD - choke manifold (Reference Figure #3).

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

**Additional information:**

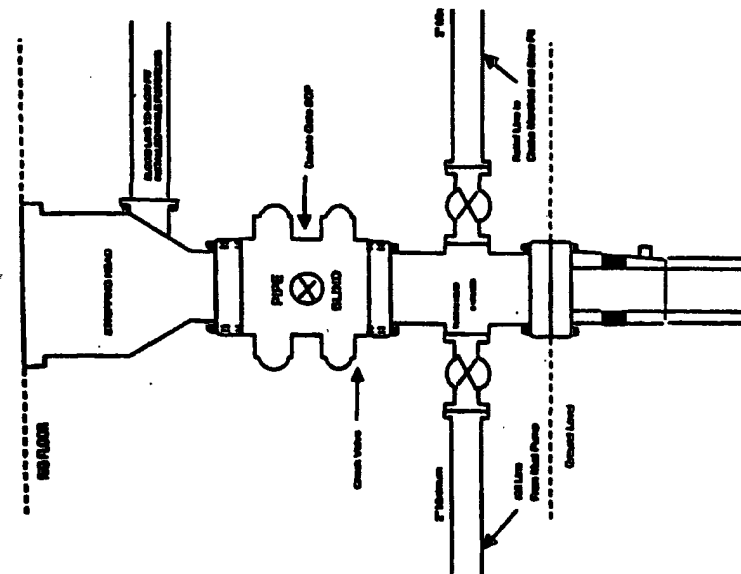
- \* The Fruitland Coal formation will be completed.
- \* Anticipated pore pressure for the Fruitland is between 600 - 700 psi.
- \* This gas is dedicated.
- \* The West/2 of section 26 is dedicated to the Fruitland Coal.
- \* New casing will be utilized.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

Drilling Engineer 

2/7/06  
Date

# BURLINGTON RESOURCES

Completion/Workover Rig  
BOP Configuration  
2,000 psi System



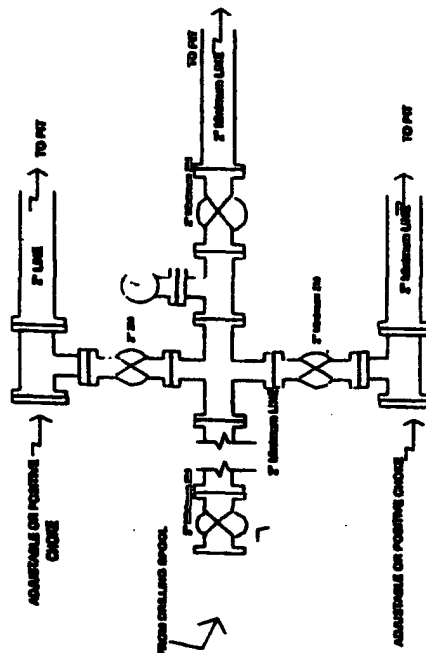
Minimum BOP installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with tilted and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 800 psi stripping head.

Figure #2

4-20-01

# BURLINGTON RESOURCES

Drilling Rig  
Choke Manifold Configuration  
2000 psi System



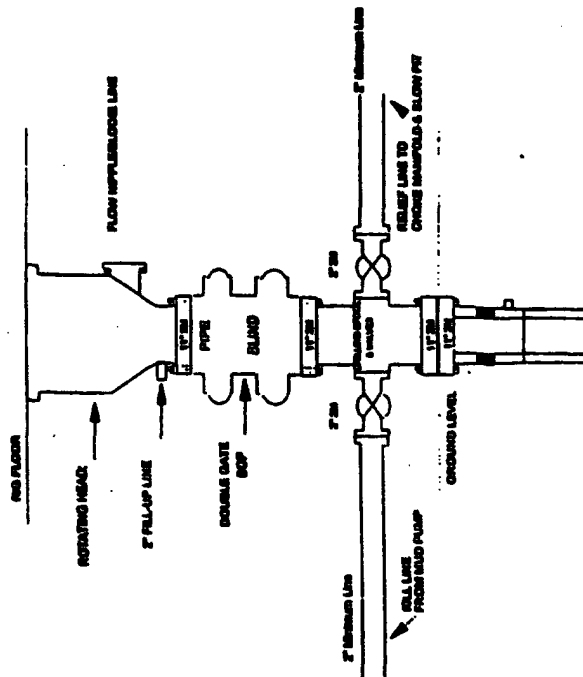
Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

# Burlington Resources

Drilling Rig  
2000 psi System



BOP installation from Surface Casing Point to Total Depth. 1 1/2" Bore BOP minimum 2000 psi working pressure. BOP to be equipped with blind rams and pipe rams. A stripping head on top of ram preventers. All BOP equipment is 2,000 psi working pressure.

Figure #1