

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 NO-G-0651-1131 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe Navajo
2. Operator <b>BURLINGTON RESOURCES</b> Oil & Gas Company	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 Huerfanito Unit 9. Well Number #552
4. Location of Well 1965' FNL, 1060' FEL Latitude 36° 33.7' N, Longitude 107° 44.6' W	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 24, T-27-N, R-9-W API # 30-045-30940
14. Distance in Miles from Nearest Town 15 miles from Blanco	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1060'	
16. Acres in Lease	17. Acres Assigned to Well 320 N/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1800'	
19. Proposed Depth 2236'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 5986' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	DRILLING OPERATIONS AUTHORIZED AND SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"
24. Authorized by: <u>Reggie Carr</u> Regulatory/Compliance Supervisor	Date <u>4-28-01</u>

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY /s/ David J. Mankiewicz TITLE \_\_\_\_\_ DATE MAR 27 2003

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

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.

District I  
PO Box 1980, Hobbs, NM 88241-1980

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

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102

Revised February 21, 1994

Submit to Appropriate District Office  
Instructions on back

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

070 February 2001

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-30940		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 7138	*Property Name HUERFANITO UNIT		*Well Number 552
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		*Elevation 5986'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	24	27N	9W		1965	NORTH	1060	EAST	SAN JUAN

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres N/320		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> 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

<div><p><sup>15</sup></p><p>2567.40'</p><p>USA SF-078356</p><p>MAR 2003</p><p>24</p><p>5286.60'</p><p>5261.52'</p></div>	<div><p>2652.54'</p><p>NAVAJO</p><p>NO-G-0651-1131</p><p>1580'</p><p>1060'</p><p>LAT: 36°33.7' N</p><p>LONG: 107°44.0' W</p><p>1965'</p><p>2661.12'</p><p>690'</p><p>2640.00'</p></div>	<div><p><sup>17</sup> OPERATOR CERTIFICATION</p><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p><p><i>Peggy Cole</i></p><p>Signature</p><p>Peggy Cole</p><p>Printed Name</p><p>Regulatory Supervisor</p><p>Title</p><p>9-28-01</p><p>Date</p></div>

## OPERATIONS PLAN

**Well Name:** Huerfanito Unit #552  
**Location:** 1965' FNL, 1060' FEL Section 24, T-27-N, R-9-W  
Latitude 36° 33.7' N, Longitude 107° 44.0' W  
San Juan County, NM  
**Formation:** Basin Fruitland Coal  
**Elevation:** 5986' GL

Formation:	Top	Bottom	Contents
Surface	San Jose	1094'	
Ojo Alamo	1094'	1216'	aquifer
Kirtland	1216'	1777'	gas
Fruitland	1777'	1988'	gas
Pictured Cliffs	1988'	2236'	gas
Total Depth	2236'		

**Logging Program:** Open hole: Platform Express TD-surface  
Cased hole: CBL/GR/CCL  
**Mudlog:** 2 Man unit form Ojo Alamo to TD  
**Coring Program:** none

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120-2236'	Non-dispersed	8.4-9.5	30-60	no control

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

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
9 7/8"	0' - 120'	7"	20.0#	J-55
6 1/4"	0' - 2236'	4 1/2"	10.5#	K-55

**Tubing Program:**

0' - 2236'	2 3/8"	4.7#	J-55
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**Float Equipment:** 7" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - guide shoe and self-fill float collar. Three centralizers run every other joint above shoe. Seven centralizers run every 3<sup>rd</sup> joint to the base of the Ojo Alamo @ 1216'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1216'. 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 screw on independent wellhead.

**Cementing:**

7" surface casing - cement with 27 sx Class A, B Portland Type I, II cement (32 cu.ft. of slurry, bring cement to surface through 3/4" line). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

4 1/2" production casing - Lead w/157 sx Premium Lite cement w/3% calcium chloride, 1/4 pps flocele, 5 pps LCM-1, 0.4% FL-52, and 0.4% SMS. Tail w/90 sx Type III cement w/1% calcium chloride, 1/4 pps flocele, and 0.2% FL-52 (459 cu.ft. of slurry, 100% excess to circulate to surface.)

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

**BOP and tests:**

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

Completion - 7 1/16" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 2000 psi/15 min.

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

Pipe rams will be actuated to 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.

**BOP and tests (If a coiled tubing drilling (CTD) rig is utilized.):**

Surface to TD: 7-1/16" 2000 psi (minimum) Torus annular BOP stack (Reference Figure #1b). Prior to drilling out surface casing, test annular BOP to 600psi/30 min.

Completion: 7-1/16" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test blind rams and casing to 1500 psi for 30 minutes; all pipe rams and casing to 1500 psi for 30 minutes each. **Same as in original APD operations plan.**

From surface to TD: choke manifold (Reference Figure #3). **Same as in original APD operations plan.**

The annular BOP will be actuated to close on drill pipe (coiled tubing) at least once each day and to close on open hole once each trip to test proper functioning.

**Additional information:**

- \* The Fruitland Coal formation will be completed and commingled.
- \* Anticipated pore pressure for the Fruitland is 570 psi.
- \* This gas is dedicated.
- \* The north half of Section 24 is dedicated to the Fruitland Coal.

Eric J. Giles  
Drilling Engineer

10/1/01  
Date