

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
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES 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 40R
4. Location of Well 1560' FSL, 945' FEL Latitude 36° 32.6'N, Longitude 107° 46.2'W	10. Field, Pool, Wildcat Ballard Pictured Cliffs 11. Sec., Twn, Rge, Mer. (NMPM) I Sec.27, T-27-N, R-9-W API # 30-045- 30863
14. Distance in Miles from Nearest Town 29 miles from Bloomfield	12. County San Juan
15. Distance from Proposed Location to Nearest Property or Lease Line 945'	13. State NM
16. Acres in Lease	17. Acres Assigned to Well 160 SE/4
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 2000'	
19. Proposed Depth 2443'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6394' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Peggy Cole</u> Regulatory/Compliance Supervisor	Date <u>9.28.01</u>

PERMIT NO. _____ APPROVAL DATE 11/14/01
APPROVED BY DJ Monticinos TITLE AEM DATE 11/14/01

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.

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-30863		² Pool Code 71439	³ Pool Name Ballard Pictured Cliffs
⁴ Property Code 7138	⁵ Property Name HUERFANITO UNIT		⁶ Well Number 40R
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		⁹ Elevation 6394'

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
I	27	27N	9W		1560	SOUTH	945	EAST	SAN JUAN

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

¹² Dedicated Acres 160 SE/4	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

<p>¹⁶</p>	<p>¹⁷ 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> Signature Peggy Cole Printed Name Regulatory Supervisor Title 9.28.01 Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>MAY 24, 2001 Date of Survey</p> <p>Signature and Seal of Professional Surveyor <i>Neale C. Edwards</i> NEALE C. EDWARDS NEW MEXICO 6857 Certificate No. PROFESSIONAL SURVEYOR 6857</p>

OPERATIONS PLAN

Well Name: Huerfanito Unit #40R
Location: 1560' FSL, 945' FEL, Section 27, T-27-N, R-9-W
San Juan County, New Mexico
Latitude 36° 32.6'N, Longitude 107° 46.2'W
Formation: Ballard Pictured Cliffs
Elevation: 6394'GR

Formation:	Top	Bottom	Contents
Surface	San Jose	1372'	
Ojo Alamo	1372'	1516'	aquifer
Kirtland	1516'	1849'	gas
Fruitland	1849'	2243'	gas
Pictured Cliffs	2243'		gas
Total Depth	2443'		

Logging Program: cased hole - CBL/GR/CCL TD to surface

Coring Program: None

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud	8.4-9.0	40-50	no control
120-2443'	FW	8.4-9.0	32-45	no control

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

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
9 7/8"	0 - 120'	7"	20#	J-55
6 1/4"	0 - 2443'	2 7/8"	6.5#	J-55

Float Equipment: 7" surface casing - saw tooth guide shoe.
Centralizers will be run in accordance with Onshore Order #2.

2 7/8" production casing - float shoe on bottom. Three centralizers run every other joint above shoe. Seven centralizers run every 3rd joint to the base of the Ojo Alamo @ 1516'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1516'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 7" x 2 7/8" 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.

2 7/8" production casing - Lead w/327 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 (821 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 Pictured Cliffs formation will be completed.
- * Anticipated pore pressure for the Pictured Cliffs is 500 psi.
- * This gas is dedicated.
- * The southeast quarter of Section 27 is dedicated to the Pictured Cliffs.

Eric J. Giles
Drilling Engineer

10/1/01
Date