

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 NM-03491 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 #22R	
4. Location of Well 1620' FNL, 1010' FEL Latitude 36° 31.2', Longitude 107° 47.3'	10. Field, Pool, Wildcat H Ballard Pict'd Cliffs 11. Sec., Twn, Rge, Mer. (NMPM) H Sec. 4, T-26-N, R-9-W API # 30-045-30773	
14. Distance in Miles from Nearest Town 25 miles from Bloomfield, NM	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1010'		
16. Acres in Lease	17. Acres Assigned to Well 161.12 NE/4	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 682'		
19. Proposed Depth 2380'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6425' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>[Signature]</u> Regulatory/Compliance Supervisor	Date <u>7-11-01</u>	

PERMIT NO. _____ APPROVAL DATE 11/14/01
APPROVED BY [Signature] TITLE AFM 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.

This action is subject to technical and procedural review pursuant to 43 CFR 3160.3 and appeal pursuant to 43 CFR 3160.4.

NOV 2001

DISTRICT I
325 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

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

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

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045- 30793		² Pool Code 71439	³ Pool Name Ballard Pictured Cliffs
⁴ Property Code 7138	⁵ Property Name HUERFANITO UNIT		⁶ Well Number 22R
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS INC.		⁹ Elevation 6425

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
H	4	26-N	9-W		1620	NORTH	1010	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

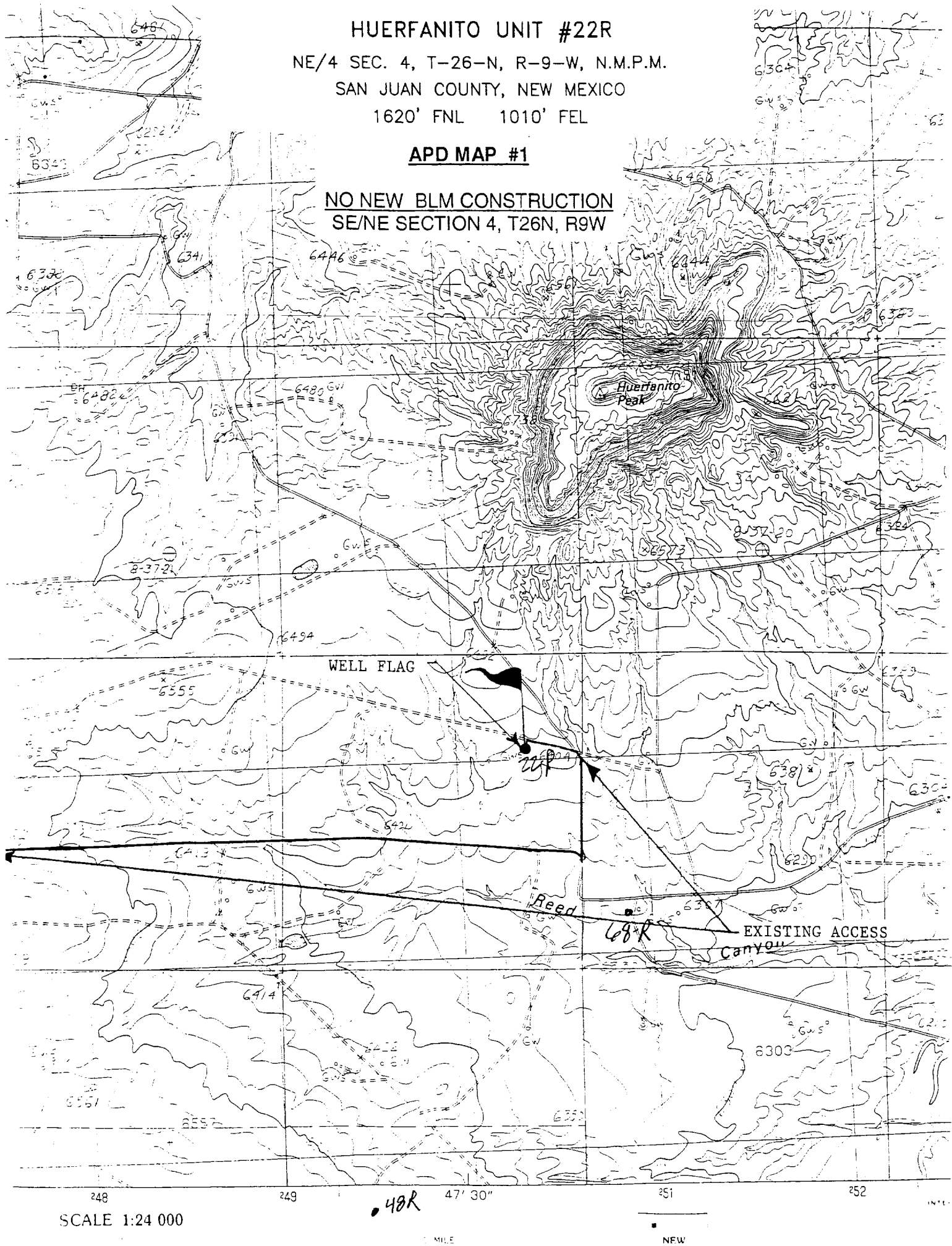
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres PC 161.12 NE/4					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.

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 LOT 4	¹⁶ LOT 3	¹⁶ LOT 2	¹⁶ LOT 1	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: <u>Peggy Cole</u> Printed Name: <u>Peggy Cole</u> Title: <u>Regulatory Supervisor</u> Date: <u>7-11-01</u>	
				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. Date of Survey: <u>5-11-01</u> Signature and Seal of Professional Surveyor: <u>[Signature]</u> Certificate Number: <u>8894</u>	

NE/4 SEC. 4, T-26-N, R-9-W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO
1620' FNL 1010' FEL

NO NEW BLM CONSTRUCTION
SE/NE SECTION 4, T26N, R9W



OPERATIONS PLAN

Well Name: Huerfanito Unit #22R
Location: 1620' FNL, 1010' FEL, Section 4, T-26-N, R-9-W
San Juan County, New Mexico
Latitude 36° 31.2', Longitude 107° 47.3'
Formation: Ballard Pictured Cliffs
Elevation: 6425' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	1265'	
Ojo Alamo	1265'	1436'	aquifer
Kirtland	1436'	1959'	gas
Fruitland	1959'	2172'	gas
Pictured Cliffs	2172'		gas
Total Depth	2380'		

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
120-2380'	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 - 2380'	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 @ 1436'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1436'. 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/317 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 (800 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 northeast quarter of Section 4 is dedicated to the Pictured Cliffs.


Drilling Engineer

7/13/01
Date