UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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070 Farmington, NM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a.	**Type of Work** DRILL	5.	**Lease Number** SF-078135 **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** **9. Well Number** 87M
4.	**Location of Well** 1360' FSL, 2265' FEL Latitude 36° 30.8, Longitude 107° 44.4	10.	**Field, Pool, Wildcat** Blanco MV/Basin DK **11. Sec., Twn, Rge, Mer. (NMPM)** Sec. 1, T-26-N, R-9-W **API #** 30-045- 31840
14.	**Distance in Miles from Nearest Town** 15 Miles Huerfanito Trading Post	12.	**County** San Juan **13. State** NM
15.	**Distance from Proposed Location to Nearest Property or Lease Line** 1360'		
16.	**Acres in Lease**	17.	**Acres Assigned to Well** 320.06 E/2 MV S/2 DK
18.	**Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease** 150'		
19.	**Proposed Depth** 6660	20.	**Rotary or Cable Tools** Rotary
21.	**Elevations (DF, FT, GR, Etc.)** 6163 GR	22.	**Approx. Date Work will Start**
23.	**Proposed Casing and Cementing Program** See Operations Plan attached		

24. **Authorized by:** Peggy Cole — Regulatory/Compliance Supervisor — Date 8-11-03

PERMIT NO. _____ **APPROVAL DATE** _____

APPROVED BY /s/ David J. Mankiewicz **TITLE** _____ **DATE** JAN 13 2004

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.

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

NMOCD

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

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	[2] Pool Code	[3] Pool Name
30-045 ~~30309~~ 31840	72319/71599	Blanco Mesaverde/Basin Dakota

[4] Property Code	[5] Property Name	[6] Well Number
7138	HUERFANITO UNIT	87M

[7] OGRID No.	[8] Operator Name	[9] Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	6163'

[10] Surface Location

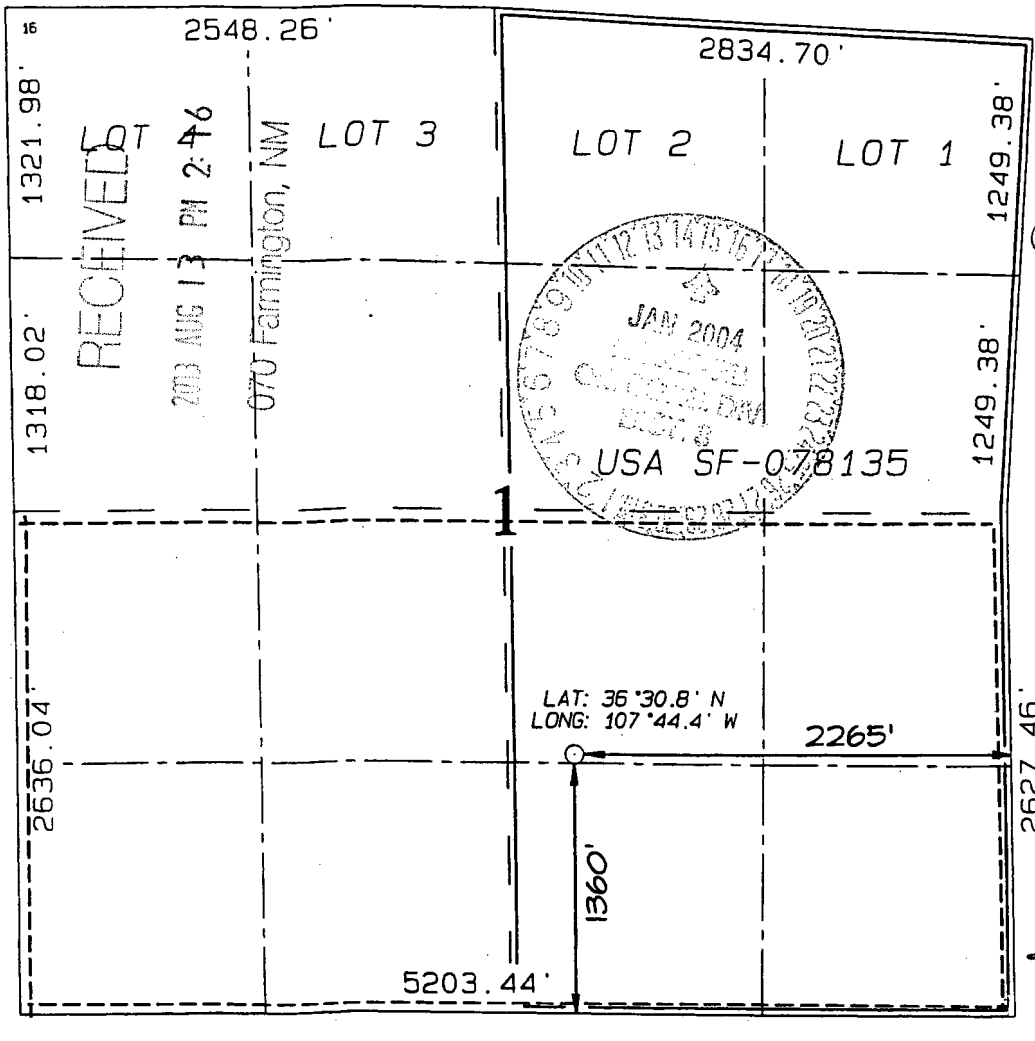
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	1	26N	9W		1360	SOUTH	2265	EAST	SAN JUAN

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
S/320 - DK E/320.06 - MV			

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



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Peggy Cole
Signature

Peggy Cole
Printed Name

Regulatory Supervisor
Title

8-11-03
Date

[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.

MARCH 29, 2000
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number 6857

OPERATIONS PLAN

Well Name: Huerfanito Unit 87M
Location: 1360' FSL, 2265' FEL, Sec.1, T-26-N, R-9-W
San Juan County, NM
Latitude 36° 30.8, Longitude 107° 44.4'
Formation: Blanco Mesaverde/Basin Dakota
Elevation: 6163' Gr

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	1097'	
Ojo Alamo	1097'	1220'	aquifer
Kirtland	1220''	1751'	gas
Fruitland	1751'	1907'	
Pictured Cliffs	1907'	2017'	gas
Lewis	2017'	2372'	gas
Huerfanito Bentonite	2372'	2802'	gas
Chacra	2802'	3462'	gas
Massive Cliff House	3462'	3552'	gas
Menefee	3552'	4262'	gas
Massive Point Lookout	4262'	4549'	gas
Mancos Shale	4549'	5376'	gas
Gallup	5376'	6207'	gas
Greenhorn	6207'	6258'	gas
Graneros	6258'	6293'	gas
Dakota	6293'	6567'	gas
Morrison	6607'	6660'	
TD	**6660'**		

Logging Program:
Open hole logs at Total Depth: Platform Express TD to 5300' and 4700' to 2000', GR/DIL: TD to surface
Cased hole logs - GR/CBL TD to surface
Cores - none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 300'	Spud	8.4-9.0	40-50	no control
300'-6660'	LSND	8.4-9.0	30-60	no control

Pit levels will be visually monitored to detect gain or loss of fluid control.

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

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 300'	8 5/8"	24.0#	WC-50
7 7/8"	0' - 6660'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 6660'	2 3/8"	4.7#	J-55 EUE

BOP Specifications, Wellhead and Tests:
Surface to TD -
11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

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.

Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Wellhead -

8 5/8" 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 drilling crew.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

8 5/8" surface casing -
Cement to surface w/263 sx Type III cement w/3% calcium chloride and 1/4#/sx cellophane flakes (371 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs prior to drilling out surface casing. 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.

4 1/2" Production Casing -
Lead w/ 302 sks Premium Lite w/ 3% calcium chloride, 0.25 pps cello-flake, 5 pps LCM-1, 0.4% fluid loss additive and 0.4% sodium metasilicate. Tail w/ 662 sks Premium Lite HS FM w/ 0.25 pps cello-flake, 0.3% CD-32, 6.25 pps LCM-1 and 1% fluid loss additive (1955 cu ft of slurry, 30% excess to circulate to surface). WOC a minimum of 18 hrs prior to completing.

4 1/2" production alternative Two Stage:
Production Casing Alternative Two-Stage: Stage collar at 4200'. First Stage: Tail w/ 359 sks Premium Lite HS FM w/ 0.25 pps cello-flake, 0.3% CD-32, 6.25 pps LCM-1 and 1% fluid loss additive. Second Stage: Lead w/ 302 sks Premium Lite w/ 3% calcium chloride, 0.25 pps cello-flake, 5 pps LCM-1, 0.4% fluid loss additive and 0.4% sodium metasilicate. Tail w/ 303 sks Premium Lite HS FM w/ 0.25 pps cello-flake, 0.3% CD-32, 6.25 pps LCM-1 and 1% fluid loss additive (1955 cu ft of slurry, 30% excess to circulate to surface).

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

Float shoe on bottom. Seven centralizers run every other joint above shoe. Centralizers - one every 4th joint to the base of the Ojo Alamo @ 1220'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1220'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.