

# APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a.	Type of Work DRILL	5.	Lease Number I-149-IND-8473 Unit Reporting Number
1b.	Type of Well GAS	6.	If Indian, All. or Tribe Navajo Tribe
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
4.	Location of Well 1245' FSL, 740' FWL Latitude 36° 32.5', Longitude 107° 44.8'	9.	Well Number #46R
14.	Distance in Miles from Nearest Town 30 miles from P.O. in Bloomfield, NM	10.	Field, Pool, Wildcat Blanco Pict'd Cliffs South
15.	Distance from Proposed Location to Nearest Property or Lease Line 740'	11.	Sec., Twn, Rge, Mer. (NMPM) M Sec. 25, T-27-N, R-9-W
16.	Acres in Lease	API #	30-045-30537
18.	Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 3552'	12.	County San Juan
19.	Proposed Depth 2325'	13.	State NM
20.	Rotary or Cable Tools Rotary	17.	Acres Assigned to Well 160 SW/4
21.	Elevations (DF, FT, GR, Etc.) 6257' GR	22.	Approx. Date Work will Start
23.	Proposed Casing and Cementing Program See Operations Plan attached	<b>DRILLING OPERATIONS AUTHORIZED</b> <b>SUBJECT TO COMPLETION OF</b> <b>"GENERAL FILL"</b>	
24.	Authorized by: <i>[Signature]</i> Regulatory/Compliance Supervisor	Date	1-9-01

PERMIT NO.                      APPROVAL DATE                       
APPROVED BY /s/ Jim Lovato TITLE                      DATE JUL 31

### 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

NOTE: This format is issued in lieu of 5010-107, DEW Form 1000-107  
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.

NMOCB

DISTRICT I  
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, N.M. 88211-0719

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

P.O. 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

<sup>1</sup> API Number 30-045- <b>30537</b>	<sup>2</sup> Pool Code 72439	<sup>3</sup> Pool Name Blanco P.C. South
<sup>4</sup> Property Code 7138	<sup>5</sup> Property Name HUERFANITO UNIT	<sup>6</sup> Well Number 46R
<sup>7</sup> GRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS INC.	<sup>9</sup> Elevation 6257'

<sup>10</sup>Surface Location

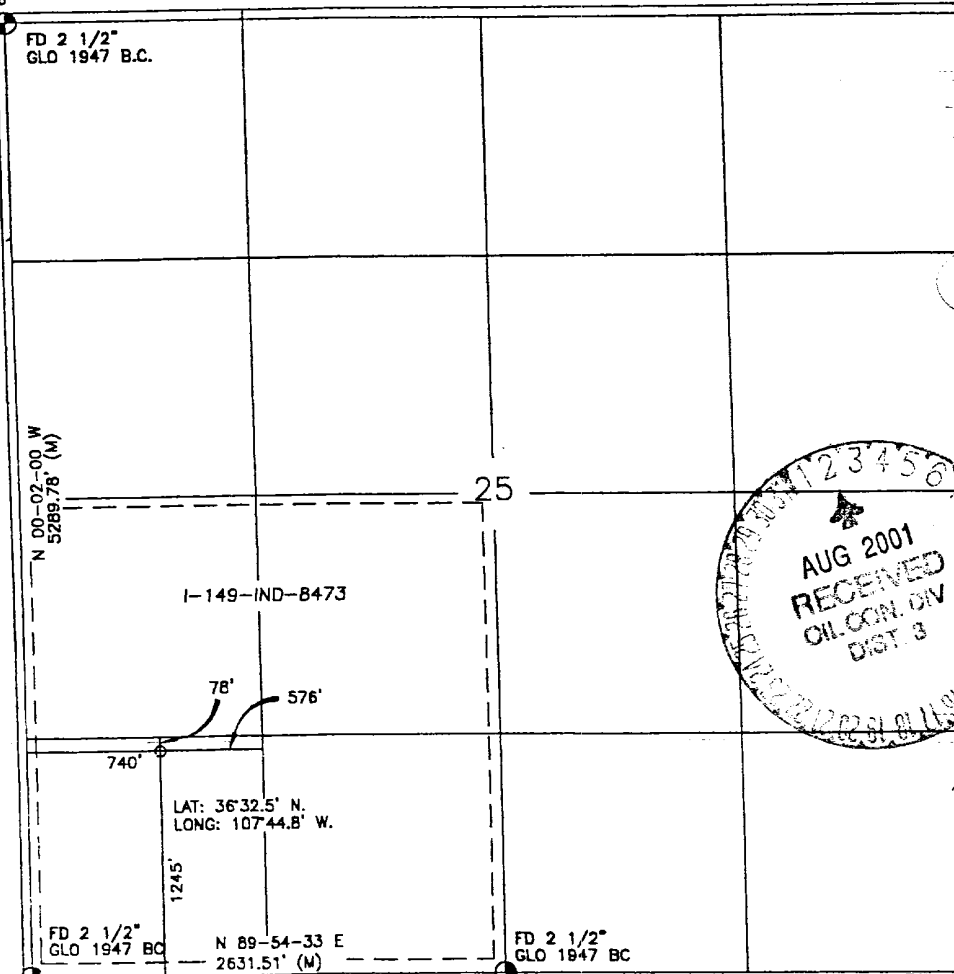
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	25	27-N	9-W		1245	SOUTH	740	WEST	SAN JUAN

<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 SW/ 160			<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

16



17 OPERATOR CERTIFICATION

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

Signature

Peggy Cole

Printed Name

Regulatory Supervisor

Title

Date

1-9-01

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

Signature and Seal of Professional Surveyor

8894

Certificate Number

## OPERATIONS PLAN

**Well Name:** Huerfanito Unit #46R  
**Location:** 1245' FSL, 740' FWL, Section 25, T-27-N, R-9-W  
San Juan County, New Mexico  
Latitude 36° 32.5', Longitude 107° 44.8'  
**Formation:** Blanco Pictured Cliffs South  
**Elevation:** 6257' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	1291'	
Ojo Alamo	1291'	1413'	aquifer
Kirtland	1413'	1769'	gas
Fruitland	1769'	2125'	gas
Pictured Cliffs	2125'		gas
<b>Total Depth</b>	<b>2325'</b>		

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

**Coring Program:** None

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120-2325'	FW	8.4-9.0	32-45	no control

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

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
8 3/4"	0 - 120'	7"	20#	J-55
6 1/4"	0 - 2325'	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 @ 1413'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1413'. 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 46 sx Class "H" cement with 1/4# flocele/sx and 3% calcium chloride (54 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

2 7/8" production casing - Lead w/258 sx Class "G" TXI lightweight cement w/2.5% sodium metasilicate, 1/2 pps flocele, 10 pps gilsonite, 2% calcium chloride, and 0.2% antifoam agent. Tail w/90 sx 50/50 Class "G" Poz w/2% gel, 2% calcium chloride, 1/4 pps flocele, 5 pps gilsonite, and 0.1% antifoam agent (781 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.

# BURLINGTON RESOURCES OIL & GAS INC.

## HUERFANITO UNIT #46R

SW/4 SEC.25, T-27-N, R-9-W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO

1245' FSL

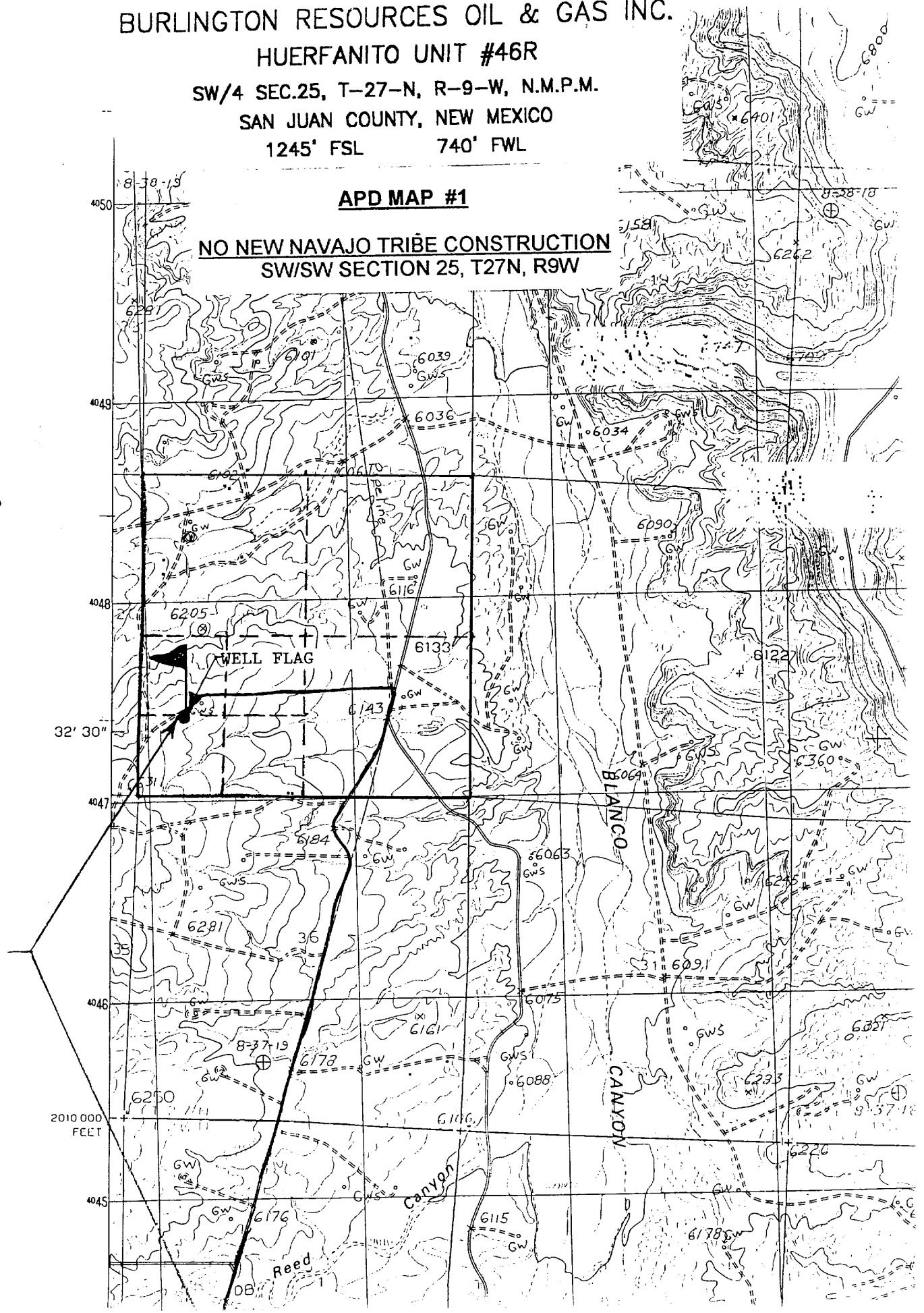
740' FWL

### APD MAP #1

**NO NEW NAVAJO TRIBE CONSTRUCTION**  
**SW/SW SECTION 25, T27N, R9W**

EXISTING  
ACCESS

2010 000  
FEET



**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.

**Additional information:**

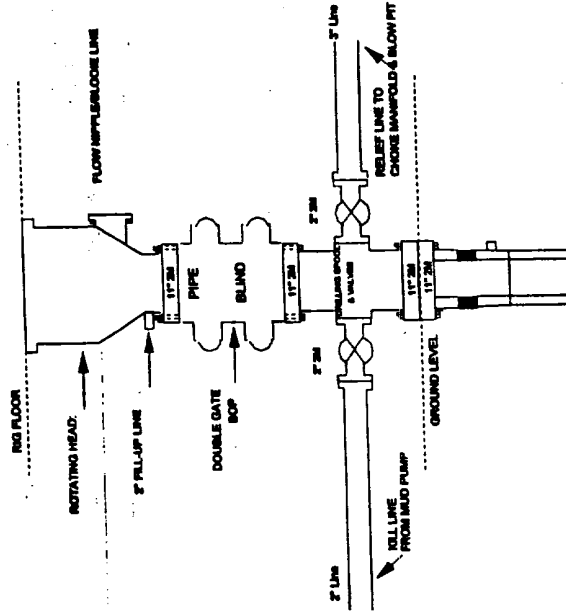
- \* The Pictured Cliffs formation will be completed.
- \* Anticipated pore pressure for the Pictured Cliffs is 500 psi.
- \* This gas is dedicated.
- \* The southwest quarter of Section 25 is dedicated to the Pictured Cliffs.

Er J. Diles  
Drilling Engineer

1/12/01  
Date

# Burlington Resources

## Drilling Rig 2000 psi System

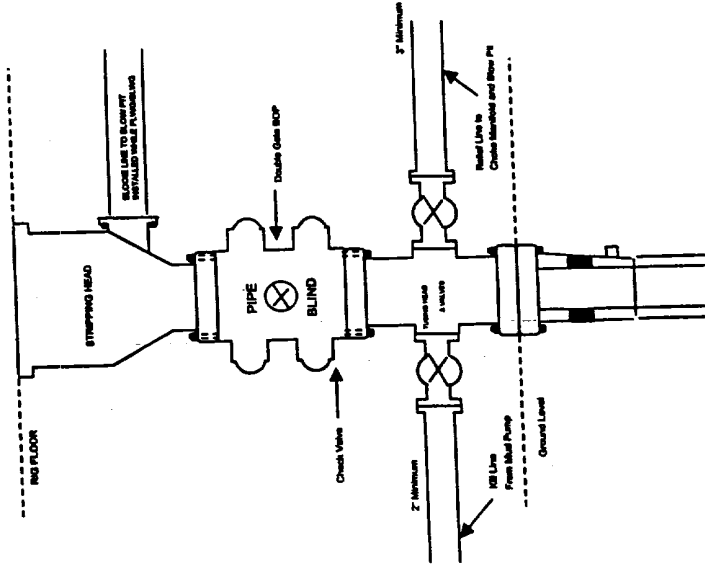


BOP Installation from Surface Casing Point to Total Depth. 1 1/2" Bore 10" Nominal, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A stripping head on top of ram preventers. All BOP equipment is 2,000 psi working pressure

Figure #1

# BURLINGTON RESOURCES

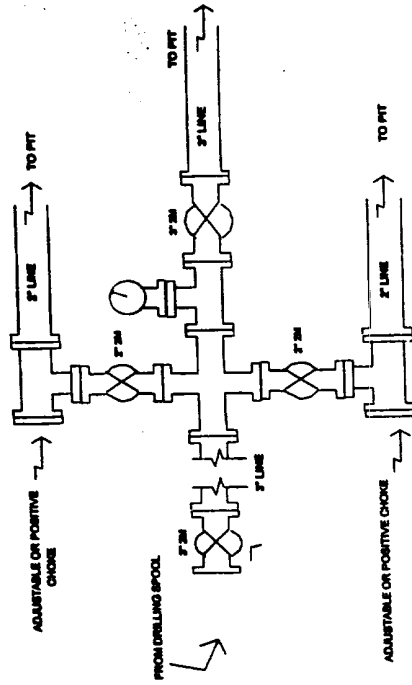
## Completion/Workover Rig BOP Configuration 2,000 psi System



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

Figure #2

## 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