

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
2004 APR 16 PM 1:56
070 Farmington, NM

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 #23R	
4. Location of Well 1995' FNL, 1660' FWL Latitude 36° 31.1409'N, Longitude 107° 47.7921'W	10. Field, Pool, Wildcat Ballard Pictured Cliffs 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 4, T26N, R9W API # 30-045- 32226	
14. Distance in Miles from Nearest Town 24.4 miles intersection Hwy 550 & 64	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1660'		
16. Acres in Lease	17. Acres Assigned to Well PC 161.44 NW	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 975'		
19. Proposed Depth 2387'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6435' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u><i>John Clark</i></u> Regulatory Specialist	<u>2-9-04</u> Date	

PERMIT NO. **David J. Markiewicz**

APPROVAL DATE

APPROVED BY

TITLE

DATE **APR 20 2004**

Archaeological Report attached

Threatened and Endangered Species Report attached

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.

NO HPA NOTIFICATION REQUIRED UNDER ORDER R-8768F.

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

NMCCP

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
1625 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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

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

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-0395-32226	*Pool Code 72359	*Pool Name Ballard Pictured Cliffs
*Property Code 7138	*Property Name HUERFANITO UNIT	*Well Number 23R
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	*Elevation 6435'

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
F	4	26-N	9-W		1995'	NORTH	1660'	WEST	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
Dedicated Acres PC NW/161.44					Joint or Infill		Consolidation Code		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

FD 2 1/2" G.L.O. BC 1947	N 89-54-13 E 2621.53' (M)	FD 2 1/2" G.L.O. BC 1947
LOT 4	LOT 3	LOT 2
1995'		
USA NM-03491		
1660'	LAT: 36°31.1409' N. (NAD 27) LONG: 107°47.7921' W. (NAD 27)	
4		
FD 2 1/2" G.L.O. BC 1947		

17 OPERATOR CERTIFICATION

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

Joni Clark
Signature

Joni Clark

Printed Name

Regulatory Specialist

Title

1-30-04

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.

Date of Survey

Signature and Seal of Professional Surveyor



Certificate Number

OPERATIONS PLAN

Well Name: Huerfanito Unit #23R
Location: 1995' FNL, 1660' FWL, Section 4, T-26-N, R-9-W
San Juan County, New Mexico
Latitude 36° 31.14'N, Longitude 107° 47.79'W
Formation: Ballard Pictured Cliffs
Elevation: 6435' GL

Formation:	Top	Bottom	Contents
Surface	San Jose	1278'	
Ojo Alamo	1278'	1444'	aquifer
Kirtland	1444'	2030'	gas
Fruitland Coal	2030'	2187'	gas
Pictured Cliffs	2187'	2267'	gas
Lewis	2267'		
Total Depth	2387'		

Logging Program:

Open hole - none
cased hole - CBL-CCL-GR 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
120-2387'	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"	20.0#	J-55
6 1/4"	0 - 2387'	4 1/2"	10.5#	J-55

Tubing Program:

0'-2387'	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 - float shoe on bottom. Standard centralizers run every third joint above shoe to the base of the Ojo Alamo @ 1444'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1444'. 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" 2000 psi screw on independent wellhead.

Cementing:

7" surface casing pre-set drilled- cement with 34 sxs Type I, II w/ cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (Bring cement to surface). Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface.

7" surface casing conventionally drilled - cement with 42 sxs Type III cement with 0.25 pps Celloflake, 3% calcium chloride. (54 cu ft-200% excess, bring cement to surface). Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60 degrees F. prior to nipple up of BOPE. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - Lead w/112 sx Premium Lite cement w/3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sx Type III cement w/1% calcium chloride, 0.25 pps celloflake, and 0.2% fluid loss (364 cu.ft. of slurry, 50% 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 - 7 1/16" 2000 psi (minimum) single spherical annular BOP stack (Reference Figure #1). Prior to drilling out surface casing, test BOP and casing to 400 psi/30 min.

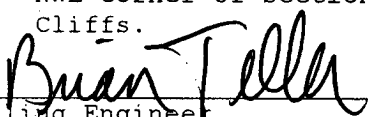
Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test BOP and casing to 2000 psi/15 min.

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

Pipe rams will be actuated at 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:

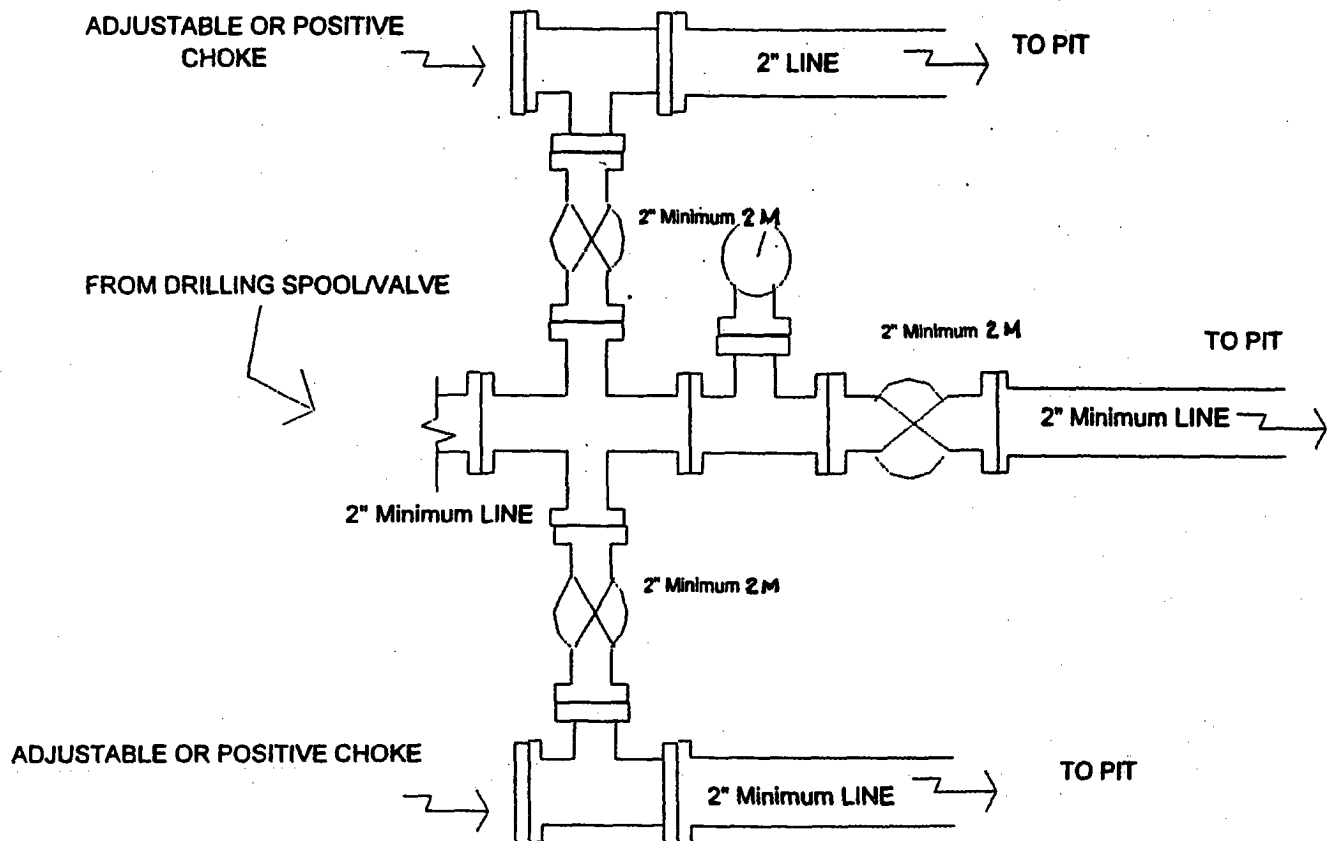
- * The Pictured Cliffs formation will be completed.
- * Anticipated pore pressure for the Pictured Cliffs is 500 psi.
- * This gas is dedicated.
- * NWE corner of Section 4 is dedicated to the Ballard Pictured Cliffs.


Drilling Engineer

2-25-04
Date

BURLINGTON RESOURCES

Drilling Rig Choke Manifold Configuration 2000 psi System



Choke manifold installation from Surface Casing
Point to Total Depth. 2,000 psi working pressure
equipment with two chokes.

Drilling Rig

2000 psi BOP System

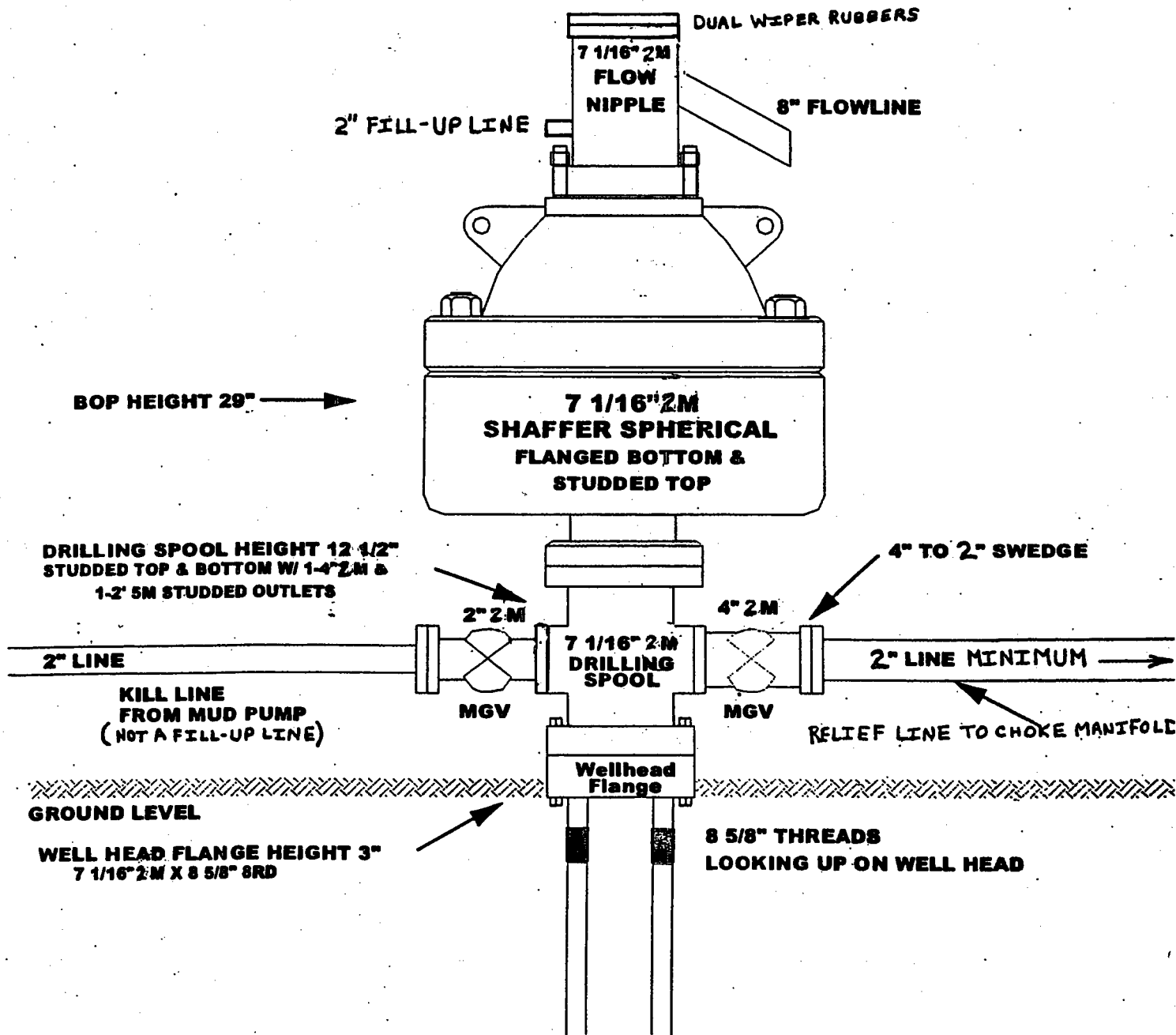
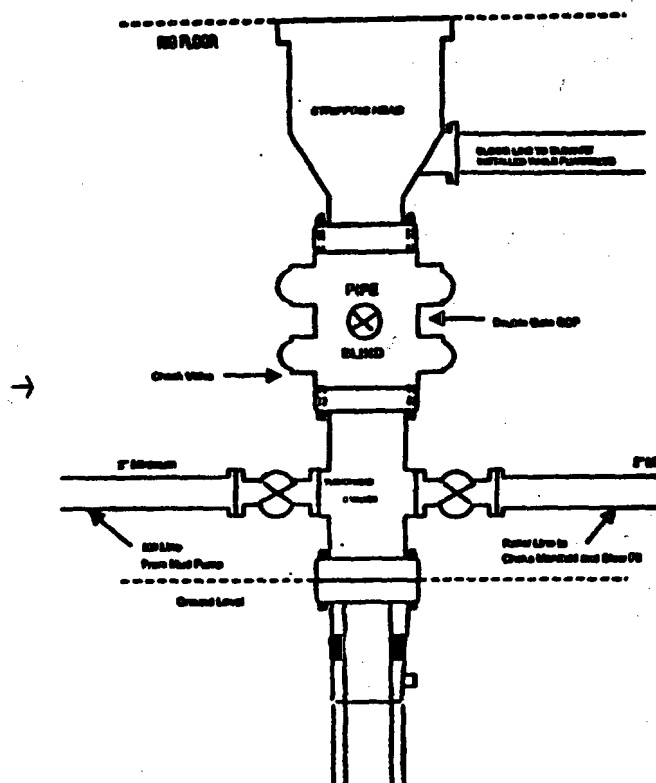


FIGURE 1

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 BOP equipment is 2000 psi working pressure or greater excluding 500 psi stripping head.

Figure #2

REVISION: REVISED CF PLAT PER TERRY LOWE BY: A.G. DATE: 1/28/04