

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2006 JUL 17 AM 5:48

1a. Type of Work DRILL	5. Lease Number Navajo 14-20-603-768 Unit Reporting Number 070 FARMINGTON NM
1b. Type of Well GAS	6. If Indian, All. or Tribe Navajo
2. Operator <b>BURLINGTON</b> RESOURCES Oil & Gas Company	7. Unit Agreement Name Navajo Indian RCVD NOV 29 '07 OIL CONS. DIV.
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name DIST. 3 9. Well Number 6S
4. Location of Well Unit D (NWNW), 1240' FNL, 660' FWL  Latitude 36° 31.2204 Longitude 107° 43.7421	10. Field, Pool, Wildcat Basin Fruitland Coal / Ballard Pictured Cliffs 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 6, T26N, R8W API # 30-045-33846
14. Distance in Miles from Nearest Town 30.8 miles to Bloomfield Post Office	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 660'	
16. Acres in Lease	17. Acres Assigned to Well 323.03 ac W2 FC 162.67 ac NW4 PC
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 583' - Navajo Indian #6	
19. Proposed Depth 2108'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6101'	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Joni Clark</u> Sr. Regulatory Specialist	Date <u>7/14/06</u>

PERMIT NO.

APPROVAL DATE

APPROVED BY [Signature]

TITLE AFM

DATE 11/27/07

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.

NOTIFY AZTEC OGD 24 HRS.

PRIOR TO CASING & CEMENT

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

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

DEC 13 2007 NMOCD

AV

AS



H<sub>2</sub>S POTENTIAL EXIST

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
1301 W. Grand Ave., Artesia, N.M. 88210

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

DISTRICT IV  
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102

Revised June 10, 2003

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 30-045-338410	<sup>2</sup> Pool Code 71629/71439	<sup>3</sup> Pool Name Basin Fruitland Coal/Ballard Pictured Cliffs
<sup>4</sup> Property Code 7349	<sup>5</sup> Property Name NAVAJO INDIAN	<sup>6</sup> Well Number 6S
<sup>7</sup> GRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	<sup>9</sup> Elevation 6101

<sup>10</sup> Surface Location

UL or lot no. D	Section 6	Township 26-N	Range 8-W	Lot Idn (4)	Feet from the 1240	North/South line NORTH	Feet from the 660	East/West line WEST	County SAN JUAN
--------------------	--------------	------------------	--------------	----------------	-----------------------	---------------------------	----------------------	------------------------	--------------------

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no. D	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres PC 162.67 ac NW4 FC 323.03 ac W2		<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

FD 2 1/2" GLO 1947 B.C.	N 88°56'21" W 2607.39' (M)	FD 3 1/4" BLM 1955 B.C.	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>Joni Clark</u> Printed Name: <u>Joni Clark</u> Title: <u>Sr. Regulatory Specialist</u> Date: <u>2/14/2006</u>
LOT 4 1240' 660'	LOT 3 LAT: 36°31.2204' N. (NAD 27) LONG: 107°43.7421' W. (NAD 27) LAT: 36.52034' N. (NAD 83) LONG: 107.72965' W. (NAD 27)	LOT 2	LOT 1
N 04°25'30" E 2501.36' (M)	NAVAJO 14-20-603-768		
LOT 5			
FD 2 1/2" GLO 1947 B.C.	LOT 6		
	NMSF-078433		
	LOT 7		
			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: <u>DEC 14 2005</u> Signature: <u>JOHN R. VUKOBICH</u> Title: <u>REGISTERED PROFESSIONAL SURVEYOR</u> Certificate Number: <u>14837</u>

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87505

May 27, 2004

WELL API NO.	30-045- <b>33846</b>
5. Indicate Type of Lease	STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	Navajo 14-20-603-768
7. Lease Name or Unit Agreement Name	Navajo Indian
8. Well Number	6S
9. OGRID Number	14538
10. Pool name or Wildcat	Basin Fruitland Coal

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other
2. Name of Operator BURLINGTON RESOURCES OIL & GAS COMPANY LP
3. Address of Operator 3401 E. 30TH STREET, FARMINGTON, NM 87402
4. Well Location Unit Letter <u>D</u> : <u>1240</u> feet from the <u>North</u> line and <u>660</u> feet from the <u>South</u> line Section <u>6</u> Township <u>26N</u> Rng <u>8W</u> NMPM County <u>San Juan</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6101'

Pit or Below-grade Tank Application	<input type="checkbox"/> or Closure <input type="checkbox"/>
Pit type <u>new drill</u> Depth to Groundwater <u>&gt;100'</u> Distance from nearest fresh water well <u>&gt;1000'</u> Distance from nearest surface water <u>&lt;1000'</u>	
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u>        </u> bbls; Construction Material <u>        </u>	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK	<input type="checkbox"/>	PLUG AND ABANDON	<input type="checkbox"/>
TEMPORARILY ABANDON	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	MULTIPLE COMPL	<input type="checkbox"/>

SUBSEQUENT REPORT OF:

REMEDIAL WORK	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
COMMENCE DRILLING OPNS.	<input type="checkbox"/>	P AND A	<input type="checkbox"/>
CASING/CEMENT JOB	<input type="checkbox"/>		

OTHER: <u>New Drill Pit</u>	<input checked="" type="checkbox"/>	OTHER:	<input type="checkbox"/>
-----------------------------	-------------------------------------	--------	--------------------------

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

New Drill, Lined:

Burlington Resources proposes to construct a new drilling pit and an associated vent/flare pit. Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drilling pit will be a lined pit as detailed in Burlington's Revised Drilling / Workover Pit Construction / Operation Procedures dated November 11, 2004 on file at the NMOCD office. A portion of the vent/flare pit will be designed to manage fluids and that portion will be lined as per the risk ranking criteria. Burlington Resources anticipates closing these pits according to the Drilling / Workover Pit Closure Procedure dated August 2, 2004 on file at the NMOCD office.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Patsy Clugston by Don Clark TITLE Sr. Regulatory Specialist DATE 2/23/2006

Type or print name Patsy Clugston E-mail address: pclugston@br-inc.com Telephone No. 505-326-9518

For State Use Only

Deputy Oil & Gas Inspector,  
District #3

APPROVED BY [Signature] TITLE          DATE DEC 13 2007

Conditions of Approval (if any):

**OPERATIONS PLAN**

**Well Name:** Navajo Indian #6S  
**Location:** Unit D (NWNW) 1240' FNL & 660' FWL, Section 6, T26N, R8W  
 San Juan County, New Mexico  
 Latitude 36° 31.2204'N; Longitude 107° 43.7421'W  
**Formation:** Basin Fruitland Coal / Pictured Cliffs  
**Elevation:** 6101' GR

Formation:	Top	Bottom	Contents
Surface	San Jose		
Ojo Alamo	1043'		
Kirtland	1223'	1716'	gas
T/Fruitland	1716'		gas
Pictured Cliffs	1908'		
<b>Total Depth</b>	<b>2108'</b>		

**Logging Program:** None

**Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis. Fluid Loss</u>
0- 120'	Spud mud/Air/Air Mist	8.4-8.9	40-50 no control
120-2108'	Non-dispersed	8.4-9.5	30-60 no control

**Casing Program:**

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csq. Size</u>	<u>Wt.</u>	<u>Grade</u>
8 $\frac{3}{4}$ "	0 - 120'	7"	20.0#	J-55
6 $\frac{1}{4}$ "	0 - 2108'	4 1/2"	10.5#	J/K-55

**Tubing Program:**

0 - 2108'	2 3/8"	4.7#	J-55
-----------	--------	------	------

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

4 1/2" production casing - float shoe and float collar on bottom. Centralizers run every third joint above shoe to the base of the Ojo Alamo @ 1223'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1223'. 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" x 11" 2000 psi xmas tree assembly.

February 23, 2006

**Cementing:**

7" surface casing Pre-Set Drilled - Cement with Type I, II 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 - Cement with 42 sx Type III cement with 0.25 pps Celloflake, 3% CaCl.  
(54cu ft of slurry @ 1.28 yield). 200% excess, bring cement to surface. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.  
**WOC until cement establishes 250 psi compressive strength prior to NU of BOPE.**

4 1/2" production casing - Cement with <sup>94</sup>74 sx (200cu ft of slurry @ 2.13 yield) Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack celloflake, 0.4% FL-52, & 0.4% SMS. Tail with 90sx (124cu ft of slurry @ 1.38 yield) Type III cmt with 1% calcium chloride, 1/4#/sack Celloflake and 0.2% FL-52. Total of 324 cf - 50% excess to circulate to surface.

**BOP and tests:**

Surface to TD - 11" 2000 psi (minimum double gate BOP stack (Reference Figure #1 and #2). Prior to drilling out surface casing, test rams to 600 psi/30 min.

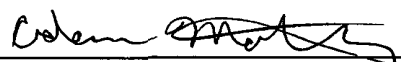
Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 1500 psi/30 min.

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 Fruitland Coal / Pictured Cliffs formation will be completed.
- \* Anticipated pore pressure for the Fruitland is between 600 - 700 psi.
- \* This gas is dedicated.
- \* The west half of the section is dedicated to Fruitland Coal, NW/4 dedicated to Pictured Cliff.
- \* New casing will be utilized.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

  
Drilling Engineer

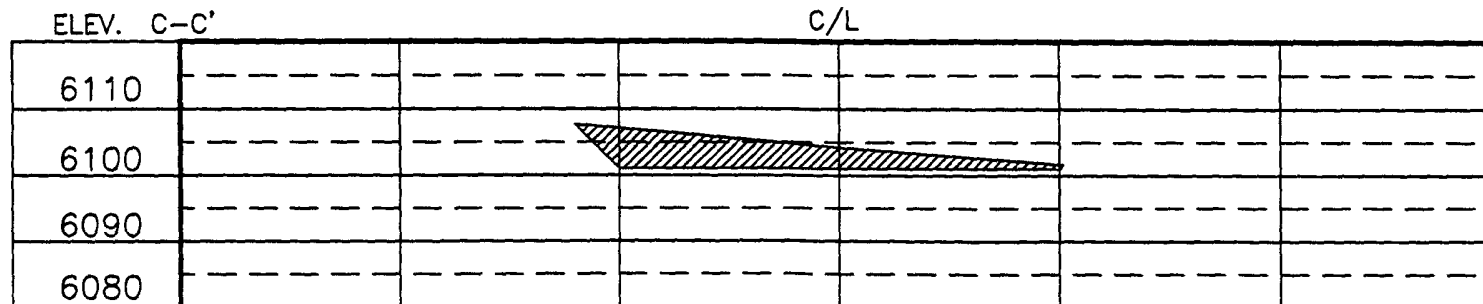
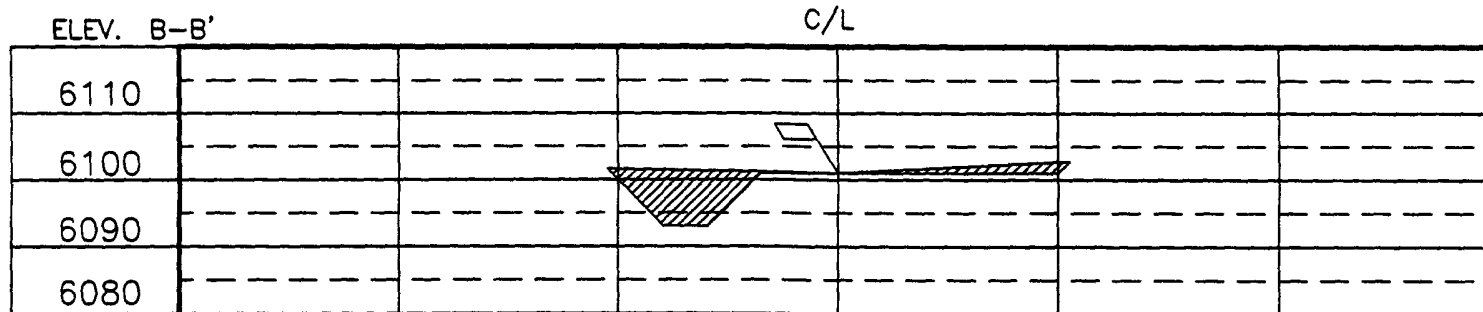
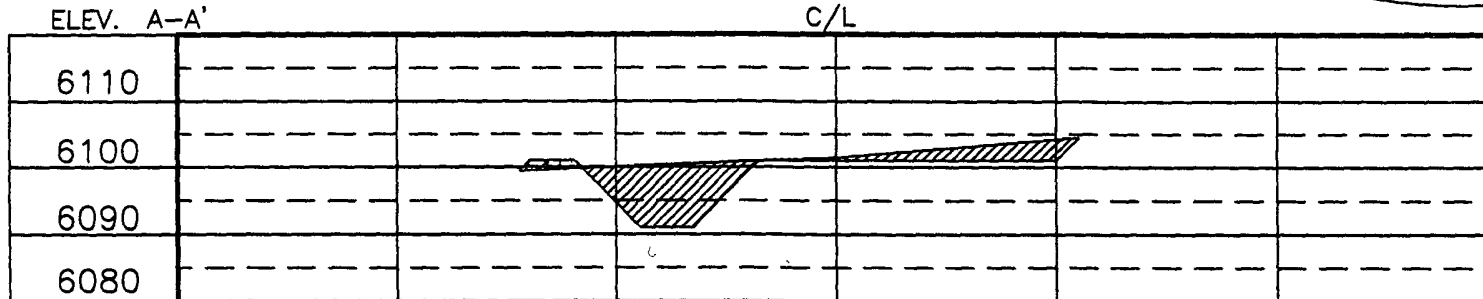
2/27/2006  
Date



# BURLINGTON RESOURCES OIL & GAS COMPANY LP


NAVAJO INDIAN No. 6S, 1240 FNL 660 FWL  
SECTION 6, T-26-N, R-8-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO  
GROUND ELEVATION: 6101', DATE: JANUARY 23, 2006

NAD 83  
LAT. = 36°31.2204' N  
LONG. = 107°43.7421' W  
NAD 27  
LAT. = 36.52034° N  
LONG. = 107.72965° W



NOTE: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR  
UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO  
ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO  
EXCAVATION OR CONSTRUCTION.

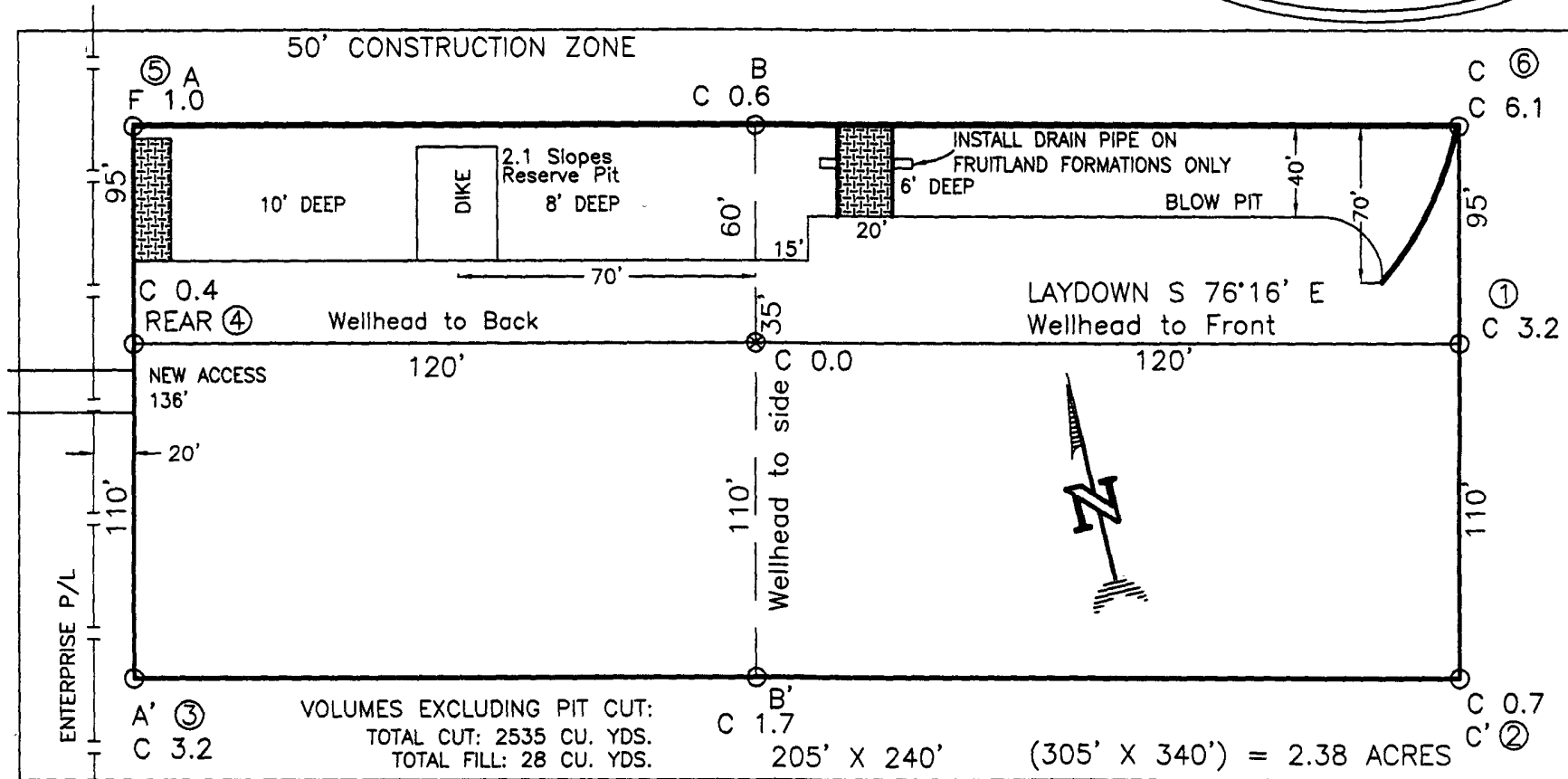
NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR  
CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

REVISION:	DATE:	REVISED BY:
 <b>Daggett Enterprises, Inc.</b> Surveying and Oil Field Services P. O. Box 15068 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-8019 NEW MEXICO L.S. 14831		
DRAWN BY: A.G.	CADFILE: BR591CFB	
ROW#: BR591	DATE: 01/26/06	

**GROUND ELEVATION: 6101', DATE: JANUARY 23, 2006**

NAD 83  
LAT. = 36°31.2204' N  
LONG. = 107°43.7421' W


NAD 27  
LAT. = 36.52035° N  
LONG. = 107.72965° W



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).  
BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

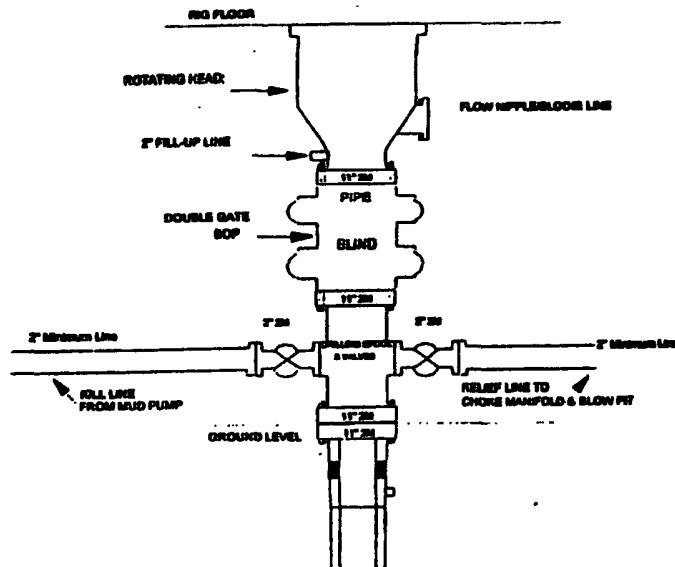
NOTE: ESTIMATED VOLUMES CALCULATED BY AVERAGE  
END AREA AT CROSS-SECTION SHOWN

REVISION:	DATE:	REVISED BY:
 <p> <b>Daggett Enterprises, Inc.</b>  <b>Surveying and Oil Field Services</b>  <b>P. O. Box 15068 • Farmington, NM 87401</b>  <b>Phone (505) 326-1772 • Fax (505) 326-5019</b>  <b>NEW MEXICO L.S. 14831</b> </p>		
DRAWN BY: A.G.	CADDLE: BR591PLB	
ROW#: BR591	DATE: 01/28/08	



## Burlington Resources

### Drilling Rig 2000 psi System



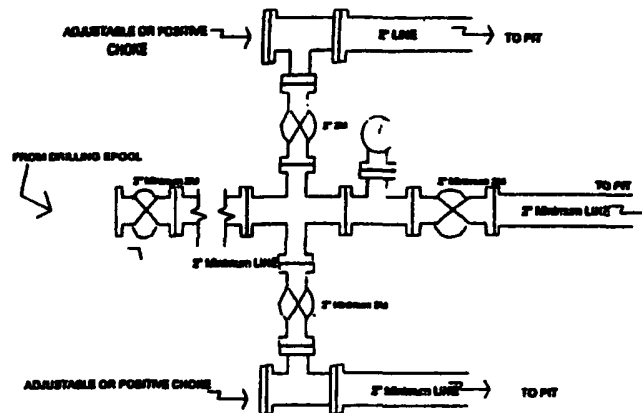
BOP installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi rotating head on top of ram preventers. All BOP equipment is 2,000 psi working pressure.

Figure #1

4-20-01

## Burlington Resources

### Drilling Rig Choke Manifold Configuration 2000 psi System

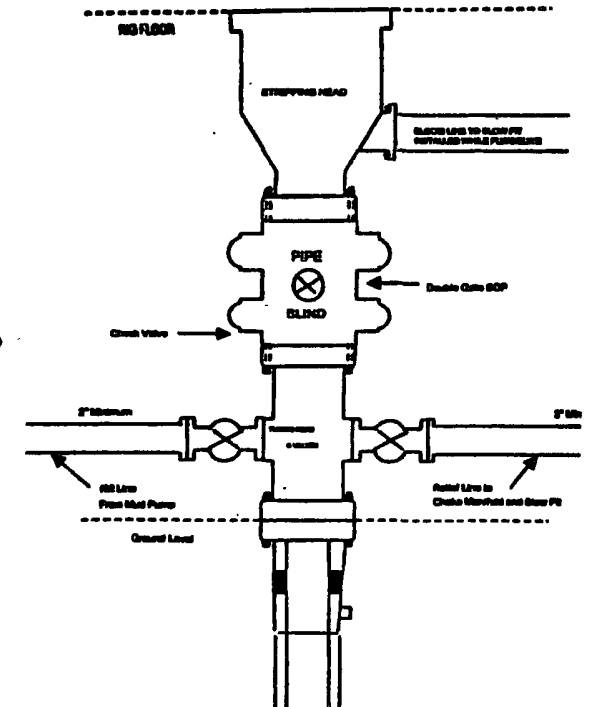


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

## 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

4-20-01