

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2005 JUL 14 PM 3:17

1a. Type of Work
DRILL

1b. Type of Well
GAS

2. Operator
BURLINGTON
RESOURCES Oil & Gas Company

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499

(505) 326-9700

4. Location of Well
Unit O (SWSE) 1070' FSL & 1555' FEL

Latitude 36° 44.2202'N
Longitude 108° 07.0504'W

5. Lease Number
NMSF-068990
Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name

8. Farm or Lease Name
Shiotani Federal

9. Well Number
#500S

10. Field, Pool, Wildcat
Basin FC / Blanco *Fulcher Katz picture cliffs*

11. Sec., Twn, Rge, Mer. (NMPM)
Sec. 8, T29N, R12W

API # 30-045- 33231

12. County
San Juan

13. State
NM

14. Distance in Miles from Nearest Town
3.2 miles

15. Distance from Proposed Location to Nearest Property or Lease Line
1050'

16. Acres in Lease

17. Acres Assigned to Well
FC - 322.86 E/2; PC - 162.86 SE/4

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease
52' Hudson #1E

19. Proposed Depth
1872'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
5664' GL

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: *Patsy Clug*
Sr. Regulatory Specialist Date *7/14/05*

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

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.

This well is NOT in the HPA area.

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

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

NMCCD

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

¹ API Number 30-045-	² Pool Code 77200 71629/72359	³ Pool Name Fuicher Kutz Basin Fruitland Coal/ Blanco Pictured Cliffs
⁴ Property Code 13840	⁵ Property Name SHIOTANI FEDERAL	⁶ Well Number 500S
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 5664'

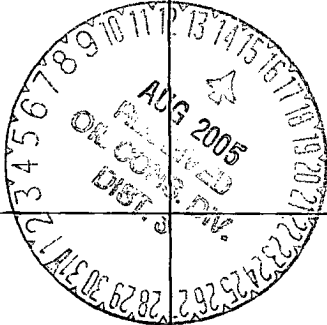
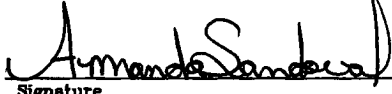
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	8	29-N	12-W	8	1070	SOUTH	1555	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 322.86 E2 FC	162.86 SE PC				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 RECEIVED JUL 14 2005 Bureau of Land Management Farmington Field Office				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Amanda Sandoval Printed Name Regulatory Assistant II Title 5-23-05 Date	
LOT 2	LOT 1	8		FD 3 1/4" B.L.M. BC 1974	
LOT 3	LOT 4	NM SF-068990		N 00-25-36 E 2641.58' (M)	
LOT 10	LOT 9	LAT. 36°44.2202' N. (NAD 27) LONG. 108°07.0504 W. (NAD 27)		1555'	
	LOT 8	FD 3 1/4" B.L.M. BC 1974		1070'	
	LOT 7	S 87-42-13 W 2633.61' (M)		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. MAY 9 2005 NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 14831	

Submit 3 Copies To Appropriate District

Office
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

State of New Mexico
 Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-103
 May 27, 2004

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.)		WELL API NO.
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator BURLINGTON RESOURCES OIL & GAS COMPANY LP		6. State Oil & Gas Lease No. Federal Lease - NMSF-068990
3. Address of Operator 3401 E. 30TH STREET, FARMINGTON, NM 87402		7. Lease Name or Unit Agreement Name
4. Well Location Unit Letter <u>O</u> : <u>1070</u> feet from the <u>South</u> line and <u>1555</u> feet from the <u>East</u> line Section <u>8</u> Township <u>29N</u> Range <u>12W</u> NMPM County <u>San Juan</u>		8. Well Number Shiotani Federal #500S
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5663' GL		9. OGRID Number 14538
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat Basin Fruitland Coal
Pit type <u>New Drill</u> Depth to Groundwater <u><100</u> Distance from nearest fresh water well <u>>1000'</u> Distance from nearest surface water <u>>1000'</u> Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 OTHER: New Drill Pit ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐
 OTHER: ☐

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.

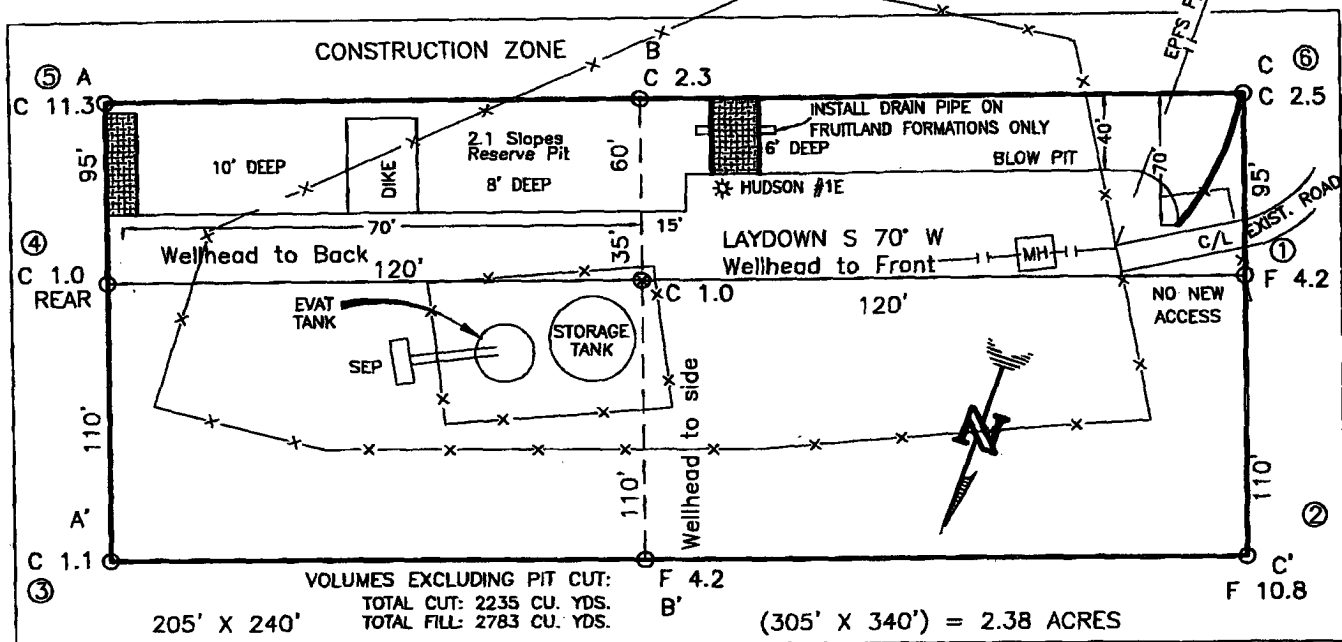
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Patsy Clugston TITLE Sr. Regulatory Specialist DATE 6/14/2005

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

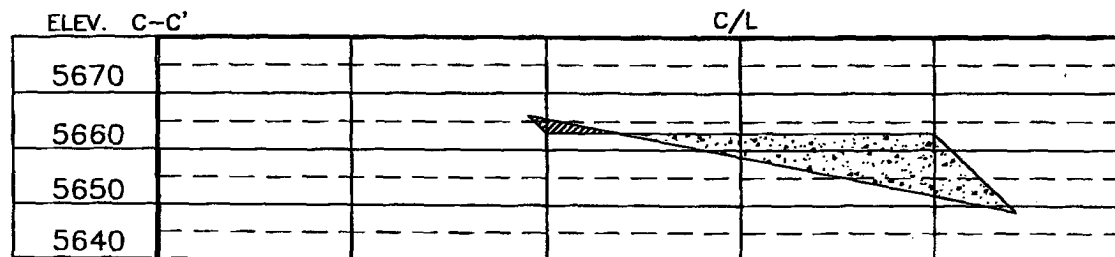
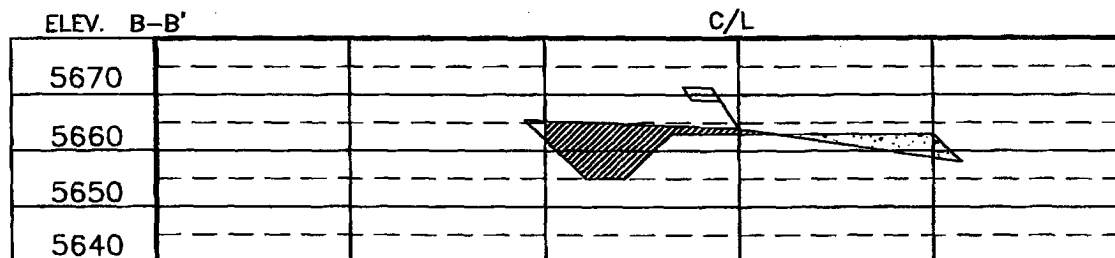
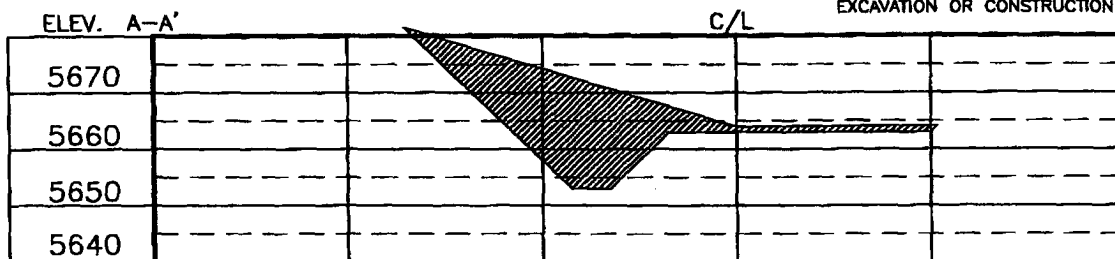
APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE AUG 15 2005
 Conditions of Approval (if any):

BURLINGTON RESOURCES OIL & GAS COMPANY LP
SHIOTANI FEDERAL NO. 500S, 1070 FSL 1555 FEL
SECTION 8, T-29-N, R-12-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 5664, DATE: MAY 9, 2005



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: 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:	REVISION BY:	DATE:
REVISION:	05/09/05	REVISION BY:	T.B.L.
Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 15088 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-6019 NEW MEXICO L.S. No. 14831 DRAWN BY: G.V. DATE: 03/22/05 ROWF: BR552			

April 8, 2005

OPERATIONS PLAN

Well Name: Shiotani Federal #500S
Location: Unit O (SWSE/4) 1070' FSL & 1555' FEL, Section 8, T29N, R12W
 San Juan County, New Mexico
 Latitude 36° 44.2202'N; Longitude 108° 07.0504'W
Formation: Basin Fruitland Coal
Elevation: 5664' GR

Formation:	Top	Bottom	Contents
Surface	San Jose		
Ojo Alamo	258'		
Kirtland	390'	1448'	gas
T/Fruitland	1448'		gas
B/Fruitland Coal	1670'		gas
Pictured Cliffs	1672'		
Total Depth	1872'		

Note: The Total Depth for this well is into the Pictured Cliffs interval, but currently only have plans to complete the Fruitland Coal interval. We could in the near future perforate/stimulate the Pictured Cliffs interval, but only would once Regulatory approval was asked for and received.

Logging Program: None

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis. Fluid Loss</u>
0 - 120' 4161	Spud /Air/Air Mist	8.4-8.9	40-50 no control
120-1872'	Non-dispersed	8.4-9.5	30-60 no control

Casing Program:

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
8 $\frac{3}{4}$ "	0 - 120' 4161	7"	20.0#	J-55
6 $\frac{1}{4}$ "	0 - 1872'	4 1/2"	10.5#	J/K-55

Tubing Program:

0 - 1872'	2 3/8"	4.7#	J-55
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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 @ 390'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 390'. 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.

Shiotani Federal #500S

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. (54 cu 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 77 sx (164 cu 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 90 sacks (124 cu ft of slurry @ 1.38 yield) Type III cmt with 1% calcium chloride, 1/4#/sack Celloflake and 0.2% FL-52. Total of 288 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~~ ^{BOP} to 600 psi/30 min.

Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test ~~rams~~ ^{BOP} 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.

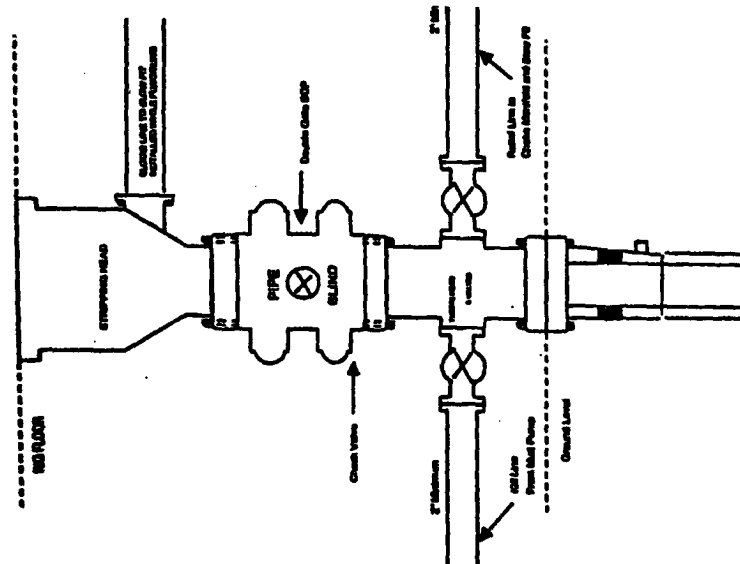
Additional information:

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


Drilling Engineer6/14/05
Date

BURLINGTON RESOURCES

Completion/Workover Rig
BOP Configuration
2,000 psi System

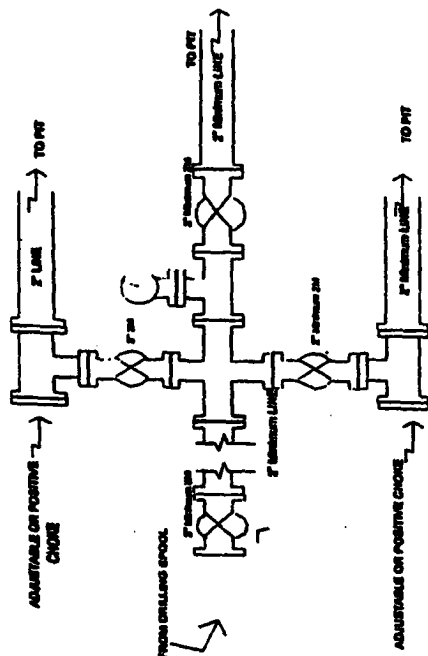


Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi stripping head.

Figure #2

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System

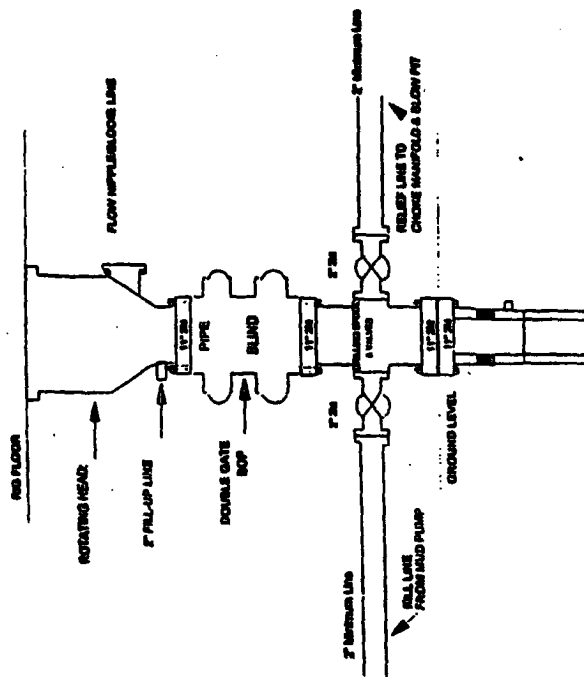


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

Burlington Resources

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 preventer. All BOP equipment is 2,000 psi working pressure

C. HARRADEN/ July 18, 2005

BURLINGTON RESOURCES/ Shiotani Federal #500S APD

STIPULATION/CONDITION OF APPROVAL

This well is located in a growing area where home development is occurring and water wells are being drilled into the Ojo Alamo aquifer. In order to protect the integrity of the Ojo Alamo fresh water aquifer, a minimum surface csg. depth of 461' is stipulated as a condition of approval for this APD

- Surface casing cement volume must be adjusted to ensure circulation to surface.