

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number SF-079960 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
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Vasaly Federal 9. Well Number #1B
4. Location of Well 1025' FSL, 1940' FWL Latitude 36° 56.2'N, Longitude 108° 01.9'W	10. Field, Pool, Wildcat Blanco Mesaverde 11. Sec., Twn, Rge, Mer. (NMPM) N Sec. 31, T-32-N, R-11-W API # 30-045-30500
14. Distance in Miles from Nearest Town 13 miles from P.O. in La Plata, NM	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1025'	
16. Acres in Lease	17. Acres Assigned to Well W/306.4
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1521'	
19. Proposed Depth 5714'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6417' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	DRILLING DEPT. APPROVAL AUTHORIZED ARE SUBJECT TO COMPLY WITH ATTACHED "GENERAL REQUIREMENTS"
24. Authorized by: <u>Perry Case</u> Regulatory/Compliance Supervisor	Date <u>11-20-00</u>

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY /s/ Lee Ottenl TITLE _____ DATE APR - 4 - 2001

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.

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

¹ API Number 30-045-30500	² Pool Code 72319	³ Pool Name Blanco Mesaverde
⁴ Property Code 18635	⁵ Property Name VASALY FEDERAL	⁶ Well Number 1B
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS INC.	⁹ Elevation 6417'

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
N	31	32-N	11-W		1025	SOUTH	1940	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
¹² Dedicated Acres W/306.4		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

<div><div>LOT 1</div><div>USA SF-07B118</div></div>	<div><div>LOT 2</div><div>LAWSON, FRED L</div></div>	<div><div>LOT 3</div><div>VASALY, M F</div></div>	<div><div>LOT 4</div><div>USA SF-079960</div></div>	<div><div>17 OPERATOR CERTIFICATION</div><div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</div><div><div>Signature</div><div>Peggy Cole</div><div>Printed Name</div><div>Regulatory Supervisor</div><div>Title</div><div>11-20-00</div><div>Date</div></div></div>
<div><div>18 SURVEYOR CERTIFICATION</div><div>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.</div><div><div>Date of Survey</div><div>10-03-29 W</div><div>Signature and Seal of Professional Surveyor</div><div>ROY A. RUSH</div><div>REGISTERED PROFESSIONAL LAND SURVEYOR</div><div>8894</div><div>Certificate Number</div></div></div>				

BURLINGTON RESOURCES OIL & GAS INC.

VASALY FEDERAL #1B

SW/4 SEC.31, T-32-N, R-11-W, N.M.P.M.

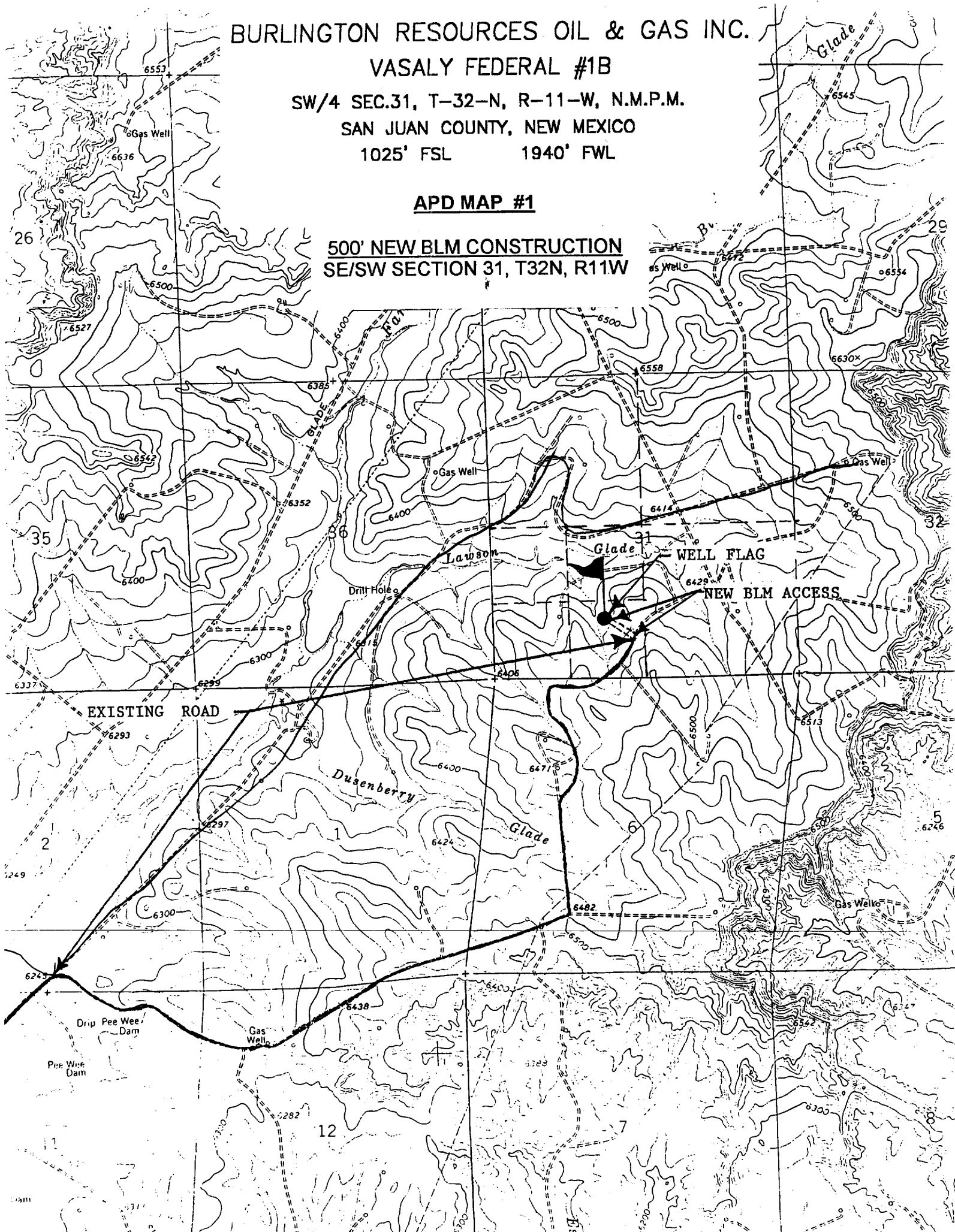
SAN JUAN COUNTY, NEW MEXICO

1025' FSL

1940' FWL

APD MAP #1

500' NEW BLM CONSTRUCTION
SE/SW SECTION 31, T32N, R11W



OPERATIONS PLAN

Well Name: Vasaly Federal #1B
Surface Location: 1025' FSL, 1940' FWL, Section 31, T-32-N, R-11-W
San Juan County, New Mexico
Latitude 36° 56.2' N, Longitude 108° 01.9' W

Formation: Blanco Mesa Verde
Elevation: 6417' GR

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	1214'	aquifer
Ojo Alamo	1214'	1289'	aquifer
Kirtland	1289'	2394'	gas
Fruitland	2394'	3069'	gas
Pictured Cliffs	3069'	3189'	gas
Lewis	3189'	3715'	gas
Intermediate TD	3439'		
Mesa Verde	3715'	4143'	gas
Chacra	4143'	4667'	gas
Massive Cliff House	4667'	4865'	gas
Menefee	4865'	5314'	gas
Point Lookout	5314'		gas
Total Depth	5714'		

Logging Program:

Cased hole logging - Gamma Ray, Cement bond from surface to TD
Open hole logging - Array Induction, Temp, Neutron-Density from TD to Intermediate csg.
Mud Logs/Coring/DST - none

Mud Program:

<u>Interval- MD</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-9.0	40-50	no control
200- 3439'	LSND	8.4-9.0	30-60	no control
3439- 5714'	Air/Mist	n/a	n/a	n/a

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

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

<u>Hole Size</u>	<u>Measured Depth</u>	<u>Csg Size</u>	<u>Weight</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3439'	7"	20.0#	J-55
6 1/4"	3439' - 5714'	4 1/2"	10.5#	J-55

Tubing Program: 0' - 5714' 2 3/8" 4.7# J-55

BOP Specifications, Wellhead and Tests:

Surface to Intermediate 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.

BOP Specifications, Wellhead and Tests (cont'd):**Intermediate TD to Total Depth -**

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -

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.

Wellhead -

9 5/8" x 7" 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 drill crew.
- All BOP tests & drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

9 5/8" surface casing - cement with 159 sx Class "H" cement with 1/4# flocele/sx and 3% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. 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.

7" intermediate casing -

Lead w/356 sx 50/50 Class "G"/Trinity Light with 2.5% sodium metasilicate, 2% calcium chloride, 10 pps Gilsonite, 0.5 pps Flocele. Tail with 90 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps Gilsonite, 0.1% antifoam and 0.25 pps Flocele (1034 cu.ft. of slurry, 100% excess to circulate to surface). WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar at 2294'. First stage: cement w/269 sx 50/50 Class "G" poz w/2% gel, 2% calcium chloride, 5 pps Gilsonite, 0.1% antifoam and 0.25 pps Flocele. Second stage: w/267 sx 50/50 Class "G"/Trinity Light with 2.5% sodium metasilicate, 2% calcium chloride, 10 pps Gilsonite, 0.5 pps Flocele (1034 cu.ft. of slurry, 100% excess to circulate to surface).

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 1289'. Two turbolating centralizers at the base of the Ojo Alamo at 1289'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Liner -

Cement to circulate liner top. Pump 239 sx Class "G" 50/50 poz w/4.5% gel, 0.25 pps Flocele, 5 pps Gilsonite, 0.25% fluid loss, 0.1% retardant (341 cu.ft., 40% excess to circulate liner). WOC a minimum of 18 hrs prior to completing.

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

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

Special Drilling Operations (Air/Mist Drilling):

The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

Additional Information:

- The Mesa Verde formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	150 psi
Pictured Cliffs	260 psi
Mesa Verde	375 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The west half of Section 31 is dedicated to the Mesa Verde.
- This gas is dedicated.

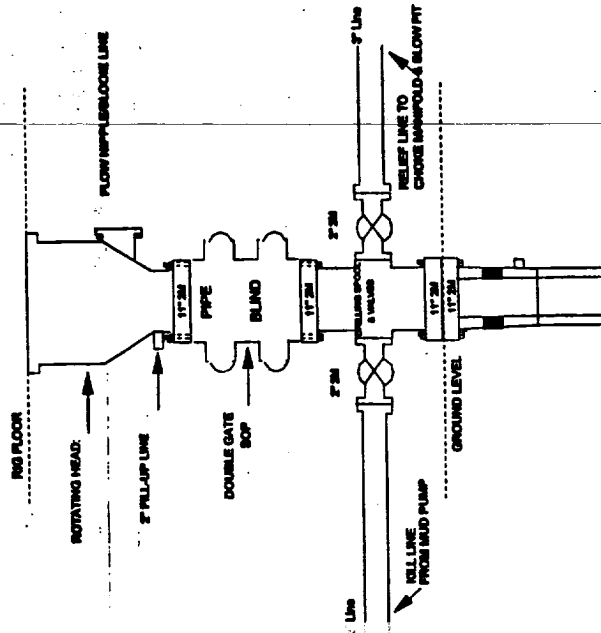

Drilling Engineer

11/29/00
Date

Burlington Resources

Drilling Rig

2000 psi System

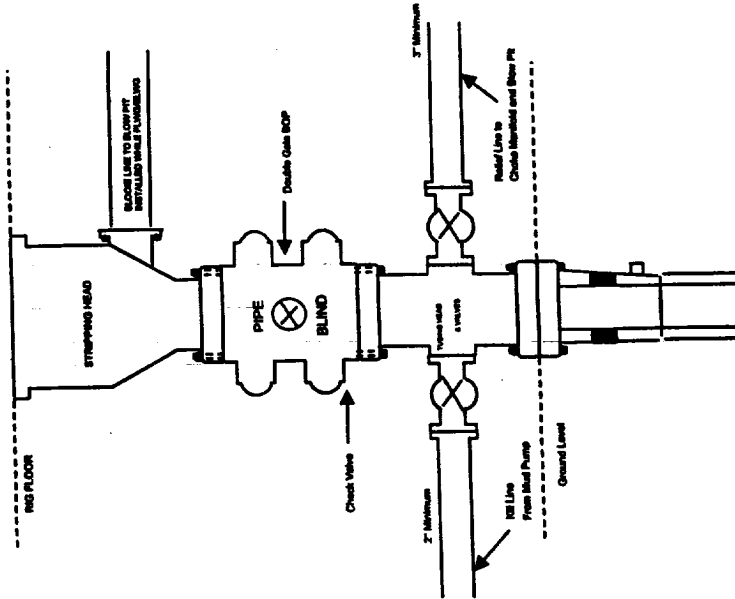


BOP Installation from Surface Casing Point to Total Depth, 11" Bore 10" Nominal, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A stripping head on top of main preventers. All BOP equipment is 2,000 psi working pressure

Figure #1

BURLINGTON RESOURCES

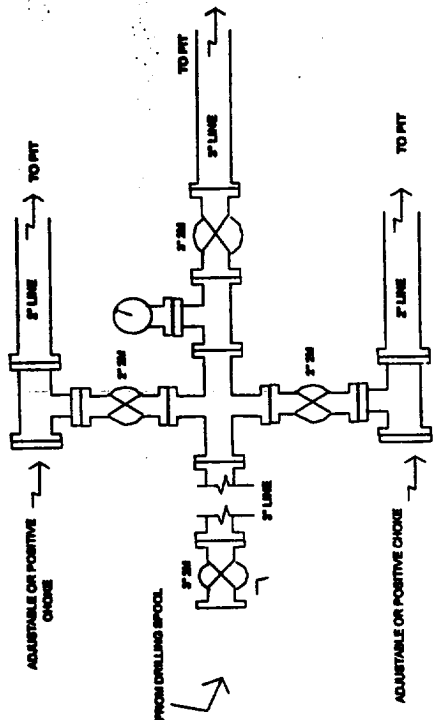
Completion/Workover Rig BOP Configuration 2,000 psi System



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