

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2005 MAR 4 PM 4 00 RECEIVED 070 FARMINGTON NM	5. Lease Number NMNM-111921 Unit Reporting Number MV-8910010510 DK-891001051B
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 Negro Canyon 9. Well Number #102
4. Location of Well 1995' FSL, 1680' FEL 710' FNL, 710' FEL	FEL FWL surface Sec 36 T32N R8W bottom hole Sec 1 T31N R8W	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 36 T32N, R08W API # 30-045- 32936
14. Distance in Miles from Nearest Town 31 miles to Blanco, NM Post Office	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1680'		
16. Acres in Lease	17. Acres Assigned to Well 299.36 42 1/2 Sec 1, T31N, 8W	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 78'		
19. Proposed Depth 3729'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6744' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Joni Clark</u> Senior Regulatory Specialist	<u>3-4-05</u> Date	

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE AFM DATE 5-27-05

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

NMOCD

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

DISTRICT II:
611 South First, Artesia, N.M. 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

**2040 South Pacheco
Santa Fe, NM 87505**

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32936	*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 34287	*Property Name NEGRO CANYON	*Well Number 102
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	*Elevation 6744'

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
J	36	32-N	8-W		1995'	SOUTH	1680'	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County
A	1	31-N	8-W		710'	NORTH	710'	EAST	SAN JUAN

13 Dedicated Acres 2 299.36 acres	15 Joint or Infill	16 Consolidation Code	17 Order No.
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**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**

[illegible]

17 OPERATOR CERTIFICATION

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

Jonni Clark
Signature

Signature Joni Clark

Printed Name
Regulatory Specialist

Title 2-1-05


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 21.11.65

Signature and Seal of Professional Surveyor



 Nelson Russell
 License Number 15703
 State of New Mexico
 Licensed Professional Surveyor
 Certificate Number 15703

Office

Energy, Minerals and Natural Resources

May 27, 2004

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

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

30-045-

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

NMNM-111921

7. Lease Name or Unit Agreement Name

Negro Canyon

8. Well Number

#102

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 ☐Gas Well ☒

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 J

1995

feet from the

South

line and

1680

feet from the

East

line

Section 36

Township 32N

Range 8W

NMPM

County

San Juan, NM

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

Pit or Below-grade Tank Application

☒ or Closure ☐

Pit type

New Drill

Depth to Groundwater

>100'

Distance from nearest fresh water well

>1000'

Distance from nearest surface water

>1000'

Pit Liner Thickness:

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 ☐TEMPORARILY ABANDON ☐PULL OR ALTER CASING ☐PLUG AND ABANDON ☐CHANGE PLANS ☐MULTIPLE COMPL ☐OTHER: ☐

SUBSEQUENT REPORT OF:

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

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 and vent/flare pit will be an unlined pit as detailed in Burlington's Revised Drilling / Workover Pit Construction / Operation Procedures dated November 11, 2004 on file at the NMOCDD office. A portion of the vent/flare pit will be designed to manage fluids, and that portion will be unlined, 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 NMOCDD 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 NMOCDD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE

TITLE

Regulatory Specialist

DATE

2/4/2005

Type or print name

Joni Clark

E-mail address:

jclark@br-inc.com

Telephone No.

326-9700

For State Use Only

APPROVED BY

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 33

DATE

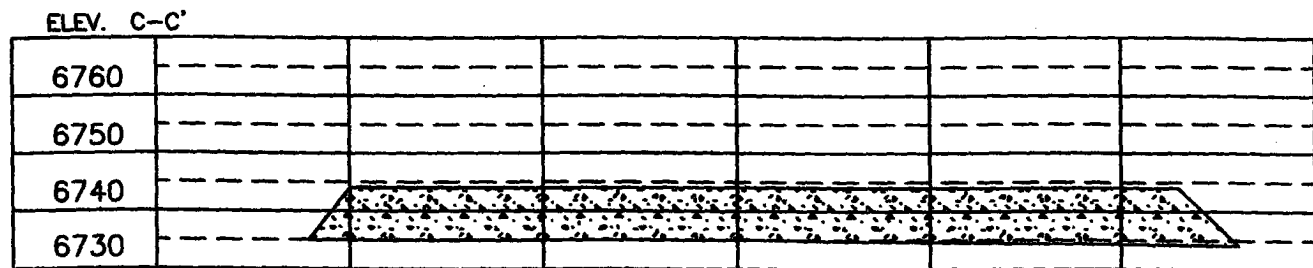
JUN - 2 2005

Conditions of Approval (if any):

Site plan for the Albino Canyon #100S wellhead. The plan shows a rectangular area measuring 250' x 335'. Key features include:

- Wellhead to Back:** 195' long, rear section.
- Wellhead to Front:** 140' long, front section.
- Wellhead to side:** 90' long, side section with two **STRG TANK** units.
- DEH:** Dehydrator unit.
- DIKE:** 2.1 Slopes Reserve Pit 8' DEEP.
- BLOW PIT:** 6' DEEP.
- Solar Panel:** Located near the rear wellhead.
- Laydown S 56° E (T):** Directional indicator.
- EDGE OF EXISTING PAD:** Boundary lines.
- CONSTRUCTION ZONE:** Area for construction activities.
- Grid Lines:** A, B, C (horizontal) and 1, 2, 3, 4, 5 (vertical).
- Dimensions:** 250' x 335' overall area.
- North Arrow:** Points towards the top-left.

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.

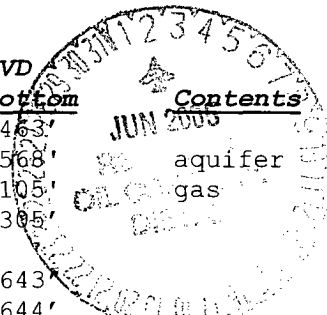


WELL PAD SKETCH
NOT TO SCALE

OPERATIONS PLAN

Well Name: Negro Canyon #102
Location: Surface - 1995' FSL, 1680' FEL, Section 36, T-32-N, R-8-W
 Bottom Hole - 710' FNL, 710' FEL, Section 1, T-31-N, R-8-W
 San Juan County, New Mexico
 Surface - Latitude 36° 56.2777'N, Longitude 107° 37.4050'W
 Bottom Hole - Latitude 36° 55.8267'N, Longitude 107° 37.2199'W
Formation: Basin Fruitland Coal
Elevation: 6744'GL

<u>Formation Tops:</u>	<u>TVD</u>	<u>TMD</u>
Surface		San Jose
Ojo Alamo	2463'	3678'
Kirtland	2568'	3849'
Fruitland	3105'	4470'
Intermediate TD	3265'	4608'
T/Coal	3305'	4670'
B/Coal	3643'	5008'
Pictured Cliffs	3644'	5009'
TD	3729'	5093'



<u>TVD</u>	<u>Bottom</u>	<u>Contents</u>
2463'		
2568'		
3105'		
3305'		
3643'		
3644'		

Burlington Resources requests a sump on this well

Logging Program:

Mudlog from 7" csg to 3729' (TVD).

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis</u>	<u>Fluid Loss</u>
0-200'	Spud Mud	8.4-9.0	40-50	no control
200'- 3265'	LSND	8.4-9.0	30-60	less than 12
3265'- 3729'	Air/Mist			

Drilling:

Surface Hole:

Drill to surface casing point of 200' and set 9 5/8" casing.

Intermediate Hole:

Mud drill to kick off point of 250'. At this point the well will be directionally drilled by building 6.0 degrees per 100' with an azimuth of 161.76 degrees. The end of the build will be at a TVD of 1032', a TMD of 1166', and an angle of 54.94 degrees. This angle and azimuth will be held to a total depth of 2483' TVD and 3693' TMD. To enter the productive interval vertical, the well will be dropped 6.0 degrees per 100'. The well will be vertical at 7" casing point of 3265' TVD and 4608' TMD.

Production Hole:

Production hole will be drilled vertical from 3265' TVD to 3729' TVD.

Materials:

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

<u>Hole Size</u>	<u>Interval</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>
	TOP	Bottom (TVD)		
12 1/4"	0'	200'	9 5/8"	32.3#
8 3/4"	0'	3265'	7"	20#/23.0#
6 1/4"	3165'	3729'	5 1/2"	15.5#

Casing program: (alternate)

<u>Hole Size</u>	<u>Interval</u>		<u>Size</u>	<u>Weight</u>	<u>Grade</u>
	<u>TOP</u>	<u>Bottom (TVD)</u>			
12 3/4"	0'	200'	9 5/8"	32.3#	H-40
8 3/4"	0'	3265'	7"	20#/23.0#	J-55/L-80

Tubing Program:

2 3/8"	0'	3729'	2 3/8"	4.7#	J-55
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Tubing Program: (alternate)

3 1/2"	0'	3729'	2 7/8"	9.2#	J-55
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Float Equipment: 9 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing - guide shoe and self-fill float collar. Standard centralizers run every other joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2568' (TVD). Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment

9 5/8" x 7" x 2 3/8" - 11" (2000 psi) wellhead assembly

Cementing:

9 5/8" surface casing -

Pre-Set Drilled Cement with 39 sx Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (63 cu ft of slurry, bring cement to surface) Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface.

Conventionally Drilled

Cement with 147 sxs Type III cement with 0.25 pps Celloflake, 3% CaCl. (188 cu ft of slurry, 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.

7" intermediate casing - lead w/429 sacks Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack flocele, 0.4% FL-52, & 0.4% SMS. Tail with 90 sacks Type III cmt with 1% calcium chloride, 1/4#/sack flocele and 0.2% FL-52 (1039 cu.ft., 50% excess to circulate to surface).

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

5 1/2" liner - will not be cemented if run.

BOP and tests:

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

Intermediate TD to Total Depth - 7 1/6" 2000 psi (minimum) completion BOP stack (Reference Figure #2) Prior to drilling out intermediate casing, test BOPE and casing to 1500 psi for 30 minutes.

From surface to 7" TD - a choke manifold will be installed in accordance with Onshore Order No. 2 (Reference Figure #3). When the cavitation completion rig drills the production hole, the completion rig configuration will be used (Reference Figure #4). ~~No choke manifold will be used on cavitation rig operation.~~

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 less than 1600 psi.
- * This gas is dedicated.
- * The north half of Section 1 is dedicated to the Fruitland Coal.

James McCarthy
Drilling Engineer

3-3-05
Date

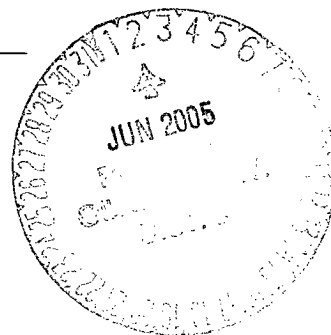
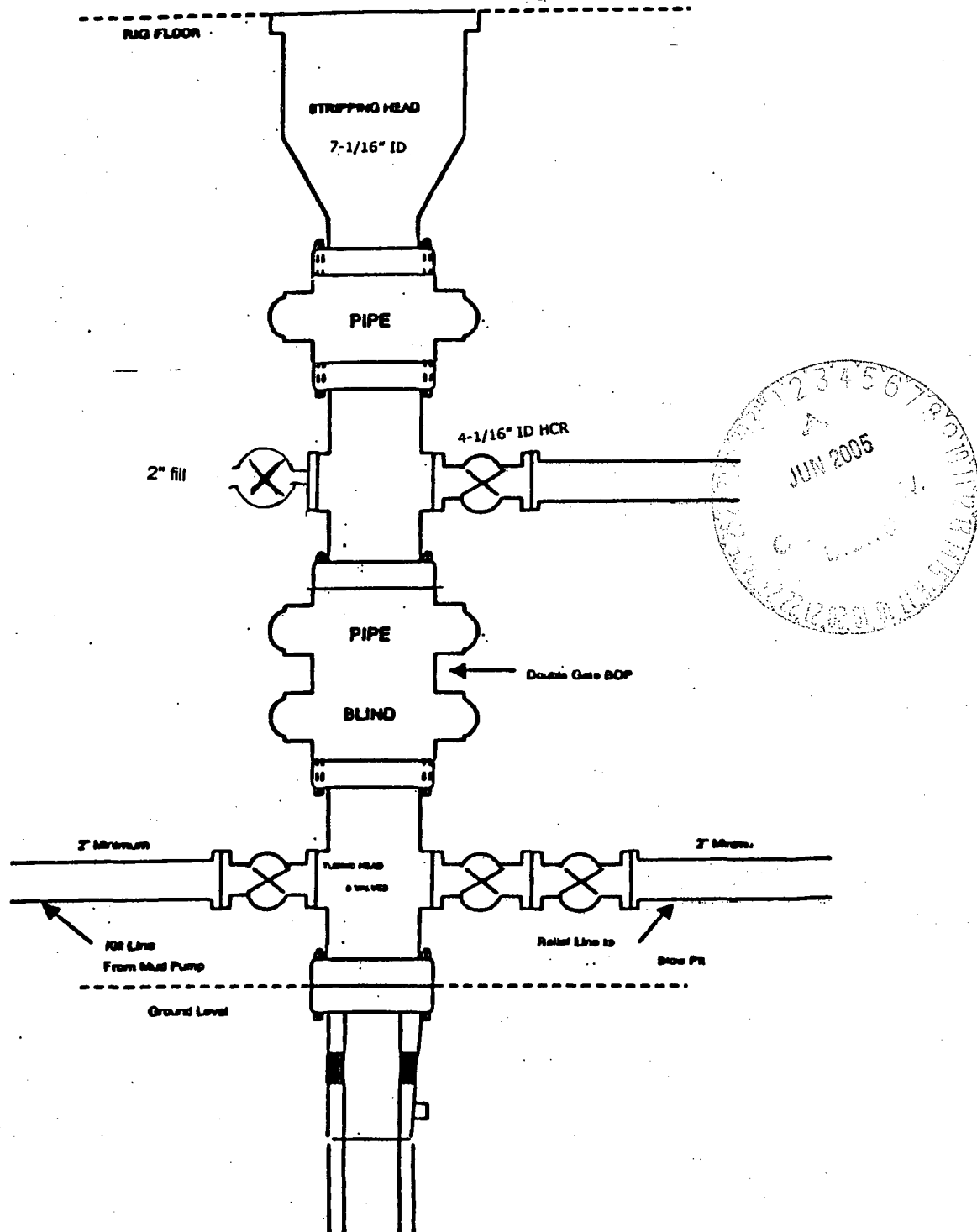
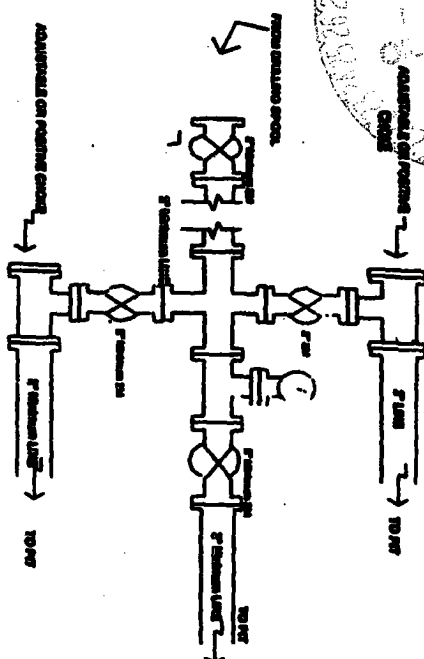


Figure #4
Cavitation Rig
BOP Configuration
2,000 psi Minimum System



BURLINGTON RESOURCES

Drilling Rig Chassis Manifold Configuration 2000 psi System



Choice mandated installation from Surface Casting Point to Total Depth. 2,000psi working pressure equipment with two choices.

Figure 43

4-20-01

Minimum BOP Installation for all Conduits/Workover Operations, 7-1/8" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A tagging head to be installed on the top of the BOP. All BOP equipment to 2000 psi working pressure or greater exceeding 650 psi tagging head.

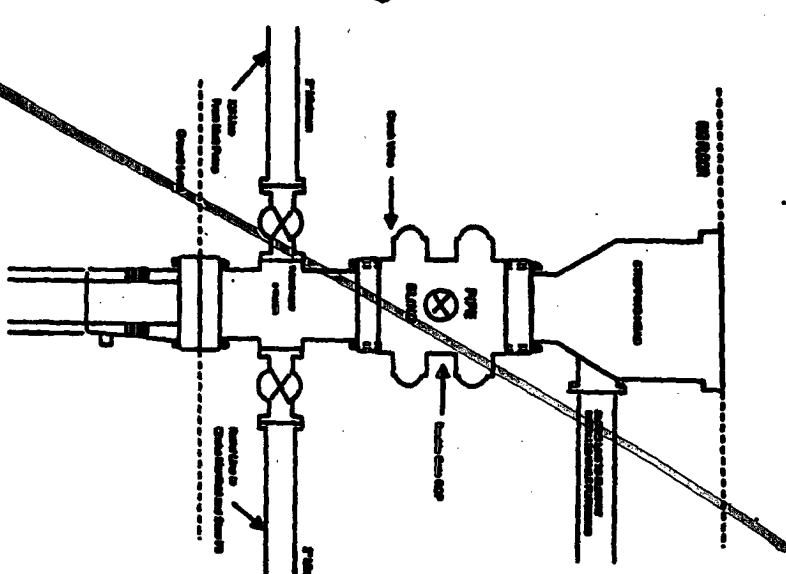


Figure 12