

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

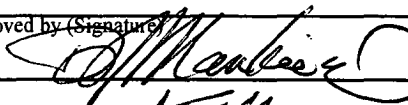
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-078305
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator CONOCOPHILLIPS COMPANY Contact: VICKI WESTBY E-Mail: VICKI.R.WESTBY@CONOCOPHILLIPS.COM		7. If Unit or CA Agreement, Name and No.
3a. Address 4001 PENBROOK ODESSA, TX 79762	3b. Phone No. (include area code) Ph: 915-368-1352	8. Lease Name and Well No. SAN JUAN 29-5 UNIT 4B
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface NESW 1465FSL 2370FWL At proposed prod. zone NESW 1465FSL 2370FWL		9. API Well No. 30039 29352
14. Distance in miles and direction from nearest town or post office*	15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	10. Field and Pool, or Exploratory BLANCO MESAVERDE
16. No. of Acres in Lease 320.00	17. Spacing Unit dedicated to this well 320.22 W/2	11. Sec., T., R., M., or Blk. and Survey or Area K Sec 6 T29N R5W Mer NMP
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 6151 MD	12. County or Parish RIO ARRIBA
20. BLM/BIA Bond No. on file	21. Elevations (Show whether DF, KB, RT, GL, etc.) 6663	13. State NM
22. Approximate date work will start	23. Estimated duration	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) VICKI WESTBY Ph: 915-368-1352	Date 11/22/2004
Title AGENT		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 5-10-05
Title AFM	Office FFO	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #51178 verified by the BLM Well Information System  
For CONOCOPHILLIPS COMPANY, sent to the Farmington

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".

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

NMOCD

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer DD, Artesia, NM 88211-0719

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO 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

*API Number <b>30-039-29352</b>		*Pool Code <b>72319</b>	*Pool Name <b>BLANCO MESAVERDE</b>
*Property Code <b>31325</b>	*Property Name <b>SAN JUAN 29-5 UNIT</b>		*Well Number <b>4B</b>
*OGRID No. <b>217817</b>	*Operator Name <b>CONOCOPHILLIPS COMPANY</b>		*Elevation <b>6663'</b>

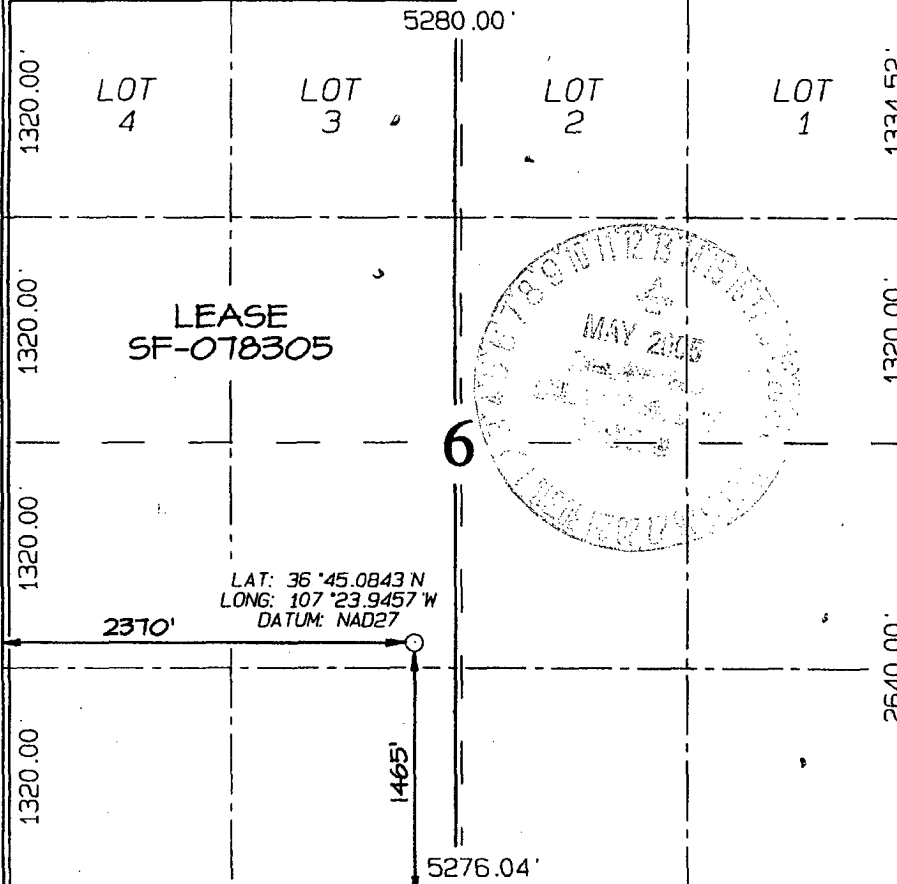
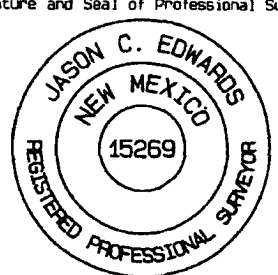
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	6	29N	5W		1465	SOUTH	2370	WEST	RIO ARriba

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres <b>320.22 Acres - (W/2)</b>					<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

 <p>LAT: 36°45.0843' N LONG: 107°23.9457' W DATUM: NAD27</p>				<p><sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Vicki Westby (pj)</i> Signature Vicki R. Westby Printed Name Sr. Analyst Title 11/22/04 Date</p> <p><sup>18</sup> 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.</p> <p>Date of Survey: AUGUST 15, 2004 Signature and Seal of Professional Surveyor</p> <p> <b>JASON C. EDWARDS</b> Certificate Number 15269</p>	
--	--	--	--	---	--

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

WELL API NO.

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

SAN JUAN 29-5 UNIT

8. Well Number 4B

9. OGRID Number 217817

10. Pool name or Wildcat

BLANCO MESA VERDE

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

ConocoPhillips Company

3. Address of Operator

4001 Penbrook, Odessa, TX 79762

4. Well Location

Unit Letter K 1465 feet from the SOUTH line and 2370 feet from the WEST line  
Section 6 Township 29N Range 5W NMPM Rio Arriba County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
6663 GL

Pit or Below-grade Tank Application ☐ Closure ☐

Pit type DRILL Depth to Groundwater 50-100' Distance from nearest fresh water well >1000' Distance from nearest surface water >1000'

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

OTHER: ☐

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.

The pit will be constructed and closed in accordance with Rule 50 and as per the Nov. 1st Guidelines. See the attached diagram that details the location of the pit in reference to the proposed wellhead. The drill pit will be lined. The drill pit will be closed after the well has been completed. The solids left after the water has been disposed of will be sampled and NMOCD approval will be obtained prior to closure of this pit.

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 Vicki Westby

TITLE Staff Agent

DATE 11/22/2004

Type or print name

E-mail address:

Telephone No.

For State Use Only

APPROVED BY:

TITLE

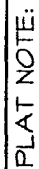
DEPUTY OIL & GAS INSPECTOR, DIST. 32

DATE

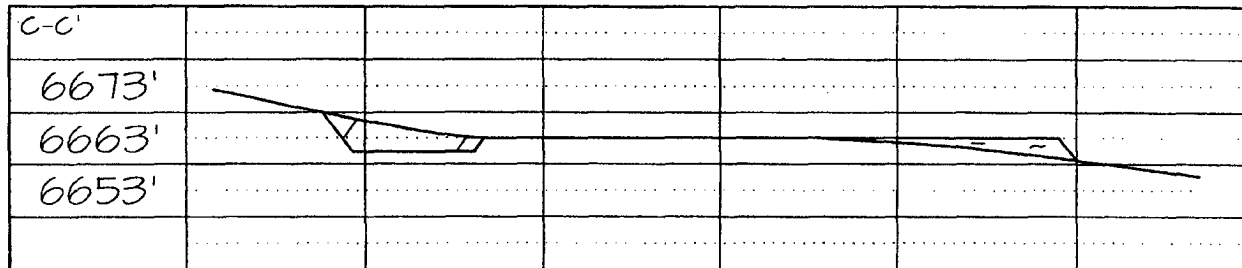
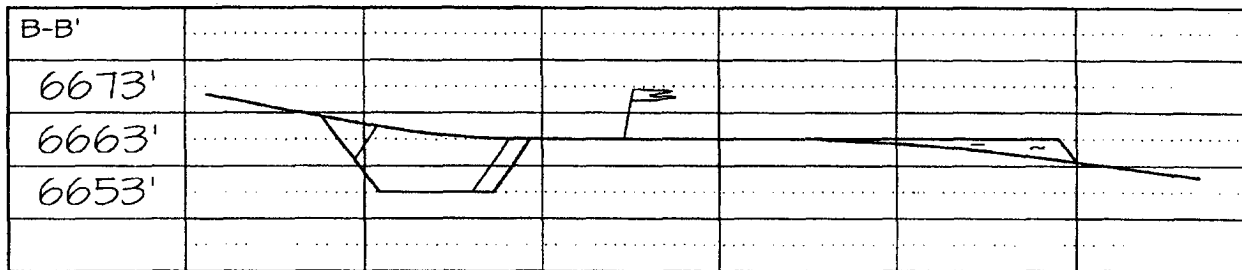
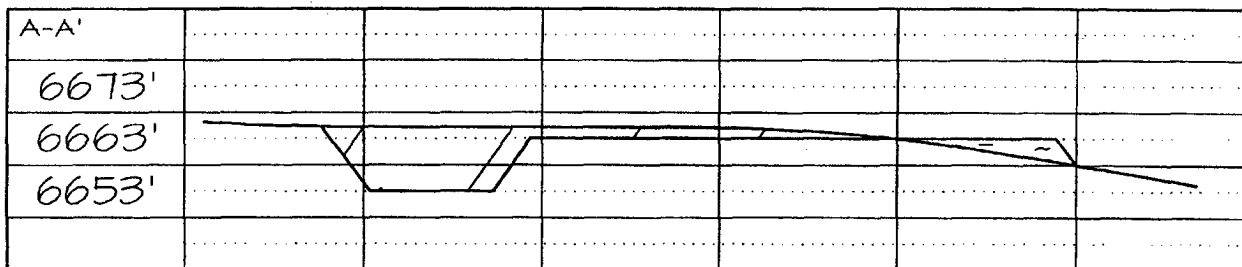
Conditions of Approval (if any):

MAY 13 2005

LATITUDE: 36.75141° N  
LONGITUDE: 107.39909° W  
DATUM: NAD1927



\*SURFACE OWNER\*  
Bureau of Land  
Management





San Juan Business Unit

**PROJECT PROPOSAL - New Drill / Sidetrack**

SAN JUAN 29-5 4B

Lease:		AFE #:		AFE \$:	
Field Name: hPHILLIPS 29-5	Rig:	State: NM	County: RIO ARRIBA	API #:	
Geoscientist: Glaser, Terry J	Phone: (832)486-2332	Prod. Engineer: Moody, Craig E.	Phone: 486-2334		
Res. Engineer: Johnson, Tom B.	Phone: (832)-486-2347	Proj. Field Lead: Fransen, Eric E.	Phone:		

**Primary Objective (Zones):**

Zone	Zone Name
R20002	MESAVERDE(R20002)

<b>Location: Surface</b>					
Latitude: 36.75	Longitude: -107.40	X: 0.00	Y: 0.00	Section: 6	Abstract: 5W
Footage X: 2370 FWL	Footage Y: 1465 FSL	Elevation: 6663 (FT)	Survey: 29N		
Tolerance:					
Location Type: Summer Only		Start Date (Est.):	Completion Date:	Date In Operation:	
Formation Data: Assume KB = 6676 Units = FT					

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200	6476	<input type="checkbox"/>			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1526	5150	<input type="checkbox"/>			
OJAM	2751	3925	<input type="checkbox"/>			Possible water flows.
KRLD	2926	3750	<input type="checkbox"/>			
FRLD	3321	3355	<input type="checkbox"/>			Possible gas.
PCCF	3621	3055	<input type="checkbox"/>			
LEWS	3821	2855	<input type="checkbox"/>			
Intermediate Casing	3921	2755	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4623	2053	<input type="checkbox"/>			
CLFH	5436	1240	<input type="checkbox"/>	750		Gas; possibly wet
MENF	5516	1160	<input type="checkbox"/>			Gas.
PTLK	5801	875	<input type="checkbox"/>			Gas.
MNCS	6051	625	<input type="checkbox"/>			
Total Depth	6151	525	<input type="checkbox"/>			6-1/4" Hole. 4-1/2", 10.5 ppf, J-55, STC casing. Circulate cement a minimum of 100' inside the previous casing string. No open hole logs. Cased hole TDT with GR to surface.

<b>Reference Wells:</b>		
Reference Type	Well Name	Comments

<b>Logging Program:</b>	
Intermediate Logs: <input type="checkbox"/> Log only if show <input type="checkbox"/> GR/ILD <input type="checkbox"/> Triple Combo	
TD Logs: <input type="checkbox"/> Triple Combo <input type="checkbox"/> Dipmeter <input type="checkbox"/> RFT <input type="checkbox"/> Sonic <input type="checkbox"/> VSP <input checked="" type="checkbox"/> TDT	

Additional Information:					
Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks

**San Juan 29-5 # 4B**

**SURFACE CASING :**

Drill Bit Diameter	12.25"	
Casing Outside Diameter	9.625"	Casing Inside Diam. 9.001"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	230'	
Cement Yield	147	cuft/sk
Excess Cement	125	%
Cement Required	147	sx

SHOE 230 ', 9.625 ", 32.3 ppf, H-40 STC

**INTERMEDIATE CASING :**

Drill Bit Diameter	8.75"	
Casing Outside Diameter	7"	Casing Inside Diam. 6.456"
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3921'	
Lead Cement Yield	288	cuft/sk
Lead Cement Excess	150	%
Tail Cement Length	784.2'	
Tail Cement Yield	133	cuft/sk
Tail Cement Excess	150	%
Lead Cement Required	393	sx
Tail Cement Required	229	sx

SHOE 3921 ', 7 ", 20 ppf, J-55 STC

**PRODUCTION CASING :**

Drill Bit Diameter	6.25"	
Casing Outside Diameter	4.5"	Casing Inside Diam. 4.000"
Casing Weight	10.5	ppf
Casing Grade	J-55	
Top of Cement	3721'	200' inside intermediate casing
Shoe Depth	6151'	
Cement Yield	145	cuft/sk
Cement Excess	50	%
Cement Required	253	sx

SHOE 6151 ', 4.5 ", 10.5 ppf, J-55 STC

## OPTION 1

9 5/8" Surface Casing	
Cement Recipe	Class C Standard Cement + 3% Calcium Chloride + 0.25 lb/sx Flocele
Cement Volume	147 sx
Cement Yield	1.21 cuft/sx
Slurry Volume	179.8 cuft
Cement Density	32.0 bbls
Water Required	15.6 ppg 5.29 gal/sx

7" Intermediate Casing	
Lead Slurry	
Cement Recipe	Standard Cement + 3% Econolite (extender) + 10 lb/sx Pheno Seal
Cement Required	393 sx
Cement Yield	2.88 cuft/sx
Slurry Volume	1131.3 cuft
Cement Density	201.5 bbls
Water Required	11.5 ppg 16.91 gal/sx

7" Intermediate Casing	
Tail Slurry	
Cement Slurry	50 / 50 POZ: Standard Cement + 2% Bentonite + 6 lb/sx Pheno Seal
Cement Required	229 sx
Cement Yield	1.33 cuft/sx
Slurry Volume	304.4 cuft
Cement Density	54.2 bbls
Water Required	13.5 ppg 5.52 gal/sx

4-1/2" Production Casing	
Cement Recipe	50 / 50 POZ: Standard Cement + 3% Bentonite + 3.5 lb/sx PhenoSeal + 0.2% CFR-3 Friction Reducer + 0.1% HR-5 Retarder + 0.8% Halad-9 Fluid Loss Additive
Cement Quantity	253 sx
Cement Yield	1.45 cuft/sx
Cement Volume	366.7 cuft
Cement Density	65.3 bbls
Water Required	13.1 ppg 6.47 gal/sx

## OPTION 2

9 5/8" Surface Casing	
Cement Recipe	Class G Standard Cement + 2% S001 Calcium Chloride + 0.25 lb/sx D029 Cellophane Flakes
Cement Volume	148 sx
Cement Yield	1.16 cuft/sx
Cement Volume	171.5 cuft
Cement Density	15.8 ppg
Water Required	4.983 gal/sx

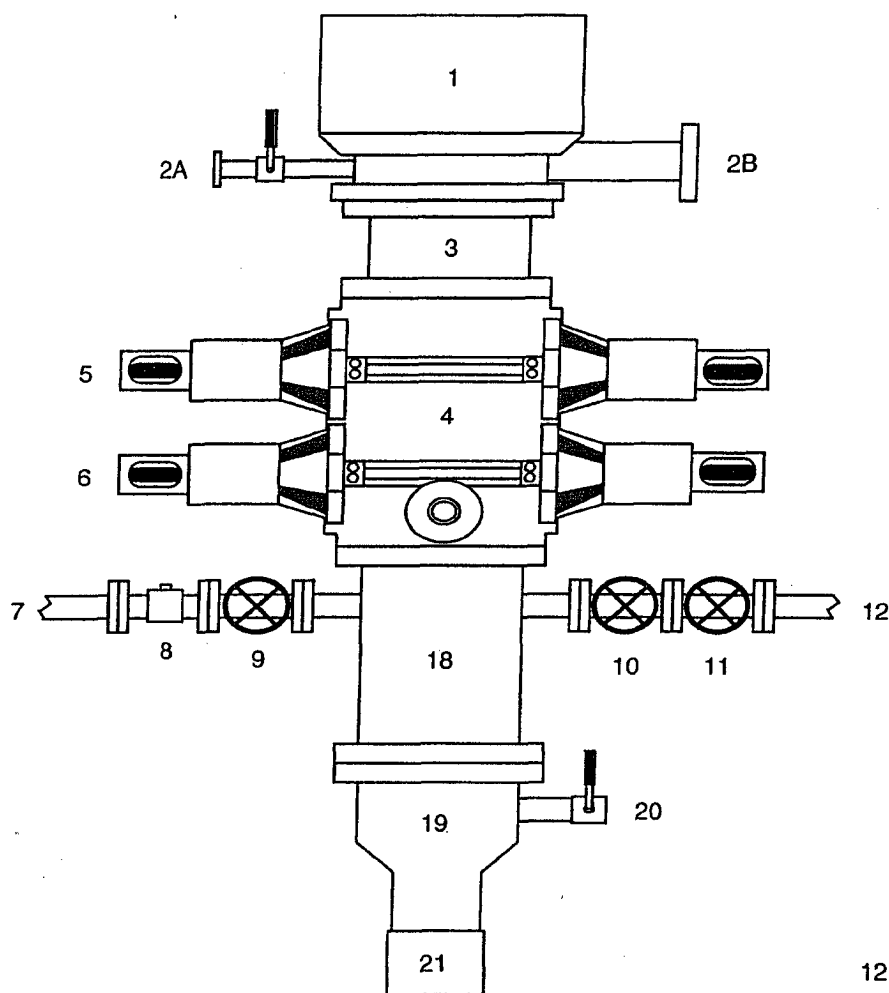
7" Intermediate Casing	
Lead Slurry	
Cement Recipe	Class G Standard Cement + 0.25 lb/sx D029 Cellophane Flakes + 3% D079 Extender + 0.20% D046 Antifoam + 10 lb/sx Pheno Seal
Cement Required	416 sx
Cement Yield	2.72 cuft/sx
Slurry Volume	1132.6 cuft
Cement Density	201.7 bbls
Water Required	11.7 ppg 15.74 gal/sx

7" Intermediate Casing	
Tail Slurry	
Cement Slurry	50 / 50 POZ: Standard Cement + 0.25 lb/sx D029 Cellophane Flakes + 2% D020 Bentonite + 1.5 lb/sx D024 Gilsonite Extender + 2% S001 Calcium Chloride + 0.10% D046 Antifoam + 6 lb/sx Pheno Seal
Cement Required	232 sx
Cement Yield	1.31 cuft/sx
Slurry Volume	304.3 cuft
Cement Density	54.2 bbls
Water Required	13.5 ppg 5.317 gal/sx

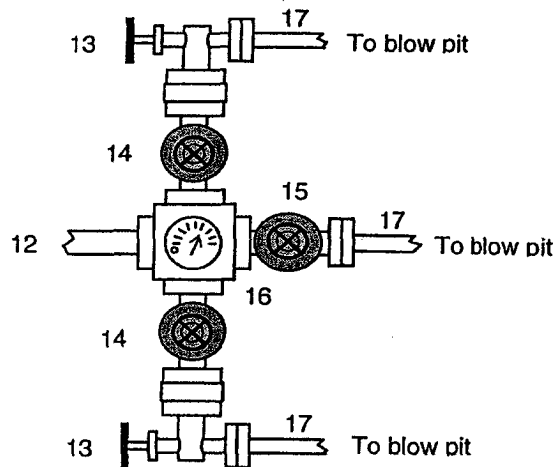
4-1/2" Production Casing	
Cement Recipe	50 / 50 POZ: Class G Standard Cement + 0.25 lb/sx D029 Cellophane Flakes + 3% D020 Bentonite + 1.0 lb/sx D024 Gilsonite Extender + 0.25% D167 Fluid Loss + 0.15% D065 Dispersant + 0.1% D800 Retarder + 0.1% D046 Antifoamer + 3.5 lb/sx PhenoSeal
Cement Quantity	255 sx
Cement Yield	1.44 cuft/sx
Cement Volume	366.6 cuft
Cement Density	65.3 bbls
Water Required	13 ppg 6.43 gal/sx

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

## For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Flowline
3. Spacer Spool
4. Double Ram BOP (11", 3000 psi)
5. Pipe Rams
6. Blind Rams
7. Kill Line
8. Kill Line Check Valve
9. Kill Line Valve
10. Inner Choke Line Valve (3")
11. Outer Choke Line Valve (3")
12. Choke Line (3")
13. Variable Choke
14. Choke Line Valve (2")
15. Panic Line Valve (3")
16. Choke Manifold Pressure Gauge
17. Choke Line (2")
18. Mud Cross Spacer Spool
19. Casing Head "A" Section
20. Casing Head "A" Section 2" Valve
21. 9 5/8" Casing Collar



A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 1000 psi (high pressure test) for 10 minutes. Then the test plug will be removed, and the **9-5/8" casing will be pressure tested** against closed blind rams to 200 psi to 300 psi for 10 minutes and to **1000 psi for 30 minutes** (this value is one 44% of the minimum internal yield pressure of the 9-5/8" casing). (Note: per regulatory requirements we will wait on cement at least 8 hrs after placement before testing the 9-5/8" surface casing). Then an 8-3/4" hole will be drilled to intermediate casing point and 7" intermediate casing will be run and cemented.

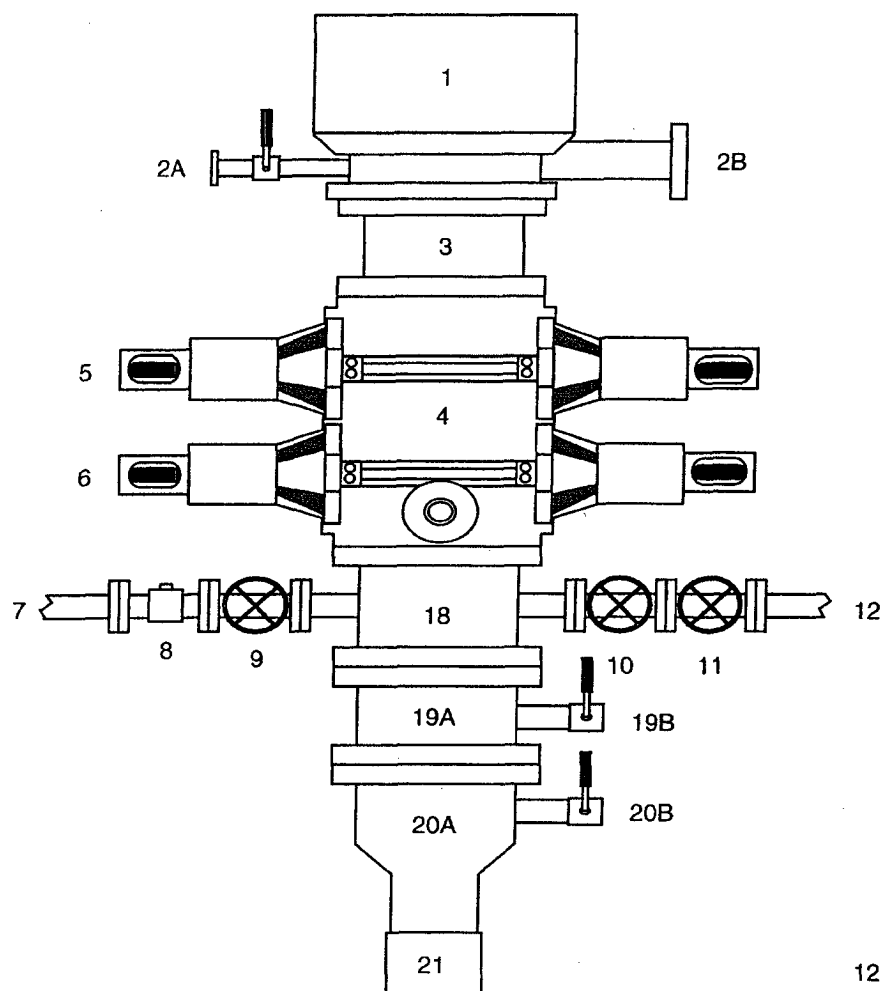
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

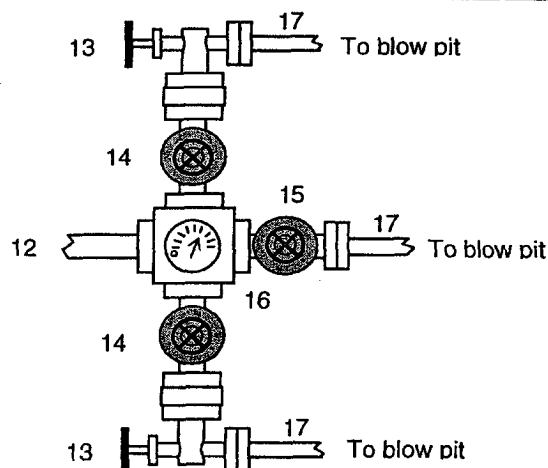


## BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Blooie Line (for Air Drilling)
3. Spacer Spool
4. Double Ram BOP (11", 3000 psi)
5. Pipe Rams
6. Blind Rams
7. Kill Line
8. Kill Line Check Valve
9. Kill Line Valve
10. Inner Choke Line Valve (3")
11. Outer Choke Line Valve (3")
12. Choke Line (3")
13. Variable Choke
14. Choke Line Valve (2")
15. Panic Line Valve (3")
16. Choke Manifold Pressure Gauge
17. Choke Line (2")
18. Mud Cross Spacer Spool
- 19A Csg Spool "B" Section (11", 3M)
- 19B "B" Section Csg Valve (2", 3M)
- 20A Csg Head "A" Section (11", 3M)
- 20B "A" Section Csg Valve (2", 3M)
21. 9 5/8" Casing Collar



After the 7" intermediate casing has been run and cemented, the Casing Spool ("B" Section) will be installed on the wellhead ("A" Section) and the BOP will be installed on the Casing Spool. A test plug will be set in the wellhead and the pipe rams, blind rams, and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 3000 psi (high pressure test) for 10 minutes. Then the test plug will be removed and the 7" casing will be pressure tested against closed blind rams to 200 psi to 300 psi for 10 minutes and to 1800 psi for 30 minutes - this test pressure is 48% of the minimum internal yield strength of 3740 psi for the 7", 20#, J-55, STC casing. Then we will air drill the 6-1/4" hole to TD and run and cement the 4-1/2" casing.

In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

Revision Date: September 1, 2004