

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

SEP 21 2004

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

Bureau of Land Management  
Farmington Field Office

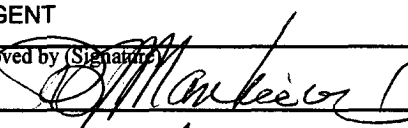
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-078738
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: CBM <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator CONOCOPHILLIPS COMPANY		7. If Unit or CA Agreement, Name and No.
Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conocophillips.com		8. Lease Name and Well No. SAN JUAN 30-5 UNIT 247R
3a. Address 4001 PENBROOK, SUITE 346 ODESSA, TX 79762	3b. Phone No. (include area code) Ph: 915.368.1352	9. API Well No. 30-039-29233
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENE 710FNL 925FEL At proposed prod. zone		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
14. Distance in miles and direction from nearest town or post office*		11. Sec., T., R., M., or Blk. and Survey or Area A Sec 26 T30N R5W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in Lease	12. County or Parish RIO ARRIBA
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3930 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 7130 GL	22. Approximate date work will start	17. Spacing Unit dedicated to this well E/2 320.00
23. Estimated duration		20. BLM/BIA Bond No. on file

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.

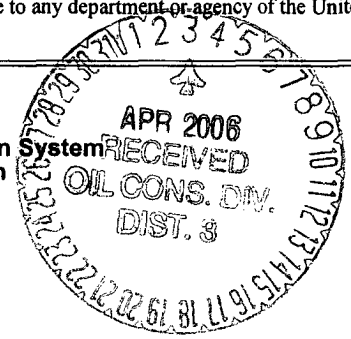
25. Signature (Electronic Submission)	Name (Printed/Typed) VICKI WESTBY	Date 09/17/2004
Title AGENT		
Approved by (Signature) 	Name (Printed/Typed)	Date 3/30/06
Title AFM	Office FFO	

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 #36308 verified by the BLM Well Information System  
For CONOCOPHILLIPS COMPANY, sent to the Farmington



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

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

Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

SEP 21 2004

Bureau of Land Management  
Farmington Field Office

☐ AMENDED REPORT

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-29233		Pool Code 71629	Pool Name BASIN FRUITLAND COAL (GAS)
Property Code 31327	Property Name SAN JUAN 30-5 UNIT		Well Number 247R
OGRID No. 217817	Operator Name CONOCOPHILLIPS COMPANY		Elevation 7130

Surface Location

UL or lot no.	Section	Township	Range	Lot	Feet from the North/South line	Feet from the East/West line	County
A	26	30N	5W	710	NORTH	925	RIO ARRIBA

Bottom Hole Location if Different From Surface

UL or lot no.	Section	Township	Range	Lot	Feet from the North/South line	Feet from the East/West line	County

Dedicated Acres 320.0	Joint or Infill	Consolidation Code	Order No.
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East 1/2

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>16</p>	<p><b>17 OPERATOR CERTIFICATION</b></p> <p>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 (sig)</i></p> <p>Signature Vicki Westby Printed Name Sr. Analyst Title and E-mail Address 9/17/04 Date</p>
	<p><b>18 SURVEYOR CERTIFICATION</b></p> <p>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: 8/20/04 Signature and Seal of Registered Professional Surveyor:  Certificate Number: 71393</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

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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.

30-039-29233

5. Indicate Type of Lease

STATE ☐

FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

SAN JUAN 30-5 UNIT

8. Well Number

247R

9. OGRID Number

217817

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

ConocoPhillips Company

3. Address of Operator

4001 Penbrook, Odessa, TX 79762

4. Well Location

Unit Letter A 710 feet from the NORTH line and 925 feet from the EAST line  
Section 26 Township 30N Range 5W NMPM County RIO ARRIBA

1. Elevation (Show whether DR, RKB, RT, GR, etc)  
7130 GL

Pit or Btl n° of nlv I ink Applikillon ☐ or Closure ☐

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

OTHER: ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PANDA ☐  
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 11.03. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

ConocoPhillips Generic Pit Plan is on files at the NMOCD in Aztec, NM. 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

Sr. Analyst

DATE 9/17/04

Type or print name  
For State Use Only

E-mail address:

Telephone No.

APPROVED BY:

Conditions of Approval (if any):

TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #8 DATE

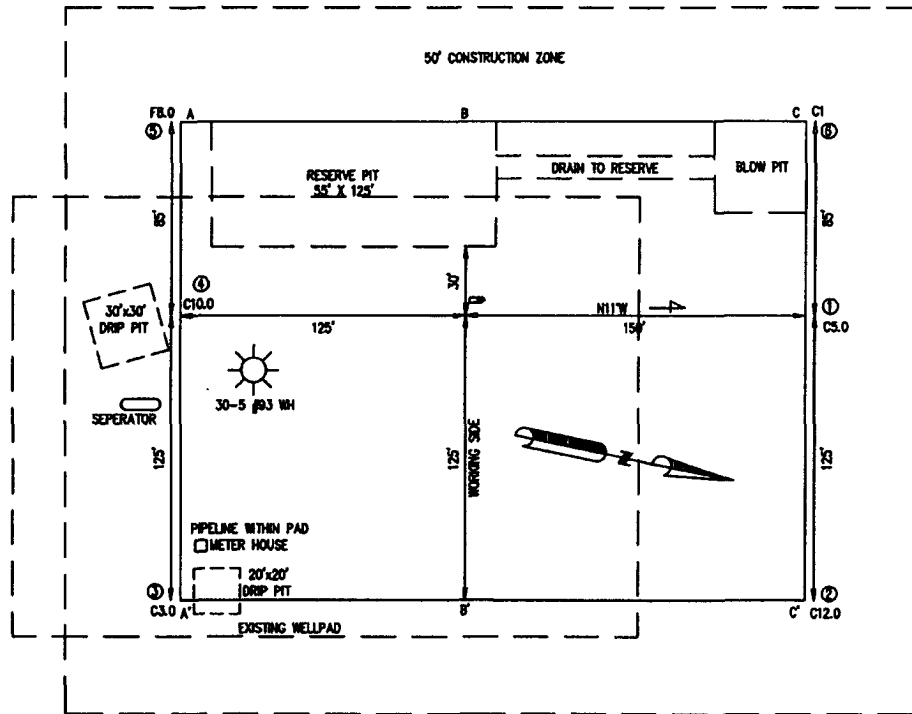
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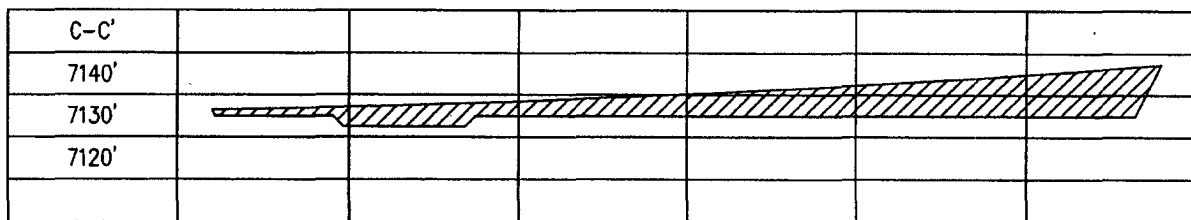
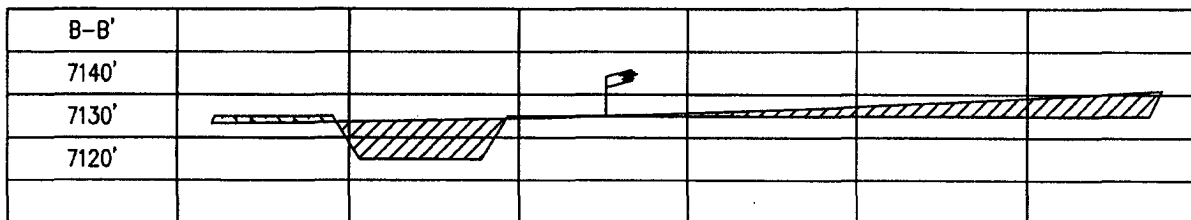
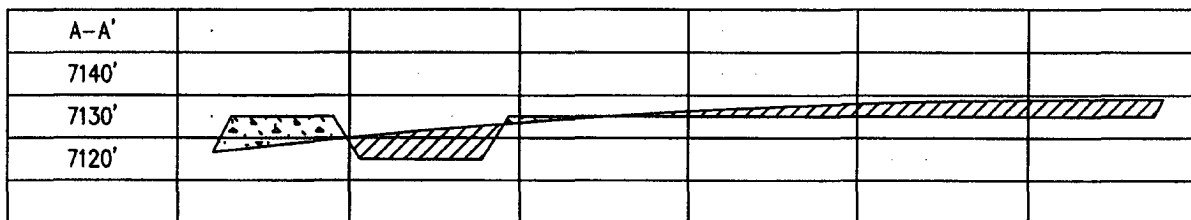
LATITUDE: 36.78901° N  
LONGITUDE: 107.03209° W  
DATE: 03/28/04

CONOCOPHILLIPS COMPANY SAN JUAN 30-5 UNIT #247R  
710' FNL & 925' FEL, SECTION 26, T30N, R5W, NMPM  
RIO ARriba COUNTY, NEW MEXICO, ELEVATION: 7130'



PLAT NOTE:

\*SURFACE OWNER\*  
BLM/FOREST SERVICE



# PROJECT PROPOSAL - New Drill / Sidetrack

**SAN JUAN 30-5 247R**

Lease:		AFE #:		AFE \$:	
Field Name: hPHILLIPS 30-5	Rig:	State: NM	County: RIO ARRIBA	API #:	
Geoscientist: Cloud, Tom A	Phone: +1 832 486-2377	Prod. Engineer: Bergman, Pat W.		Phone: (832) 486-2358	
Res. Engineer: Kolesar, James E.	Phone: (832) 486 - 2336	Proj. Field Lead:		Phone:	

## Primary Objective (Zones)

Zone	Zone Name
JCV	BASIN FRUITLAND COAL (GAS)

## Location: Surface

Latitude: 36.79	Longitude: -107.03	X:	Y:	Section: 26	Range: 5W
Footage X: 925 FEL	Footage Y: 710 FNL	Elevation: 7130 (FT)	Township: 30N		

Tolerance:

Location Type:	Start Date (Est.):	Completion Date:	Date In Operation:
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Formation Data: Assume KB = 7143 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SAN JOSE	13	7130	<input type="checkbox"/>			
Surface Casing	213	6930	<input type="checkbox"/>			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	2043	5100	<input type="checkbox"/>			
OJAM	3313	3830	<input type="checkbox"/>			Possible water flows.
KRLD	3413	3730	<input type="checkbox"/>			
FRLD	3643	3500	<input type="checkbox"/>			Possible gas.
Intermediate Casing	3728	3415	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
BASE MAIN COAL	3843	3300	<input type="checkbox"/>	325		
PC TONGUE	3898	3245	<input type="checkbox"/>			
Total Depth	3930	3213	<input type="checkbox"/>			6-1/4" hole possibly underreamed to 9.5". Optional Liner: 5.5", 15.5#, J-55 LTC - left uncemented.
BASE LOWEST COAL	4038	3105	<input type="checkbox"/>			
PCCF	4040	3103	<input type="checkbox"/>			

## Reference Wells:

Reference Type	Well Name	Comments
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## Logging Program:

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 type="checkbox"/> TDT
Additional Information:			

Comments: Zones - Carson National Forest

General/Work Description - Carson National Forest  
Twin to #93 drilled in 1983

Mud Log from intermediate casing shoe to TD will be obtained.

Drilling Mud Program:  
Surface: spud mud  
Intermediate: fresh water mud with bentonite and polymer as needed

## San Juan 30-5 # 247R

### SURFACE CASING :

Drill Bit Diameter	12.25"	
Casing Outside Diameter	9.625"	Casing Inside Diam. 8.000"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	230'	
Cement Yield	12	cuft/sk
Excess Cement	125	%
Cement Required	147	sx

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

### INTERMEDIATE CASING :

Drill Bit Diameter	10.75"	
Casing Outside Diameter	7"	Casing Inside Diam. 6.562"
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3728'	
Lead Cement Yield	9	cuft/sk
Lead Cement Excess	160	%
Tail Cement Length	31.3'	
Tail Cement Yield	9	cuft/sk
Tail Cement Excess	160	%
Lead Cement Required	44	sx
Tail Cement Required	100	sx

LINER TOP 3708 '

SHOE 3728 ', 7 ", 20 ppf, J-55

LINER BOTTOM 3930' (Uncemented)

San Juan 30-3 # 247R		
	Surf Csg	Int Csg
OD	9.625	7
ID	9.001	6.456
Depth	230	3728
Hole Diam	12.25	8.75
% Excess Lead		160
% Excess Tail	125	160
Lead Yield		291
Tail Yield		135
Bot of Tail Slurry	230	315
Top of Tail Slurry	0	3413
Top of Lead Slurry	N/A	0
Mud Wt (ppg)	8.9	9.0
Mud Type	WBM	WBM

Surface Casing						
	Ft	Cap	XS Factor	bbls	cuft	sx
Open Hole Annulus	230	0.055804	2.25	28.9	162.1	134.0
Shoe Track Volume	40	0.078735	1	3.1	17.7	13.3
Total				32.0	179.8	147.3

Intermediate Casing						
	Ft	Cap	XS Factor	bbls	cuft	sx
Lead Open Hole Annulus	3183	0.026786	2.6	221.7	1244.6	427.7
Lead Cased Hole Annulus	220	0.031116	1	6.8	38.4	13.2
Lead Total				228.5	1283.0	440.9
Tail Open Hole Annulus	315	0.026786	2.6	21.9	123.2	92.6
Tail Shoe Track Volume	42	0.040505	1	1.7	9.6	7.2
Tail Total				23.6	132.7	99.8

San Juan 30-5 # 247R		
9 5/8 Surface Casing		
Cement Recipe	Class C Standard Cement	
	+ 3% Calcium Chloride	
	+0.25 lb/sx Floccle	
Cement Volume	1.7	cu/sx
Cement Yield	1.21	cuft/sx
Slurry Volume	1.29	cuft
	0.24	bbls
Cement Density	15.6	ppg
Water Required	5.29	gal/sx



San Juan 30-5 # 247R

7" Intermediate Casing	
Lead Slurry	
Cement Recipe	Standard Cement
	+ 3% Econolite (Lost Circulation Additive)
	+ 10 lb/sx Gilsonite (Lost Circ. Additive)
	+ 0.25 lb/sx Flocele (Lost Circ. Additive)
Cement Required	44.1 sx
Cement Yield	2.91 cuft/sx
Slurry Volume	283.0 cuft
	228.5 bbls
Cement Density	11.5 ppg
Water Required	16.88 gal/sx

7" Intermediate Casing	
Tail Slurry	
Cement Slurry	50 / 50 POZ:Standard Cement
	+ 2% Bentonite (Light Weight Additive)
	+ 5 lbm/sk Gilsonite (Lost Circ. Additive)
	+ 0.25 lbm/sk Flocele (lost Circ. Additive)
	+ 2% Calcium Chloride (Accelerator)
Cement Required	100.0 sx
Cement Yield	1.33 cuft/sx
Slurry Volume	22.0 cuft
	18.0 bbls
Cement Density	13.5 ppg
Water Required	5.36 gal/sx

## San Juan 30-5 #247R

### SURFACE CASING :

Drill Bit Diameter	2 1/2"	
Casing Outside Diameter	9 5/8"	9.001
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	230'	40'
Cement Yield	147	cuft/sk
Excess Cement	125	%
Casing Capacity	0.0787 bbl/ft	0.4419 cuft/ft
Hole / Casing Annulus Capacity	0.0558 bbl/ft	0.3132 cuft/ft

**Cement Required 147 sx**

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

### INTERMEDIATE CASING :

Drill Bit Diameter	7"	
Casing Outside Diameter	7"	6.456
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3728'	
Lead Cement Yield	494	cuft/sk
Lead Cement Excess	100	%
Tail Cement Length	42'	
Tail Cement Yield	100	cuft/sk
Tail Cement Excess	100	%
Casing Capacity	0.0405 bbl/ft	0.2273 cuft/ft
Casing / Casing Annulus Capacity	0.0311 bbl/ft	0.1746 cuft/ft
Hole / Casing Annulus Capacity	0.0268 bbl/ft	0.1503 cuft/ft

**Lead Cement Required 494 sx**  
**Tail Cement Required 100 sx**

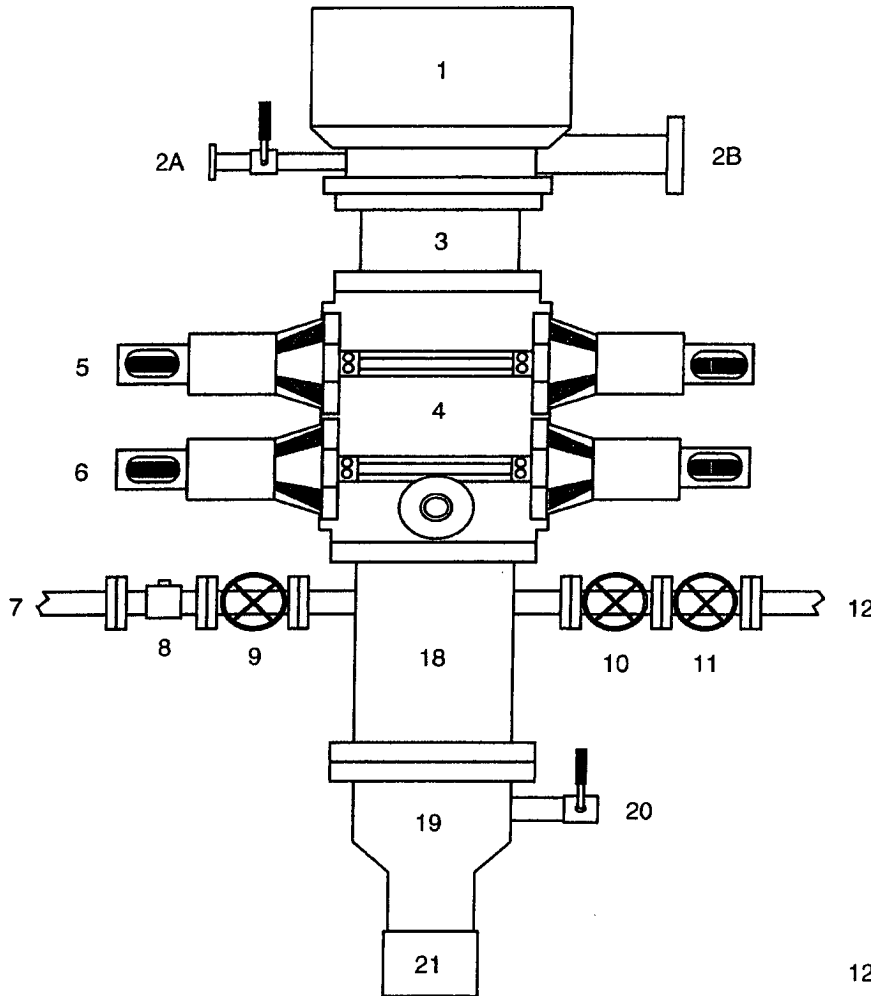
**LINER TOP 3708'**

**SHOE 3728', 7", 20 ppf, J-55**

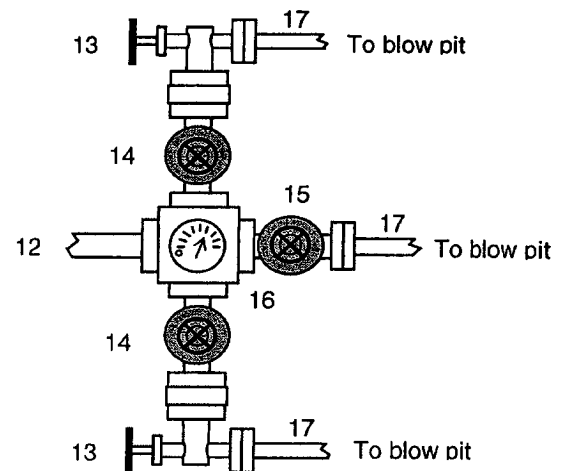
**LINER BOTTOM 3930' (Uncemented)**

## 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.

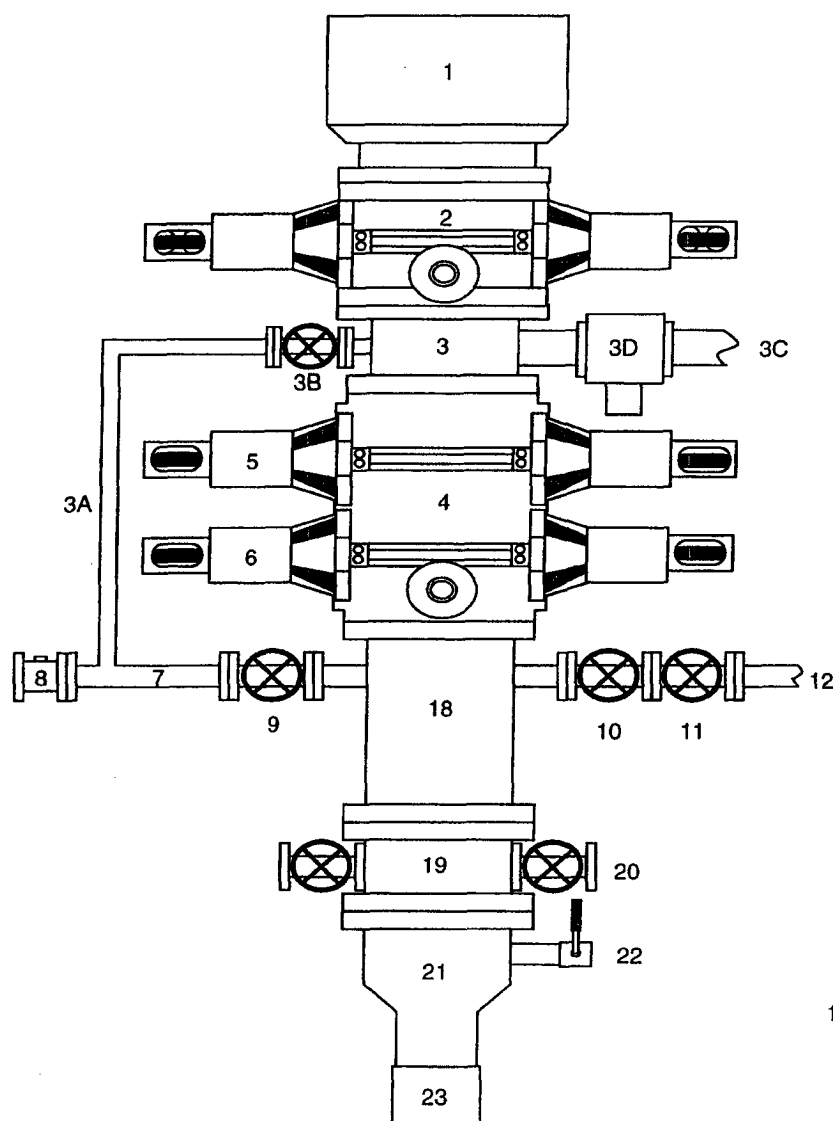
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

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

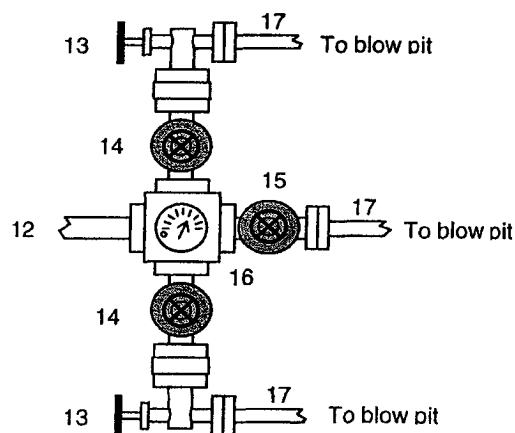
Revision Date: September 1, 2004

## BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

### For Cavitation Program



1. Stripping Head
2. Single Ram BOP (7-1/16", 3M)
3. Mud Cross
- 3A. Equalizing Line (2")
- 3B. Wing Valve (2-1/16", 3M)
- 3C. Blooie Line (2 ea, 5" OD)
- 3D. HCR Valve (1 ea per line, 4-1/16")
4. Double Ram BOP (7-1/16", 3M)
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. Vent Line (2")
18. Spacer Spool
19. Tubing Head
20. Tubing Head Valves (2- 9/16")
21. Casing Head "A" Section
22. Casing Head "A" Section 2" Valve
23. 9-5/8" Casing Collar



This BOP arrangement and test program is for the cavitation program. The BOP will be installed on the tubing head. 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. The pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 1800 psi (high pressure test) for 10 minutes - This test will be done with a test plug or possibly without a test plug (ie against casing). If we conduct this test without a test plug we will ensure that we have sufficient drillstring weight in the hole to exceed the upward force generated by the test.

We use a power swivel and air/mist to drill the 6-1/4" hole in our cavitation program. We do not use a kelly. In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. String floats will be used inside the drillpipe
2. Stab-in TIW valve for all drillstrings in use
3. Each blooie line is equipped with a hydraulically controlled valve (HCR valve).

Revision Date: September 1, 2004