

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-078460
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		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 32-7 UNIT 243A
3a. Address 4001 PENBROOK ODESSA, TX 79762	3b. Phone No. (include area code) Ph: 915-368-1352	9. API Well No. 3004532732
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface NENW 610FNL 2391FWL At proposed prod. zone NENW 610FNL 2391FWL		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 Sec 19 T32N R7W 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 2484.30	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.		13. State NM
19. Proposed Depth 3340 MD		17. Spacing Unit dedicated to this well 330.37 W/2
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6375 GL	22. Approximate date work will start	20. BLM/BIA Bond No. on file
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 11/30/2004
Title AGENT		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 3-31-05
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)

HOLD 0104 FOR NSL

Electronic Submission #51337 verified by the BLM Well Information System  
For CONOCOPHILLIPS COMPANY, sent to the Farmington

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

NMOC

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

\*\* 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  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies  
☐ 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 <b>3005-32732</b>		Pool Code <b>71629</b>	Pool Name <b>BASIN FRUITLAND COAL (GAS)</b>
Property Code <b>31329</b>	Property Name <b>SAN JUAN 32-7 UNIT</b>		Well Number <b>243A</b>
OGRD No. <b>217817</b>	Operator Name <b>CONOCOPHILLIPS COMPANY</b>		Elevation <b>6375</b>

#### 10 Surface Location

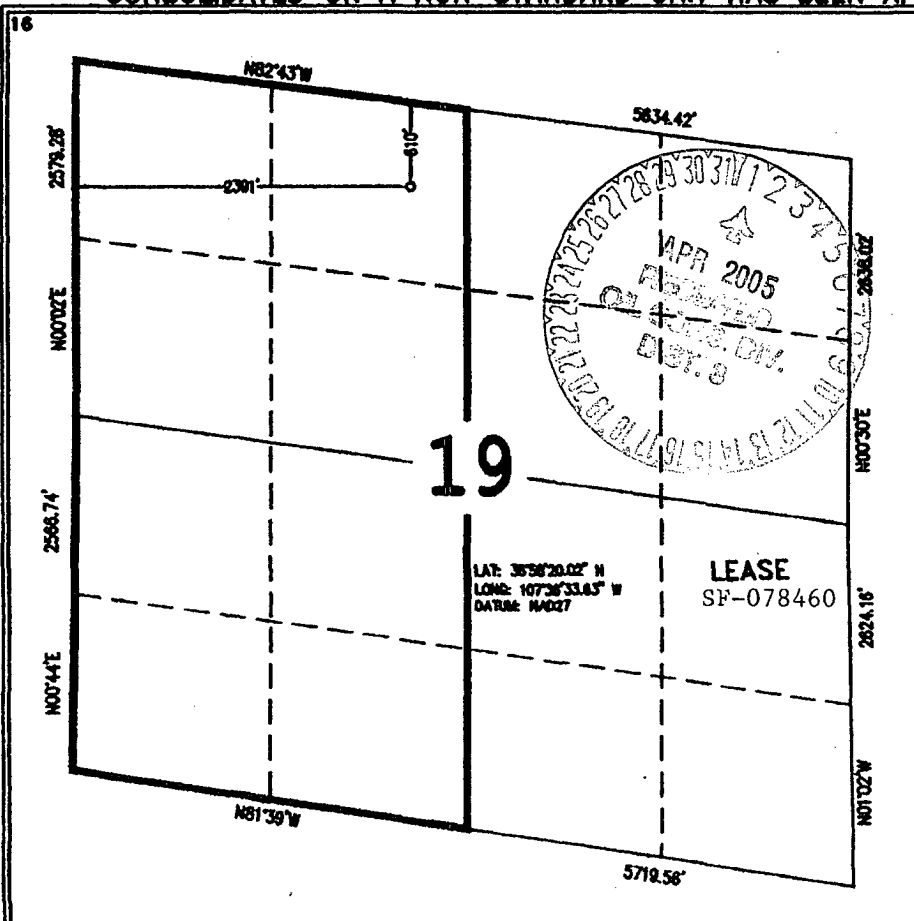
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>C</b>	<b>19</b>	<b>32N</b>	<b>07W</b>		<b>610</b>	<b>NORTH</b>	<b>2391</b>	<b>WEST</b>	<b>SAN JUAN</b>

#### 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

Dedicated Acres <b>330.37</b>	Joint or Infill <input checked="" type="checkbox"/>	Consolidation Code	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



#### 17 OPERATOR CERTIFICATION

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

*Vicki Westby (pf)*  
Signature

**Vicki Westby**  
Printed Name

**Staff Agent**  
Title and E-mail Address

**11/28/04**  
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: **11/28/04**  
Signature and Seal of Surveyor

**HENRY P. MADHUSART, JR.**  
**REGISTERED PROFESSIONAL SURVEYOR**  
Certificate Number: **113934**

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

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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 ConocoPhillips Company		6. State Oil & Gas Lease No.
3. Address of Operator 4001 Penbrook, Odessa, TX 79762		7. Lease Name or Unit Agreement Name SAN JUAN 32-7 UNIT
4. Well Location Unit Letter C 610 feet from the NORTH line and 2391 feet from the WEST line Section 19 Township 32N Range 7W NMPM SAN JUAN County		8. Well Number 243A
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6375 GL		9. OGRID Number 217817
		10. Pool name or Wildcat Basin Fruitland Coal

Pit or Below-grade Tank Application <input type="checkbox"/> Closure <input type="checkbox"/>
Pit type DRILL Depth to Groundwater 110' Distance from nearest fresh water well > 1 MILE Distance from nearest surface water 370'
Liner Thickness: mil Below-Grade Tank: Volume bbls; Construction Material

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

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

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.

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 11/28/04

Type or print name  
For State Use Only

E-mail address:

Telephone No.

APPROVED BY:

Conditions of Approval (if any):

TITLE

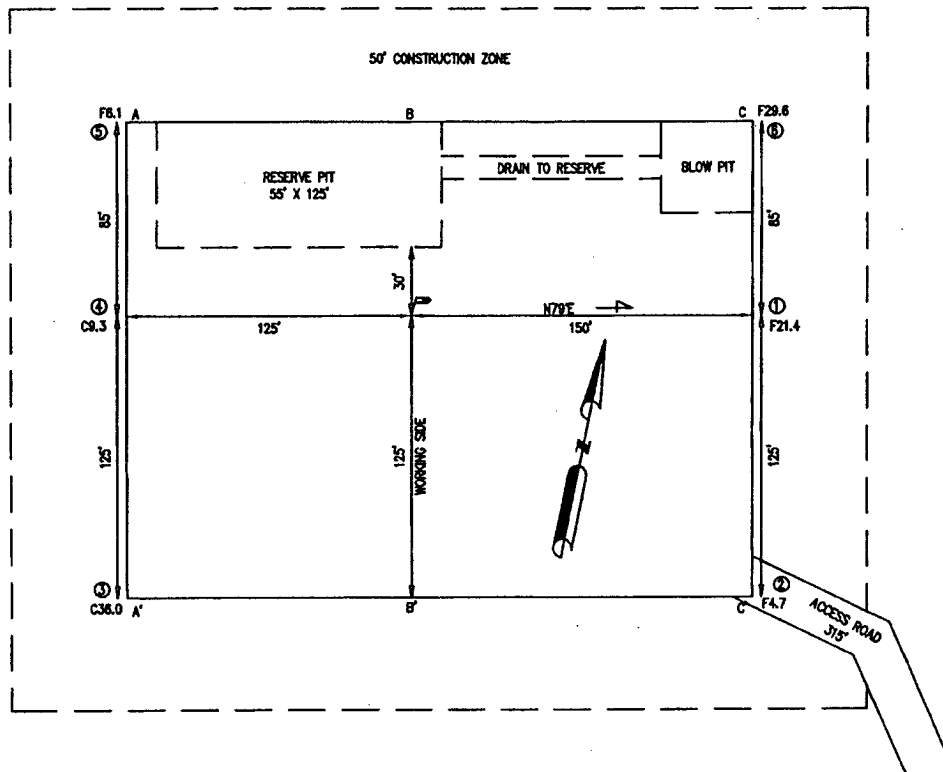
DEPUTY OIL & GAS INSPECTOR, DIST. 6

DATE

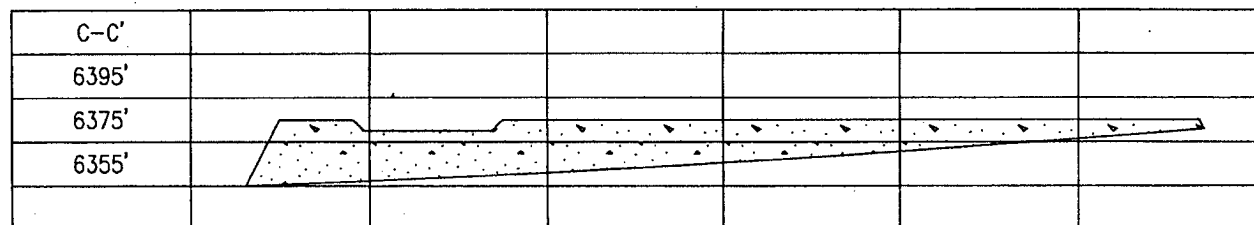
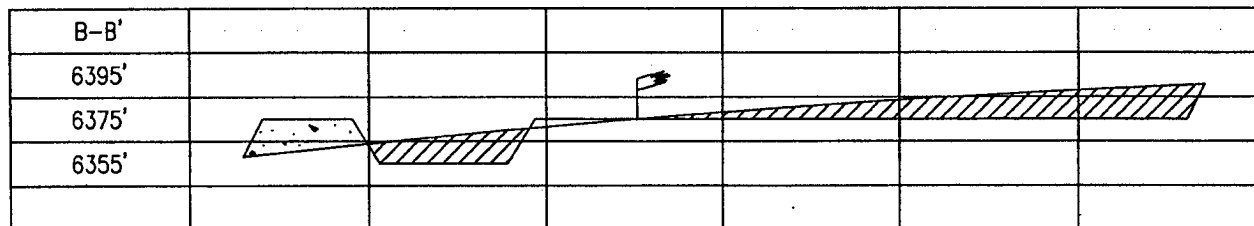
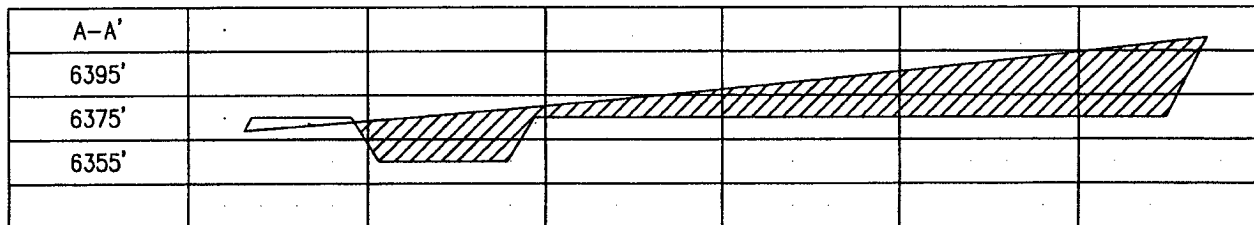
APR - 1 2005

CONOCOPHILLIPS COMPANY SAN JUAN 32-7 UNIT #243A  
 610' FNL & 2391' FWL, SECTION 19, T32N, R07W, NMPM  
 SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6375'

LATITUDE: 36°58'20.02" N  
 LONGITUDE: 107°36'33.63" W  
 DATUM: NAD27



PLAT NOTE:  
 \*SURFACE OWNER\*  
 BLM



# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32-7 243A

Lease:		AFE #:		AFE \$:	
Field Name: hPHILLIPS 32-7		Rig:		State: NM	County: SAN JUAN
Geoscientist: Murphy, Jim O.		Phone: 832-486-2361		Prod. Engineer: Phone: 832-486-2254	
Res. Engineer: Anderson, Derrick K		Phone: 832 486-3486		Proj. Field Lead: Phone:	

## Primary Objective (Zones):

Zone	Zone Name
JCV	BASIN FRUITLAND COAL (GAS)

## Location: Surface

## Straight Hole

Latitude: 36.97	Longitude: -107.61	X:	Y:	Section: 19	Range: 7W
Footage X: 2391 FWL	Footage Y: 610 FNL	Elevation: 6375	(FT)	Township: 32N	
Tolerance:					

Location Type: Start Date (Est.): Completion Date: Date In Operation:

Formation Data: Assume KB = 6388 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SAN JOSE	13	6375	<input type="checkbox"/>			
Surface Casing	213	6175	<input type="checkbox"/>			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	471	5917	<input type="checkbox"/>			
OJAM	2013	4375	<input type="checkbox"/>			Possible water flows.
KRLD	2093	4295	<input type="checkbox"/>			
FRLD	2868	3520	<input type="checkbox"/>			Possible gas.
Intermediate Casing	2913	3475	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
BASE MAIN COAL	3078	3310	<input type="checkbox"/>	800		
PC TONGUE	3173	3215	<input type="checkbox"/>			
BASE LOWEST COAL	3250	3138	<input type="checkbox"/>			
PCCF	3258	3130	<input type="checkbox"/>			
Total Depth	3340	3048	<input type="checkbox"/>			6-1/4" hole possibly underreamed to 9.5". Optional Liner: 5.5", 15.5#, J-55 LTC - left uncemented.

## Reference Wells:

Reference Type	Well Name	Comments
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## Logging Program:

Intermediate Logs: ☐ Log only if show ☐ GR/ILD ☐ Triple Combo

TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☐ TDT

TD includes 80 feet sump/rathole & COPC will comply with

Additional Information: the BLM's Conditions of Approval for the proposed sump/rathole in this non-producing Pictured Cliffs formation

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Comments: General/Work Description -

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

### San Juan 32-7 # 243A

#### 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	121	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	2913'	
Lead Cement Yield	291	cuft/sk
Lead Cement Excess	160	%
Tail Cement Length	315'	
Tail Cement Yield	133	cuft/sk
Tail Cement Excess	160	%
Lead Cement Required	331	sx
Tail Cement Required	100	sx

LINER TOP 2893 '

SHOE 2913 ', 7 ", 20 ppf, J-55

LINER BOTTOM 3340 ' (Uncemented)

**SAN JUAN 32-7 #243A**

**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
	32.0	bbls
Cement Density	15.6	ppg
Water Required	5.29	gal/sx

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	331	sx
Cement Yield	2.91	cuft/sx
Slurry Volume	964.3	cuft
	171.8	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	sx
Cement Yield	1.33	cuft/sx
Slurry Volume	132.7	cuft
	23.6	bbls
Cement Density	13.5	ppg
Water Required	5.36	gal/sx

**OPTION 2**

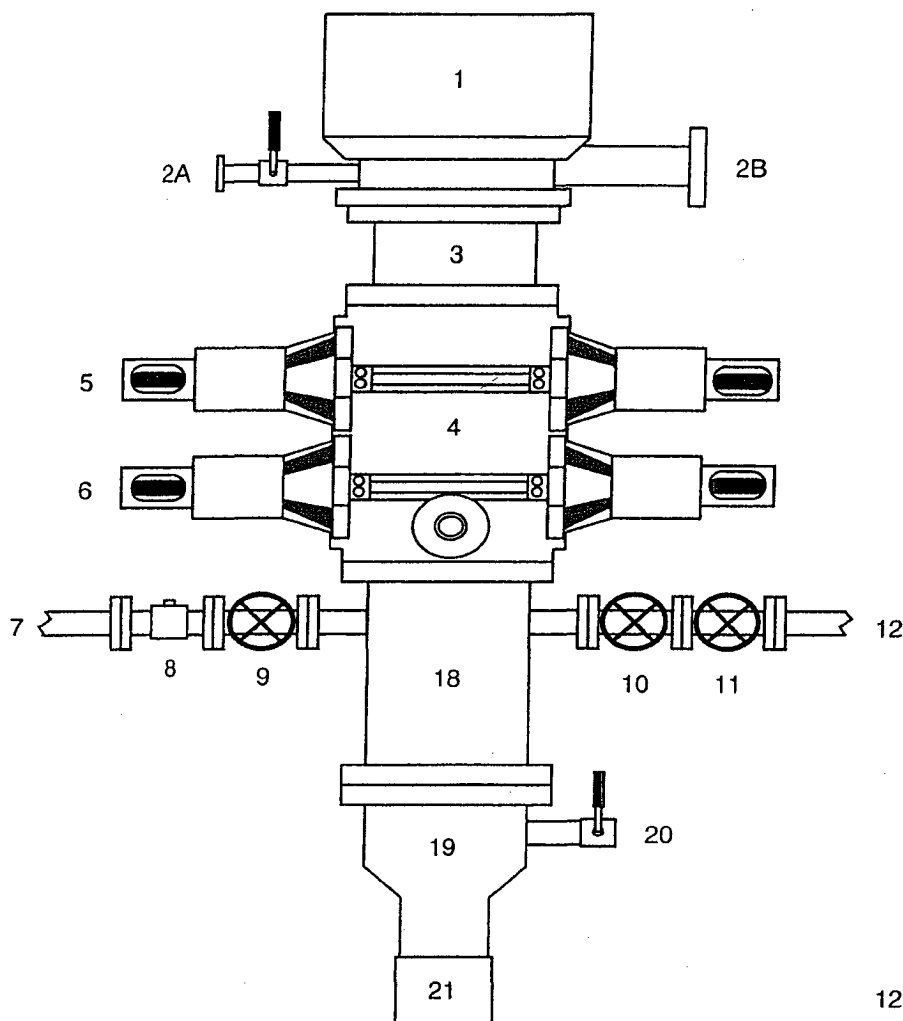
9-5/8" Surface Casing		
Cement Slurry	Class G	
	+ 2% S001 Calcium Chloride	
	+ 0.25 lb/sx D029 Cellophane Flakes	
Cement Volume	147	sx
Cement Yield	1.16	cuft/sx
Cement Volume	170.52	cuft
Cement Density	15.8	ppg
Water Required	4.983	gal/sx

7" Intermediate Casing		
Lead Slurry		
Cement Slurry	Class G	
	+ 3% D079 Extender	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 0.2% D046 Antifoam	
Cement Volume	372	sx
Cement Yield	2.61	cuft/sx
Cement Volume	971.50	cuft
Cement Density	11.7	ppg
Water Required	15.876	gal/sx

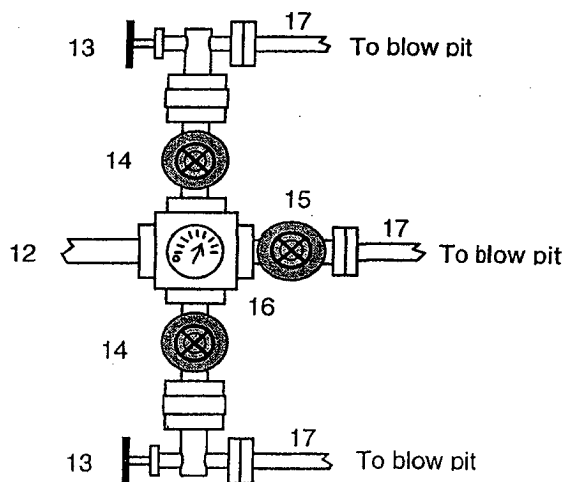
7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50% POZ / 50% Class G cement	
	+ 2% D020 Bentonite	
	+ 2% S001 Calcium Chloride	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 5 lb/sx Gilsonite Extender	
	+ 0.2% D046 Antifoam	
Cement Volume	100	sx
Cement Yield	1.27	cuft/sx
Cement Volume	126.80	cuft
Cement Density	13.5	ppg
Water Required	5.182	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.

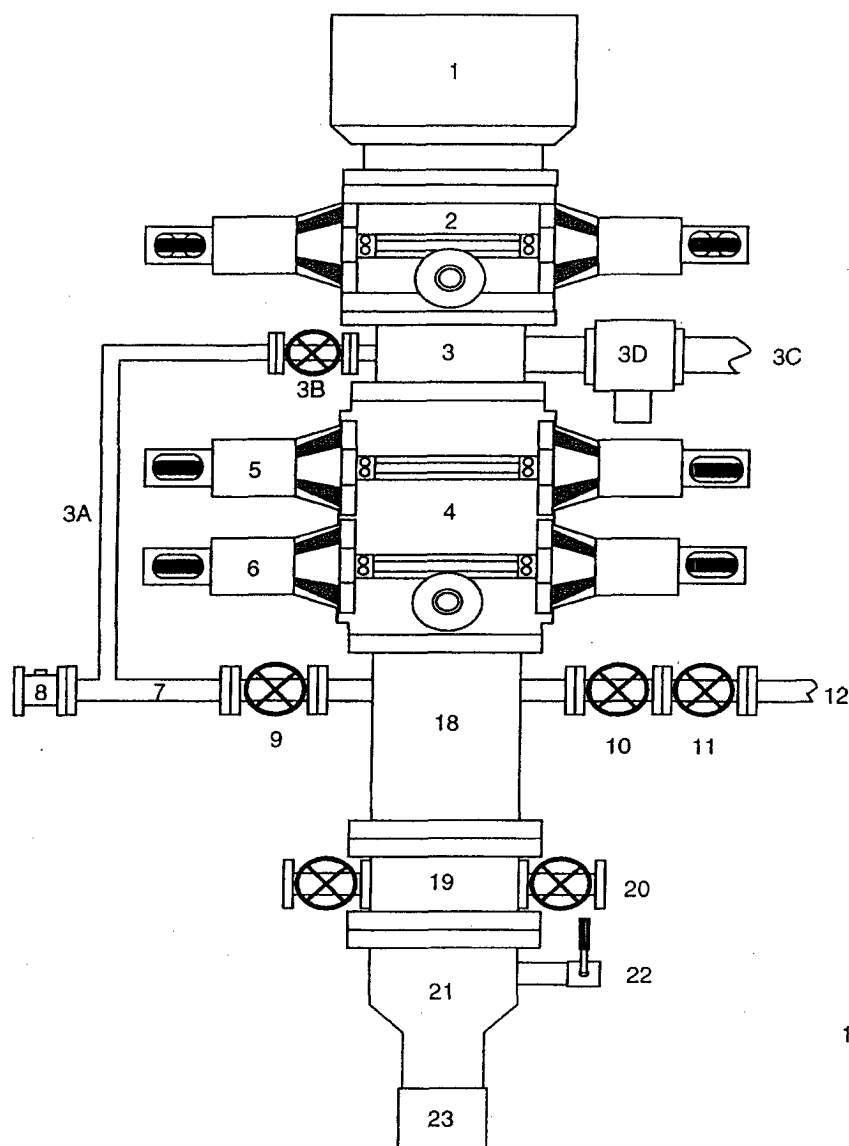
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

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

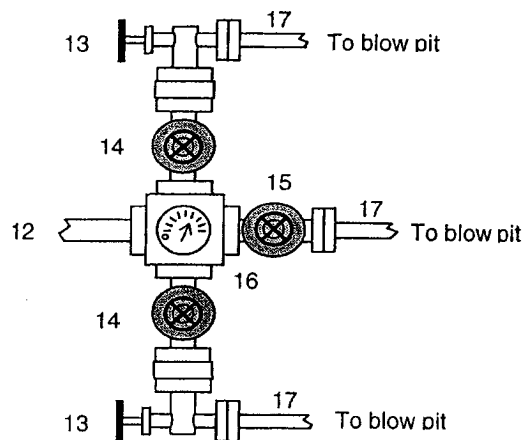


# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

## For 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. Bore 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 bore line is equipped with a hydraulically controlled valve (HCR valve).

**Property :** SAN JUAN 32-7 UNIT **Well #:** 243A

**Surface Location:**

**Unit:** C **Section:** 19 **Township:** 32N **Range:** 7W

**County:** SAN JUAN **State:** New Mexico

**Footage:** 610 **from the** NORTH **line,** 2391 **from the** WEST **line.**

**CATHODIC PROTECTION**

ConocoPhillips (COP) proposes to drill a cathodic protection deep well groundbed for the subject well. COP will drill a hole vertically at the surface large enough to accommodate 20 feet of 8 inch diameter PVC pipe for surface casing to assist in further drilling and loading. Casing may be cemented in place for stability if needed. COP will drill a 6-7/8" hole to an anticipated minimum depth of 300'(maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on the existing well pad and a Farmington based company will be doing the drilling for ConocoPhillips.