

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-078998
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 213A
3a. Address 4001 PENBROOK ODESSA, TX 79762	3b. Phone No. (include area code) Ph: 915.368.1352	9. API Well No. 30-045-32966
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWNW 2528FNL 402FWL At proposed prod. zone SENE 2471FNL 457FEL		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 E Sec 17 T31N R07W 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 1718.90	12. County or Parish SAN JUAN ✓
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3673 MD 3508 TVD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6525 GL	22. Approximate date work will start	17. Spacing Unit dedicated to this well 325.68-unit # -R-9305
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.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 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). | 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 03/15/2005
Title AGENT		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) FFO	Date 4-26-05
Title AFM		

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 #54892 verified by the BLM Well Information System  
For CONOCOPHILLIPS COMPANY, sent to the Farmington

HOLD C104 FOR Directional Survey

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

NMCCD

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 30-045-32966		Pool Code 71629	Pool Name BASIN FRUITLAND COAL (GAS)
Property Code 31329	Property Name SAN JUAN 32-7 UNIT		Well Number 213A
GORID No. 217817	Operator Name CONOCOPHILLIPS COMPANY		Elevation 6525

<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
E	17	31N	07W		2528	NORTH	402	WEST	SAN JUAN

<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
H	18	31N	07W		2471	NORTH	457	EAST	SAN JUAN

Dedicated Acres 325.68	Joint or Infill <input type="checkbox"/>	Consolidation Code 	Order No. R-9305 Unit #1
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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

<p><sup>16</sup></p>	<p><sup>17</sup>OPERATOR CERTIFICATION</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 (if)</i> Signature Vicki Westby Printed Name Staff Agent Title and E-mail Address 3/10/05 Date</p> <p><sup>18</sup>SURVEYOR CERTIFICATION</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: 10/15/04 Signature and Seal: HENRY T. BROADHURST, JR. REGISTERED PROFESSIONAL SURVEYOR Certificate Number: 171393</p>
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**Additional Operator Remarks:**

ConocoPhillips Company proposes to drill a directional wellbore to the Basin Fruitland Coal formation. This well will be drilled and equipped in accordance with the attachments submitted herewith.

ConocoPhillips will use mudloggers to prevent us from accessing the Pictured Cliffs formation.

This well does not require HPA notification.

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

Form C-1 03  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name San Juan 32-7 Unit
8. Well Number 213A
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 <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other
2. Name of Operator ConocoPhillips Company
3. Address of Operator 4001 Penbrook, Odessa, TX 79762
4. Well Location Unit Letter E 2528 feet from the North line and 402 feet from the West line Section 17 Township 31N Range 7W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
6525 GL

Pit or Below-grade Tank Application <input checked="" type="checkbox"/> Closure <input type="checkbox"/>
Pit type DRILL Depth to Groundwater 130' Distance from nearest fresh water well >1 Mile Distance from nearest surface water 850'
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:		SUBSEQUENT REPORT OF:	
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 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. 1, 2004 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 3/10/2005

Type or print name

E-mail address:

Telephone No.

For State Use Only

DEPUTY OIL & GAS INSPECTOR, DIST. 13

APR 29 2005

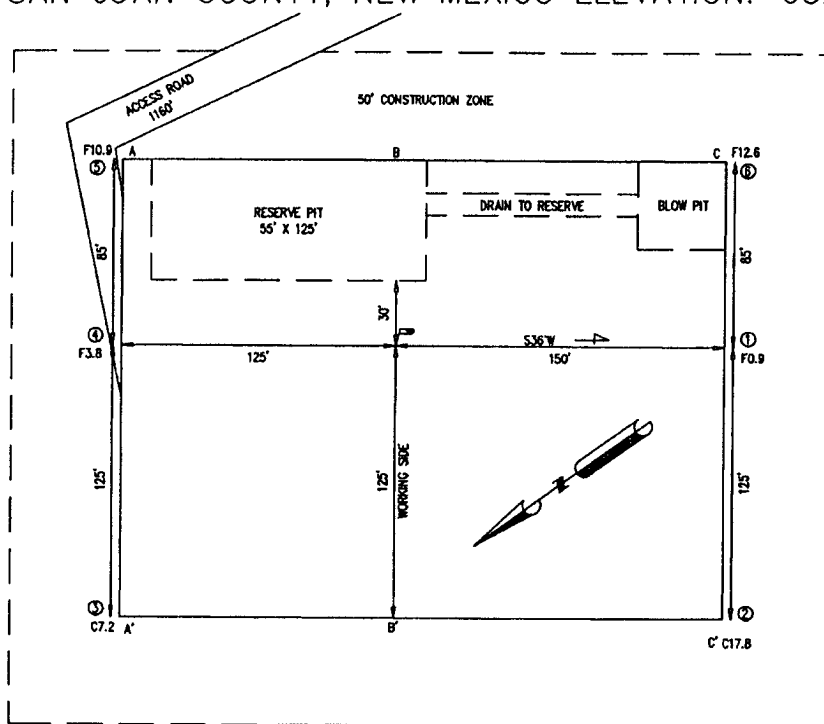
APPROVED BY:

TITLE

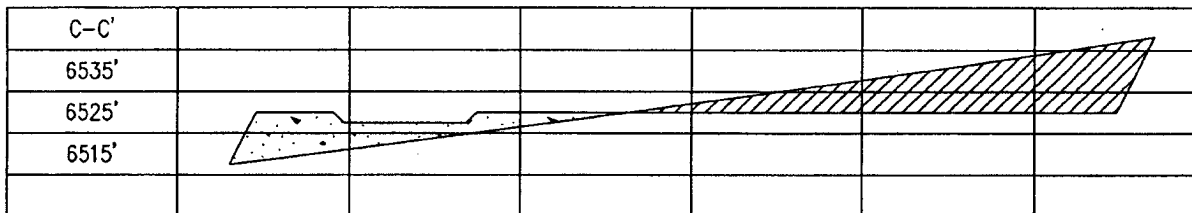
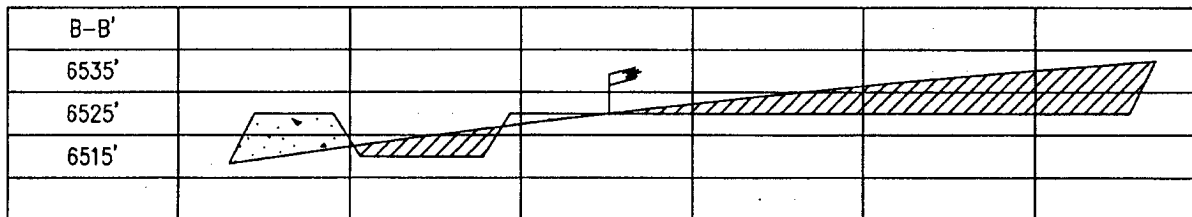
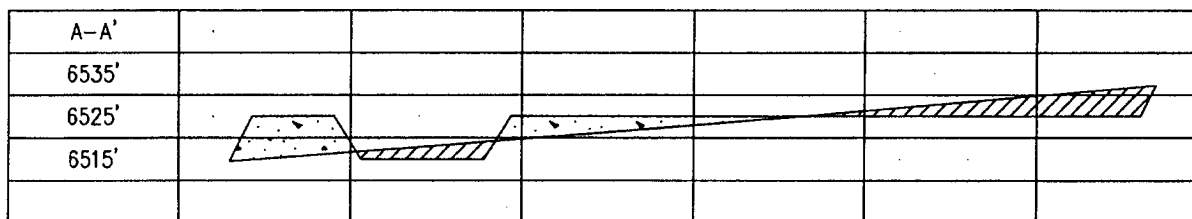
DATE

Conditions of Approval (if any):

LATITUDE: 36°53'59.50" N  
LONGITUDE: 107°36'04.62" W



**\*SURFACE OWNER\***  
BLM





# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32-7 213A

Lease:		AFE #:		AFE \$:	
Field Name: hPHILLIPS 32-7		Rig:	State: NM	County: SAN JUAN	API #:
Geoscientist: Cloud, Tom A		Phone: +1 832 486-2377	Prod. Engineer:		Phone:
Res. Engineer: Peterson, Brad T		Phone: 486-2055	Proj. Field Lead:		Phone:
<b>Primary Objective (Zones):</b>					
<b>Zone</b>	<b>Zone Name</b>				
JCV	BASIN FRUITLAND COAL (GAS)				
<b>Location: Surface</b>					
<b>Straight Hole</b>					
Latitude: 36.90	Longitude: -107.60	X:	Y:	Section: 17	Range: 7W
Footage X: 402 FWL	Footage Y: 2528 FNL	Elevation: 6525	(FT)	Township: 31N	
Tolerance:					
<b>Location: Bottom Hole</b>					
<b>Straight Hole</b>					
Latitude:	Longitude:	X:	Y:	Section: 18	Range: 7w
Footage X: 457 FEL	Footage Y: 2471 FNL	Elevation:	(FT)	Township: 31n	
Tolerance:					
Location Type:		Start Date (Est.):		Completion Date:	
				Date In Operation:	
Formation Data: Assume KB = 6538 Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT
Remarks					
SAN JOSE	13	6525	<input type="checkbox"/>		
Surface Casing	213	6325	<input type="checkbox"/>		12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1118	5420	<input type="checkbox"/>		
OJAM	2298	4240	<input type="checkbox"/>		Possible water flows.
KRLD	2408	4130	<input type="checkbox"/>		
FRLD	3018	3520	<input type="checkbox"/>		Possible gas.
Intermediate Casing	3078	3460	<input type="checkbox"/>		8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
TOP COAL	3108	3430	<input type="checkbox"/>		
BASE MAIN COAL	3238	3300	<input type="checkbox"/>	200	
PC TONGUE	3308	3230	<input type="checkbox"/>		
BASE LOWEST COAL	3428	3110	<input type="checkbox"/>		
PCCF	3431	3107	<input type="checkbox"/>		
Total Depth	3508	3030	<input type="checkbox"/>		6-1/4" hole possibly underreamed to 9.5". Optional Liner: 5.5", 15.5#, J-55 LTC - left uncemented.
<b>Reference Wells:</b>					
<b>Reference Type</b>	<b>Well Name</b>	<b>Comments</b>			
Intermediate	NWPL 32-7 #227				
Intermediate	NWPL 32-7 #201				
Intermediate	COP SJ 32-7 #231A				

## Logging Program:

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

## PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32-7 213A

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
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	

Comments: Location/Tops/Logging - Target hardline is at least 402' west of surface location at section line.

General/Work Description - To drill and complete a directional Fruitland coal well.  
Mud Log from intermediate casing shoe to TD will be obtained.  
BHL location is 457 FEL due to 860' hor. reach. NSL required?

**Drilling Mud Program:**

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist drilling media with foamer, polymer, & corrosion inhibitor as needed

## San Juan 32-7 # 213A

### 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	3243'	
Lead Cement Yield	291	cuft/sk
Lead Cement Excess	160	%
Tail Cement Length	315'	
Tail Cement Yield	138	cuft/sk
Tail Cement Excess	160	%
Lead Cement Required	376	sx
Tail Cement Required	100	sx

LINER TOP 3223 '

SHOE 3243 ', 7 ", 20 ppf, J-55

LINER BOTTOM 3673 ' (Uncemented)



**SAN JUAN 32-7 #213A**

**HALLIBURTON OPTION**

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	376	sx
Cement Yield	2.91	cuft/sx
Slurry Volume	1093.4	cuft
	194.7	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

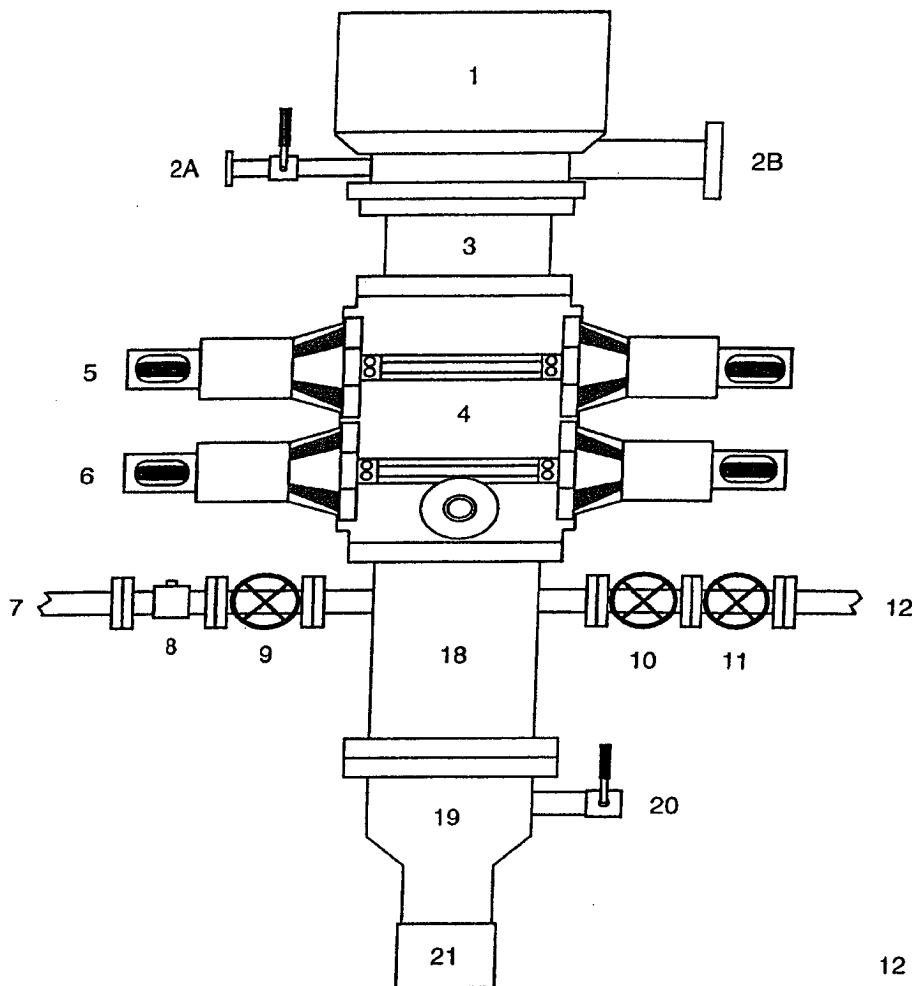
**SCHLUMBERGER OPTION**

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	170.59	cuft
Cement Density	15.8	ppg
Water Required	4.983	gal/sx

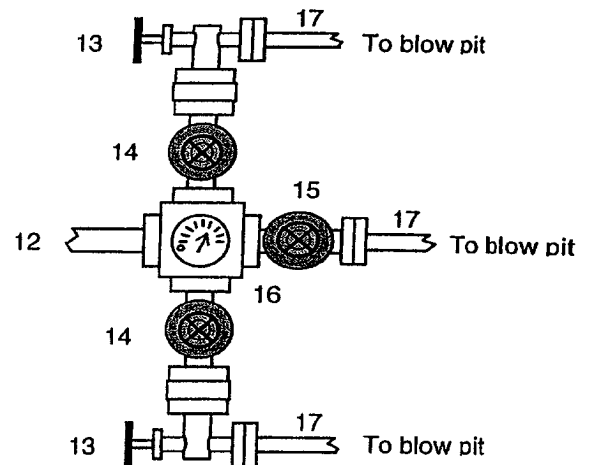
7" Intermediate Casing		
Lead Slurry		
Cement Slurry	Class G	
	+ 3% D079 Extender	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 0.2% D046 Antifoam	
Cement Volume	422	sx
Cement Yield	2.61	cuft/sx
Cement Volume	1100.48	cuft
Cement Density	11.7	ppg
Water Required	15.876	gal/sx

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



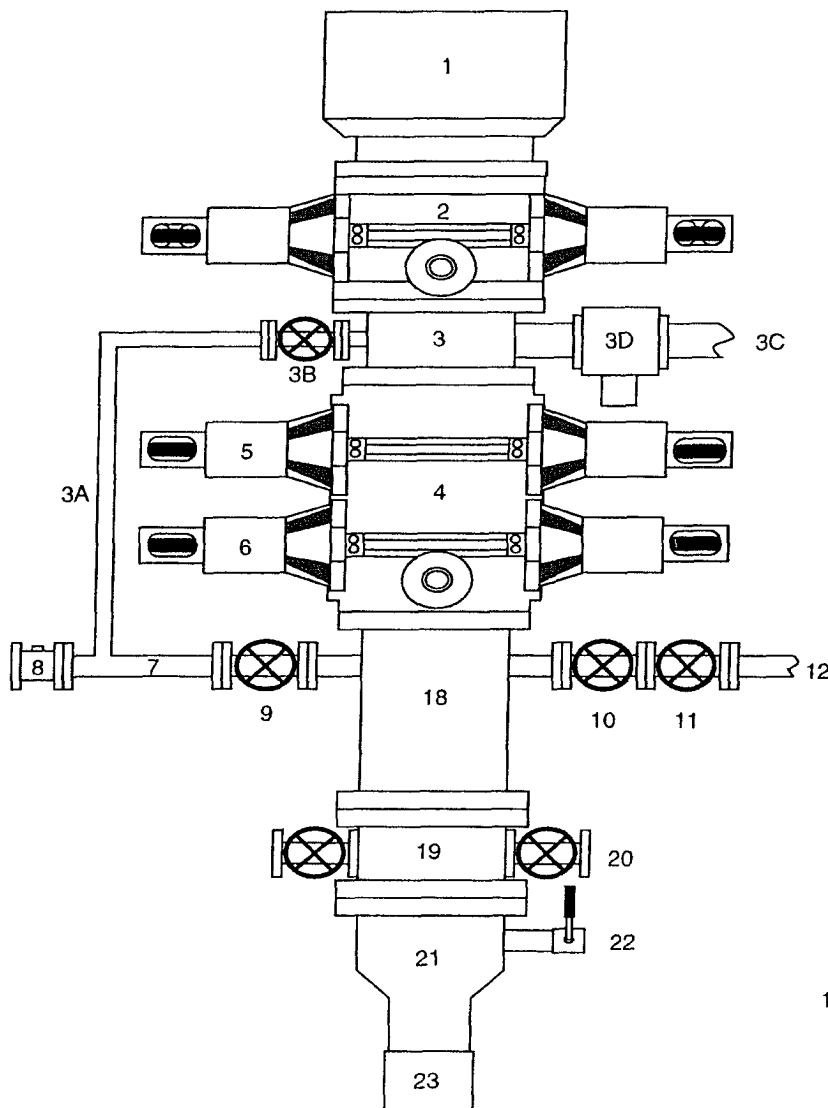
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe 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:

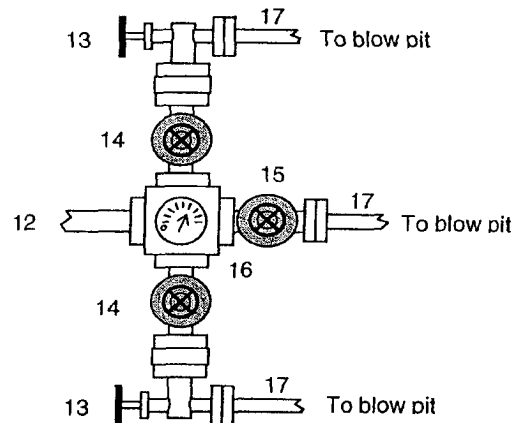
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

# 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. 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).

**Property :** SAN JUAN 32-7 UNIT **Well #:** 213A

**Surface Location:**

**Unit:** E **Section:** 17 **Township:** 31N **Range:** 7W

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

**Footage:** 2528 **from the** North **line,** 402 **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.