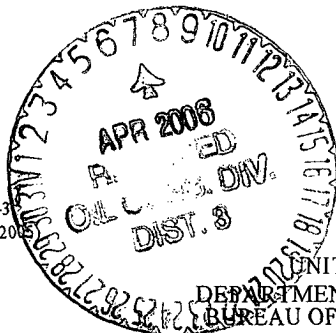


Form 3160-3
(February 2005)



2006 MAR 22 PM 1 08

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON NM
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-078997
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 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.
3a. Address 4001 Penbrook, Odessa, TX 79762		8. Lease Name and Well No. SAN JUAN 30-5 UNIT #220A
3b. Phone No. (include area code) 432-368-1230		9. API Well No. 30-039-29857
4. Location of Well (Report location clearly and in accordance with any State requirements, *) At surface SENW 1810 FNL - 1975 FWL 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 SECTION 8, T30N, R5W NMPM F
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 2,560 ACRES	12. County or Parish RIO ARRIBA
17. Spacing Unit dedicated to this well 320.0 ACRES - W/2	13. State NM	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 3211'	19. Proposed Depth	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6355' GL	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, must 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 must 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 BLM~

25. Signature 	Name (Printed/Typed) Peggy James	Date 3/18/2006
Title Senior Associate		
Approved by (Signature) 	Name (Printed/Typed)	Date 4/5/06
Title AFM	Office FFU	

Application approval does not warrant or certify that 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.

*(Instructions on page 2)

ConocoPhillips Company proposes to drill a vertical wellbore to the Basin Fruitland Coal formation. This well will be drilled and equipped in accordance with the attachments submitted herewith. This application is for APD/ROW.

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

This well does not require HPA notification

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 BY BLM
SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

Handwritten initials and marks.

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

District II
PO Box 1980, 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 20882
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

RECEIVED
070 FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29857	*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 31327	*Property Name SAN JUAN 30-5 UNIT	*Well Number 220A
*GRID No. 217817	*Operator Name CONOCOPHILLIPS COMPANY	*Elevation 6355'


10 Surface Location

UL or lot no. F	Section 8	Township 30N	Range 5W	Lot Idn	Feet from the 1810	North/South line NORTH	Feet from the 1975	East/West line WEST	County RIO ARriba
--------------------	--------------	-----------------	-------------	---------	-----------------------	---------------------------	-----------------------	------------------------	----------------------

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
12 Dedicated Acres 320.0 Acres - W/2					13 Joint or Infill	14 Consolidation Code	15 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>16</p> <p>5279.34'</p> <p>1810'</p> <p>1975'</p> <p>LAT: 36.82945°N LONG: 107.38295°W DATUM: NAD83</p> <p>LEASE SF-078997 2,560 acres</p> <p>LEASE FEE</p> <p>5280.00'</p> <p>5280.00'</p>	<p>17 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>Virgil E. Chavez</i></p> <p>Signature Virgil E. Chavez</p> <p>Printed Name Projects & Operations Lead</p> <p>Title <i>March 7, 2006</i></p> <p>Date</p> <p>18 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>Survey Date: FEBRUARY 16, 2006</p> <p>Signature and Seal of Professional Surveyor</p> <p></p> <p><i>JASON C. EDWARDS</i></p> <p>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-1 03
May 27, 2004

WELL API NO.

30-033-29857

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 220A

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 F 1810 feet from the NORTH line and 1975 feet from the WEST line
Section 8 Township 30N Range 5W NMPM RIO ARRIBA County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6355' GL

Pit or Below-grade Tank Application ☒ Closure ☐

Pit type DRILL Depth to Groundwater 40' Distance from nearest fresh water well 2.12 miles Distance from nearest surface water 350'
Liner Thickness: 12 mil Below-Grade Tank: Volume 4400 bbls; Construction Material SYNTHETIC

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 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 COPC June 2005 General Pit Plan on file with the NMOCD. 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

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 Peggy James TITLE Senior Associate DATE

Type or print name

E-mail address peggy.s.james@conocophillips.com:

Telephone No.: (432)368-1230

For State Use Only

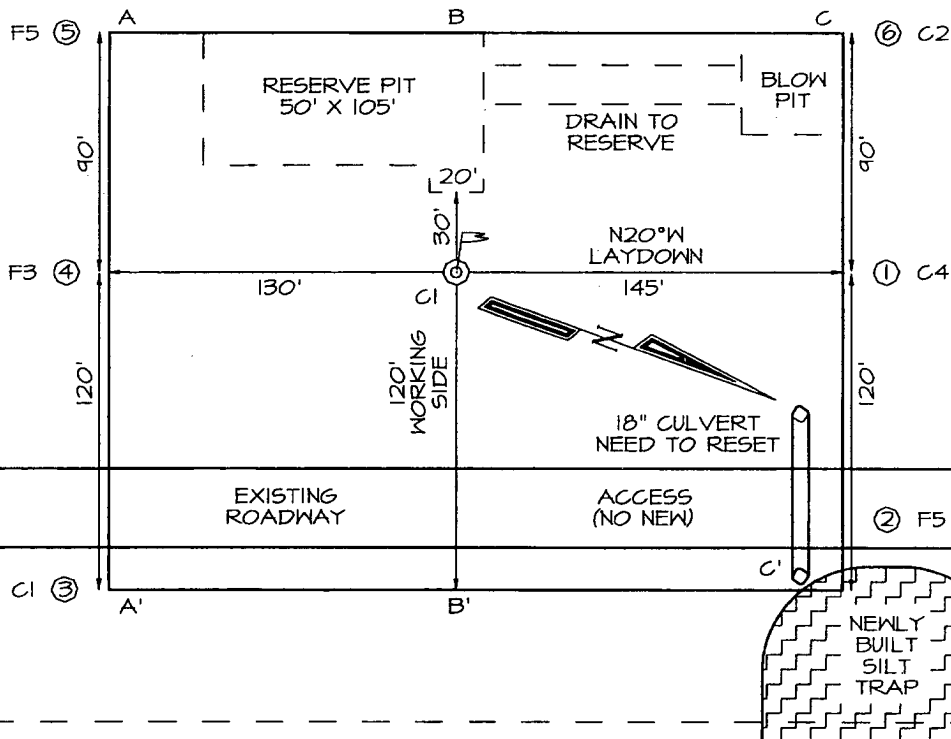
APPROVED BY: TITLE DEPUTY OIL & GAS INSPECTOR, DIST. DATE APR 07 2006

Conditions of Approval (if any):

CONOCOPHILLIPS COMPANY SAN JUAN 30-5 UNIT #220A
1810' FNL & 1975' FWL, SECTION 8, T30N, R5W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6355'

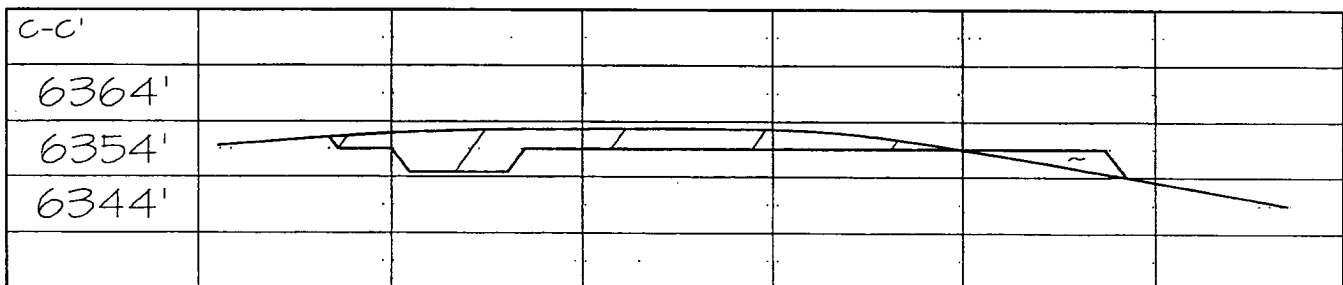
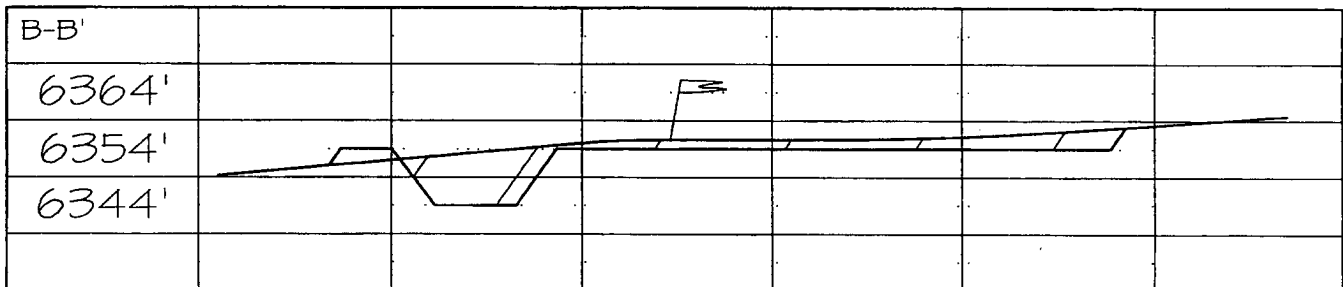
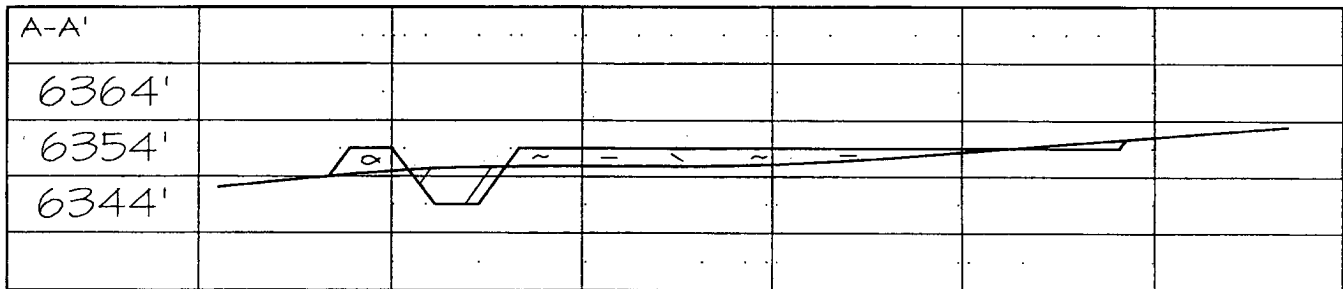
LATITUDE: 36.82945° N
LONGITUDE: 107.38295° W
 DATUM: NAD1983

50' CONSTRUCTION ZONE



PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management



PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 30-5 220A

Lease:		AFE #: WAN.CBM.5143		AFE \$:	
Field Name: 30-5	Rig: 320-2419	State: NM	County: RIO ARRIBA	API #:	
Geoscientist: Wentz, Robert M.		Phone: 832-486-2056	Prod. Engineer:		Phone:
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		Datum Code: NAD 27		Straight Hole	
Latitude: 36.829335	Longitude: -107.382278	X:	Y:	Section: 8	Range: 5W
Footage X: 1975 FWL	Footage Y: 1810 FNL	Elevation: 6355	(FT)	Township: 30N	
Tolerance: 200					
Location Type:		Start Date (Est.):		Completion Date:	
				Date In Operation:	
Formation Data: Assume KB = 6371 Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT
SAN JOSE	16	6355	<input type="checkbox"/>		
Surface Casing	223	6148	<input type="checkbox"/>		13-1/2 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1331	5040	<input type="checkbox"/>		
OJAM	2351	4020	<input type="checkbox"/>		Possible water flows.
KRLD	2531	3840	<input type="checkbox"/>		
FRLD	2941	3430	<input type="checkbox"/>		Possible gas.
Intermediate Casing	2981	3390	<input type="checkbox"/>		8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
TOP COAL	3011	3360	<input type="checkbox"/>		
BASE MAIN COAL	3131	3240	<input type="checkbox"/>	400	
PCCF	3191	3180	<input type="checkbox"/>		
Total Depth	3211	3160	<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
Intermediate	30-5 #204	TD includes 80 feet sump/rathole & COPC will comply with the BLM's Conditions of Approval for the proposed sump/rathole in this non-producing Pictured Cliffs formation
Intermediate	30-5 #202A	
Intermediate	30-5 #215	
Intermediate	30-5 #215A	

TOPSET FRUITLAND COAL Wells: (topset casing above coal to prepare for cavitation/DO/UR)

Drilling Mud Program:

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

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

Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

CASE & FRAC FRUITLAND COAL Wells: (casing set below coal to prepare for frac completion)

Drilling Mud Program:

Surface: spud mud

Production: fresh water mud with bentonite and polymer as needed

Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints

Production: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

MESA VERDE Wells:

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

Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

DAKOTA Wells:

Drilling Mud Program:

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

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

Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

San Juan 30-5 # 220A
Halliburton Cementing Program

SURFACE CASING :

Drill Bit Diameter	13.5"	
Casing Outside Diameter	9.625"	Casing Inside Diam. 9.001"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	235'	
Cement Yield	1.21	cuft/sk
Cement Density	15.6	lb/gal
Excess Cement	125	%
Cement Required	214	sx

SHOE 235 ', 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	2981'	
Lead Cement Yield	2.91	cuft/sk
Lead Cement Density	11.5	lb/gal
Lead Cement Excess	160	%
Tail Cement Length	315'	
Tail Cement Yield	1.33	cuft/sk
Tail Cement Density	13.5	lb/gal
Tail Cement Excess	160	%
Lead Cement Required	340	sx
Tail Cement Required	100	sx

LINER TOP 2961 '

SHOE 2981 ', 7 ", 20 ppf, J-55

LINER BOTTOM 3211' (Uncemented)

SAN JUAN 30-5 #220A

HALLIBURTON OPTION

9-5/8 Surface Casing		
Cement Recipe	Standard Cement	
	+ 3% Calcium Chloride	
	+ 0.25 lb/sx Flocele	
Cement Volume	214	sx
Cement Yield	1.21	cuft/sx
Slurry Volume	258.6	cuft
	46.1	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	340	sx
Cement Yield	2.91	cuft/sx
Slurry Volume	988.8	cuft
	176.1	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

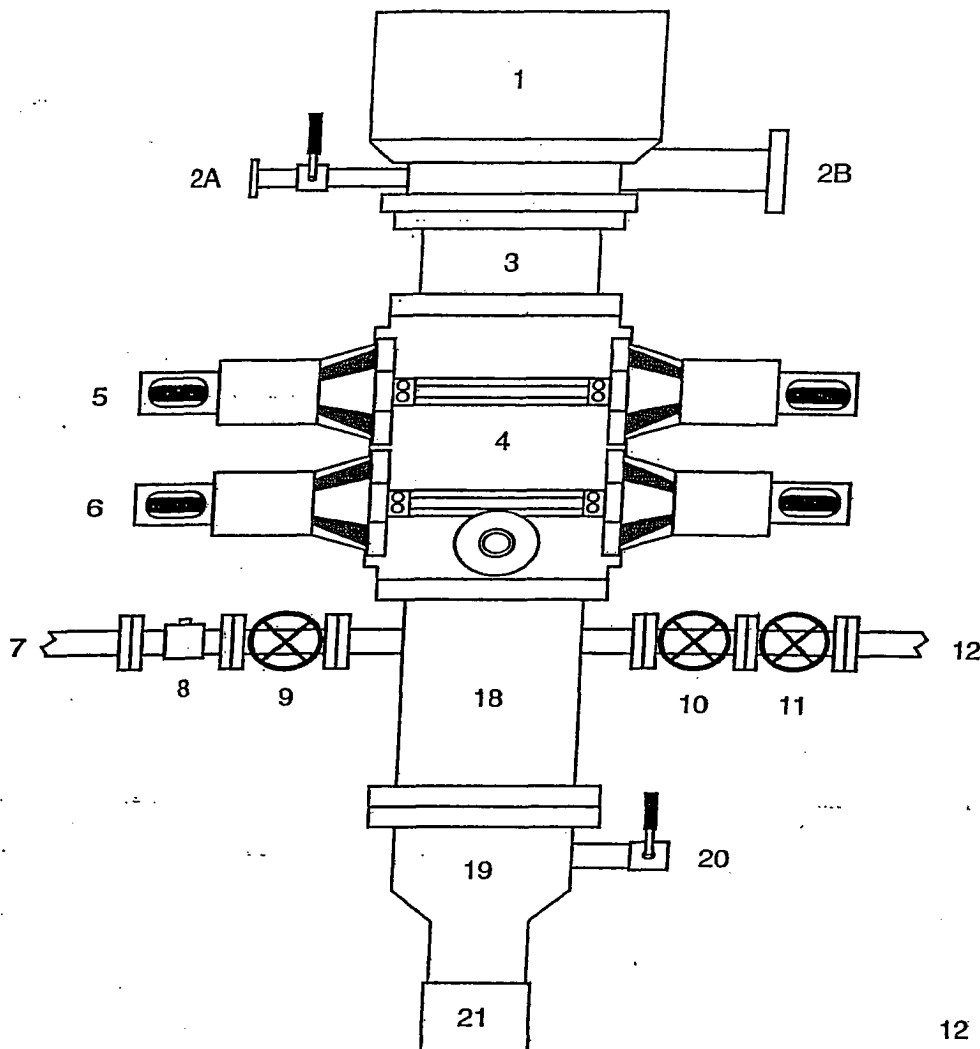
9-5/8 Surface Casing		
Cement Recipe	Class G Cement	
	+ 3% S001 Calcium Chloride	
	+ 0.25 lb/sx D029 Cellophane Flakes	
Cement Volume	223	sx
Cement Yield	1.16	cuft/sx
Slurry Volume	258.6	cuft
	46.1	bbls
Cement Density	15.8	ppg
Water Required	4.983	gal/sx

7" Intermediate Casing		
Lead Slurry		
Cement Recipe	Class G Cement	
	+ 3% D079 Extender	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 0.2% D046 Antifoam)	
Cement Required	381	sx
Cement Yield	2.61	cuft/sx
Slurry Volume	994.7	cuft
	177.2	bbls
Cement Density	11.7	ppg
Water Required	15.876	gal/sx

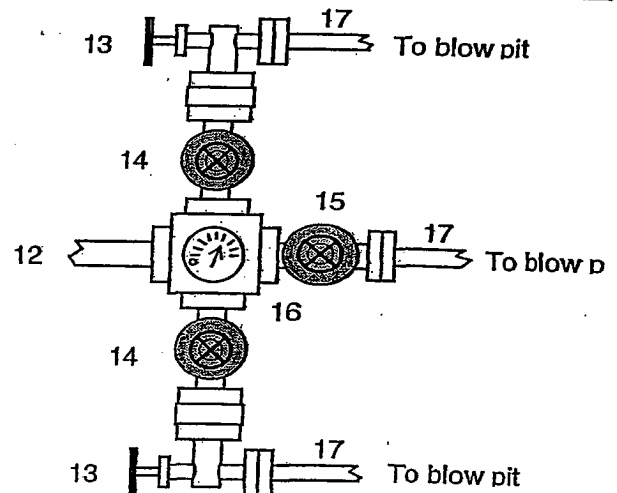
7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ : Class G Cement	
	+ 2% D020 Bentonite	
	+ 5 lb/sx D024 Gilsonite extender	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 2% S001 Calcium Choloride	
	+ 0.2% D046 Antifoam	
Cement Required	100	sx
Cement Yield	1.27	cuft/sx
Slurry Volume	126.9	cuft
	22.6	bbls
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

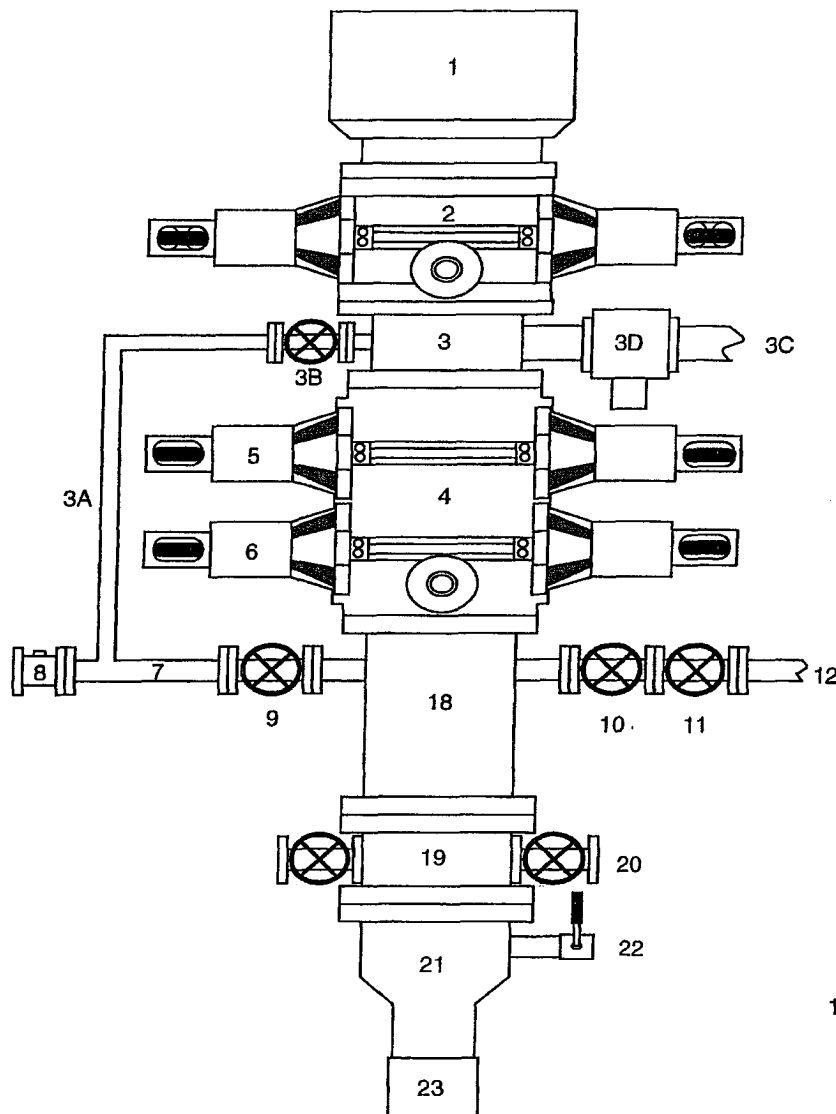


A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

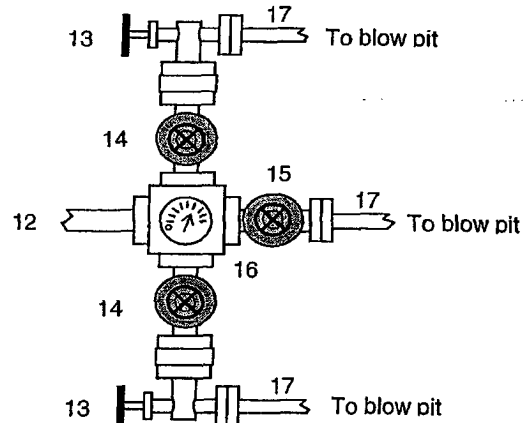
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

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).