

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-078740
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input 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, SUITE 346 ODESSA, TX 79762	3b. Phone No. (include area code) Ph: 915.368.1352	8. Lease Name and Well No. SAN JUAN 30-5 UNIT 226A
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface NENW 660FNL 1350FWL At proposed prod. zone		9. API Well No. 30-039-29210
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 BASIN FRUITLAND COAL
16. No. of Acres in Lease	17. Spacing Unit dedicated to this well	11. Sec., T., R., M., or Blk. and Survey or Area Sec 29 T30N R5W Mer NMP
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3183 MD	12. County or Parish RIO ARRIBA ✓
20. BLM/BIA Bond No. on file	21. Elevations (Show whether DF, KB, RT, GL, etc.) 6285 GL	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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- 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 08/18/2004
Title AGENT		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 8-7-04
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 #34840 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

NMOC

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

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

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

District II
PO Drawer 00, 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 30-039-29210		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 31327	*Property Name SAN JUAN 30-5 UNIT		*Well Number 226A
*GRID No. 217817	*Operator Name CONOCOPHILLIPS COMPANY		*Elevation 6285'

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
C	29	30N	5W		660	NORTH	1350	WEST	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

<div><p>¹⁶</p><p>LAT: 36°47.3442'N LONG: 107°23.0682'W DATUM: NAD27</p><p>5266.80'</p><p>1350'</p><p>660'</p><p>29</p><p>LEASE SF-078740</p><p>5260.20'</p><p>5280.00'</p></div>	<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>Vicki Westby</i> Signature Vicki R. Westby Printed Name Sr. Analyst Title Date <i>August 4, 2004</i></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>Date of Survey: JULY 3, 2004</p> <p>Signature and Seal of Professional Surveyor</p> <div><p>JASON C. EDWARDS Certificate Number 15269</p></div>

Additional Operator Remarks:

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. ConocoPhillips will have mudloggers on location and they will pick the TD to avoid accessing the pictured cliffs formation. This application is for APD / ROW. This is a HPA well that does not require notification. The 226A is located entirely within the SJ 30-5 FC PA and is surrounded by the PA operator - ConocoPhillips Company

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-103
May 27, 2004

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

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.)		WELL API NO.
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/>		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 <i>San Juan 30-5</i>
4. Well Location Unit Letter <i>C</i> : <i>6600</i> feet from the <i>North</i> line and <i>1350</i> feet from the <i>West</i> line Section <i>29</i> Township <i>30N</i> Range <i>5W</i> NMPM <i>Rio Arriba</i> County		8. Well Number <i>226 A</i>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GL		9. OGRID Number <i>217817</i>
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat <i>Basin Fruitland Coal</i>
Pit type <i>Drill</i> Depth to Groundwater <i>50-100'</i> Distance from nearest fresh water well <i>71000'</i> Distance from nearest surface water <i>4200'</i>		
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:		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: <i>Drill Pit Notification</i> <input checked="" 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.

ConocoPhillips Company's Generic Pit Plan is on file at 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 (pj)* TITLE *SR. Analyst* DATE *8/18/04*

Type or print name Vicki Westby E-mail address: Vicki.R.Westby@ConocoPhillips.com Telephone No. 432-368-1352

For State Use Only

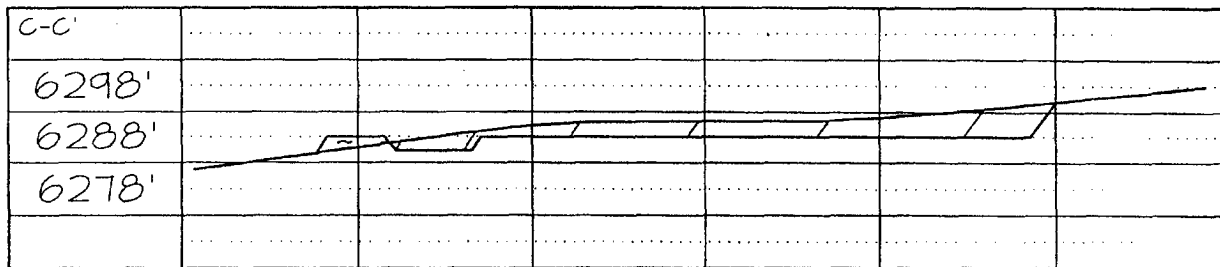
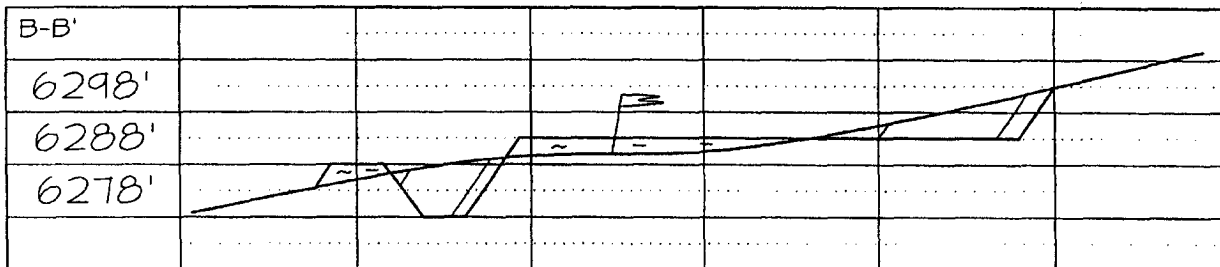
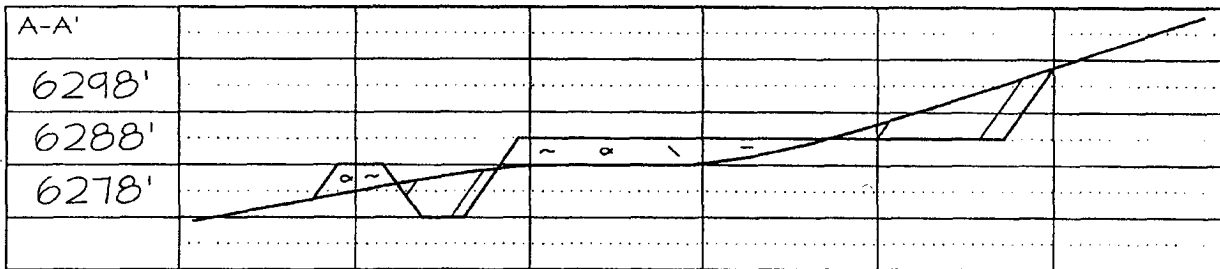
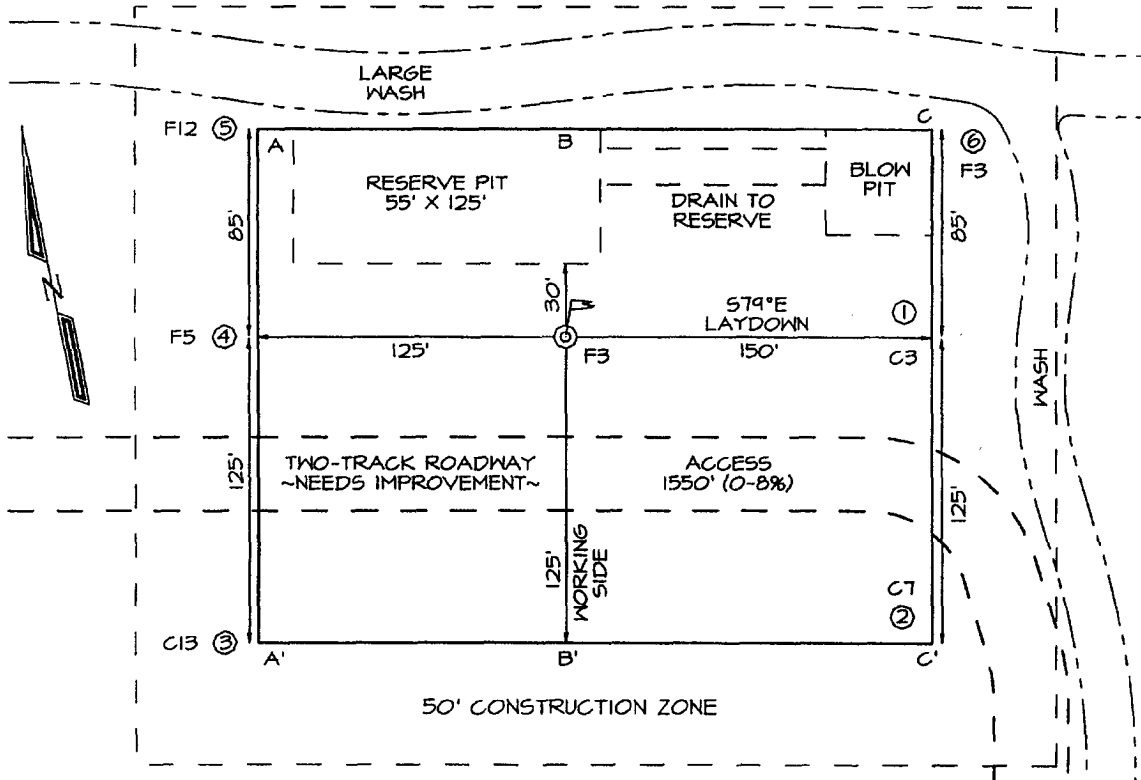
APPROVED BY: *[Signature]* TITLE *DEPUTY OIL & GAS INSPECTOR, DIST. 43* DATE *SEP - 7 2004*
Conditions of Approval (if any)

CONOCOPHILLIPS COMPANY SAN JUAN 30-5 UNIT #226A
660' FNL & 1350' FWL, SECTION 29, T30N, R5W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6285'

LATITUDE: 36.78907° N
LONGITUDE: 107.38447° W
 DATUM: NAD1983

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management





San Juan Business Unit

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 30-5 226A

Lease:		AFE #: WAN.CBM.4189		AFE \$:	
Field Name: hPHILLIPS 30-5	Rig: 320-2419	State: NM	County: RIO ARRIBA	API #:	
Geoscientist: Murphy, Jim O.		Phone: 832-486-2361	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				Straight Hole	
Latitude: 36.79	Longitude: -107.38	X:	Y:	Section: 29	Range: 5W
Footage X: 1350 FWL	Footage Y: 660 FNL	Elevation: 6285 (FT)	Township: 30N		
Tolerance:					
Location Type:		Start Date (Est.):	Completion Date:	Date In Operation:	
Formation Data: Assume KB = 6298 Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT
Remarks					
SAN JOSE	-2	6300	<input type="checkbox"/>		
Surface Casing	213	6085	<input type="checkbox"/>		12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1046	5252	<input type="checkbox"/>		
OJAM	2423	3875	<input type="checkbox"/>		Possible water flows.
KRLD	2528	3770	<input type="checkbox"/>		
FRLD	2838	3460	<input type="checkbox"/>		Possible gas.
Intermediate Casing	2931	3367	<input type="checkbox"/>		8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
BASE MAIN COAL	3043	3255	<input type="checkbox"/>	120	
PC TONGUE	3113	3185	<input type="checkbox"/>		
Total Depth	3183	3115	<input type="checkbox"/>		6-1/4" hole possibly underreamed to 9.5". Optional liner: 5.5", 15.5#, J-55 LTC - left uncemented.
PCCF	3203	3095	<input type="checkbox"/>		

Reference Wells		
Reference Type	Well Name	Comments

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: Location/Tops/Logging - HPA

Zones - HPA

General/Work Description -

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

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.

San Juan 30-5 # 226A

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	3.34	sx
Cement Yield	2.91	cuft/sx
Slurry Volume	9.70	cuft
	0.73	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	1.00	sx
Cement Yield	1.33	cuft/sx
Slurry Volume	1.32	cuft
	0.11	bbls
Cement Density	13.5	ppg
Water Required	5.36	gal/sx

San Juan 30-5 #226A		
9-5/8 Surface Casing		
Cement Recipe	Class C Standard Cement	
	+ 3% Calcium Chloride	
	+ 0.25 lb/sx Floccle	
Cement Volume	1.21	cuft/sx
Cement Yield	1.21	cuft/sx
Slurry Volume	1.70	cuft
	32.0	bbls
Cement Density	15.6	ppg
Water Required	5.29	gal/sx

San Juan 30-5 # 226A			
	Surf. Csg.	Int. Csg.	
OD	9.625	7	
ID	9.001	6.456	
Depth	230	2931	
Hole Diam.	12.25	8.75	
% Excess Lead		160	
% Excess Tail	125	160	
Lead Yield		2.91	
Tail Yield		1.33	
Foot of Tail Slurry	230	315	
Top of Tail Slurry	0	2616	
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	sq
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	sq
Lead Open Hole Annulus	2386	0.026786	2.6	166.2	932.9	320.6
Lead Cased Hole Annulus	220	0.031116	1	6.8	38.4	13.2
Lead Total				173.0	971.4	333.8
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 # 226A

SURFACE CASING :

Drill Bit Diameter	12 1/8"	
Casing Outside Diameter	9 5/8"	Casing Inside Diam. 9 0/8"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	230'	
Cement Yield	122	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 7/8"	
Casing Outside Diameter	7"	Casing Inside Diam. 6 4/8"
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	2931'	
Lead Cement Yield	297	cuft/sk
Lead Cement Excess	160	%
Tail Cement Length	5'	
Tail Cement Yield	13	cuft/sk
Tail Cement Excess	160	%
Lead Cement Required	334	sx
Tail Cement Required	100	sx

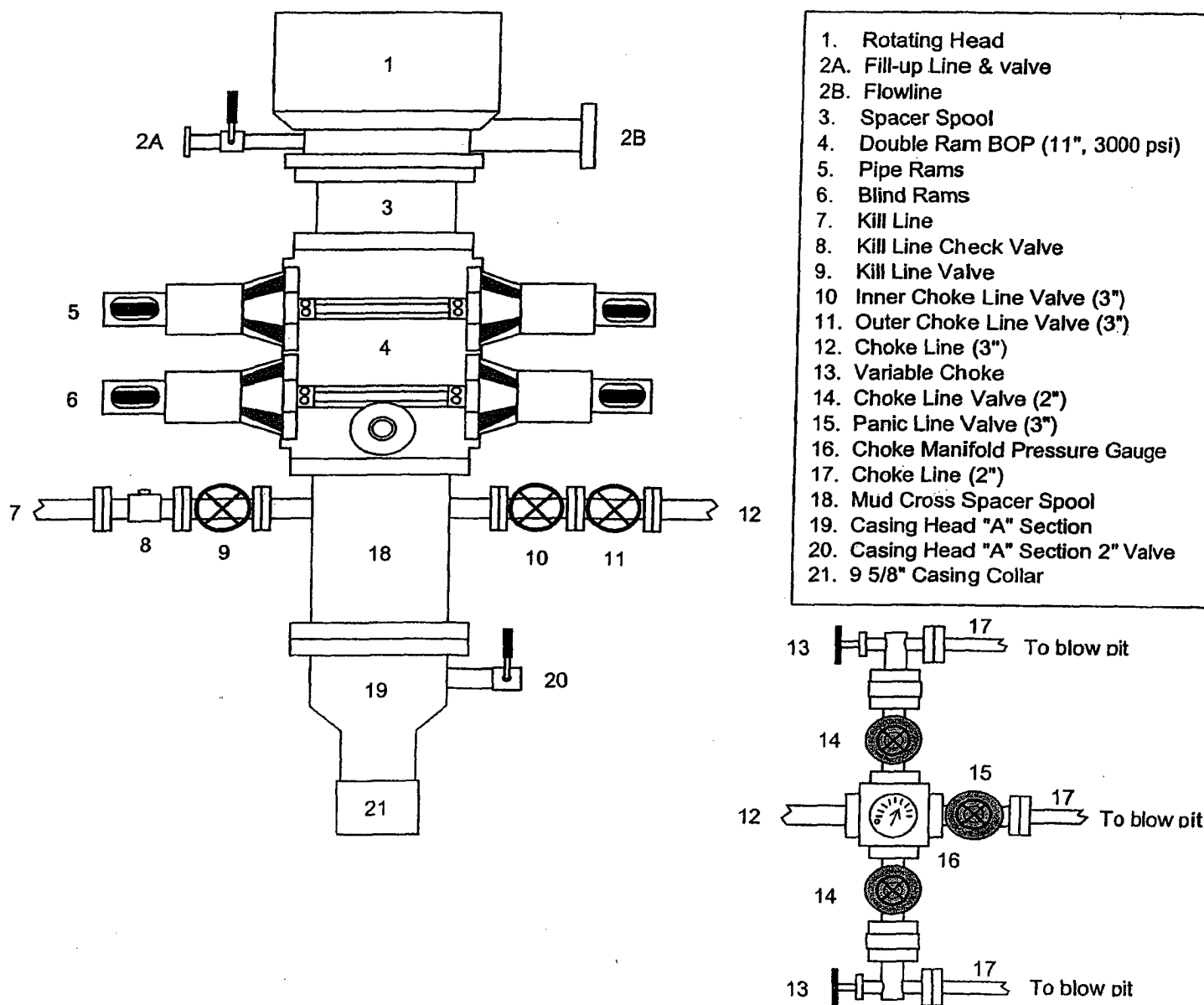
LINER TOP 2911'

SHOE 2931', 7", 20 ppf, J-55

LINER BOTTOM 3189' (Uncemented)

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

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



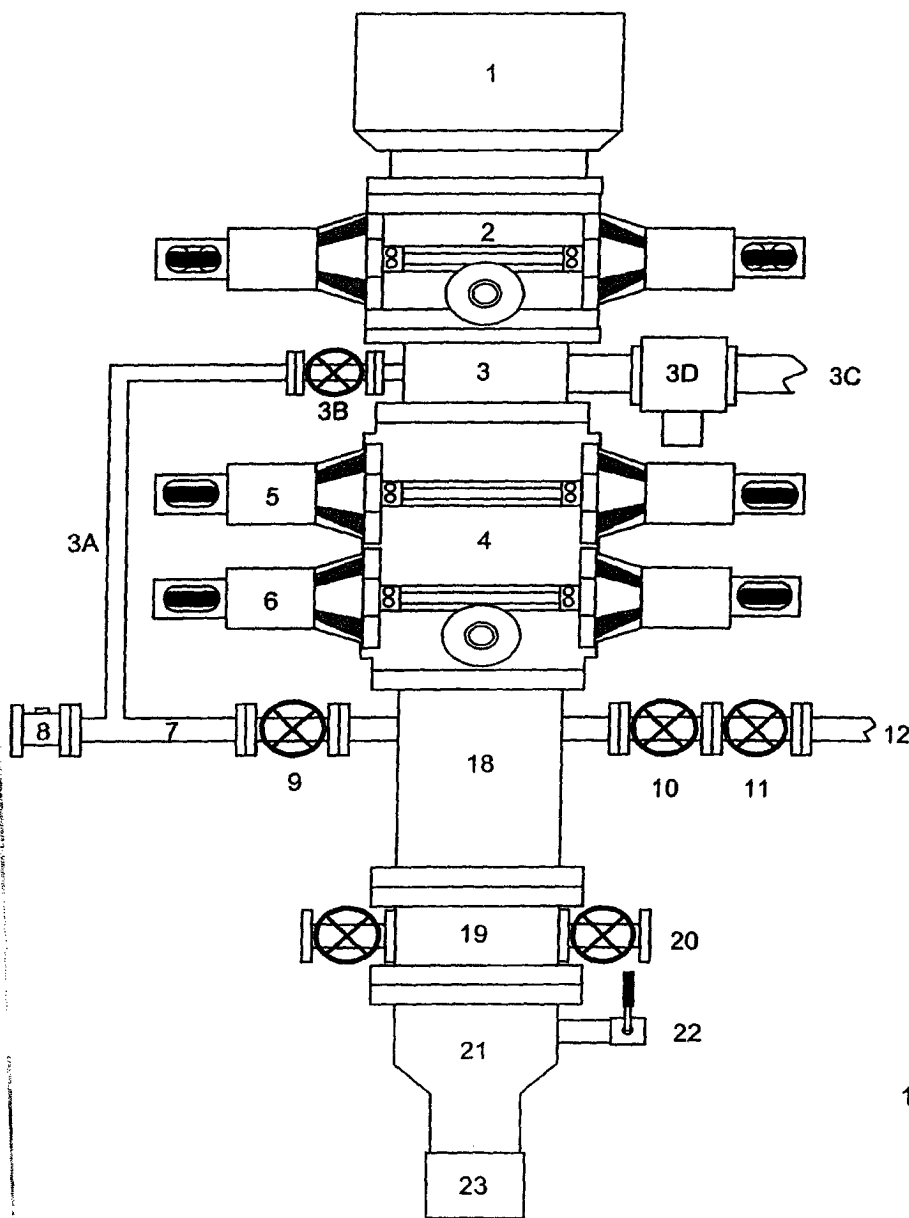
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 2-3 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 2-3 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:

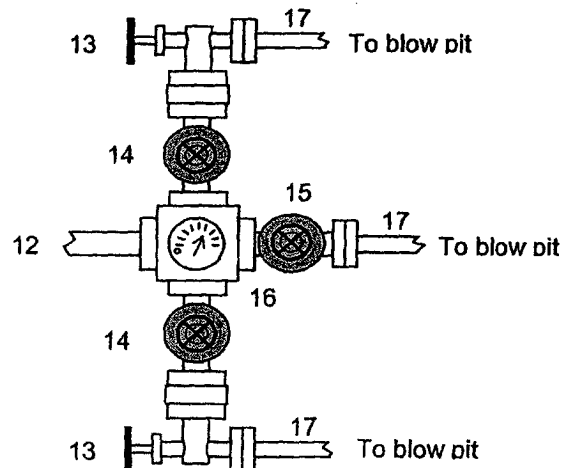
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Cavitation Program



1. Rotating 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 2-3 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 2-3 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)