

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		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 223A
3a. Address 4001 PENBROOK, SUITE 346 ODESSA, TX 79762	3b. Phone No. (include area code) Ph: 915.368.1352	9. API Well No. 30039 27813
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SESE 1300FSL 815FEL 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 p Sec 20 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 3365 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6459 GL	22. Approximate date work will start	17. Spacing Unit dedicated to this well E/2
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	Date 06/22/2004
Title AGENT		
Approved by (Signature) Original Signed: Stephen Mason	Name (Printed/Typed)	Date JUL 14 2004
Title		Office

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 #32224 verified by the BLM Well Information System
For CONOCOPHILLIPS COMPANY, sent to the Farmington

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

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

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

NMOCB

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-27813		Pool Code 71629	Pool Name BASIN FRUITLAND COAL (GAS)	
Property Code 31327	Property Name SAN JUAN 30-5 UNIT			Well Number 223A
OGSD No. 217817	Operator Name CONOCOPHILLIPS COMPANY			Elevation 6459

Surface Location									
UL or lot no. P	Section 20	Township 30N	Range 5W	Lot 1300	Feet from the North/South line SOUTH	Feet from the East/West line 815	East/West line EAST	County 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	East/West line	County	

Dedicated Acres 320.0	Joint or Infill	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

<p>16</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>Signature <i>Vicki Westby</i> Vicki Westby Sr. Analyst Date <i>June 22, 2004</i></p> <p>18 SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from well notes or 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 <i>06/07/04</i> Signature and Seal of Registered Surveyor <i>ANDREW P. BRUDERHUSE</i> NEW MEXICO REGISTERED 11833 5/27/04 CERTIFICATE NO. 17</p>
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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. This application is for APD/ROW.

ConocoPhillips will have mudloggers on location and they will be picking the TD to prevent us from accessing the PC.

This is a HPA well that doesn't require notification. The 223A 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
June 22, 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		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 30-5 Unit
4. Well Location Unit Letter <u>P</u> : <u>1300</u> feet from the <u>SOUTH</u> line and <u>815</u> feet from the <u>EAST</u> line Section <u>20</u> Township <u>30N</u> Range <u>5W</u> NMPM Rio Arriba County		8. Well Number 223A
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6459' GL		9. OGRID Number 217817
Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)		
Pit Location: UL <u>P</u> Sect <u>20</u> Twp <u>30N</u> Rng <u>5W</u> Pit type <u>Drill Pit</u> Depth to Groundwater <u>>100'</u> Distance from nearest fresh water well <u>>1 000'</u> Distance from nearest surface water <u>>200<1000'</u> Below-grade Tank Location UL _____ Sect _____ Twp _____ Rng _____ ; _____ feet from the _____ line and _____ feet from the _____ line		
10. Pool name or Wildcat Basin Fruitland Coal		

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"/> PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
OTHER: Drill Pit Notification <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 ☐.

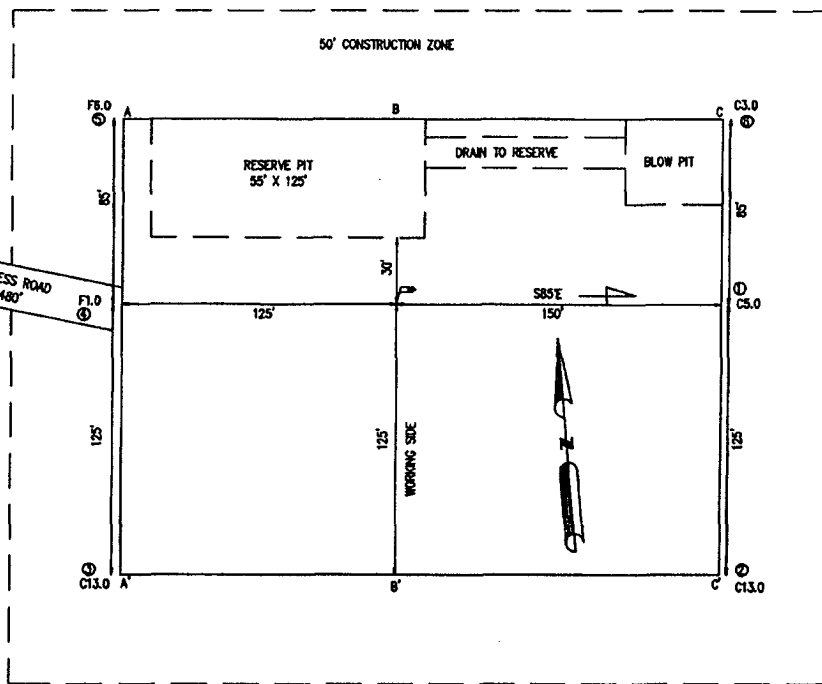
SIGNATURE Vicki Westby TITLE Sr. Analyst DATE 6/22/04

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

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 2 DATE JUL 22 2004
Conditions of approval, if any:

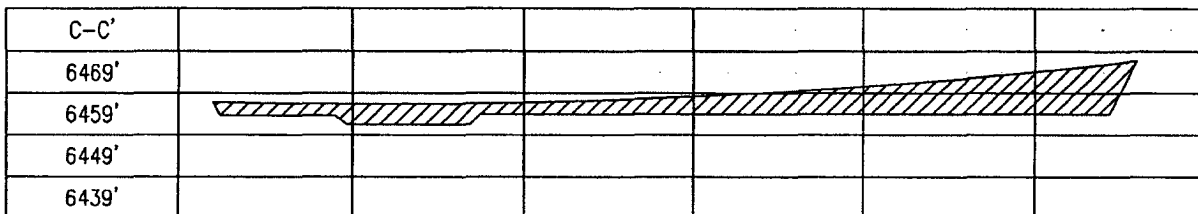
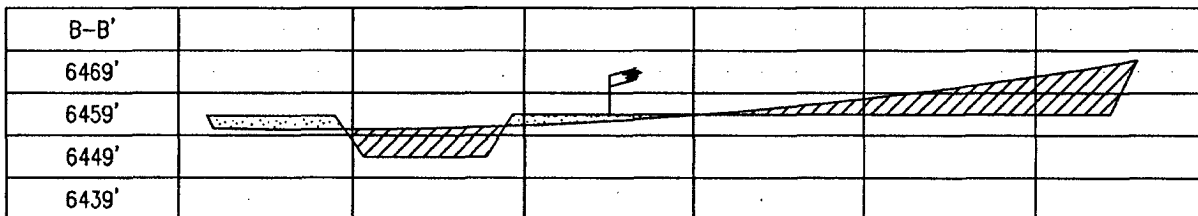
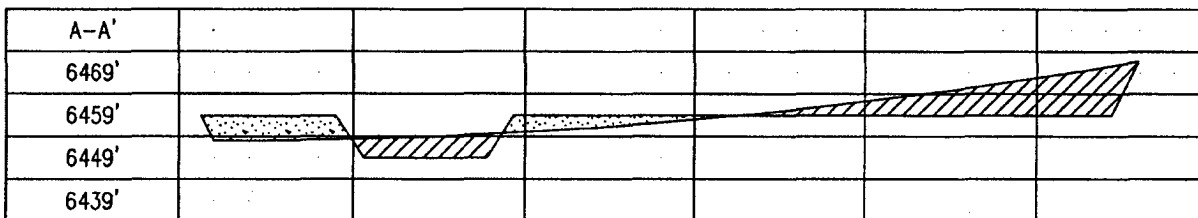
CONOCOPHILLIPS COMPANY SAN JUAN 30-5 UNIT #223A
 1300' FSL & 815' FEL, SECTION 20, T30N, R5W, NMPM
 RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6459



LATITUDE: 36.79444° N
 LONGITUDE: 107.37444° W
 DATUM: NAD83

PLAT NOTE:

SURFACE OWNER
 BLM





San Juan Business Unit

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 30-5 223A

Lease:		AFE #: WAN.CBM.4188		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: -107.37	X:	Y:	Section: 20	Range: 5W	
Footage X: 815 FEL	Footage Y: 1300 FSL	Elevation: 6459 (FT)	Township: 30N			
Tolerance:						
Location Type:		Start Date (Est.):	Completion Date:	Date In Operation:		
Formation Data: Assume KB = 6472 Units = FT						
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	
SAN JOSE	13	6459	<input type="checkbox"/>			
Surface Casing	213	6259	<input type="checkbox"/>		12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.	
NCMT	1212	5260	<input type="checkbox"/>			
OJAM	2562	3910	<input type="checkbox"/>		Possible water flows.	
KRLD	2662	3810	<input type="checkbox"/>			
FRLD	2870	3602	<input type="checkbox"/>		Possible gas.	
Intermediate Casing	3079	3393	<input type="checkbox"/>		8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.	
BASE MAIN COAL	3214	3258	<input type="checkbox"/>	115		
BASE LOWEST COAL	3276	3196	<input type="checkbox"/>			
PC TONGUE	3286	3186	<input type="checkbox"/>			
Total Depth	3365	3107	<input type="checkbox"/>		6-1/4" hole possibly underreamed to 9.5". Optional Liner: 5.5", 15.5#, J-55 LTC - left uncemented.	
PCCF	3404	3068	<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 -

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

Drilling Mud Program:
Surface: spud mud

Printed on: 06/22/2004 9:25:03 AM

San Juan 30-5 # 223A

SURFACE CASING :

Drill Bit Diameter	12.25 "	
Casing Outside Diameter	9.625 "	9.001
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	230 '	40 '
Cement Yield	1.16	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 155.0 sx

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

INTERMEDIATE CASING :

Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.456
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3079 '	
Lead Cement Yield	2.61	cuft/sk
Lead Cement Excess	160	%
Tail Cement Length	300 '	42 '
Tail Cement Yield	1.22	cuft/sk
Tail Cement Excess	160	%

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 397.1 sx
Tail Cement Required 99.8 sx

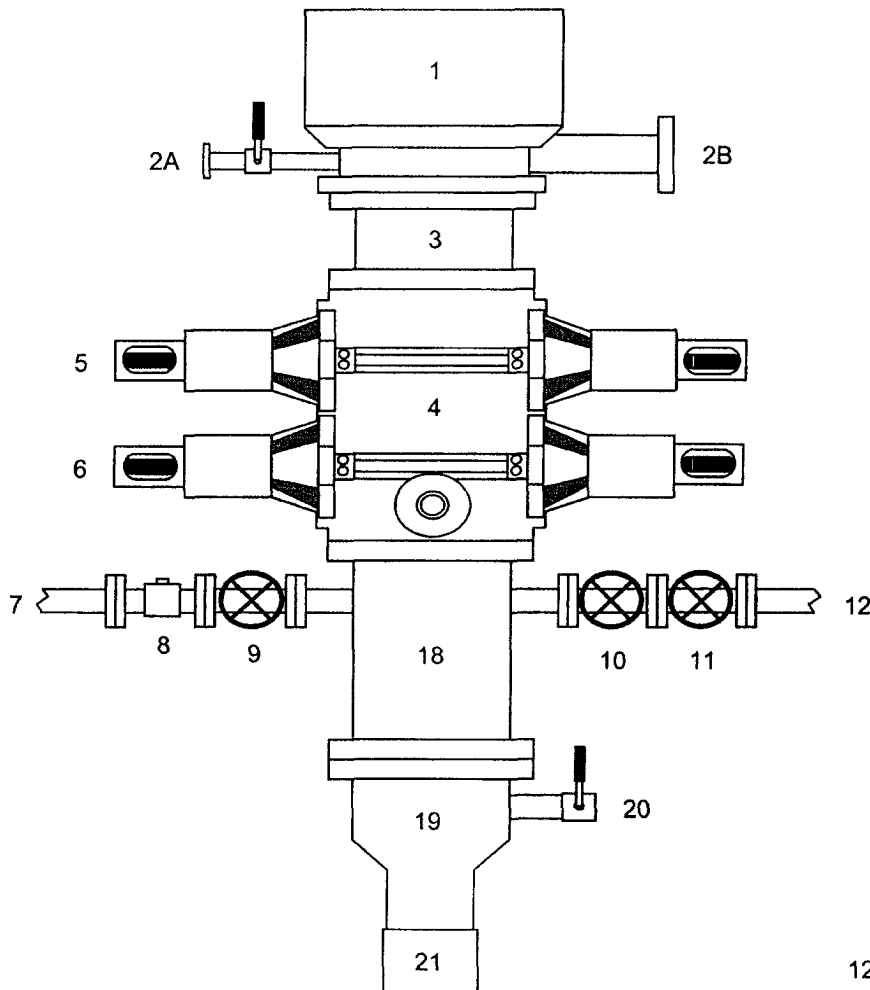
LINER TOP 3059 '

SHOE 3079 ', 7 ", 20 ppf, J-55

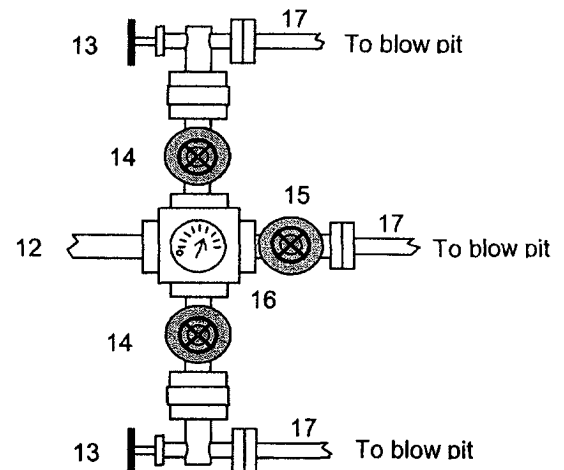
LINER BOTTOM 3404 ' (Uncemented)

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



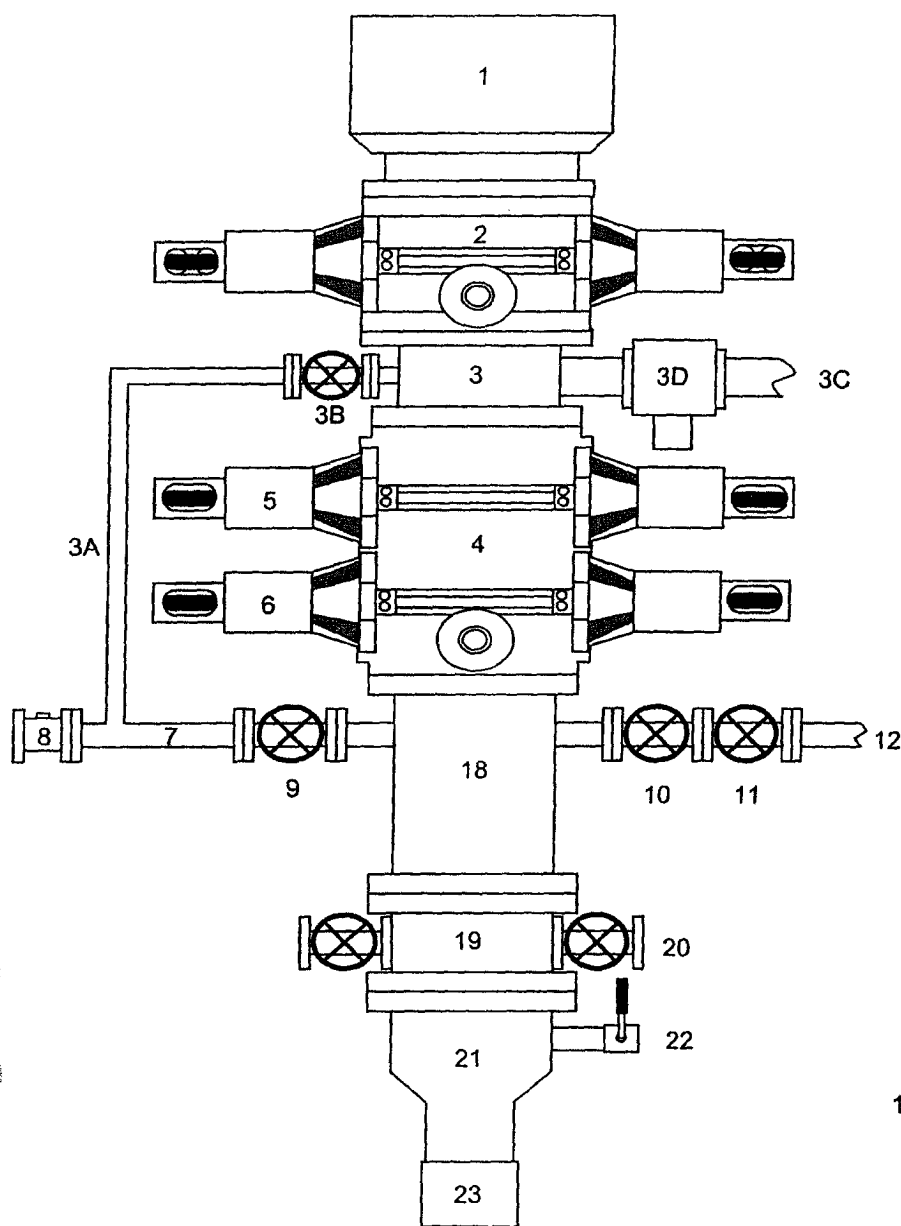
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

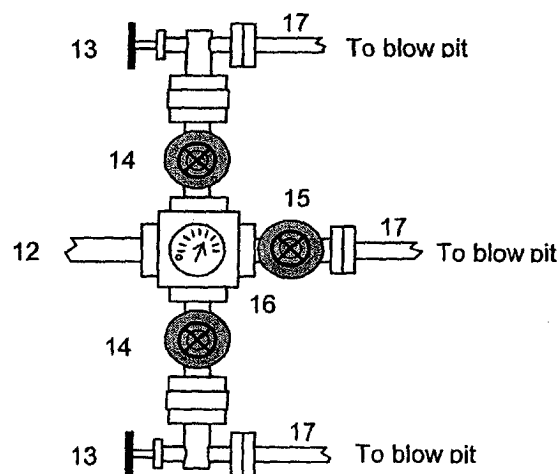
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

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).

Cathodic Protection System Description

Anode Bed Type	Deep Well	
Hole Size	8"	
Hole Depth	200' - 500'	As required to place anodes below moisture and in low resistance strata.
Surface Casing	8" Diam., \geq 20' Length. Cemented In Annular Space	When needed, casing will be installed at an adequate depth to control ground water flow. Casing will extend a minimum of 2' above grade, be surrounded by a concrete pad, and sealed with a PVC cap. Steel casing will be substituted when boulders are encountered.
Vent Pipe	1" Diam. PVC	Vent pipe will extend from bottom of hole, through top of casing cap, and sealed with a 1" perforated PVC cap.
Type Of Anodes	Cast Iron Or Graphite	
Number Of Anodes	8 - 20	Sufficient quantity to achieve a total anode bed resistance of < 1 ohm and a design life \geq 20 years.
Anode Bed Backfill	Loreco SW Calcined Petroleum Coke Breeze	Installed from bottom of hole to 10' above top anode.
Anode Junction Box	8 - 20 Circuit Fiberglass Or Metal	Sealed to prevent insect & rodent intrusion.
Current Splitter Box	2 - 5 Circuit Metal	Sealed to prevent insect & rodent intrusion.
DC / AC Cable	DC: #2, #4, #6, #8 Stranded Copper (One Size Or Any Combination Of) With High Molecular Weight Polyethylene (HMWPE) Insulation. AC: #8 Stranded Copper HMWPE	18" depth in typical situation, 24" depth in roadway, & 36" depth in arroyos and streams. EXCEPTION: If trenching is in extremely hard substratum, depth will be 8 - 12" with cable installed in conduit. Installed above foreign pipelines if 1' clearance is available, if not, installed under foreign pipeline with 1' clearance (AC cable always installed under foreign pipeline in conduit).
Power Source	1) Rectifier 2) Solar Power Unit 3) Thermoelectric Generator	Choice of power source depending on availability of AC & other economic factors.
External Painting	Color to be selected according to BLM specifications.	Paint applied to any surface equipment associated with the CP system which can reasonably be painted.