Form 3160-3
(August 1999)

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM 012698

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
SAN JUAN 29-6 UNIT 220A

2. Name of Operator
CONOCOPHILLIPS COMPANY
Contact: VICKI WESTBY
E-Mail: Vicki.R.Westby@conocophillips.com

9. API Well No.
30-039-29279

3a. Address
4001 PENBROOK, SUITE 346
ODESSA, TX 79762

3b. Phone No. (include area code)
Ph: 915.368.1352

10. Field and Pool, or Exploratory
FRUITLAND COAL

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface SWSE 1180FSL 1415FEL

At proposed prod. zone

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 11 T29N R6W Mer NMP
O

14. Distance in miles and direction from nearest town or post office*

12. County or Parish
SAN JUAN

13. State
NM

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

17. Spacing Unit dedicated to this well
E/320

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth
3720 MD

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KB, RT, GL, etc.
6760 GL

22. Approximate date work will start

23. Estimated duration

OCT 2004
OIL CONS. DIV.
DIST. 3

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
07/08/2004

Title
AGENT

Approved by (Signature)
Wayne Townsend

Name (Printed/Typed)
Wayne Townsend

Date
10/18/04

Title
Acting 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 #32830 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".

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 ****

NMOCD

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

District II
PO Drawer DD, 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

[1] API Number	[2] Pool Code	[3] Pool Name
	71629	BASIN FRUITLAND COAL

[4] Property Code	[5] Property Name	[6] Well Number
31326	SAN JUAN 29-6 UNIT	220A

[7] OGRID No.	[8] Operator Name	[9] Elevation
217817	CONOCOPHILLIPS COMPANY	6760'

[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
O	11	29N	6W		1180	SOUTH	1415	EAST	RIO ARRIBA

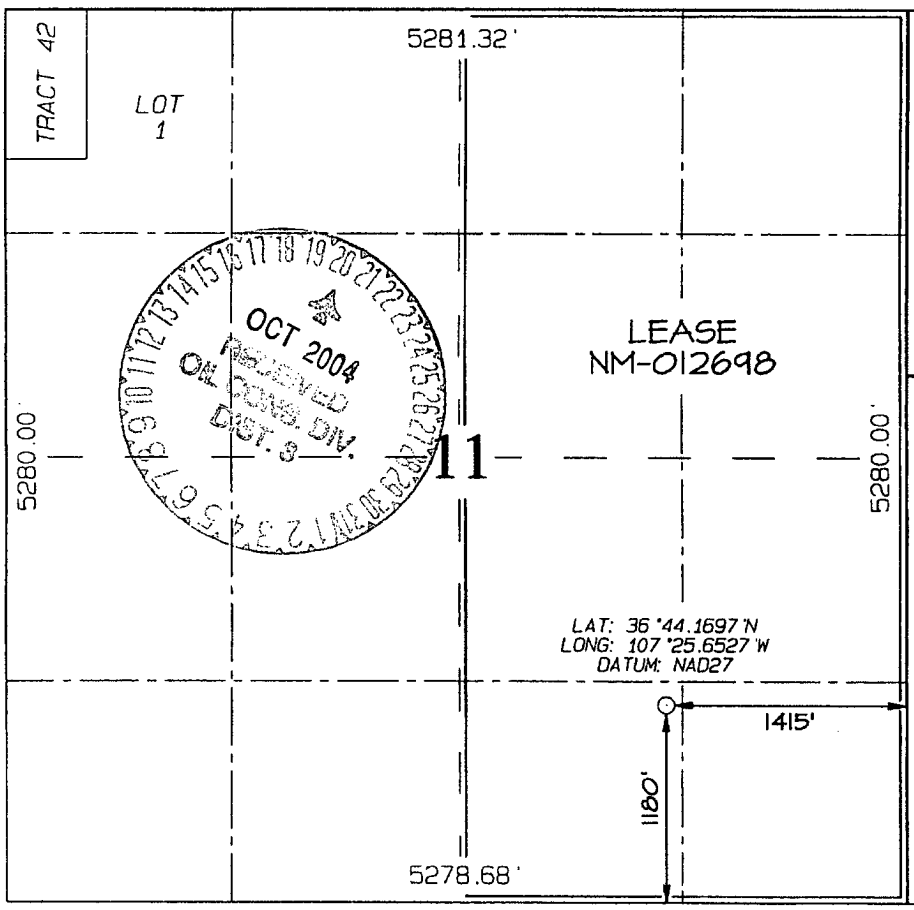
[11] Bottom Hole Location If Different From Surface

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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320.0 Acres - E/2			

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

[16]



[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
Signature

Vicki R. Westby
Printed Name

Sr. Analyst
Title

7/8/04
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: MARCH 11, 2004

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

Additional Operator Remarks:

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

This is a HPA well that doesn't require notification. The 220A is located entirely within the SJ 29-6 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

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

Form C-103
May 27, 2004

WELL API NO.

5. Indicate Type of Lease STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

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.)

7. Lease Name or Unit Agreement Name
SAN JUAN 29-6 UNIT

1. Type of Well: Oil Well ☐ Gas Well X☐ Other

8. Well Number **220A**

2. Name of Operator
ConocoPhillips Company

9. OGRID Number
217817

3. Address of Operator
4001 Penbrook, Odessa, TX 79762

10. Pool name or Wildcat
BASIN FRUITLAND COAL

4. Well Location
Unit Letter **O** : **1180** feet from the **SOUTH** line and **1415** feet from the **EAST** line
Section **11** Township **29N** Range **6W** NMPM **RIO ARRIBA** County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
6760

Pit or Below-grade Tank Application X☐ or Closure ☐

Pit type DRILLING Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water ≥1000'

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	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
OTHER: **Drill Pit Notification**			**X** ☐	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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

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 7/8/04

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

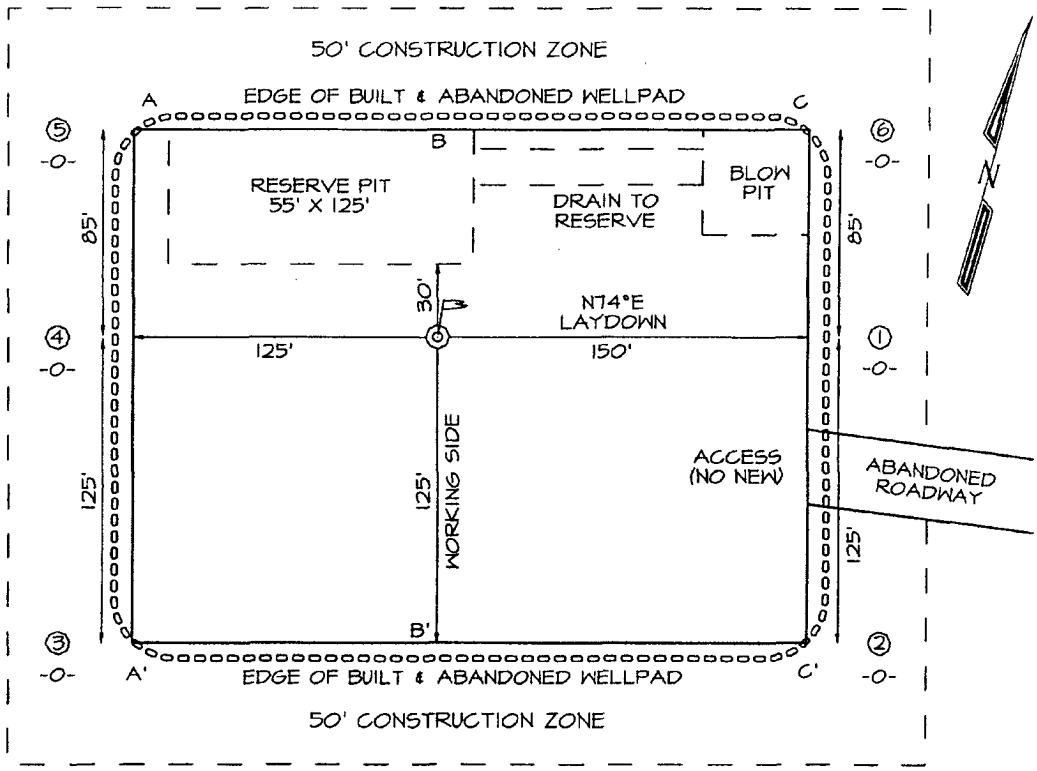
For State Use Only

APPROVED BY: TITLE DEPUTY OIL & GAS INSPECTOR, DIST. ☒ DATE OCT 20 2004

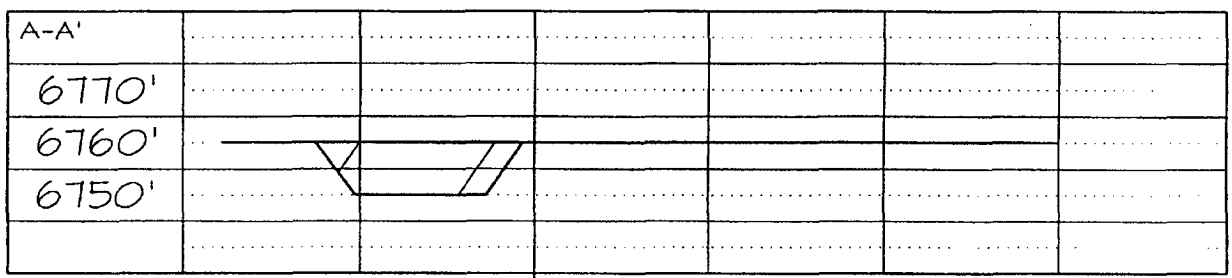
Conditions of Approval (if any):

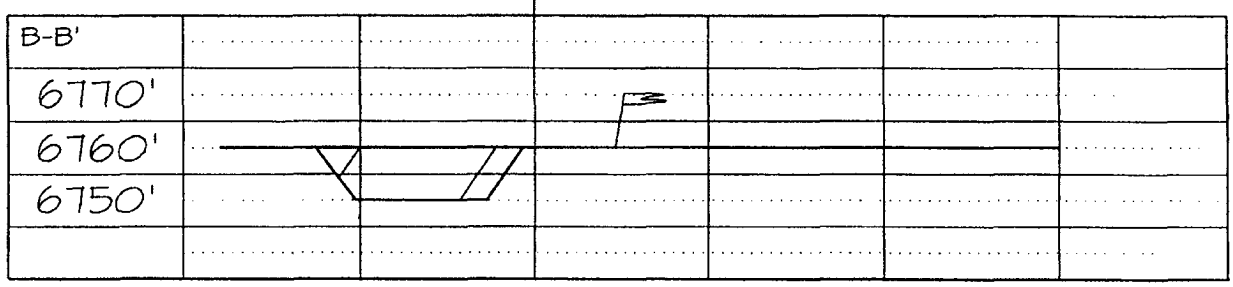
CONOCOPHILLIPS COMPANY SAN JUAN 29-6 UNIT #220A
1180' FSL & 1415' FEL, SECTION 11, T29N, R6W, NMPM
RIO ARRIBA COUNTY, NEW MEXICO ELEVATION: 6760'

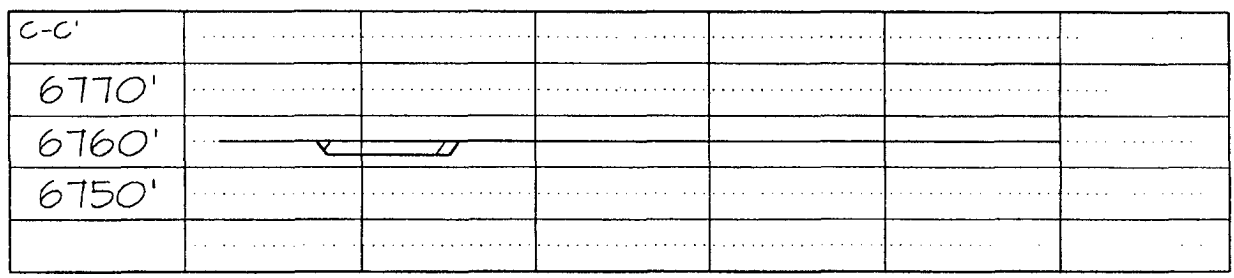
LATITUDE: 36.73616° N
LONGITUDE: 107.42754° W
DATUM: NAD1927



PLAT NOTE:
SURFACE OWNER Bureau of Land Management







FILENAME: 296110T	SHEET 2 OF 6	NCE SURVEYS, INC.	DRAWN BY: EDO	CHECKED BY: JCE

ConocoPhillips

San Juan Business Unit

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 29-6 220A

Lease:	AFE #: WAN.CBM.4172			AFE $:
Field Name: hPHILLIPS 29-6	Rig: 486-0597	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: 36.74	Longitude: -107.43	X:	Y:	Section: 11	Range: 6W
Footage X: 1415 FEL	Footage Y: 1180 FSL	Elevation: 6760 (FT)	Township: 29N		

Tolerance:

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

Formation Data: Assume KB = 6773 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SAN JOSE	13	6760	☐			
Surface Casing	213	6560	☐			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1592	5181	☐			
OJAM	2827	3946	☐			Possible water flows.
KRLD	2977	3796	☐			
FRLD	3253	3520	☐			Possible gas.
Intermediate Casing	3433	3340	☐			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
BASE MAIN COAL	3638	3135	☐			
PCCF	3683	3090	☐			
Total Depth	3720	3053	☐			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

Logging Program:

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

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

Additional Information:

Comments: Location/Tops/Logging - HPA

Zones - HPA

General/Work Description - Fruitland Coal 160-acre infill well.

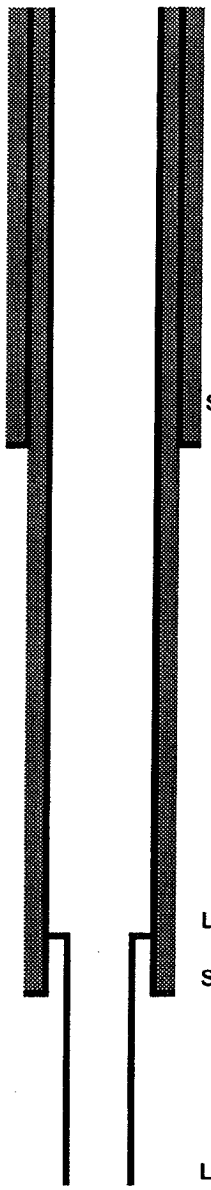
Mud Log from intermediate casing shoe to TD will be obtained.

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

Printed on: 7/8/2004 8:45:09 AM

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 29-6 # 220A



SURFACE CASING :

Drill Bit Diameter	12.25	"
Casing Outside Diameter	9.625	"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	230	'
Cement Yield	1.21	cuft/sk
Excess Cement	125	%
Cement Required	147	**sx**

Casing Inside Diam. 9.001 "

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

INTERMEDIATE CASING :

Drill Bit Diameter	8.75	"
Casing Outside Diameter	7	"
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3433	'
Lead Cement Yield	2.91	cuft/sk
Lead Cement Excess	160	%
Tail Cement Length	315	'
Tail Cement Yield	1.33	cuft/sk
Tail Cement Excess	160	%
Lead Cement Required	401	**sx**
Tail Cement Required	109	**sx**

Casing Inside Diam. 6.456 "

LINER TOP 3413 '

SHOE 3433 ', 7 ", 20 ppf, J-55

LINER BOTTOM 3720 ' (Uncemented)

San Juan 29-6 # 220A		
	Surf. Csg	Int. Csg
OD	9.625	7
ID	9.001	6.456
Depth	230	3433
Hole Diam	12.25	8.75
% Excess Lead		160
% Excess Tail	125	160
Lead Yield		2.91
Tail Yield	1.21	1.38
Ft of Tail Slurry	230	315
Top of Tail Slurry	0	3118
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	sx
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	sx
Lead Open Hole Annulus	2888	0.026786	2.6	201.1	1129.2	388.1
Lead Cased Hole Annulus	220	0.031116	1	6.8	38.4	13.2
Lead Total				208.0	1167.7	401.3
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 29-6 # 220A		
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

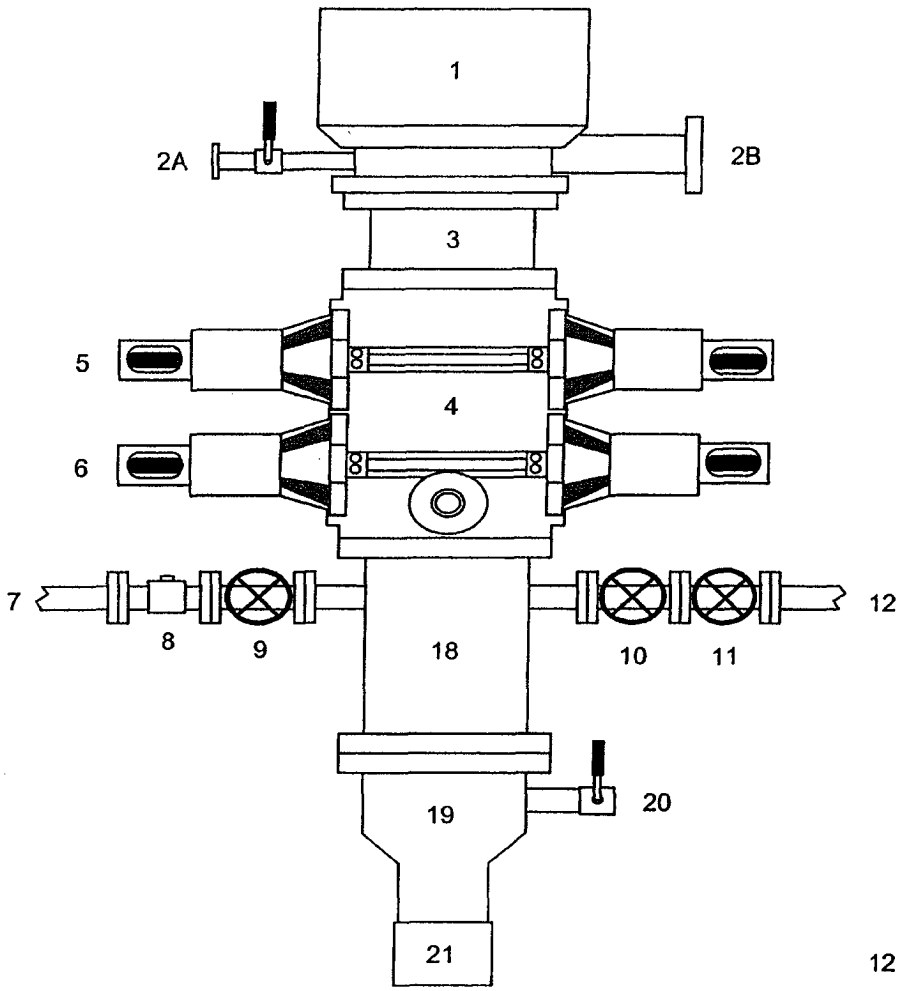
San Juan 29-6 # 220A		

7" Intermediate Casing		
Lead Slurry		
Cement Recipe	Standard Cement	
	+ 3% Econolite (Lost Circulation Additive)	
	+ 10 lb/sx Gilsonite (Lost Circ. Additvie)	
	+ 0.25 lb/sx Flocele (Lost Circ. Additive)	
Cement Required	401	sx
Cement Yield	2.91	cuft/sx
Slurry Volume	1167.7	cuft
	208.0	bbls
Cement Density	11.5	ppg
Water Required	16.88	gal/sx

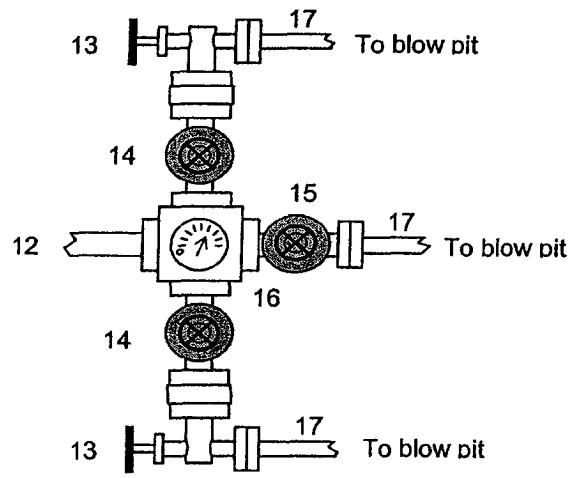
7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ:Standard Cement	
	+ 2% Bentonite (Light Weight Additive)	
	+ 5 lbm/sk Gilsonite (Lost Circ. Additive)	
	+ 0.25 lbm/sk Flocele (lost Circ. Additive)	
	+ 2% Calcium Chloride (Accelerator)	
Cement Required	100	sx
Cement Yield	1.33	cuft/sx
Slurry Volume	132.7	cuft
	23.6	bbls
Cement Density	13.5	ppg
Water Required	5.36	gal/sx

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



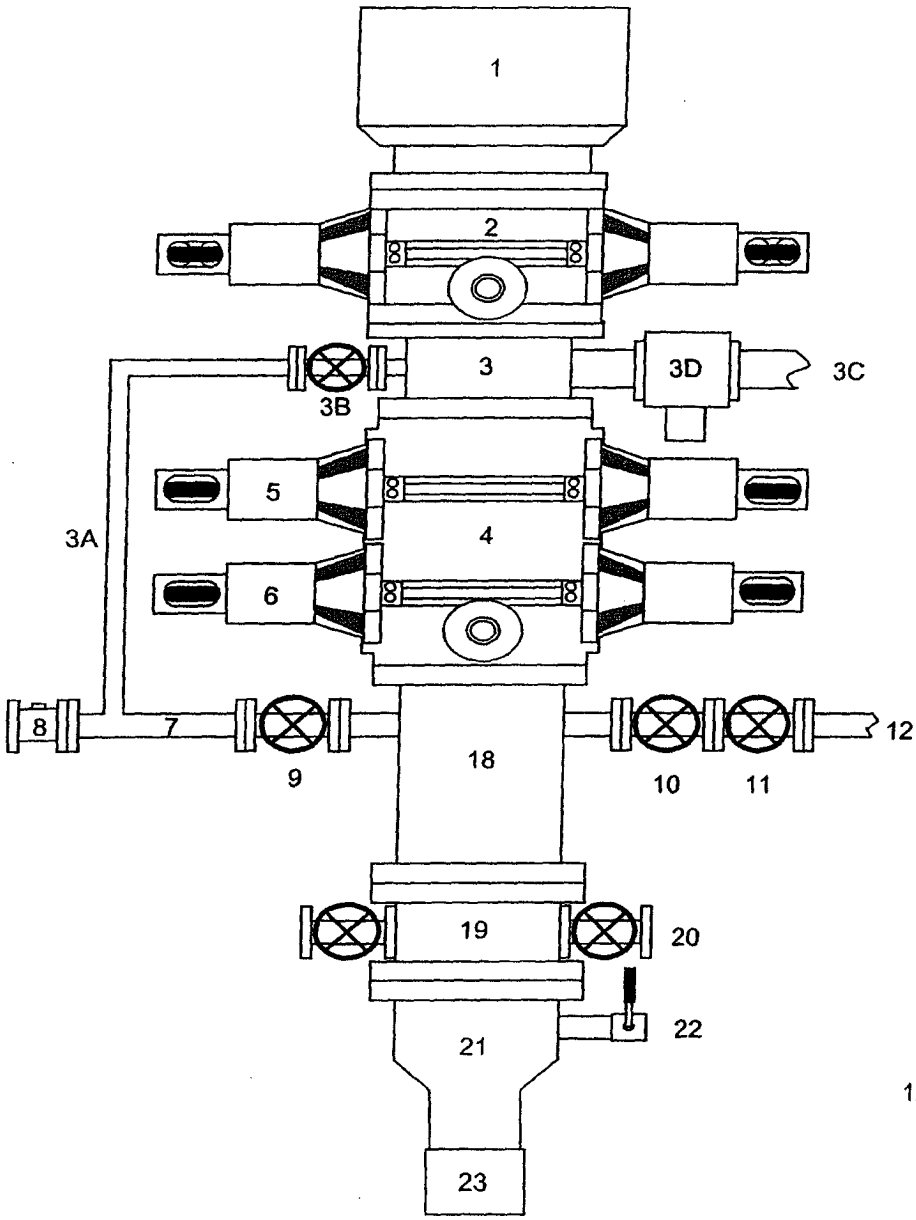
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

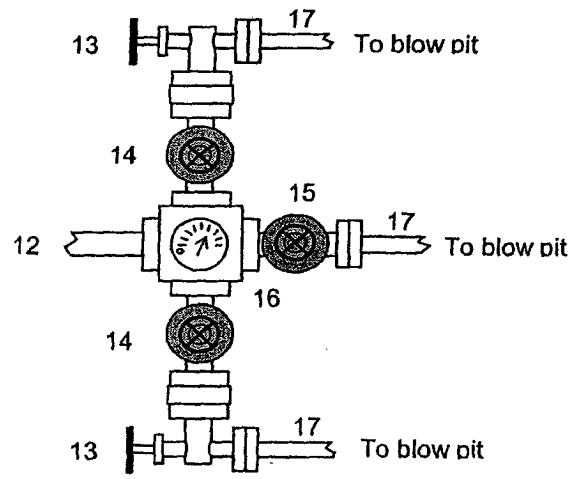
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

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)