Form 3160-3
(August 1999)

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: ☒ DRILL ☐ REENTER	5. Lease Serial No. SF-078738
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☒ Other: CBM ☒ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. SAN JUAN 30-5 UNIT 241A
2. Name of Operator CONOCOPHILLIPS COMPANY Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conocophillips.com	9. API Well No. 30-039-29244
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 BASIN FRUITLAND COAL
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SWNW 2254FNL 611FWL At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Sec 23 T30N R5W Mer NMP E
14. Distance in miles and direction from nearest town or post office*	12. County or Parish RIO ARRIBA — 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 W/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. — 19. Proposed Depth 3580 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

RECEIVED JUN 2006 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	Name (Printed/Typed)	Date
(Electronic Submission)	VICKI WESTBY	09/17/2004

Title: AGENT

Approved by (Signature)	Name (Printed/Typed)	Date
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 #36305 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

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

☐ AMMENDED 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	*Pool Code	*Pool Name
30-039-29244	71629	BASIN FRUITLAND COAL (GAS)

*Property Code	*Property Name	*Well Number
31327	SAN JUAN 30-5 UNIT	241A

*OGRID No.	*Operator Name	*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
E	23	30N	5W		2254	NORTH	611	WEST	RIO ARRIBA

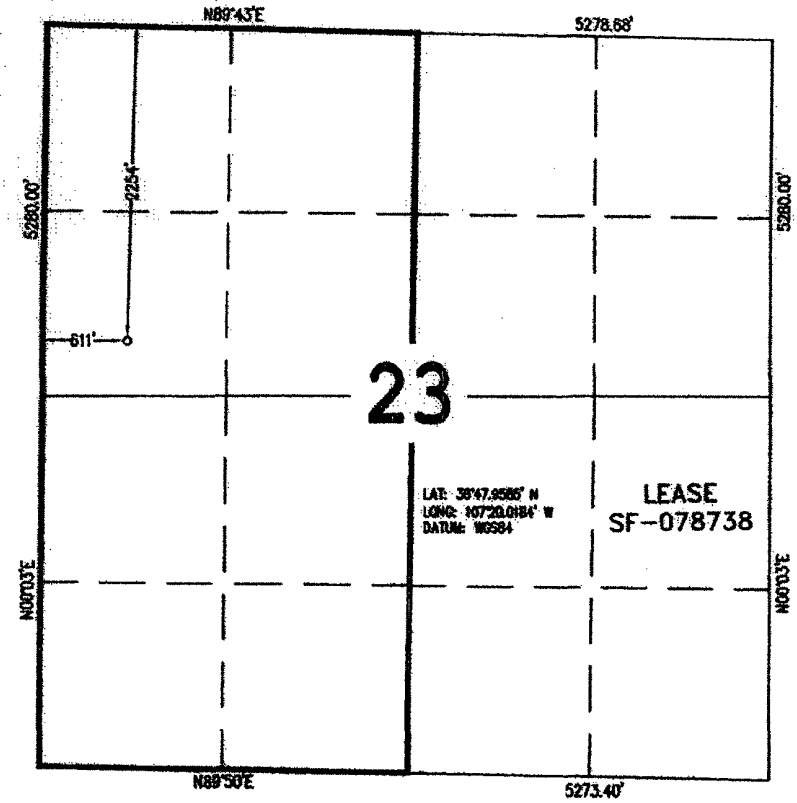
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

*Dedicated Acres	*Joint or Infill	*Consolidation Code	*Order No.
320.0 (West ½)			

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 (pf)
Signature

Vicki Westby
Printed Name

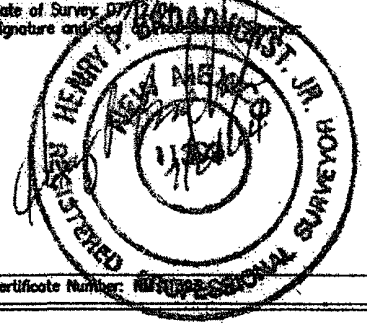
Sr. Analyst
Title and E-mail Address

8/31/04
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: 07/12/04
Signature and Seal of Professional Surveyor:



Certificate Number: NM [illegible] PROFESSIONAL

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., flobbs, NM 88240
District 11
1301 W. Grand Ave., Artesia, NM 882 1 0
District III
I 000 Rio Brazos Rd., Aztec, NM 8741 0
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

Fonn C-103
May 27, 2004

WELL API NO. 30-039-29244
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 30-5 UNIT
1. Type of Well: Oil Well ☐ Gas Well ☒ Other
8. Well Number: 241A
2. Name of Operator: ConocoPhillips Company
9. OGRID Number: 217817
3. Address of Operator: 4001 Penbrook, Odessa, TX 79762
I 0. Pool name or Wildcat: BASIN FRUITLAND COAL

4. Well Location
Unit Letter E 2254 feet from the NORTH line and 611 feet from the WEST line
Section 23 Township 30N Range 5W NMPM County RIO ARRIBA

I 1. Elevation (Show *whether DR, RKB, RT, GR, etc)*: 6760 GL

Pit r Btl n% aj n1v I ink Applikilion ☐ ir Closure ☐
Pit type DRILL Depth to Groundwater 50-100' 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. ☐	PANDA ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: ☒		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 I 1 03. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

ConocoPhillips Generic Pit Plan is on files at the 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 9/17/04

Type or print name E-mail address: Telephone No.

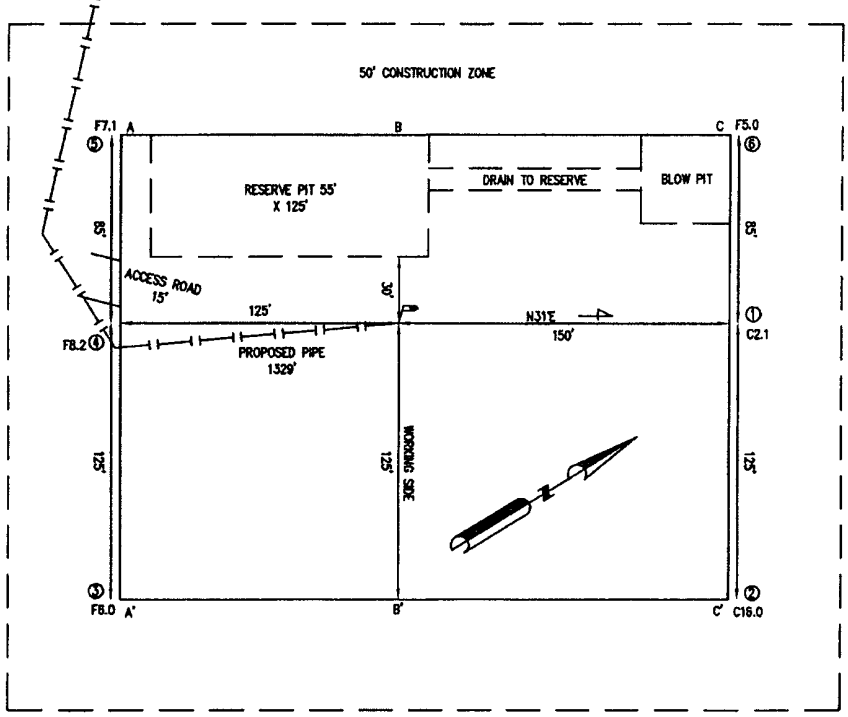
For State Use Only

APPROVED BY: TITLE DEPUTY OIL & GAS INSPECTOR, DIST. DATE JUN 15 2006
Conditions of Approval (if any):

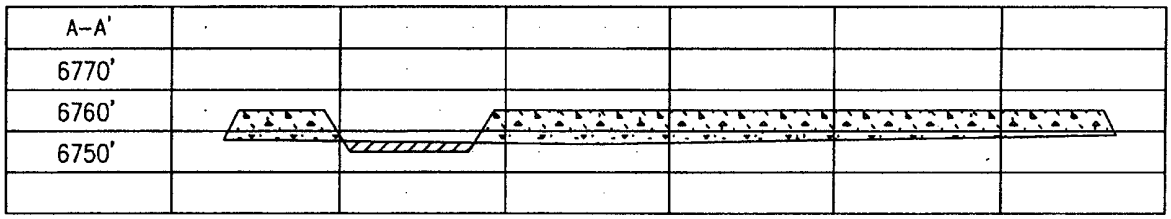
36. 47. 57.48
107. 19. 58.94
NAD 27

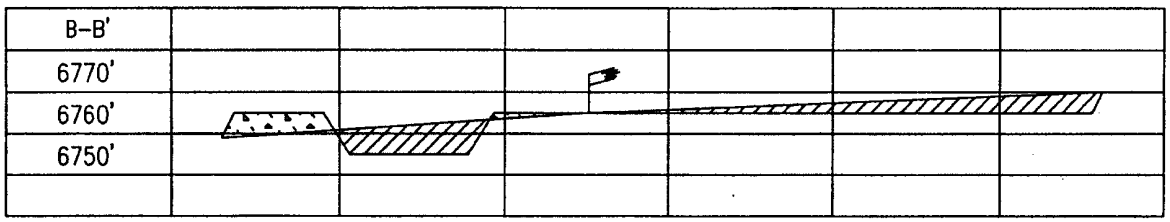
LATITUDE: 36.79931° N
LONGITUDE: 107.33364° W
DATUM: WGS84

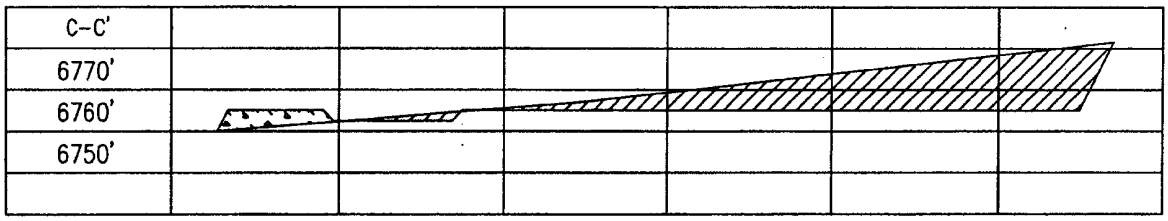
CONOCOPHILLIPS COMPANY SAN JUAN 30-5 UNIT # 241A
2254' FNL & 611 FWL, SECTION 23, T30N, R05W, NMPM
RIO ARRIBA COUNTY, NEW MEXICO ELEVATION: 6760'



PLAT NOTE:
SURFACE OWNER BLM/FOREST SERVICE







FILENAME: 30-5 241A.DWG	SHEET 2 OF 6	CHENAULT CONSULTING INC.	DRAWN BY:G.CHAVEZ	CHECKED BY:J. FUNK

ConocoPhillips

San Juan Business Unit

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 30-5 241A

Lease:		AFE #:		AFE $:
Field Name: hPHILLIPS 30-5	Rig:	State: NM	County: RIO ARRIBA	API #:
Geoscientist: Cloud, Tom A	Phone: +1 832 486-2377	Prod. Engineer: Bergman, Pat W.		Phone: (832) 486-2358
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

Latitude: 36.80	Longitude: -107.33	X:	Y:	Section: 23	Range: 5W
Footage X: 611 FWL	Footage Y: 2254 FNL	Elevation: 6760 (FT)	Township: 30N		
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	1693	5080	☐			
OJAM	2913	3860	☐			Possible water flows.
KRLD	3023	3750	☐			
FRLD	3293	3480	☐			Possible gas.
Intermediate Casing	3373	3400	☐			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
BASE MAIN COAL	3493	3280	☐	250		
PC TONGUE	3523	3250	☐			
Total Depth	3580	3193	☐			6-1/4" hole possibly underreamed to 9.5". Optional Liner: 5.5", 15.5#, J-55 LTC - left uncemented.
BASE LOWEST COAL	3673	3100	☐			
PCCF	3675	3098	☐			

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: Zones - Carson National Forest

General/Work Description - Carson National Forest
Next to road

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

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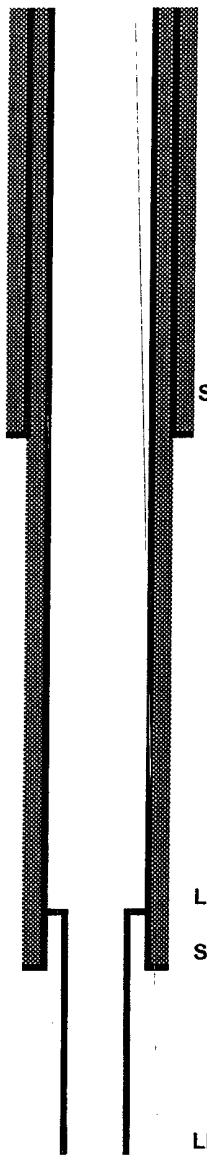
San Juan 30-5 # 241A



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	1.21	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	3373	'
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	393	**sx**
Tail Cement Required	100	**sx**

LINER TOP **3353 '**

SHOE **3373 ', 7 ", 20 ppf, J-55**

LINER BOTTOM 3580 ' (Uncemented)

San Juan 30-5 # 241A		
	Surf. Csg	Int. Csg
OD	9.625	7
ID	9.001	6.456
Depth	230	3373
Hole Diam	12.25	8.75
% Excess Lead		160
% Excess Tail	125	160
Lead Yield		2.91
Tail Yield	1.21	1.33
Ft of Tail Slurry	230	315
Top of Tail Slurry	0	3058
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	2828	0.026786	2.6	197.0	1105.8	380.0
Lead Cased Hole Annulus	220	0.031116	1	6.8	38.4	13.2
Lead Total				203.8	1144.2	393.2
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

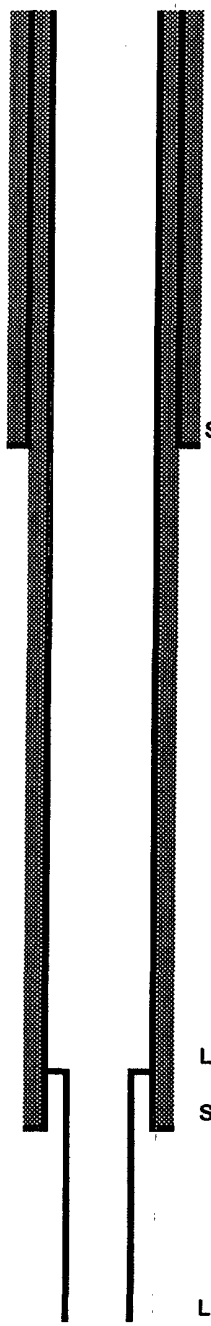
San Juan 30-5 # 241A		
9-5/8 Surface Casing		
Cement Recipe	Class C Standard Cement	
	+ 3% Calcium Chloride	
	+0.25 lb/sx Flocele	
Cement Volume	147	sx
Cement Yield	1.21	cuft/sx
Slurry Volume	179.8	cuft
	32.0	bbls
Cement Density	15.6	ppg
Water Required	5.29	gal/sx

San Juan 30-5 # 241A		

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	393	sx
Cement Yield	2.91	cuft/sx
Slurry Volume	1144.2	cuft
	203.8	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

San Juan 30-5 #241A



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 **147 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	3373	'	
Lead Cement Yield	2.61	cuft/sk	
Lead Cement Excess	160	%	
Tail Cement Length	300	'	42 '
Tail Cement Yield	1.27	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 **441 sx**
Tail Cement Required **100 sx**

LINER TOP **3353 '**

SHOE **3373 ', 7 ", 20 ppf, J-55**

LINER BOTTOM 3580 ' (Uncemented)

San Juan 30-5 #241A		
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
Compressive Strength		
12 hr	1174	psi
36 hr	2763	psi

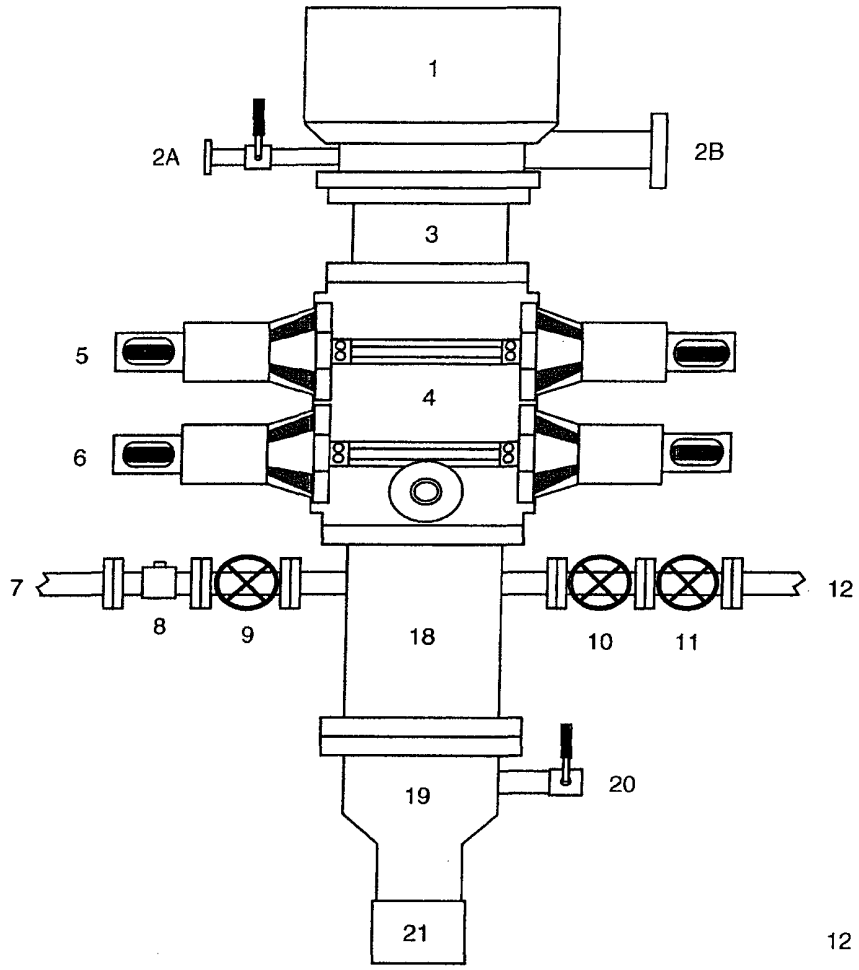
San Juan 30-5 #241A		

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	441	sx
Cement Yield	2.61	cuft/sx
Cement Volume	1151.29	cuft
Cement Density	11.7	ppg
Water Required	15.876	gal/sx
Compressive Strength		
2 hr 37 min	50	psi
39 hr 40 min	500	psi

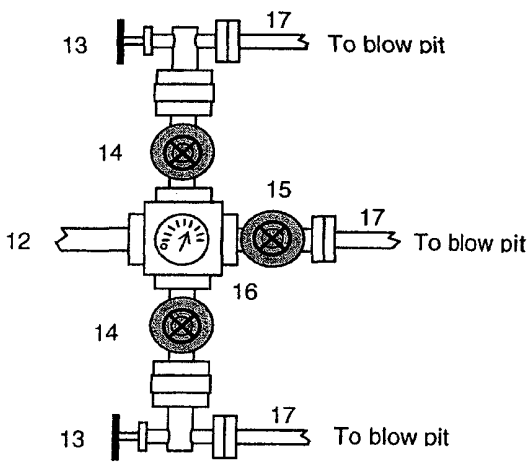
7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50% POZ / 50% Class G cement	
	+ 2% D020 Bentonite	
	+ 2% S001 Calcium Chloride	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 5 lb/sx Gilsonite Extender	
	+ 0.2% D046 Antifoam	
Cement Volume	100	sx
Cement Yield	1.27	cuft/sx
Cement Volume	126.80	cuft
Cement Density	13.5	ppg
Water Required	5.182	gal/sx
Compressive Strength		
24 hr	908	psi
48 hr	1950	psi

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.

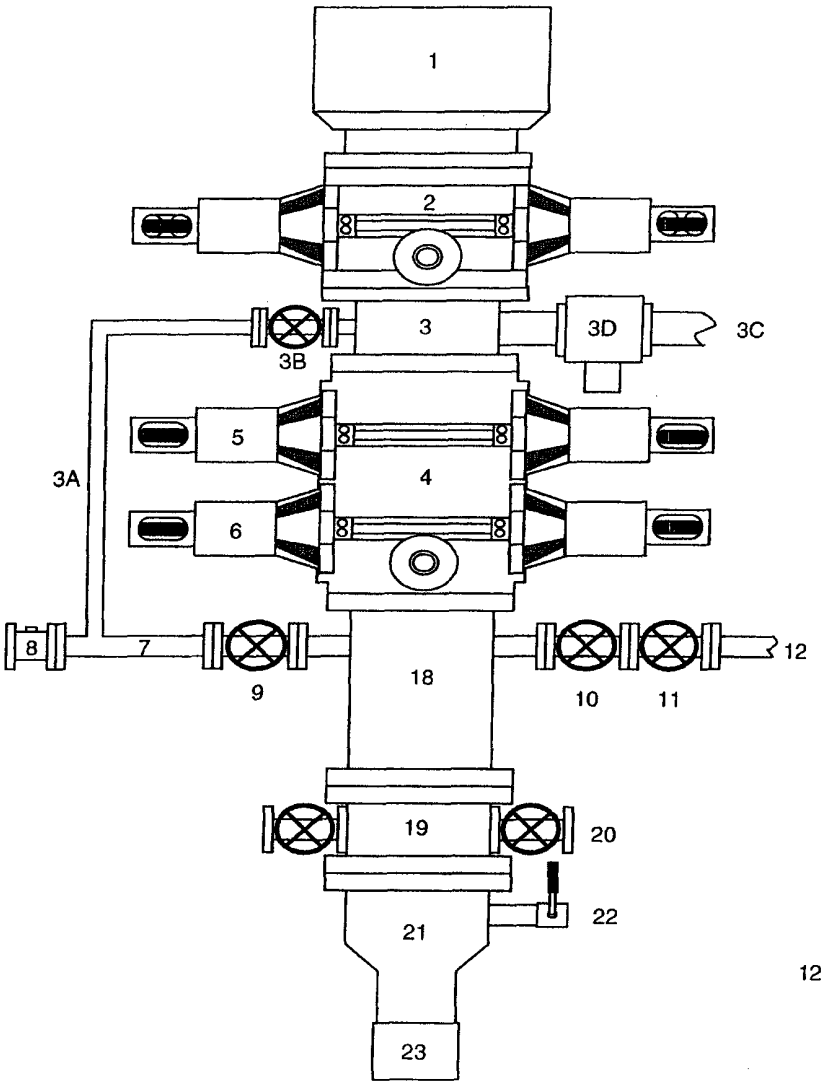
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

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

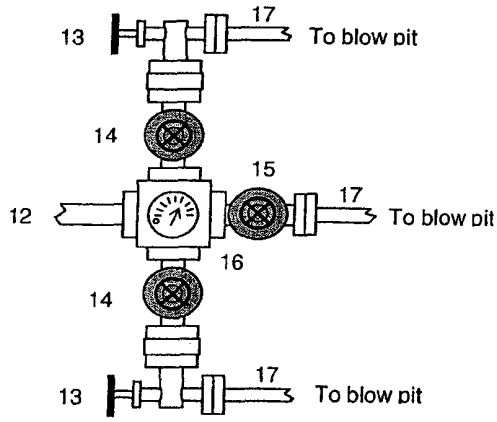
Revision Date: September 1, 2004

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).

Revision Date: September 1, 2004