

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RCVD JANS'07
OIL CONS. DIV.
DIST. 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2006 NOV 21 PM 4 25	5. Lease Number SF-079290 Unit Reporting Number NMAN-78413A-MU NMAN-78413C-DK
1b. Type of Well GAS	RECEIVED OTO FARMINGTON NM	6. If Indian, All. or Tribe
2. Operator ConocoPhillips	7. Unit Agreement Name San Juan 28-7 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number #223F	
4. Location of Well Unit B (NWNE), 15' FNL & 2435' FEL, Latitude 36° 38.3697' N Longitude 107° 32.4938' W	10. Field, Pool, Wildcat Blanco MesaVerde/Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) G Sec. 26 T28N, R7W, NMPM API # 30-039-30119 27257	
14. Distance in Miles from Nearest Town 22 miles to Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 15'		
16. Acres in Lease	17. Acres Assigned to Well 320 acres E/2	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease		
19. Proposed Depth 7310'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6658' GL	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Nancy A. Monroe</u> Regulatory Technician	<u>11/20/06</u> Date	

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY Wayne Leonard TITLE Acting AFM DATE 11/7/07

Archaeological Report submitted separately
Environmental Assessment is attached.

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3
Title 18 U.S.C. Section 1001, makes 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 presentations as to any matter within its jurisdiction.
This is not an HPA well

This action is subject to technical and
regulatory review pursuant to 43 CFR 3165.3
and 43 CFR 3165.4

NMOCD

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

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-107
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT
RCVD JAN 9 07
OIL CONS. DIV
DIST. 3

RECEIVED

070 FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number 30-039-27257	'Pool Code 72319 / 71599	'Pool Name BLANCO MESAVERDE / BASIN DAKOTA
'Property Code 31739	'Property Name SAN JUAN 28-7 UNIT	'Well Number 223F
'OGRID No. 217817	'Operator Name CONOCOPHILLIPS COMPANY	'Elevation 6658

10 Surface Location

UL or lot no. B	Section 26	Township 28N	Range 7W	Lot Idn	Feet from the 15	North/South line NORTH	Feet from the 2435	East/West line EAST	County RIO ARriba
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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 - (E/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
5276.04' A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16	15' 0"	2435'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature Virgil E. Chavez Printed Name Projects & Operations Lead Title August 30, 2006 Date
LAT: 36.63950°N LONG: 107.54217°W DATUM: NAD83 LAT: 36°38.3697'N LONG: 107°32.4938'W DATUM: NAD27	LEASE SF-079290		
5280.00'	26	5280.00'	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: JULY 31, 2006 Signature and Seal of Professional Surveyor JASON C. EDWARDS NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 15269 JASON C. EDWARDS Certificate Number 15269
	LEASE SF-079294		
	5280.00'		

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

WELL API NO.	30-039-27257
5. Indicate Type of Lease	STATE ☐ FEE ☐
6. State Oil & Gas Lease No.	SF-079290
7. Lease Name or Unit Agreement Name	San Juan 28-7 Unit
8. Well Number	223F
9. OGRID Number	217817
10. Pool name or Wildcat	Blanco Mesa Verde/Basin Dakota

SUNDY 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

3. Address of Operator
3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location
Unit Letter B : 15 feet from the North line and 2435 feet from the East line
Section 26 Township 28N Range 7W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6658' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type New Drill Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >1000'
Pit Liner Thickness: 12 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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER:

New Drill Pit

☒

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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

New Drill, Lined:

ConocoPhillips proposes to construct a new drilling pit, an associated vent/flare pit and a pre-set mud pit (if required). Based on ConocoPhillips' interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and pre-set mud pit will be lined pits as detailed in ConocoPhillips' General Plan dated June 2005 on file at the NMOCD office. A portion of the vent/flare pit will be designed to manage fluids and that portion will be lined as per the risk ranking criteria. ConocoPhillips anticipates closing these pits according to the November 1, 2004 Guidelines.

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 Tracey N. Monroe TITLE Regulatory Technician DATE 11/20/2006

Type or print name Tracey N. Monroe E-mail address: Tracey.N.Monroe@conocophillips.com Telephone No. 505-326-9752
For State Use Only

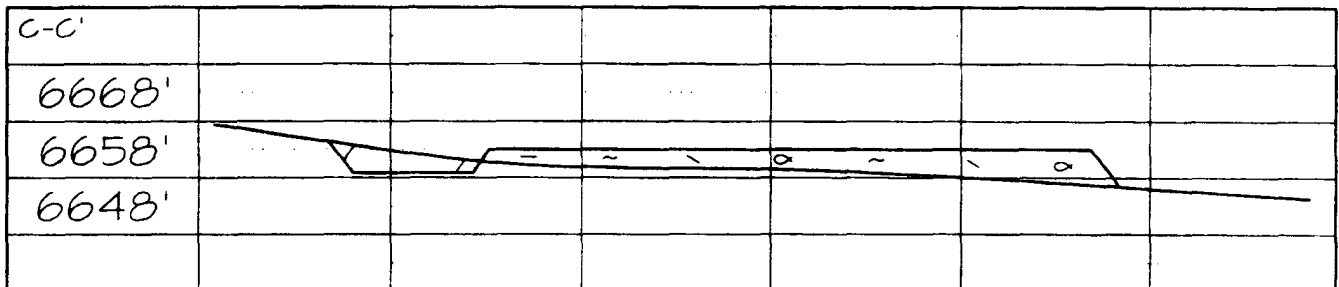
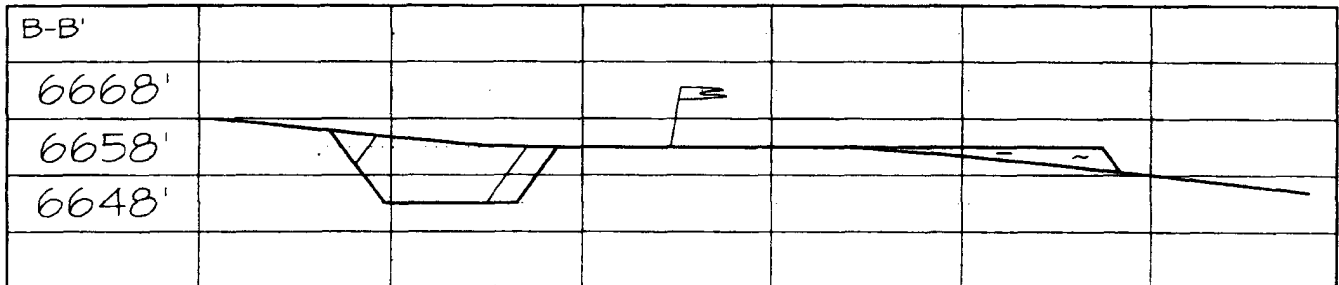
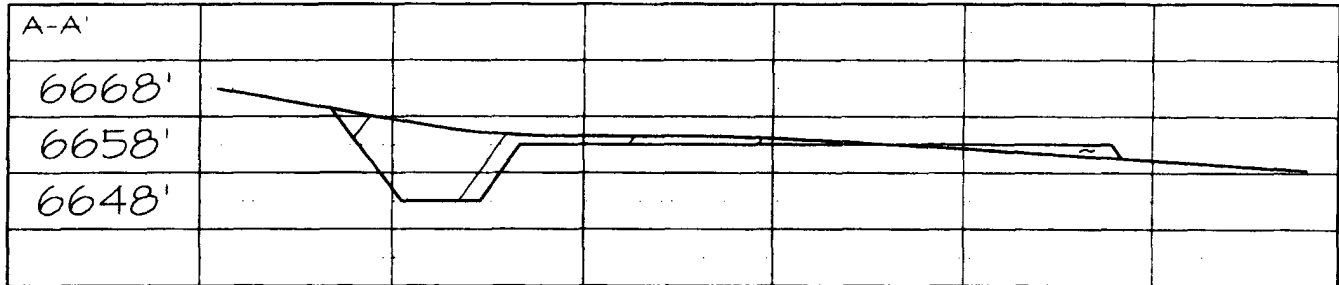
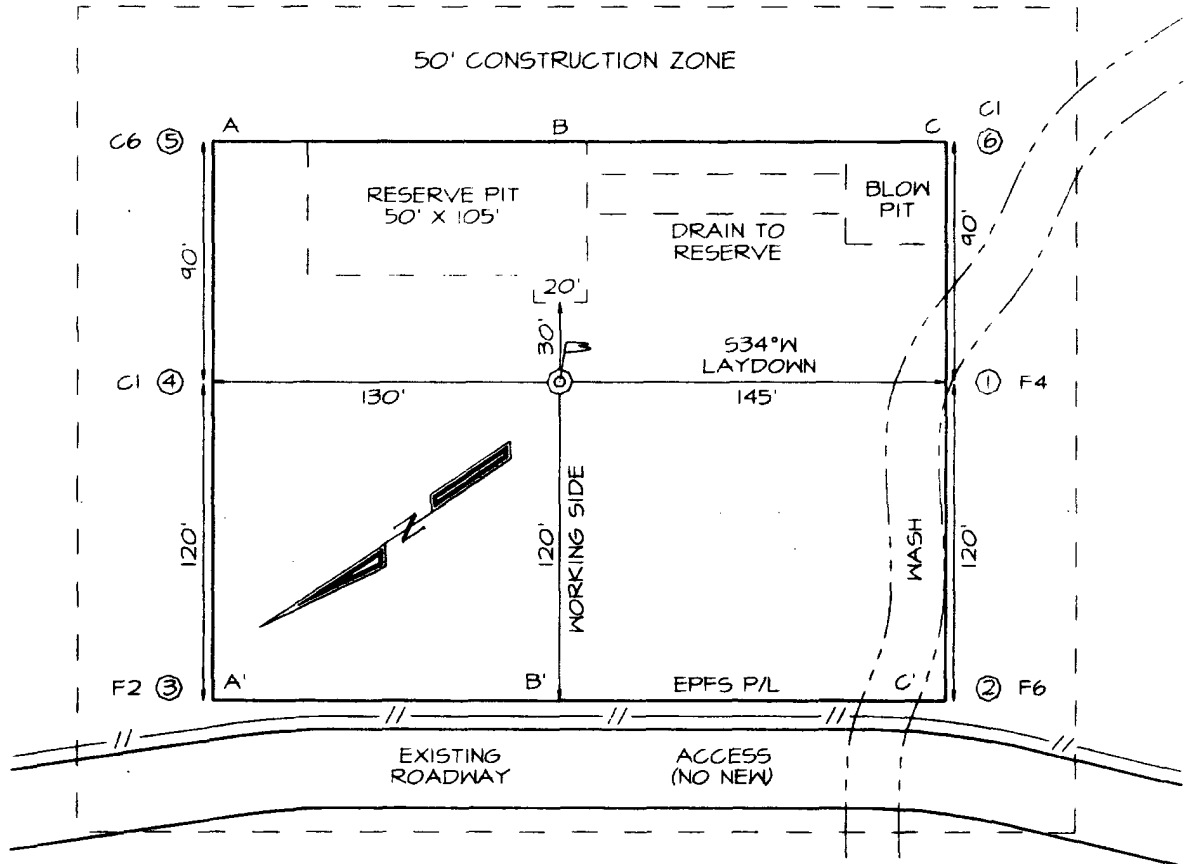
APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 6 DATE JAN 11 2007
Conditions of Approval (if any):

CONOCOPHILLIPS COMPANY SAN JUAN 28-7 UNIT #223F
15' FNL & 2435' FEL, SECTION 26, T28N, R7W, NMPM
RIO ARRIBA COUNTY, NEW MEXICO ELEVATION: 6658'

LATITUDE: 36.63950° N
LONGITUDE: 107.54217° W
 DATUM: NAD1983

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management



PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 223F

Lease:		AFE #: WAN.CNV.7170		AFE \$:	
Field Name: 28-7		Rig: Aztec Rig 711		State: NM	County: RIO ARRIBA
Geoscientist: Glaser, Terry J		Phone: (281) 293 - 6538	Prod. Engineer: Fontenot, Jessie C		Phone: +1 832-486-3483
Res. Engineer: Johnson, Tom B.		Phone: (832)-486-2347	Proj. Field Lead: Fransen, Eric E.		Phone:
Primary Objective (Zones):					
Zone	Zone Name				
R20002	MESAVERDE(R20002)				
R20076	DAKOTA(R20076)				

Location: Surface		Datum Code: NAD 27				Straight Hole	
Latitude: 36.639494	Longitude: -107.541564	X:	Y:	Section: 26	Range: 7W		
Footage X: 2435 FEL	Footage Y: 15 FNL	Elevation: 6658	(FT)	Township: 28N			
Tolerance:							
Location Type: Year Round		Start Date (Est.):		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6671 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks	
Surface Casing	120 210	6455	☐	12' 1/4		13 1/2" hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.	
OJAM	2521	4150	☐			Possible water flows	
KRLD	2671	4000	☐				
FRLD	3096	3575	☐			Possible gas	
PCCF	3346	3325	☐				
LEWS	3546	3125	☐				
Intermediate Casing	4000	2671	☐			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.	
CHRA	4296	2375	☐				
CLFH	4995	1676	☐	1300		Gas; possibly wet	
MENF	5131	1540	☐			Gas	
PTLK	5547	1124	☐			Gas	
MNCS	5771	900	☐				
GLLP	6560	111	☐				
GRHN	7503	-832	☐			Gas possible, highly fractured	
GRRS	7570	-899	☐				
TWLS	7608	-937	☐			Gas	
PAGU	7638	-967	☐			Gas. Highly Fractured.	
CBBO	7723	-1052	☐			Gas	
CBRL	7764	-1093	☐				
TD	7821	-1150	☐	3000			

Reference Wells:		
Reference Type	Well Name	Comments
Intermediate	SJ 28-7 258	23-28N-7W-SW, KB = 6660
Intermediate	SJ 28-7 223	23-28N-7W-NE, KB = 6641

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 28-7 223F

Logging Program:

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

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

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Comments:

HOLE: 12.25 "
CSG OD: 9.625 "
CSG ID: 9.001 "
WGT: 32.3 ppf
GRADE: H-40
EXCESS: 125 %
DEPTH: 120'

HOLE: 8.75 "
CSG OD: 7 "
CSG ID: 6.456 "
WGT: 20 ppf
GRADE: J-55
EXCESS: 50 %
TAIL: 729.2'
DEPTH: 3646'

HOLE: 6.25 "
CSG OD: 4.5 "
CSG ID: 4 "
WGT: 11.6 ppf
GRADE: N-80
EXCESS: 30 %
DEPTH: 7621'

SURFACE:

Option 1
79 sx
16.4 bbls
91.9 cuft
1.17 ft³/sx
15.8 ppg
4.973 gal/sx
Class G Cement
+ 3% S001 Calcium Chloride
+ 0.25 lb/sx D029 Cellophane Flakes

Option 2
76 sx
16.4 bbls
91.9 cuft
1.21 ft³/sx
15.6 ppg
5.29 gal/sx
Standard Cement
+ 3% Calcium Chloride
+ 0.25 lb/sx Flocele

Option 3
37 sx
10.6 bbls
59.3 cuft
1.61 ft³/sx
14.5 ppg
7.41 gal/sx
Type I-II Ready Mix
+ 20% Fly Ash

Comp. Strength
6 hrs 250 psi
8 hrs 500 psi
24 hrs 1375 psi

INTERMEDIATE LEAD:

Option 1
240 sx
116.1 bbls
651.9 cuft
2.72 ft³/sx
11.7 ppg
15.74 gal/sx
Class G Cement
+ 3% D079 Extender
+ 0.20% D046 Antifoam
+ 10 lb/sx Phenoseal

Option 2
251 sx
116.1 bbls
651.9 cuft
2.60 ft³/sx
11.5 ppg
14.62 gal/sx
Type III Ashgrove Cement
+ 30 lb/sx San Juan Poz
+ 3% Bentonite
+ 5.0 lb/sx Phenoseal

Option 3
248 sx
116.1 bbls
651.9 cuft
2.63 ft³/sx
11.7 ppg
15.92 gal/sx
Class G Cement
+ 3% D079 Extender
+ 0.20% D046 Antifoam
+ 1.0 lb/bbl CemNet

Comp. Strength
9 hrs 300 psi
48 hrs 525 psi

Comp. Strength
1:47 hrs 50 psi
12 hrs 350 psi
24 hrs 450 psi

Comp. Strength
3 hrs 100 psi
24 hrs 443 psi

INTERMEDIATE TAIL:

Option 1
133 sx
31.0 bbls
174.0 cuft
1.31 ft³/sx
13.5 ppg
5.317 gal/sx
50/50 Poz: Class G Cement
+ 0.25 lb/sx D029 Cellophane Flakes
+ 3% S001 Calcium Chloride
+ 2% D020 Bentonite
+ 1.5 lb/sx D024 Gilsomite Extender
+ 0.1% D046 Antifoamer
+ 6 lb/sx Phenoseal

Option 2
131 sx
31.0 bbls
174.0 cuft
1.33 ft³/sx
13.5 ppg
5.52 gal/sx
50/50 Poz: Standard Cement
+ 2% Bentonite
+ 6.0 lb/sx Phenoseal

Option 3
136 sx
31.0 bbls
174.0 cuft
1.28 ft³/sx
13.5 ppg
5.255 gal/sx
50/50 Poz: Class G Cement
+ 2% D020 Bentonite
+ 5.0 lb/sx D024 Gilsomite Extender
+ 2% S001 Calcium Chloride
+ 0.1% D046 Antifoamer
+ 0.15% D065 Dispersant
+ 1.0 lb/bbl CemNet

Comp. Strength
3:53 500 psi
8:22 1000 psi
24 hrs 3170 psi
48 hrs 5399 psi

Comp. Strength
2:05 50 psi
4:06 500 psi
12 hrs 1250 psi
24 hrs 1819 psi

Comp. Strength
24 hrs 1850 psi
48 hrs 3411 psi

PRODUCTION:

Option 1
403 sx
103.4 bbls
580.5 cuft
1.44 ft³/sx
13.0 ppg
6.47 gal/sx
50/50 Poz: Class G Cement
+ 0.25 lb/sx D029 Cellophane Flakes
+ 3% D020 Bentonite
+ 1.0 lb/sx D024 Gilsomite Extender
+ 0.25% D167 Fluid Loss
+ 0.25% D065 Dispersant
+ 0.1% D800 Retarder
+ 0.1% D046 Antifoamer
+ 3.5 lb/sx Phenoseal

Option 2
400 sx
103.4 bbls
580.5 cuft
1.45 ft³/sx
13.1 ppg
6.55 gal/sx
50/50 Poz: Standard Cement
+ 3% Bentonite
+ 0.2% CFR-3 Friction Reducer
+ 0.1% HR-5 Retarder
+ 0.8% Halad-9 Fluid Loss Additive
+ 3.5 lb/sx Phenoseal

Comp. Strength
7 hrs 500 psi
24 hrs 2100 psi

Comp. Strength
9:32 50 psi
12 hrs 500 psi
13:29 1026 psi
24 hrs 2300 psi

M³- 11/15/06

HOLE: 12.25"
CSG OD: 9.625"
CSG ID: 9.001"
WGT: 32.3 ppf
GRADE: H-40
EXCESS: 125 %
DEPTH: 120'

SURFACE:

INTERMEDIATE LEAD:

Option 4

226 sx

116.1 bbls

651.9 cuft

2.88 ft³/sx

11.5 ppg

16.85 gal/sx

Standard Cement

+ 3% Econolite (Extender)

+ 10 lb/sx Phenoseal

Comp. Strength

1:47 50 psi

12 hrs 350 psi

24 hrs 450 psi

HOLE: 8.75"
CSG OD: 7"
CSG ID: 6.456"
WGT: 20 ppf
GRADE: J-55
EXCESS: 50 %

TAIL: 729.2'

DEPTH: 3645'

Option 5

310 sx

116.1 bbls

651.9 cuft

2.10 ft³/sx

11.7 ppg

11.724 gal/sx

75% Type XI / 25% Class G Cement

+ 0.25 lb/sx D029 Cellophane Flakes

+ 3% D079 Extender

+ 0.20% D046 Antifoam

Comp. Strength

10:56 500 psi

42 hrs 1012 psi

INTERMEDIATE TAIL:

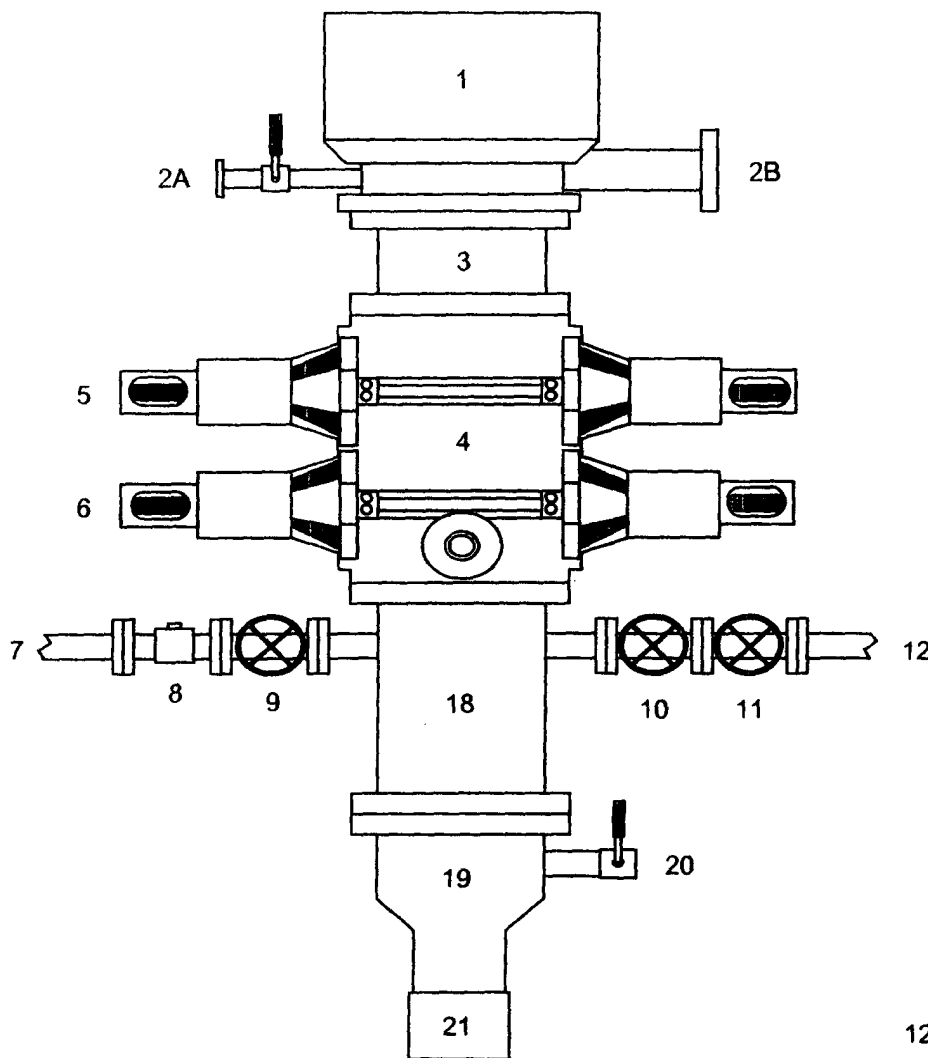
PRODUCTION:

HOLE: 6.25"
CSG OD: 4.5"
CSG ID: 4"
WGT: 11.6 ppf
GRADE: N-80
EXCESS: 30 %
DEPTH: 7821'

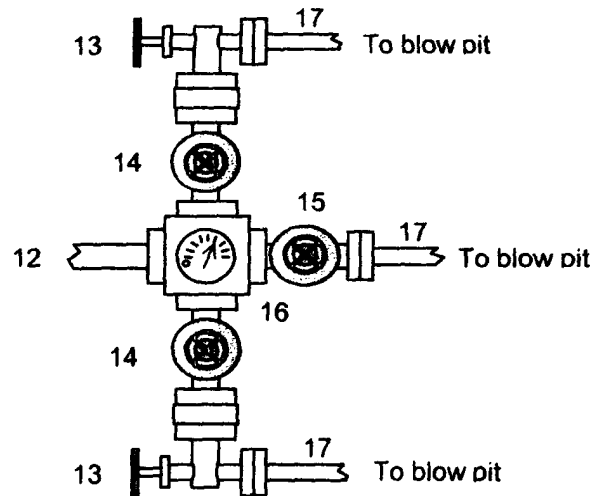
M³ - 11/15/06

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



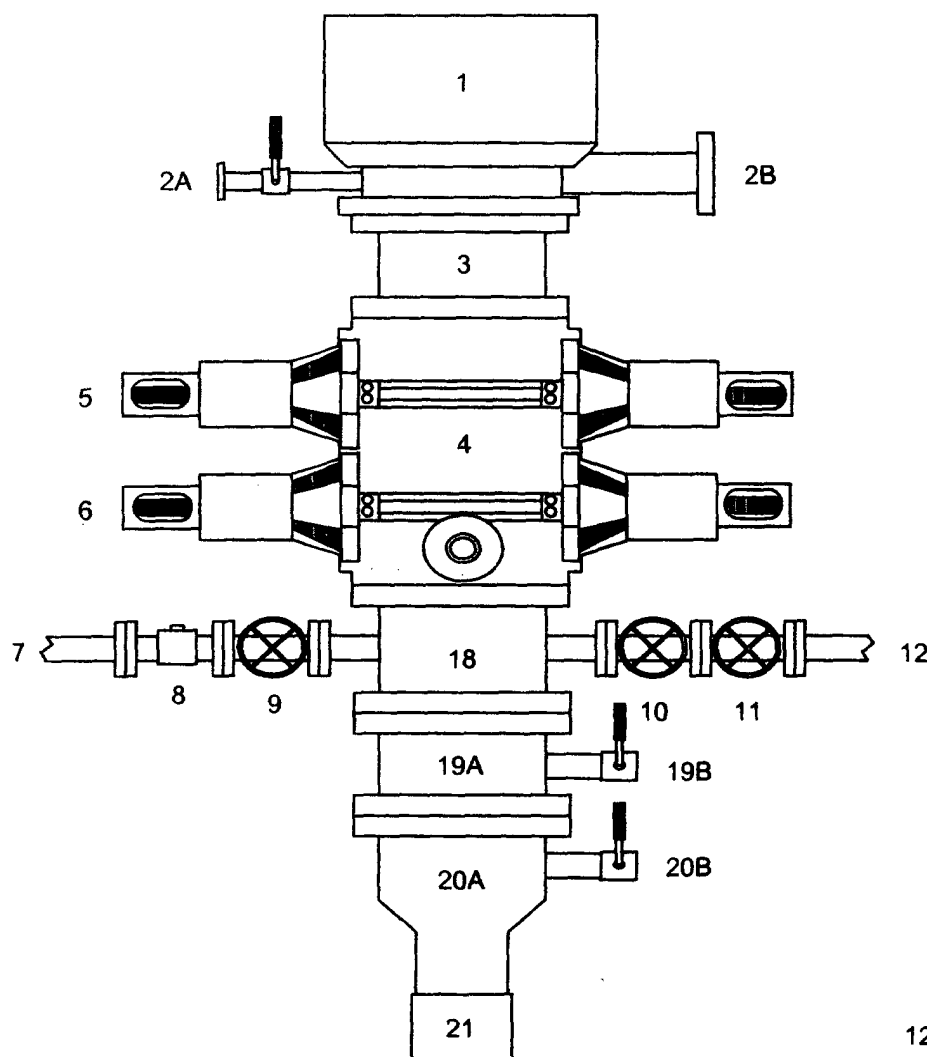
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

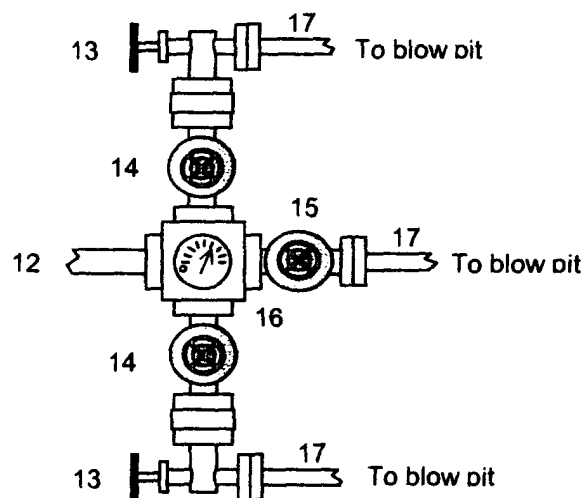
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Bloopie Line (for Air Drilling)
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
- 19A Csg Spool "B" Section (11", 3M)
- 19B "B" Section Csg Valve (2", 3M)
- 20A Csg Head "A" Section (11", 3M)
- 20B "A" Section Csg Valve (2", 3M)
21. 9 5/8" Casing Collar



After the 7" intermediate casing has been run and cemented, the Casing Spool ("B" Section) will be installed on the wellhead ("A" Section) and the BOP will be installed on the Casing Spool. A test plug will be set in the wellhead and the pipe rams, blind rams, and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 3000 psi (high pressure test) for 10 minutes. Then the test plug will be removed and 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. Then we will air drill the 6-1/4" hole to TD and run and cement the 4-1/2" casing.

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