

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number NMNM-012299 Unit Reporting Number 070 FARMINGTON, NM
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator ConocoPhillips	7. Unit Agreement Name San Juan 31-6 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name
4. Location of Well Unit L (NWSW), 1980' FSL & 660' FWL, Latitude 36° 50.4'N Longitude 107° 25.2'W	9. Well Number #53M 10. Field, Pool, Wildcat Basin Dakota / Blanco MV 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 1, T30N, R06W API # 30-039-30023
14. Distance in Miles from Nearest Town	12. County Rio Arriba Arriba
15. Distance from Proposed Location to Nearest Property or Lease Line 660'	13. State NM
16. Acres in Lease	17. Acres Assigned to Well DK - S/2 273.49; MV - 319.69 W/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease	
19. Proposed Depth 7956'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6415' GL	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Patsy Choat</u> Sr. Regulatory Analyst	Date <u>9/18/06</u>

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE AFM DATE 9/19/06

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.

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994

District II
PO Drawer 00, Artesia, NM 88211-0719

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

District III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

District IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-30023		*Pool Code 72319 / 71599		*Pool Name BLANCO MESAVERDE / BASIN DAKOTA	
*Property Code 31328		*Property Name SAN JUAN 31-6 UNIT			*Well Number 53M
*OGRID No. 217817		*Operator Name CONOCOPHILLIPS COMPANY			*Elevation 6415'

¹⁰ Surface Location

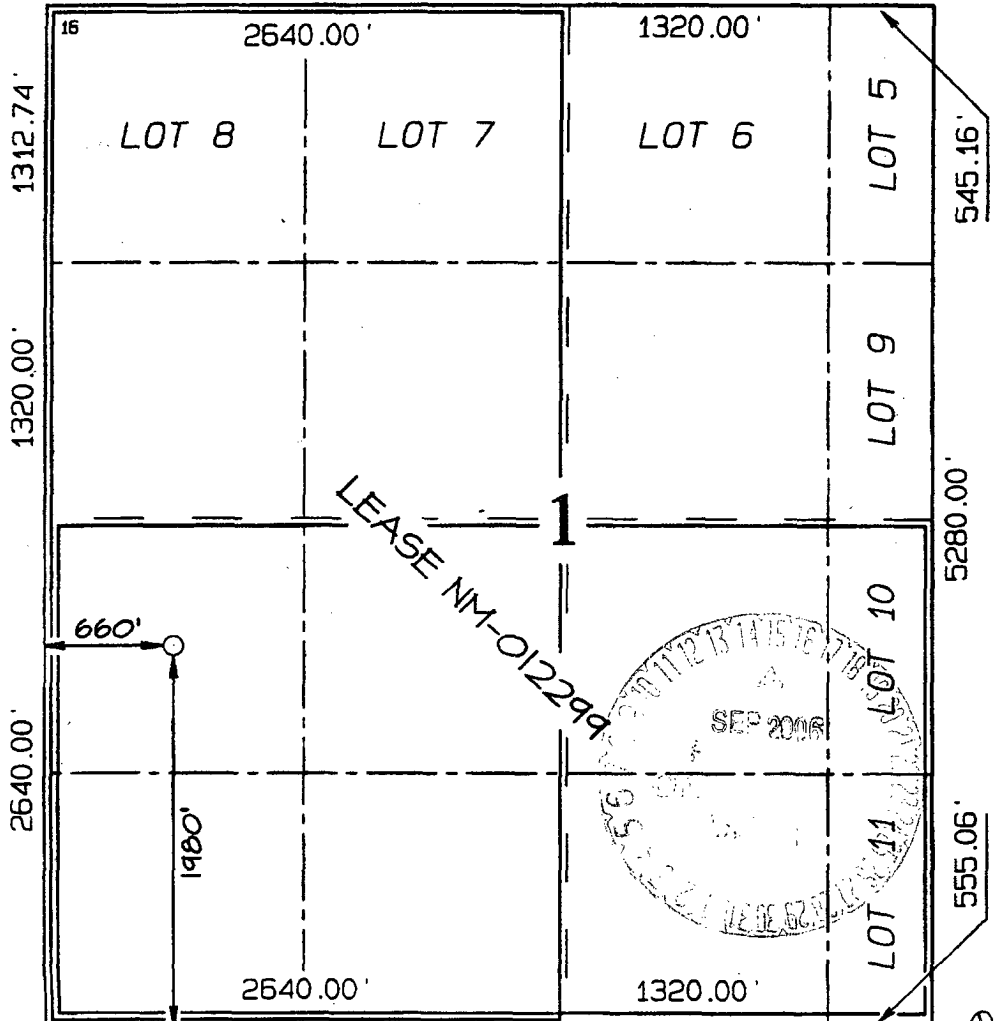
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	1	30N	6W		1980	SOUTH	660	WEST	RIO ARriba

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 319.69 Acres - W/2 (MV) 273.49 Acres - S/2 (DK)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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>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>Virgil E. Chavez</i></p> <p>Signature Virgil E. Chavez</p> <p>Printed Name Projects & Operations Lead</p> <p>Title December 21, 2005</p> <p>Date</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>Survey Date: SEPTEMBER 14, 2005</p> <p>Signature and Seal of Professional Surveyor</p> <p><i>JASON C. EDWARDS</i></p> <p>Certificate Number 15269</p>

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

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. 30-039-
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. Federal Lease - NM-012299
3. Address of Operator 3401 E. 30TH STREET, FARMINGTON, NM 87402		7. Lease Name or Unit Agreement Name San Juan 31-6, Unit
4. Well Location Unit Letter <u>L</u> : <u>1980</u> feet from the <u>South</u> line and <u>660</u> feet from the <u>West</u> line Section <u>1</u> Township <u>30N</u> Rng <u>6W</u> NMPM County <u>Rio Arriba</u>		8. Well Number #53M
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6415' GL		9. OGRID Number 217817
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat Blanco Mesaverde / Basin DK
Pit type <u>New Drill</u> Depth to Groundwater <u>>100'</u> Distance from nearest fresh water well <u>>1000'</u> Distance from nearest surface water <u><200'</u> Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u> </u> bbls; Construction Material <u> </u>		

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 ☒

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.

We are constructing Drilling and workover pits as per our General plan on file with the OCD dated June 2005 and we are closing all pits as per 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 Patsy Clugston TITLE Sr. Regulatory Specialist DATE 8/8/2006

Type or print name Patsy Clugston E-mail address: pclugston@br-inc.com Telephone No. 505-326-9518

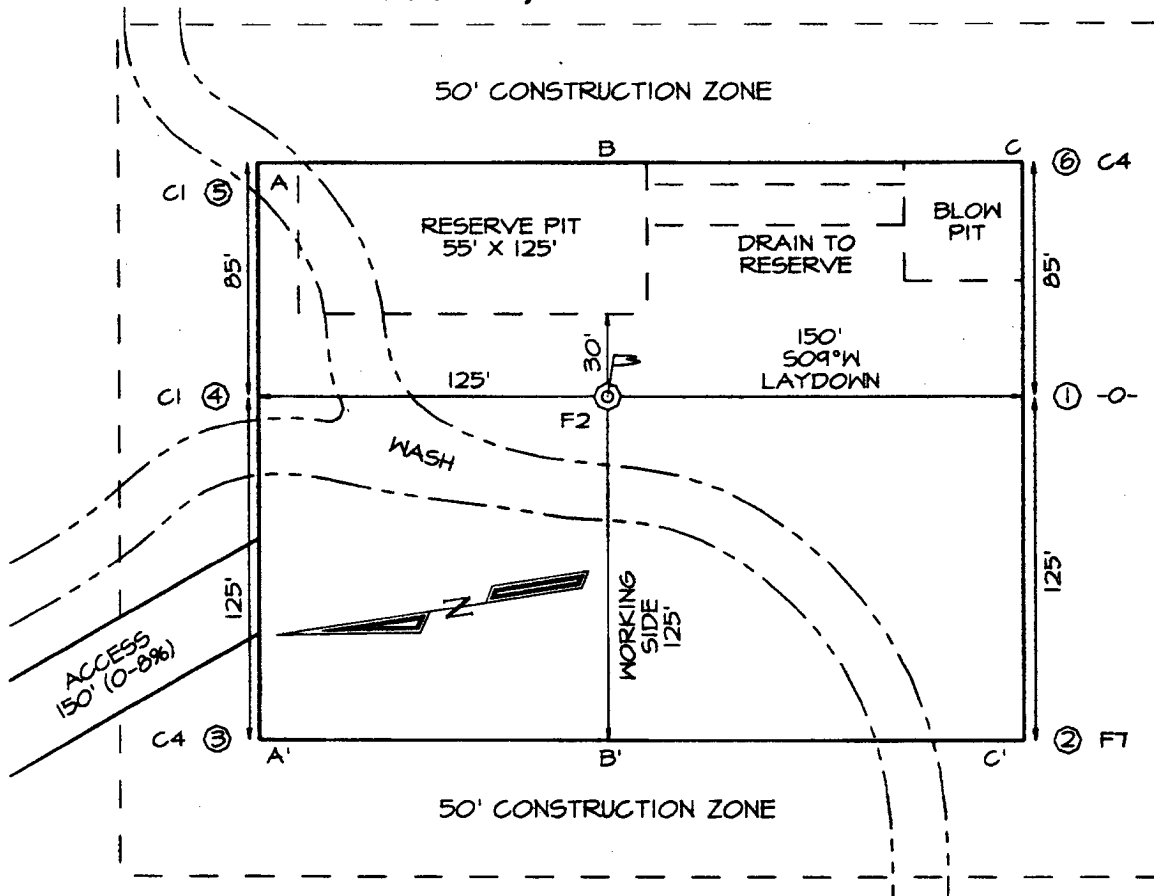
For State Use Only

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. # DATE SEP 15 2006

Conditions of Approval (if any):

CONOCOPHILLIPS COMPANY SAN JUAN 31-6 UNIT #53M
1980' FSL & 660' FWL, SECTION 1, T30N, R6W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6415'

LATITUDE: 36.83980° N
LONGITUDE: 107.42033° W
 DATUM: NAD1927



PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management

A-A'						
6427'						
6417'						
6407'						

B-B'						
6427'						
6417'						
6407'						

C-C'						
6427'						
6417'						
6407'						

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 31-6 53M

Lease:		AFE #: WAN.CNV.7194		AFE \$:	
Field Name: 31-6		Rig: UNSCHEDULED 2007 RIG 2	State: NM	County: RIO ARRIBA	API #:
Geoscientist: Glaser, Terry J		Phone: (832)486-2332	Prod. Engineer: Piotrowicz, Greg M.		Phone: +1 832-486-3486
Res. Engineer: Pena, David Fernando		Phone: 832-486-2328	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: 36.839800	Longitude: -107.420330	X:	Y:	Section: 1	Range: 6W	
Footage X: 660 FWL	Footage Y: 1980 FSL	Elevation: 6415 (FT)	Township: 30N			
Tolerance:						
Location Type: Summer Only		Start Date (Est.):	Completion Date:	Date In Operation:		
Formation Data: Assume KB = 6431 Units = FT						

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	216	6215	<input type="checkbox"/>			13-1/2 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1331	5100	<input type="checkbox"/>			
OJAM	2451	3980	<input type="checkbox"/>			Possible water flows.
KRLD	2591	3840	<input type="checkbox"/>			
FRLD	3011	3420	<input type="checkbox"/>			Possible gas.
PCCF	3231	3200	<input type="checkbox"/>			
LEWS	3431	3000	<input type="checkbox"/>			
Intermediate Casing	3531	2900	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4496	1935	<input type="checkbox"/>			
CLFH	5341	1090	<input type="checkbox"/>			Gas; possibly wet
MENF	5371	1060	<input type="checkbox"/>			Gas.
PTLK	5606	825	<input type="checkbox"/>			Gas.
GLLP	6896	-465	<input type="checkbox"/>			Gas. Possibly wet.
GRHN	7606	-1175	<input type="checkbox"/>			Gas possible, highly fractured
CBBO	7791	-1360	<input type="checkbox"/>			Gas
TOTAL DEPTH DK	7956	-1525	<input type="checkbox"/>			6-1/4" Hole. 4-1/2", 11.6 ppf, N-80, LTC casing. Circulate cement a minimum of 100' inside the previous casing string. No open hole logs. Cased hole TDT with GR to surface.

Reference Wells:		
Reference Type	Well Name	Comments

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 31-6 53M

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: Location/Tops/Logging - TD is 310' below top of Greenhorn

General/Work Description - COP does not own DK - Need to propose DK DB to Burlington

San Juan 31-6 # 53M
Halliburton Cementing Program

SURFACE CASING :

Drill Bit Diameter	13.5"	
Casing Outside Diameter	9.625"	Casing Inside Diam. 9.001"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	235'	
Cement Yield	1.21	cuft/sk
Cement Density	15.6	lb/gal
Excess Cement	125	%
Cement Required	214	sx

SHOE 235 ' , 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	3531'	
Lead Cement Yield	2.88	cuft/sk
Lead Cement Density	11.5	lb/gal
Lead Cement Excess	150	%
Lead Cement Required	352	sx
Tail Cement Length	706.2'	
Tail Cement Yield	1.33	cuft/sk
Tail Cement Density	13.5	lb/gal
Tail Cement Excess	150	%
Tail Cement Required	207	sx

SHOE 3531 ' , 7 " , 20 ppf , J-55 STC

PRODUCTION CASING :

Drill Bit Diameter	6.25"	
Casing Outside Diameter	4.5"	Casing Inside Diam. 4.000"
Casing Weight	11.6	ppf
Casing Grade	N-80	
Top of Cement	3331'	200' inside intermediate casing
Shoe Depth	7956'	
Cement Yield	1.45	cuft/sk
Cement Density	13.1	lb/gal
Cement Excess	50	%
Cement Required	486	sx

SHOE 7956 ' , 4.5 " , 11.6 ppf , N-80 LTC

San Juan 31-6 # 53M
Schlumberger Cementing Program

SURFACE CASING :

Drill Bit Diameter	13.5"	
Casing Outside Diameter	9.625"	Casing Inside Diam. 9.001"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	235'	
Cement Yield	1.17	cuft/sk
Cement Density	15.8	lb/gal
Excess Cement	125	%
Cement Required	222	sx

SHOE 235 ', 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	3531'	
Lead Cement Yield	2.72	cuft/sk
Lead Cement Density	11.7	lb/gal
Lead Cement Excess	150	%
Lead Cement Required	373	sx
Tail Cement Length	706.2'	
Tail Cement Yield	1.31	cuft/sk
Tail Cement Density	13.5	lb/gal
Tail Cement Excess	150	%
Tail Cement Required	210	sx

SHOE 3531 ', 7 ", 20 ppf, J-55 STC

PRODUCTION CASING :

Drill Bit Diameter	6.25"	
Casing Outside Diameter	4.5"	Casing Inside Diam. 4.000"
Casing Weight	11.6	ppf
Casing Grade	N-80	
Top of Cement	3331'	200' inside intermediate casing
Shoe Depth	7956'	
Cement Yield	1.44	cuft/sk
Cement Density	13	lb/gal
Cement Excess	50	%
Cement Required	489	sx

SHOE 7956 ', 4.5 ", 11.6 ppf, N-80 LTC

San Juan 31-6 # 53M
Schlumberger Cementing Program

SURFACE CASING :

Drill Bit Diameter	13.5"	
Casing Outside Diameter	9.625"	Casing Inside Diam. 9.001"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	235'	
Cement Yield	1.33	cuft/sk
Cement Density	14.8	lb/gal
Excess Cement	125	%
Cement Required	195	sx

SHOE 235 ' , 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	3531'	
Lead Cement Yield	2.1	cuft/sk
Lead Cement Density	11.7	lb/gal
Lead Cement Excess	150	%
Lead Cement Required	483	sx
Tail Cement Length	706.2'	
Tail Cement Yield	1.31	cuft/sk
Tail Cement Density	13.5	lb/gal
Tail Cement Excess	150	%
Tail Cement Required	210	sx

SHOE 3531 ' , 7 " , 20 ppf , J-55 STC

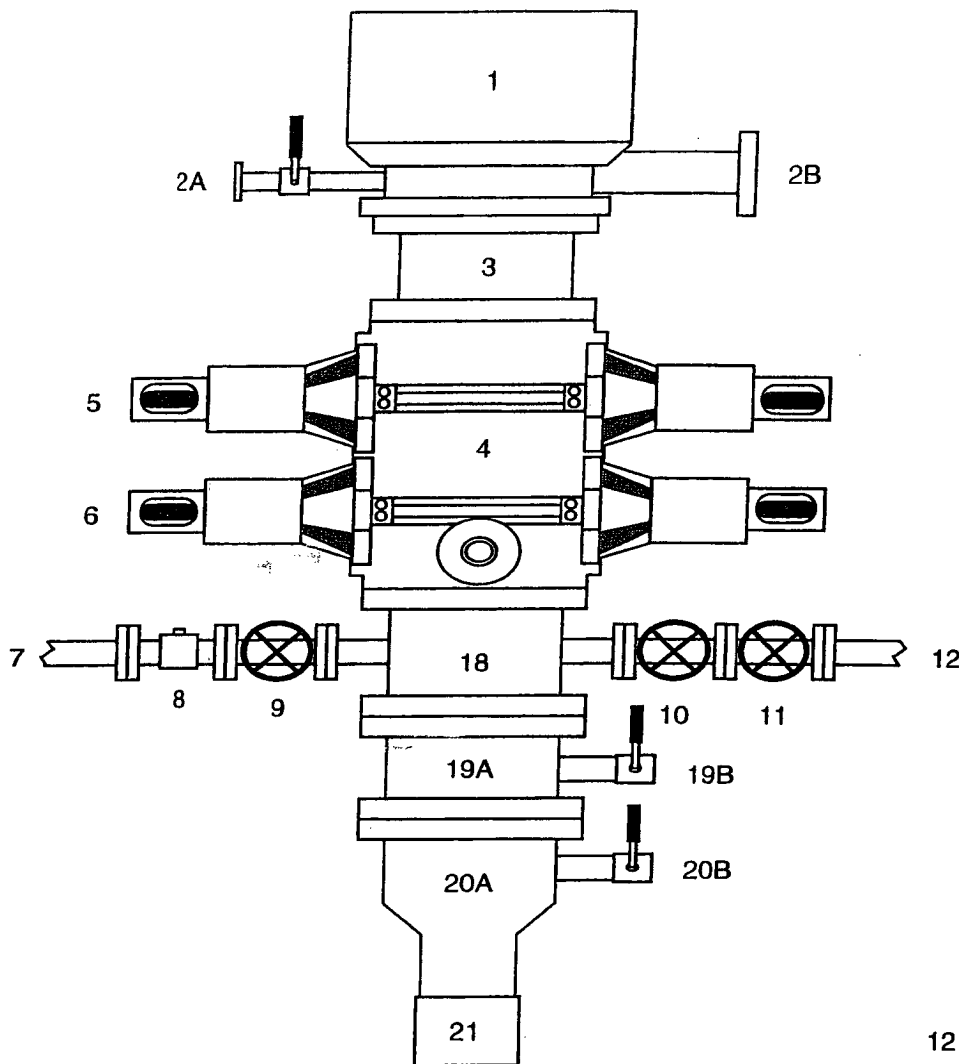
PRODUCTION CASING :

Drill Bit Diameter	6.25"	
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Casing Weight	11.6	ppf
Casing Grade	N-80	
Top of Cement	3331'	200' inside intermediate casing
Shoe Depth	7956'	
Cement Yield	1.44	cuft/sk
Cement Density	13	lb/gal
Cement Excess	50	%
Cement Required	489	sx

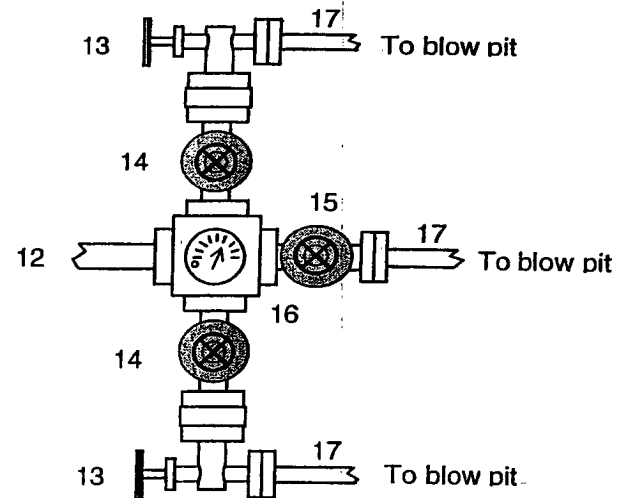
SHOE 7956 ' , 4.5 " , 11.6 ppf , N-80 LTC

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Bleeed 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



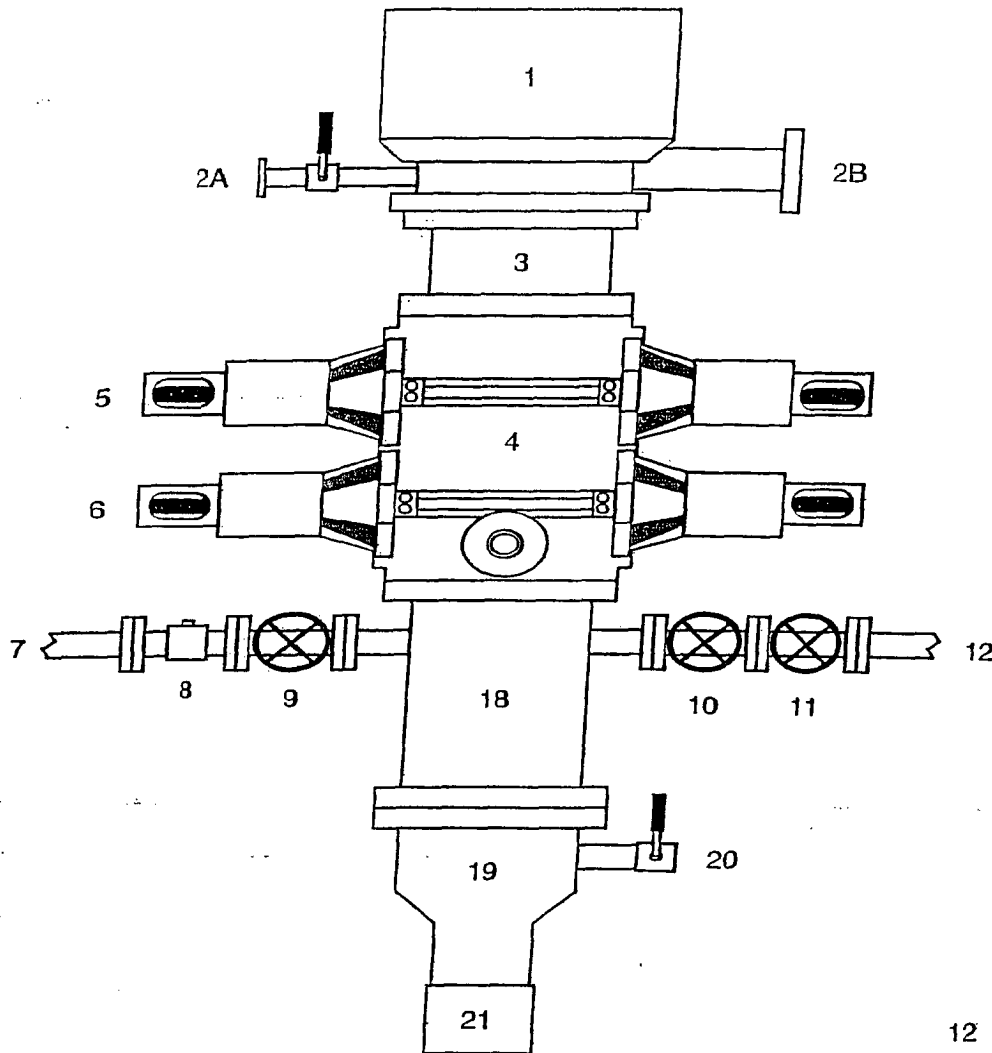
After the 7" intermediate casing has been run and cemented, the Casing Spool ("B" Section) will be installed on the wellhead ("A" Section) and the BOP will be installed on the Casing Spool. A test plug will be set in the wellhead and the pipe rams, blind rams, and choke manifold will be tested to 200 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:

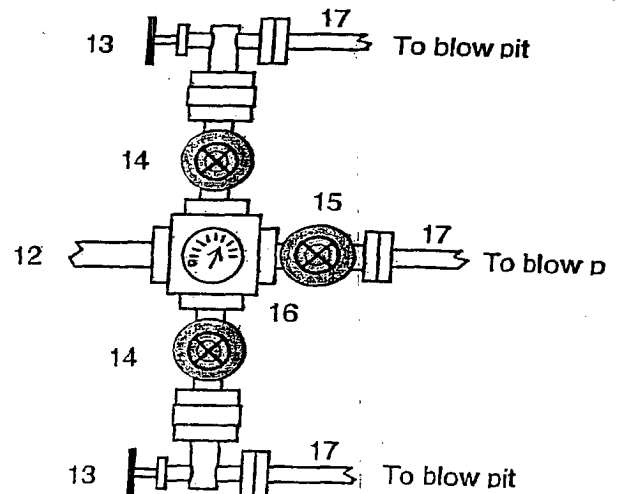
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

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: