

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL

1b. Type of Well
GAS

2. Operator
ConocoPhillips

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499
(505) 326-9700

4. Location of Well
Unit E (SNNW), 2630' FNL & 660' FWL,

Latitude 36° 94252'N
Longitude 108° 08938'W

14. Distance in Miles from Nearest Town

15. Distance from Proposed Location to Nearest Property or Lease Line
660'

16. Acres in Lease

18. Distance from Proposed Location to Nearest Well, Drlg. Compl. or Applied for on this Lease

19. Proposed Depth
7325'

21. Elevations (DF, FT, GR, Etc.)
6109' GL

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: Peter Clusiton
Sr. Regulatory Analyst

5. Lease Number

NMSF-078146

Unit Reporting Number

070 FARMINGTON NM

6. If Indian, All. or Tribe

7. Unit Agreement Name

8. Farm or Lease Name

9. Well Number

Newberry LS #2M

10. Field, Pool, Wildcat

Blanco MV / Basin DK

11. Sec., Twn, Rge, Mer. (NMPM)

Sec. 34, T32N, R12W

API # 30-045-33787

12. County
San Juan

13. State
NM

17. Acres Assigned to Well
MV & DK 320.0 - W/2

20. Rotary or Cable Tools
Rotary

22. Approx. Date Work will Start

PERMIT NO.

APPROVED BY

APPROVAL DATE

TITLE

DATE

Archaeological Report attached

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

DRILLING OPER. IT'S 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-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

*API Number 30-045-33787	*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 31843	*Property Name NEWBERRY LS	*Well Number 2M
*GRID No. 217817	*Operator Name CONOCOPHILLIPS COMPANY	*Elevation 6109'



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	34	32N	12W		2630	NORTH	660	WEST	SAN JUAN

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 - W/2 (MV) 320.0 Acres - W/2 (DK)					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 A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

 <p>LEASE SF-078146</p>		¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Virgil E. Chavez</i> Signature Virgil E. Chavez Printed Name Projects & Operations Lead Title Date <i>June 6, 2006</i>
		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. Survey Date: JANUARY 30, 2006 Signature and Seal of Professional Surveyor  <i>JASON C. EDWARDS</i> Certificate Number 15269

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

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.)

1. Type of Well:

Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

ConocoPhillips Company

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter E : 2630' feet from the North line and 660' feet from the West line
Section 34 Township 32N Rng 12W NMPM County San Juan

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

6109' 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 ☐TEMPORARILY ABANDON ☐PULL OR ALTER CASING ☐PLUG AND ABANDON ☐CHANGE PLANS ☐MULTIPLE COMPL ☐

OTHER:

New Drill

☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐COMMENCE DRILLING OPNS. ☐CASING/CEMENT JOB ☐ALTERING CASING ☐P AND A ☐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. Please be sure to include this language on all pit NOI's and C-144's.

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 Analyst

DATE

6/8/2006

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

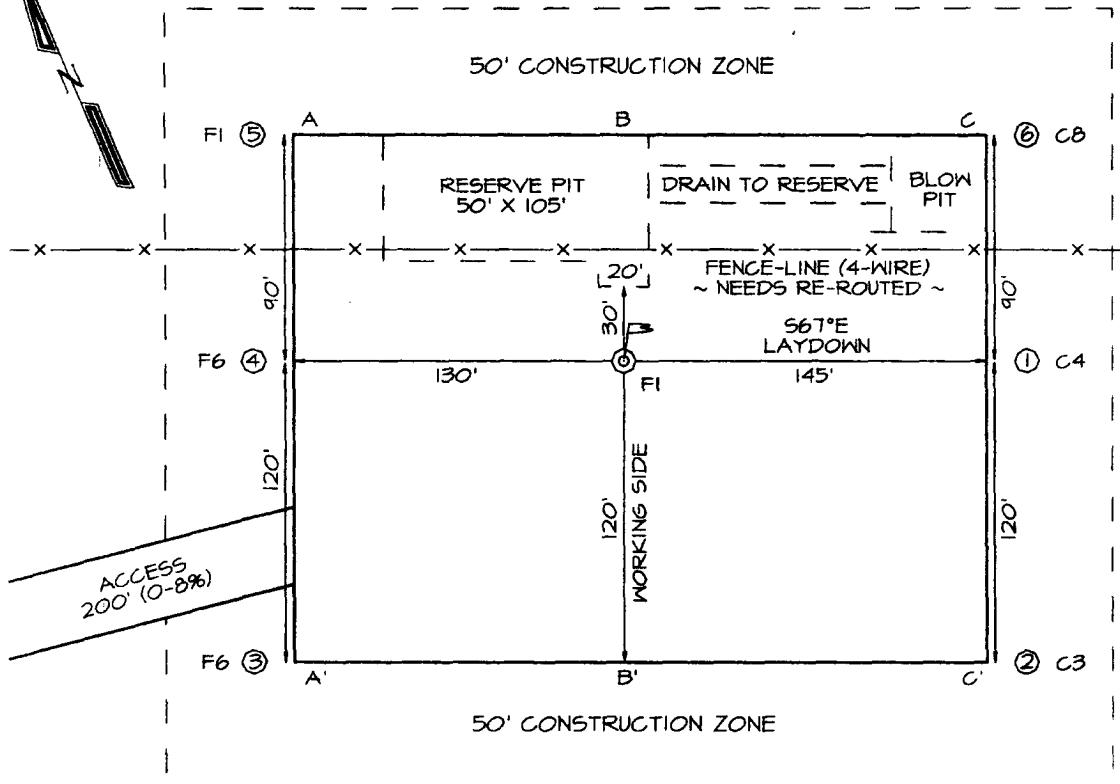
DEPUTY OIL & GAS INSPECTOR, DIST. 60

DATE

SEP 15 2006

Conditions of Approval (if any):

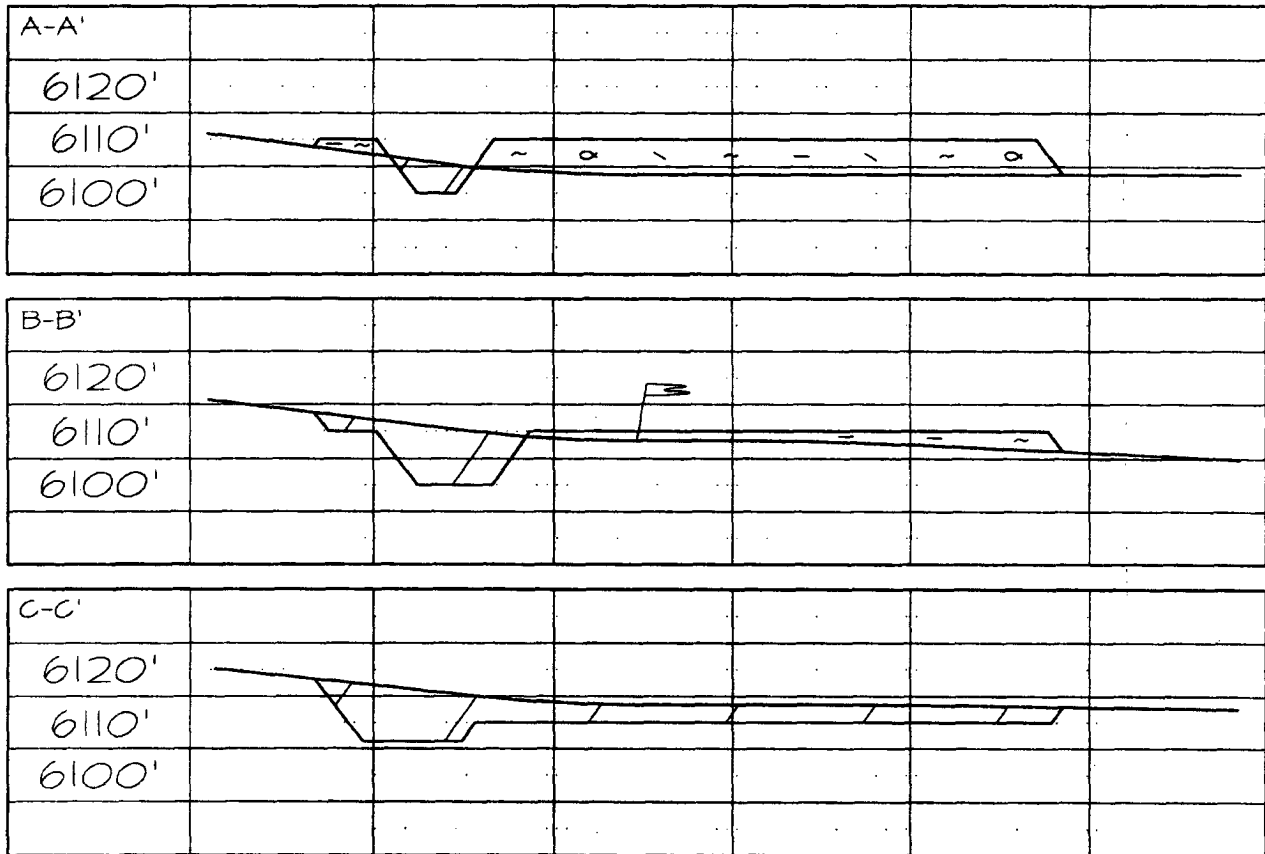
CONOCOPHILLIPS COMPANY NEWBERRY LS #2M
2630' FNL & 660' FWL, SECTION 34, T32N, R12W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6109'



LATITUDE: 36.94252° N
LONGITUDE: 108.08938° W
 DATUM: NAD1983

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management



PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

NEWBERRY LS 2M

Lease:		AFE #: WAN.CNV.6148		AFE \$:	
Field Name: NEW MEXICO-NORTH	Rig: 486-0597	State: NM	County: SAN JUAN	API #:	
Geoscientist: Brain, Ted H.	Phone: 832-486-2592	Prod. Engineer: Piotrowicz, Greg M.	Phone: +1 832-486-3486		
Res. Engineer: Skinner, Steve E	Phone: 832 486-2651	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: 36.942520	Longitude: -108.089380	X:	Y:	Section: 34	Range: 12W
Footage X: 660 FWL	Footage Y: 2630 FNL	Elevation: 6109	(FT)	Township: 32N	
Tolerance:					

Location Type: Year Round	Start Date (Est.):	Completion Date:	Date In Operation:
Formation Data: Assume KB = 6125 Units = FT			

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	216	5909	<input type="checkbox"/>			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
CJAM	1575	4550	<input type="checkbox"/>			Possible water flows.
KRLD	1775	4350	<input type="checkbox"/>			
FRLD	2255	3870	<input type="checkbox"/>			Possible gas.
PCCF	2555	3570	<input type="checkbox"/>			
LEWS	2755	3370	<input type="checkbox"/>			
Intermediate Casing	2855	3270	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	3705	2420	<input type="checkbox"/>			
CLFH	4185	1940	<input type="checkbox"/>			Gas; possibly wet
MENF	4425	1700	<input type="checkbox"/>			Gas.
PTLK	4850	1275	<input type="checkbox"/>			Gas.
CLLP	5990	135	<input type="checkbox"/>			Gas. Possibly wet.
CRHN	6975	-850	<input type="checkbox"/>			Gas possible, highly fractured
TWLS	7090	-965	<input type="checkbox"/>			Gas
PAGU	7175	-1050	<input type="checkbox"/>			Gas. Highly Fractured.
Total Depth	7325	-1200	<input type="checkbox"/>			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
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HOLE: 12.25 "
 CSG OD: 9.625 "
 CSG ID: 9.001 "
 WGT: 32.3 ppf
 GRADE: H-40
 EXCESS: 125 %
 DEPTH: 235'

SURFACE:
 Option 1
 148 sx
 30.8 bbls
 172.9 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
 Comp. Strength
 6 hrs 250 psi
 8 hrs 500 psi
 psi

Option 2
 143 sx
 30.8 bbls
 172.9 cuft
 1.21 ft³/sx
 15.6 ppg
 5.29 gal/sx
 Standard Cement
 + 3% Calcium Chloride
 + 0.25 lb/sx Floccle
 Comp. Strength
 6 hrs 250 psi
 8 hrs 500 psi
 psi

Option 3
 65 sx
 18.6 bbls
 104.3 cuft
 1.61 ft³/sx
 14.5 ppg
 7.41 gal/sx
 Type I-II Ready Mix
 + 20% Fly Ash
 Comp. Strength
 8 hrs 475 psi
 24 hrs 1375 psi

INTERMEDIATE LEAD:

HOLE: 8.75 "
 CSG OD: 7 "
 CSG ID: 6.456 "
 WGT: 20 ppf
 GRADE: J-55
 EXCESS: 150 %
 TAIL: 571'
 DEPTH: 2855'

INTERMEDIATE LEAD:
 Option 1
 298 sx
 144.5 bbls
 811.4 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
 Comp. Strength
 9 hrs 300 psi
 48 hrs 525 psi
 psi

Option 2
 312 sx
 144.5 bbls
 811.4 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
 Comp. Strength
 1.47 hrs 50 psi
 12 hrs 350 psi
 24 hrs 450 psi
 psi

Option 3
 309 sx
 144.5 bbls
 811.4 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
 3 hrs 100 psi
 24 hrs 443 psi

INTERMEDIATE TAIL:

HOLE: 6.25 "
 CSG OD: 4.5 "
 CSG ID: 4 "
 WGT: 11.6 ppf
 GRADE: N-80
 EXCESS: 50 %
 DEPTH: 7325'

INTERMEDIATE TAIL:
 Option 1
 171 sx
 39.9 bbls
 224.2 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
 Comp. Strength
 3.53 500 psi
 8.22 1000 psi
 24 hrs 3170 psi
 48 hrs 5399 psi

Option 2
 169 sx
 39.9 bbls
 224.2 cuft
 1.33 ft³/sx
 13.5 ppg
 5.52 gal/sx
 50/50 Poz: Standard Cement
 + 2% Bentonite
 + 6.0 lb/sx Phenoseal
 Comp. Strength
 2.05 50 psi
 4.06 500 psi
 12 hrs 1250 psi
 24 hrs 1819 psi

Option 3
 175 sx
 39.9 bbls
 224.2 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
 24 hrs 1850 psi
 48 hrs 3411 psi

PRODUCTION:

Option 1
 494 sx
 126.7 bbls
 711.6 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
 Comp. Strength
 7 hrs 500 psi
 24 hrs 2100 psi

Option 2
 491 sx
 126.7 bbls
 711.6 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
 9.32 50 psi
 12 hrs 500 psi
 13.29 1026 psi
 24 hrs 2300 psi

Newberry LS #2M

HOLE: 12.25 "
CSG OD: 9.625 "
CSG ID: 9.001 "
WGT: 32.3 ppf
GRADE: H-40
EXCESS: 125 %
DEPTH: 235'

SURFACE:

INTERMEDIATE LEAD:

Option 4

282 sx
144.5 bbls
811.4 cuft
2.88 ft³/sx
11.5 ppg
18.85 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-65
EXCESS: 150 %

TAIL: 571'
DEPTH: 2855'

Option 5

386 sx
144.5 bbls
811.4 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

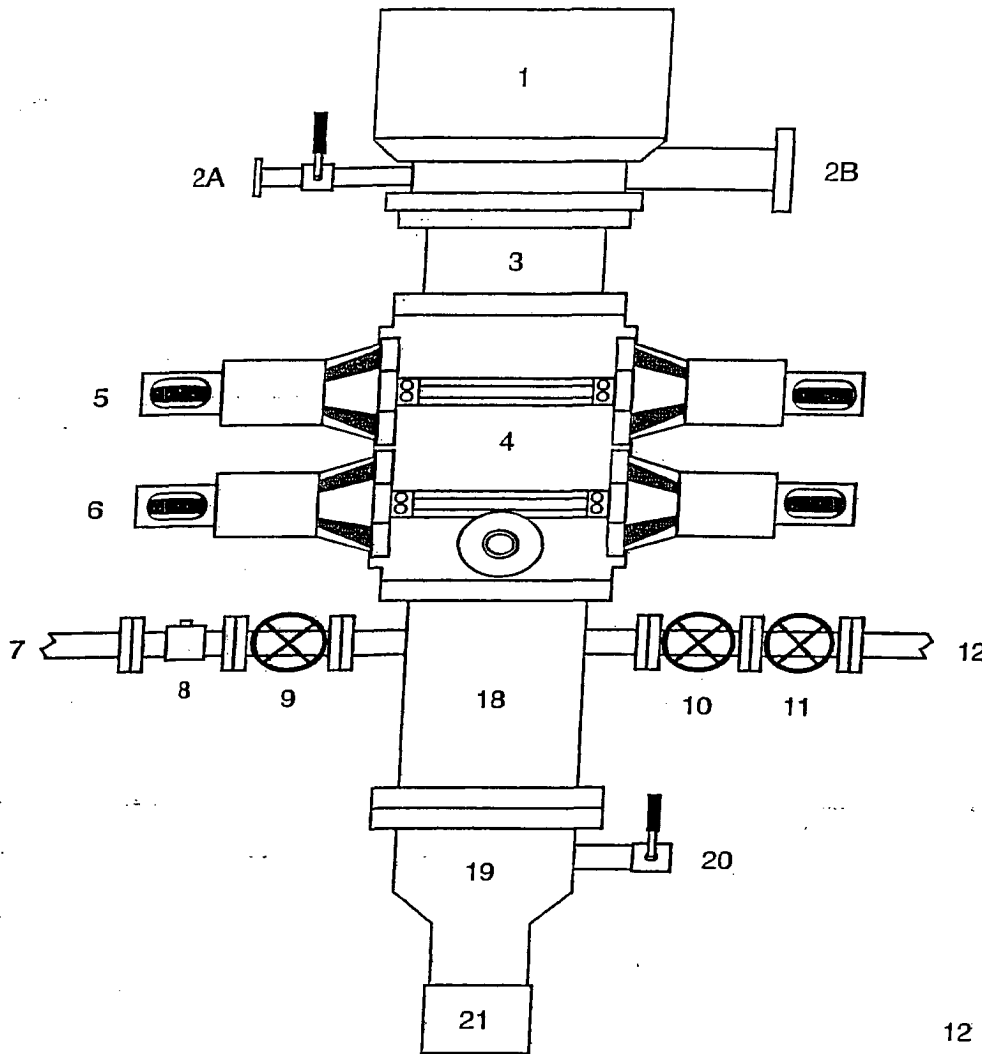
INTERMEDIATE TAIL:

PRODUCTION:

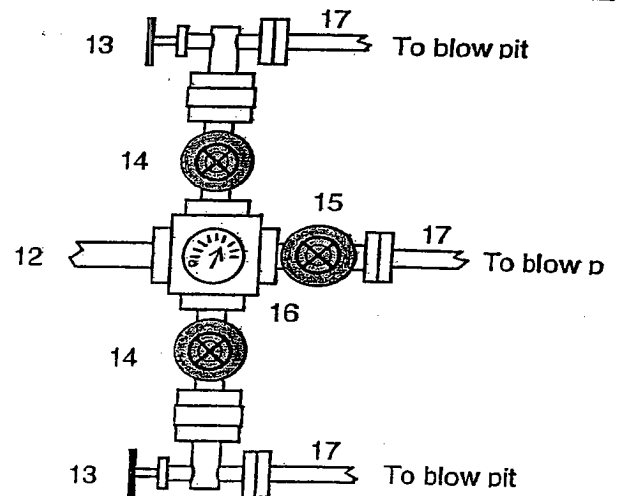
HOLE: 6.25 "
CSG OD: 4.5 "
CSG ID: 4 "
WGT: 11.6 ppf
GRADE: N-80
EXCESS: 50 %
DEPTH: 7325'

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

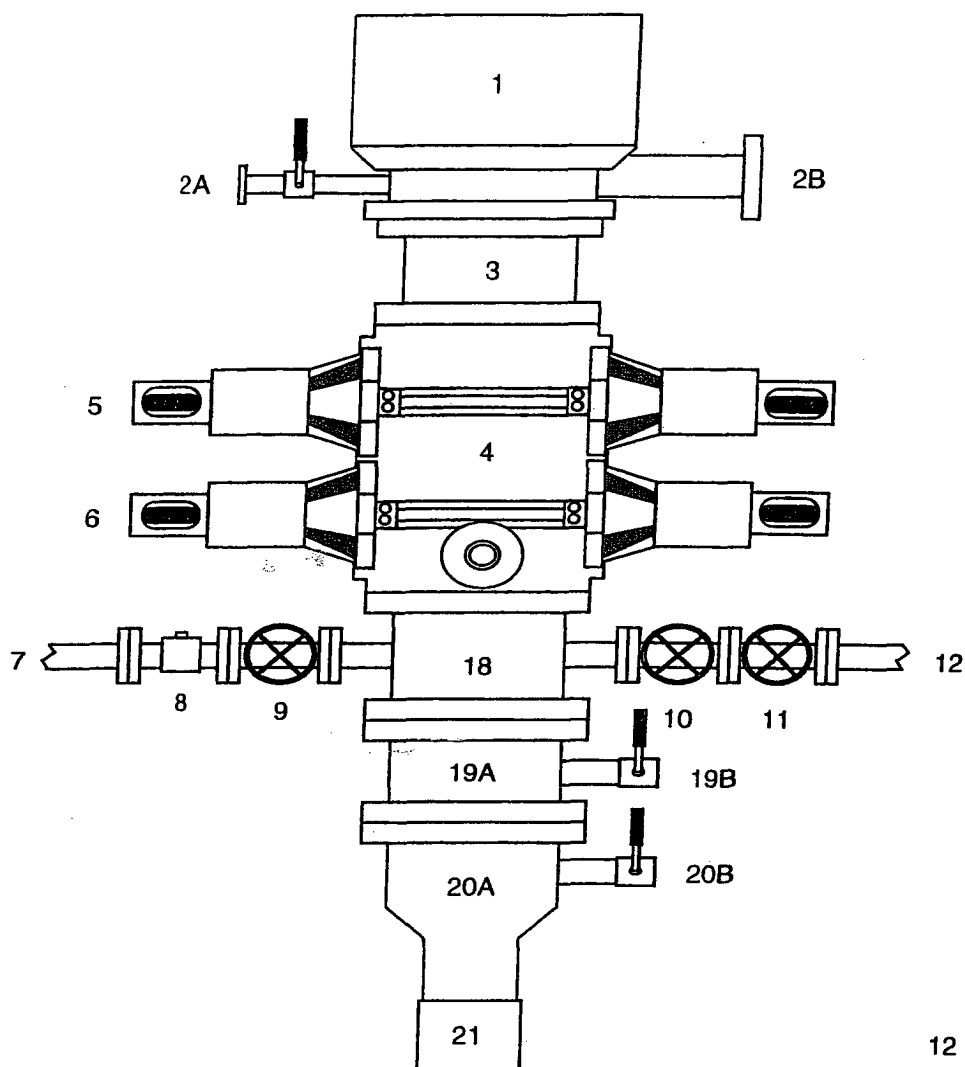


A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

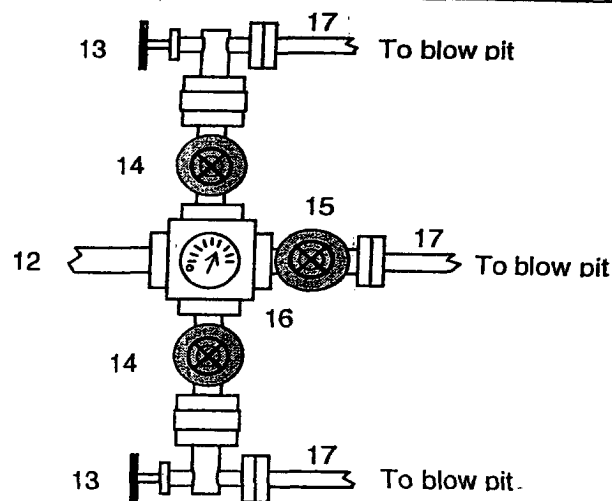
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

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