RCVD DEC21'06
OIL CONS. DIV.
DIST. 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2006 MAY 11 AM 11 00
RECEIVED
070 FARMINGTON NM

1a. Type of Work: DRILL

1b. Type of Well: GAS

5. Lease Number: NMSF-079012
Unit Reporting Number: NMNM-078421A-MV

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:

9. Well Number: #13M

4. Location of Well: Unit D (NWNW), 1010' FNL & 758' FWL,
Latitude 36° 50.45.8'N
Longitude 107° 28.28.8'W
Lot 8

10. Field, Pool, Wildcat: Basin Dakota / Blanco MV

11. Sec., Twn, Rge, Mer. (NMPM): D
Sec. 4, T30N, R06W

API # 30-039-29905

14. Distance in Miles from Nearest Town:

12. County: Rio Arria

13. State: NM

15. Distance from Proposed Location to Nearest Property or Lease Line: 758'

16. Acres in Lease:

17. Acres Assigned to Well: DK & MV 319.84 W/2

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

19. Proposed Depth: 7961'

20. Rotary or Cable Tools: Rotary

21. Elevations (DF, FT, GR, Etc.): 6430' GL

22. Approx. Date Work will Start:

23. Proposed Casing and Cementing Program: See Operations Plan attached

24. Authorized by: Patsy Clugston
Sr. Regulatory Analyst

5/8/06
Date

PERMIT NO.

APPROVED BY: [signature] TITLE: AFM DATE: 12/18/06

APPROVAL DATE

Archaeological Report attached
Enviromental Assessment is attached. V

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.

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

NMOCD

B 12/22/06

RCVD DEC21'06

OIL CONS. DIV.
DIST. 3

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

2005 MAY 11 AM 11 20
RECEIVED
070 FARMINGTON NM

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☐ AMMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-039-29905	71629	DAKOTA / MESAVERDE

4 Property Code	5 Property Name	6 Well Number
~~31011~~ 31328	SAN JUAN 31-6 UNIT	13M

7 OGRID No.	8 Operator Name	9 Elevation
217817	CONOCOPHILLIPS COMPANY	6430

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
D	4	30N	06W	8	1010	NORTH	758	WEST	RIO ARRIBA

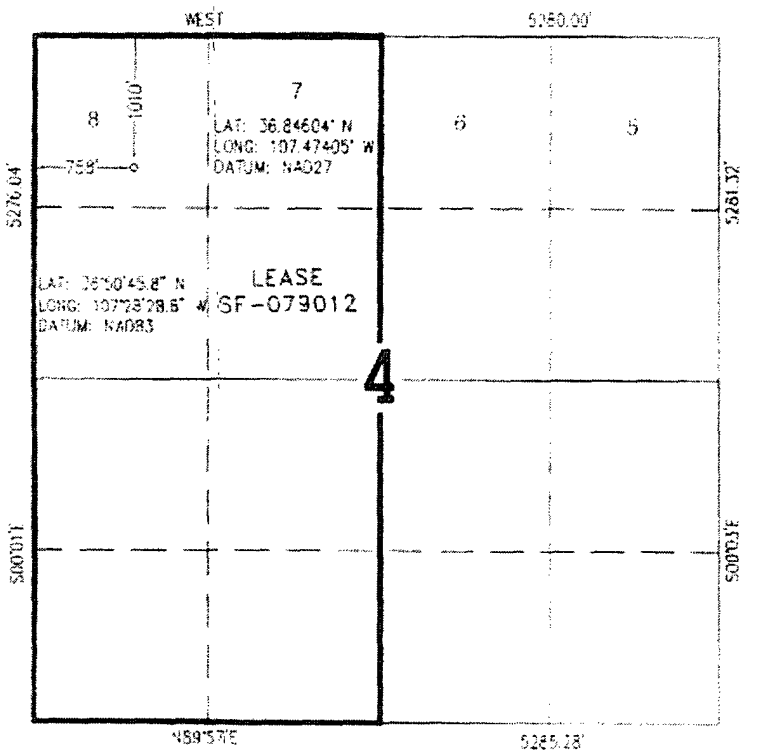
11 Bottom Hole Location If Different From Surface

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	13 Joint or Infill	14 Consolidation Code	15 Order No.
W/2 319.84			

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.

Virgil Chavez
Signature

Virgil Chavez
Printed Name

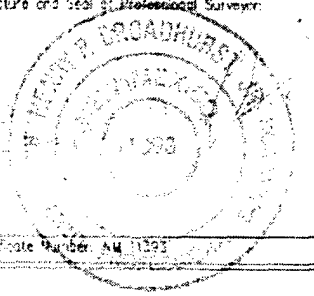
Projects & Operations Lead
Title and e-mail Address

April 12, 2006
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: 02/21/06
Signature and Seal of Professional Surveyor:



Certificate Number: NM 14393

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. 30-039- 29905

5. Indicate Type of Lease STATE ☐ FEE ☐

6. State Oil & Gas Lease No. NMSF-079012

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 31-6 Unit

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

8. Well Number: #13M

2. Name of Operator: ConocoPhillips Company

9. OGRID Number: 217817

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

10. Pool name or Wildcat: Basin Dakota / Blanco Mesaverde

4. Well Location
Unit Letter D : 1010 feet from the North line and 758 feet from the West line
Section 4 Township 30N Rng 6W NMPM County Rio Arriba

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 6430' 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 >200' <1000

Pit Liner Thickness: n/a 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:	New Drill		☒	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.

The pit will be constructed and closed in accordance with Rule 50 and as per the November 1, 2004 guidelines. See the attached diagram that details the location of the pit in reference to the proposed wellhead. The dirll pit will be lined. The drill pit will be closed after the well has been completed.

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 5/3/2006

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

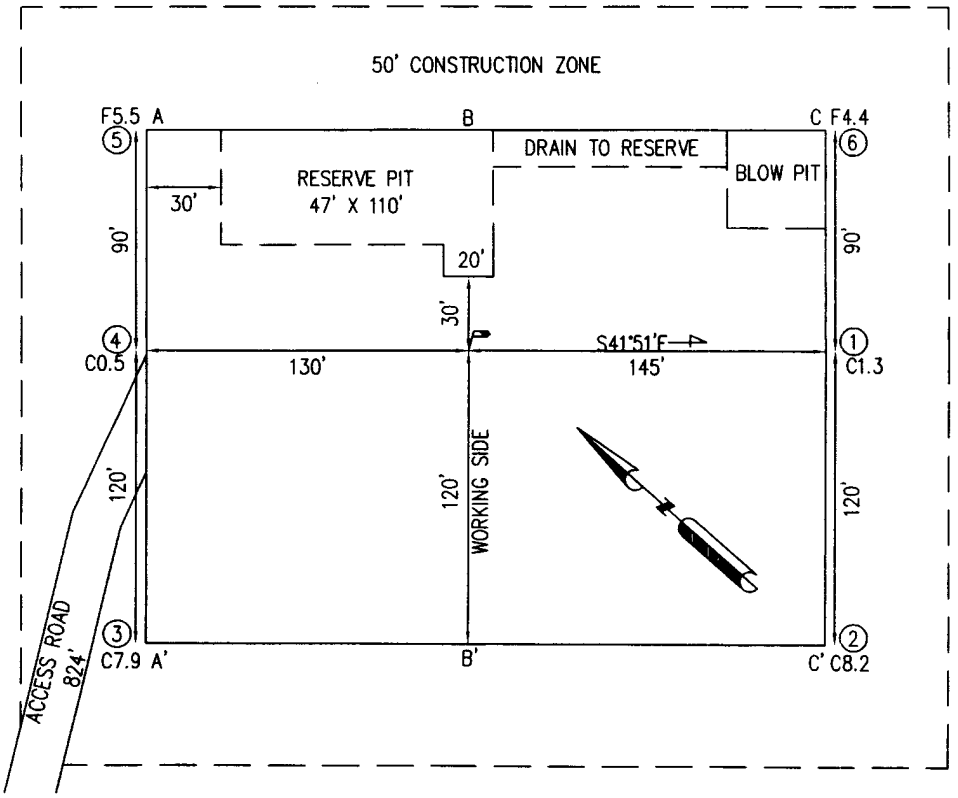
For State Use Only

APPPROVED BY _____ TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE DEC 22 2006

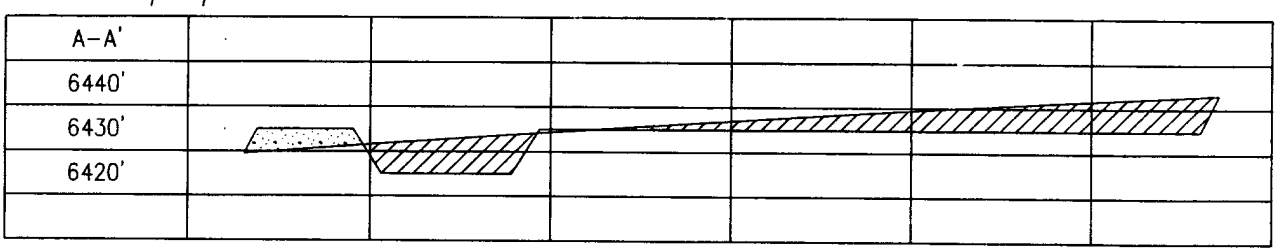
Conditions of Approval (if any):

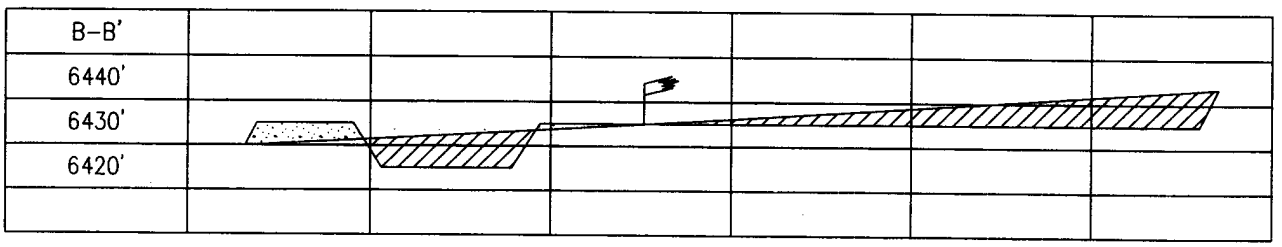
CONOCOPHILLIPS COMPANY SAN JUAN 31-6 UNIT #13M
1010' FNL & 758' FWL, SECTION 4, T30N, R06W, NMPM
RIO ARRIBA COUNTY, NEW MEXICO ELEVATION: 6430'

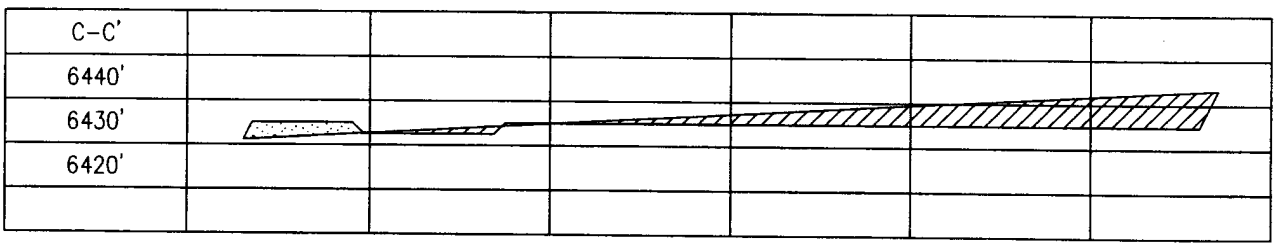
LATITUDE: 36.84604° N
LONGITUDE: 107.47405° W
DATUM: NAD27



PLAT NOTE:
SURFACE OWNER NM GAME & FISH







FILENAME: SJ31-6 13M.dwg	SHEET 2 OF 6	CHENAULT CONSULTING INC.	DRAWN BY:J. FUNK	CHECKED BY:G. CHENAULT

ConocoPhillips

San Juan Business Unit

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 31-6 13M

Lease:	AFE #: 1/1			AFE $:
Field Name: 31-6	Rig: H&P 283	State: NM	County: RIO ARRIBA	API #:
Geoscientist: Glaser, Terry J	Phone: (832)486-2332	Prod. Engineer: Pusch, Jennye		Phone: 832-486-2345
Res. Engineer: Pena, David Fernando	Phone: 832-486-2328	Proj. Field Lead:		Phone:

Primary Objective (Zones):

Zone	Zone Name
R20002	MESAVERDE(R20002)
R20076	DAKOTA(R20076)

Location: Surface	Datum Code: NAD 27				**Straight Hole**
Latitude: 36.846040	Longitude: -107.474050	X:	Y:	Section: 4	Range: 6W
Footage X: 758 FWL	Footage Y: 1010 FNL	Elevation: 6430 (FT)	Township: 30N		
Tolerance:					

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

Formation Data: Assume KB = 6446 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	216	6230	☐			13-1/2" hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
CJAM	2356	4090	☐			Possible water flows.
KRLD	2556	3890	☐			
FRLD	3066	3380	☐			Possible gas.
PCCF	3366	3080	☐			
LEWS	3566	2880	☐			
Intermediate Casing	3666	2780	☐			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4526	1920	☐			
CLFH	5346	1100	☐			Gas.
MENF	5386	1060	☐			Gas.
PTLK	5636	810	☐			Gas.
CLLP	6996	-550	☐			Gas. Possibly wet.
CRHN	7651	-1205	☐			Gas possible, highly fractured
CBBO	7836	-1390	☐			Gas
TOTAL DEPTH DK	7961	-1515	☐			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

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ConocoPhillips

San Juan Business Unit

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 31-6 13M

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

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

General/Work Description - COP does not own Dk

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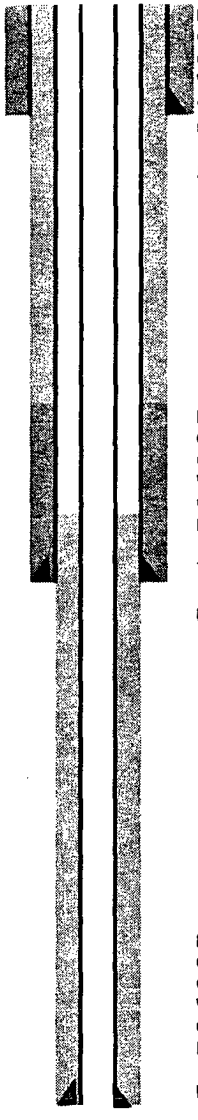
San Juan 31-6 #13M

APD Cement Calculations



HOLE:	13.5 "
CSG OD:	9.625 "
CSG ID:	9.001 "
WGT:	32.3 ppf
GRADE:	H-40
EXCESS:	125 %
DEPTH:	**235** '

SURFACE:

Option 1

222 sx	Comp. Strength		
46.2 bbls	6 hrs	250	psi
259.5 cuft	8 hrs	500	psi
1.17 ft^3/sx			psi
15.8 ppg			
4.973 gal/sx			

Class G Cement
+ 3% S001 Calcium Chloride
+ 0.25 lb/sx D029 Cellophane Flakes

Option 2

214 sx	Comp. Strength		
46.2 bbls	6 hrs	250	psi
259.5 cuft	8 hrs	500	psi
1.21 ft^3/sx			
15.6 ppg			
5.29 gal/sx			

Standard Cement
+ 3% Calcium Chloride
+ 0.25 lb/sx Flocele

HOLE:	8.75 "
CSG OD:	7 "
CSG ID:	6.456 "
WGT:	20 ppf
GRADE:	J-55
EXCESS:	150 %
TAIL:	733.2 '
DEPTH:	**3686** '

INTERMEDIATE LEAD:

Option 1

388 sx	Comp. Strength		
188.0 bbls	9 hrs	300	psi
1055.3 cuft	48 hrs	525	psi
2.72 ft^3/sx			
11.7 ppg			
15.74 gal/sx			

Class G Cement
+ 3% D079 Extender
+ 0.20% D046 Antifoam
+ 10 lb/sx Phenoseal

Option 2

406 sx	Comp. Strength		
188.0 bbls	1:47 hrs	50	psi
1055.3 cuft	12 hrs	350	psi
2.60 ft^3/sx	24 hrs	450	psi
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

401 sx	Comp. Strength		
188.0 bbls	3 hrs	100	psi
1055.3 cuft	24 hrs	443	psi
2.63 ft^3/sx			
11.7 ppg			
15.92 gal/sx			

Class G Cement
+ 3% D079 Extender
+ 0.20% D046 Antifoam
+ 1.0 lb/bbl CemNet

INTERMEDIATE TAIL:

Option 1

218 sx	Comp. Strength		
50.8 bbls	3:53	500	psi
285.2 cuft	8:22	1000	psi
1.31 ft^3/sx	24 hrs	3170	psi
13.5 ppg	48 hrs	5399	psi
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 Gilsonite Extender
+ 0.1% D046 Antifoamer
+ 6 lb/sx Phenoseal

Option 2

214 sx	Comp. Strength		
50.8 bbls	2:05	50	psi
285.2 cuft	4:06	500	psi
1.33 ft^3/sx	12 hrs	1250	psi
13.5 ppg	24hrs	1819	psi
5.52 gal/sx			

50/50 Poz: Standard Cement
+ 2% Bentonite
+ 6.0 lb/sx Phenoseal

Option 3

223 sx	Comp. Strength		
50.8 bbls	24 hrs	1850	psi
285.2 cuft	48 hrs	3411	psi
1.28 ft^3/sx			
13.5 ppg			
5.255 gal/sx			

50/50 Poz: Class G Cement
+ 2% D020 Bentonite
+ 5.0 lb/sx D024 Gilsonite Extender
+ 2% S001 Calcium Chloride
+ 0.1% D046 Antifoamer
+ 0.15% D065 Dispersant
+ 1.0 lb/bbl CemNet

HOLE:	6.25 "
CSG OD:	4.5 "
CSG ID:	4 "
WGT:	11.6 ppf
GRADE:	N-80
EXCESS:	50 %
DEPTH:	**7961** '

PRODUCTION:

Option 1

475 sx	Comp. Strength		
121.9 bbls	7 hrs	500	psi
684.7 cuft	24 hrs	2100	psi
1.44 ft^3/sx			
13.0 ppg			
6.47 gal/sx			

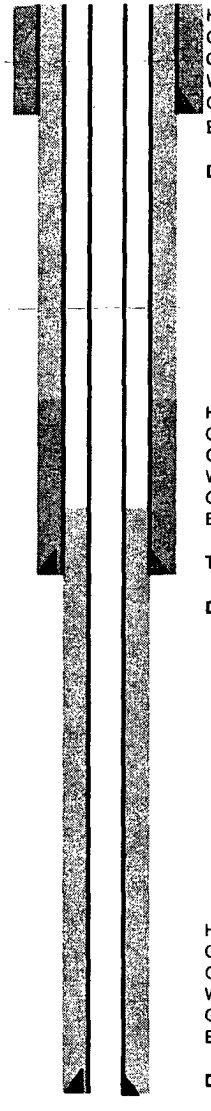
50/50 Poz: Class G Cement
+ 0.25 lb/sx D029 Cellophane Flakes
+ 3% D020 Bentonite
+ 1.0 lb/sx D024 Gilsonite Extender
+ 0.25% D167 Fluid Loss
+ 0.25% D065 Dispersant
+ 0.1% D800 Retarder
+ 0.1% D046 Antifoamer
+ 3.5 lb/sx Phenoseal

Option 2

472 sx	Comp. Strength		
121.9 bbls	9:32	50	psi
684.7 cuft	12 hrs	500	psi
1.45 ft^3/sx	13:29	1026	psi
13.1 ppg	24 hrs	2300	psi
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

San Juan 31-6 #13M



SURFACE:

HOLE:	13.5 "
CSG OD:	9.625 "
CSG ID:	9.001 "
WGT:	32.3 ppf
GRADE:	H-40
EXCESS:	125 %
DEPTH:	**235** '

INTERMEDIATE LEAD:

	Option 4			Option 5		
	366 sx	Comp. Strength		**503 sx**	Comp. Strength	
	188.0 bbls	1:47	50 psi	188.0 bbls	10:56	500 psi
	1055.3 cuft	12 hrs	350 psi	1055.3 cuft	42 hrs	1012 psi
HOLE: 8.75 "	2.88 ft^3/sx	24 hrs	450 psi	2.10 ft^3/sx		
CSG OD: 7 "	11.5 ppg			11.7 ppg		
CSG ID: 6.456 "	16.85 gal/sx			11.724 gal/sx		
WGT: 20 ppf	Standard Cement			75% Type XI / 25% Class G Cement		
GRADE: J-55	+ 3% Econolite (Extender)			+ 0.25 lb/sx D029 Cellophane Flakes		
EXCESS: 150 %	+ 10 lb/sx Phenoseal			+ 3% D079 Extender		
				+ 0.20% D046 Antifoam		
TAIL: **733.2** '						
DEPTH: **3666** '						

INTERMEDIATE TAIL:

HOLE:	6.25 "
CSG OD:	4.5 "
CSG ID:	4 "
WGT:	11.6 ppf
GRADE:	N-80
EXCESS:	50 %
DEPTH:	**7961** '

PRODUCTION:

TOPSET FRUITLAND COAL Wells: (topset casing above coal to prepare for cavitation/DO/UR)

Drilling Mud Program:
Surface: spud mud
Intermediate: fresh water mud with bentonite and polymer as needed
Below Intermediate: air/mist/nitrogen drilling media with foamer, polymer, & corrosion inhibitor as needed

Centralizer Program:
Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints
Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints
Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale
Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

CASE & FRAC FRUITLAND COAL Wells: (casing set below coal to prepare for frac completion)

Drilling Mud Program:
Surface: spud mud
Production: fresh water mud with bentonite and polymer as needed

Centralizer Program:
Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints
Production: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints
Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

MESA VERDE Wells:

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

Centralizer Program:
Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints
Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints
Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale
Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

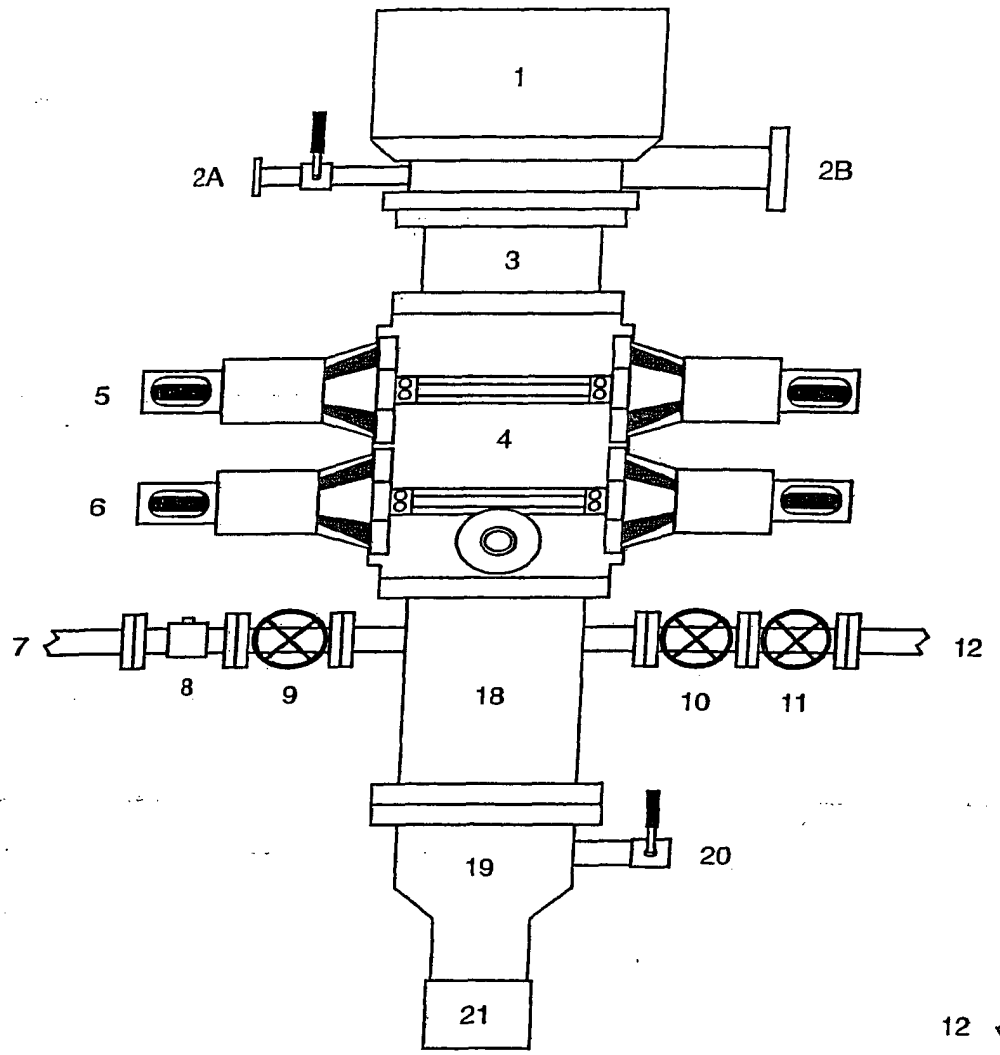
DAKOTA Wells:

Drilling Mud Program:
Surface: spud mud
Intermediate: fresh water mud with bentonite and polymer as needed
Below Intermediate: air/mist/nitrogen drilling media with foamer, polymer, & corrosion inhibitor as needed

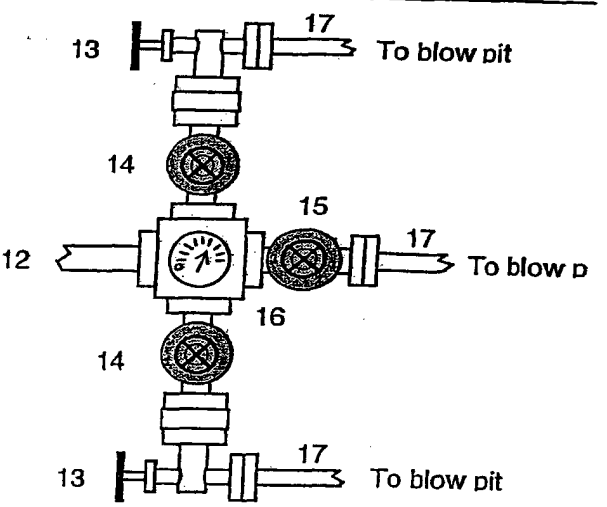
Centralizer Program:
Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints
Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints
Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale
Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

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

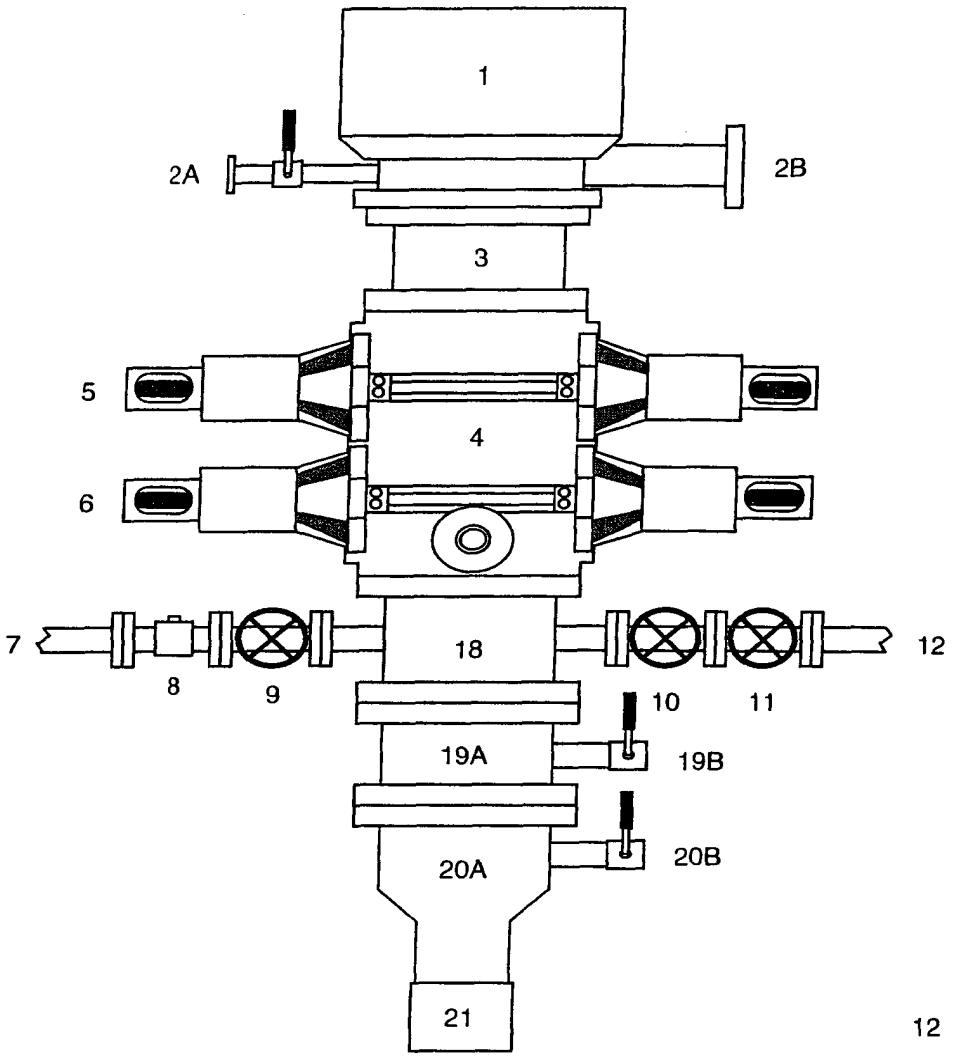


A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

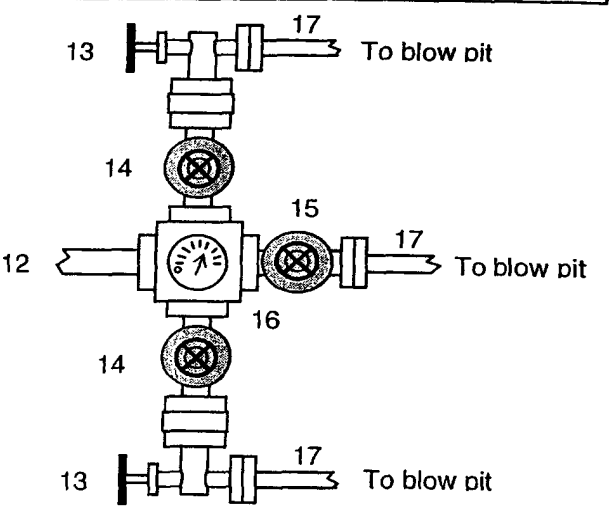
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



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

Revision Date: September 1, 2004