

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-011350 Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator ConocoPhillips	7. Unit Agreement Name San Juan 29-5Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number 5G	
4. Location of Well Unit H (SENE), 2350' FNL & 260' FEL, Latitude 36° 68289'N Longitude 107° 35465'W	10. Field, Pool, Wildcat Blanco Mesaverde / Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) H Sec. 33, T29N, R05W, NMPM API # 30-039- 30081	
14. Distance in Miles from Nearest Town	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 260'	17. Acres Assigned to Well MV & DK 320 ac E/2	
16. Acres in Lease	17. Acres Assigned to Well MV & DK 320 ac E/2	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease		
19. Proposed Depth 8108'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6695' GL	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Pedro Clustm</u> Sr. Regulatory Analyst	Date <u>10/4/06</u>	

PERMIT NO.

APPROVAL DATE

APPROVED BY [Signature]

TITLE AFU

DATE 10/17/06

Archaeological Report & Environmental Assessment submitted separately.

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

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 00, 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

RECEIVED

070 FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039- 30081		*Pool Code 72319 \ 71599	*Pool Name BLANCO MESAVERDE \ BASIN DAKOTA
*Property Code 31325	*Property Name SAN JUAN 29-5 UNIT		*Well Number 5G
*GRID No 217817	*Operator Name CONOCOPHILLIPS COMPANY		*Elevation 6695'

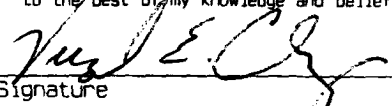

¹⁰ Surface Location

UL or lot no. H	Section 33	Township 29N	Range 5W	Lot Idn	Feet from the 2350	North/South line NORTH	Feet from the 260	East/West line EAST	County RIO ARriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. H	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 (MV) 320.0 Acres - E/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

<div>16</div> <div>5280.00'</div> <div>5287.92'</div> <div>33</div> <div>LEASE NMNM-011348-A</div> <div>LEASE NMNM-011350</div> <div>5280.00'</div> <div>LAT: 36.68289°N LONG: 107.35465°W DATUM: NAD83</div> <div>2350'</div> <div>2640.00'</div> <div>260'</div> <div>2640.00'</div>	<div>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</div> <div>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: AUGUST 1, 2005 Signature and Seal of Professional Surveyor  JASON C. EDWARDS Certificate Number 15269</div>
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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

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

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- 30081
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 NM-011350
3. Address of Operator 3401 E. 30TH STREET, FARMINGTON, NM 87402		7. Lease Name or Unit Agreement Name San Juan 29-5 Unit
4. Well Location Unit Letter <u>H</u> : <u>2350</u> feet from the <u>North</u> line and <u>260</u> feet from the <u>East</u> line Section <u>33</u> Township <u>29N</u> Rng <u>5W</u> NMPM County <u>Rio Arriba</u>		8. Well Number #5 G
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6695'		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 Dakota
Pit type <u>new drill</u> Depth to Groundwater <u>0-50'</u> Distance from nearest fresh water well <u>>1000'</u> Distance from nearest surface water <u>>1000'</u> Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u>440</u> bbls; Construction Material <u>Synthetic</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 ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 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.

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 Patsy Clugston TITLE Sr. Regulatory Specialist DATE 10/4/2006

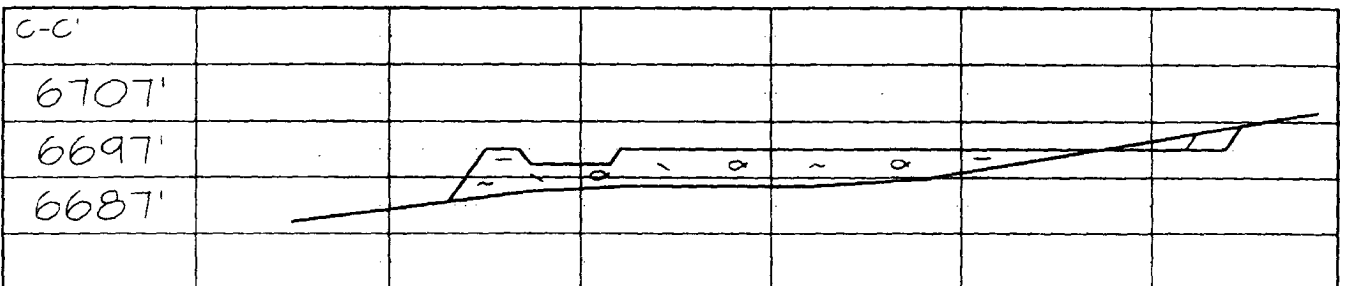
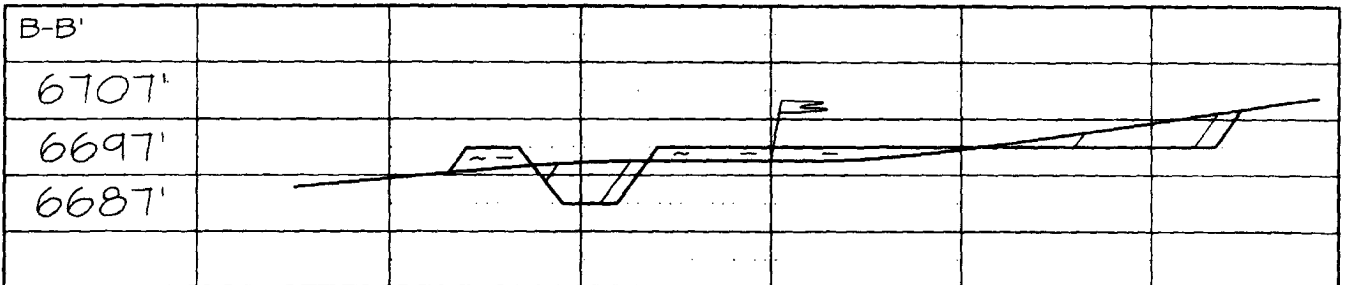
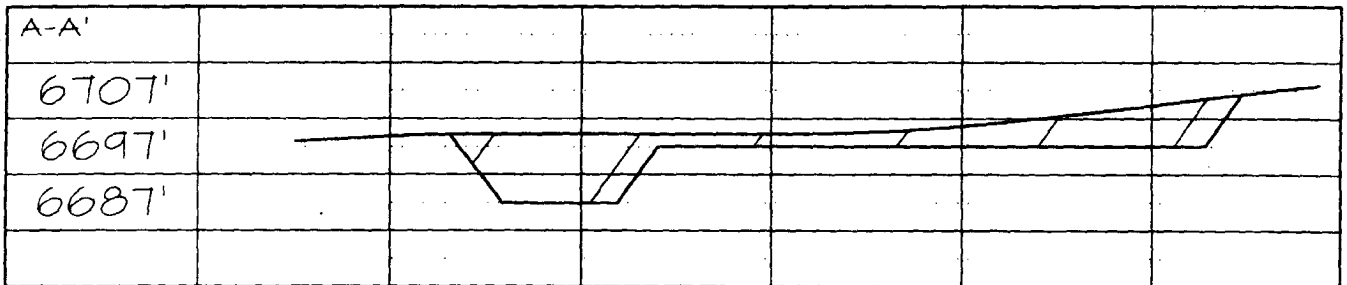
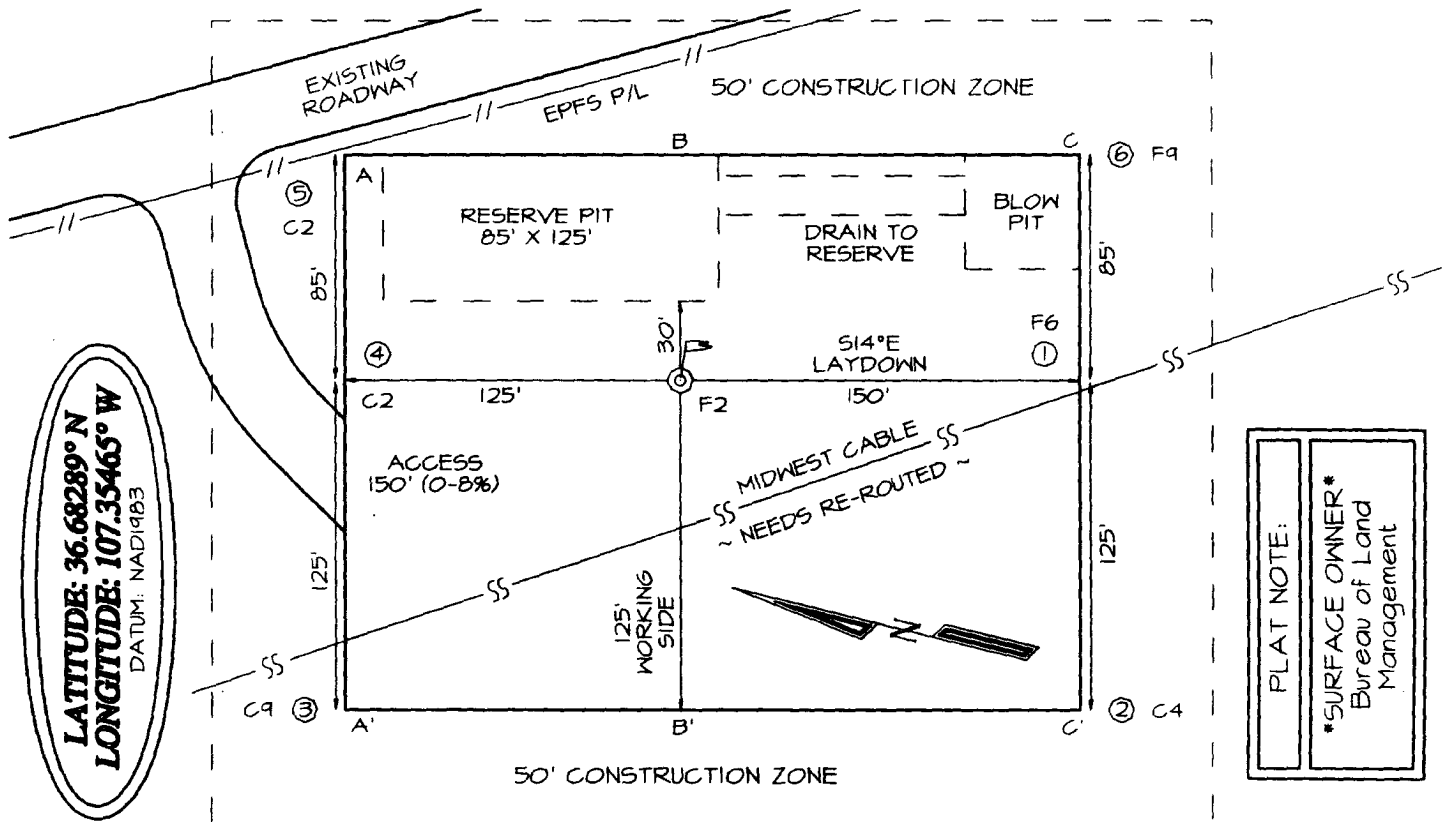
Type or print name Patsy Clugston E-mail address: L.Clugston@conocophillip Telephone No. 505-326-9518

For State Use Only

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. IV DATE OCT 18 2006

Conditions of Approval (if any):

CONOCOPHILLIPS COMPANY SAN JUAN 29-5 UNIT #5G
2350' FNL & 260' FEL, SECTION 33, T29N, R5W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6695'



PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 29-5 5G

Lease: AFE #: WAN.CNV.6173 AFE \$: Field Name: 29-5 Rig: Bickley State: NM County: RIO ARRIBA API #: Geoscientist: Glaser, Terry J Phone: (832)486-2332 Prod. Engineer: James Phone: 832-486-2335 Res. Engineer: Johnson, Tom B. Phone: (832)-486-2347 Proj. Field Lead: Shenfield, Wayne Phone:

Primary Objective (Zones):

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

Location: Surface Datum Code: NAD 27 Straight Hole Latitude: 36.682882 Longitude: -107.354048 X: Y: Section: 33 Range: 5W Footage X: 260 FEL Footage Y: 2350 FNL Elevation: 6695 (FT) Township: 29N Tolerance:

Location Type: Year Round Start Date (Est.): Completion Date: Date In Operation:

Formation Data: Assume KB = 6708 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200	6508	<input type="checkbox"/>			13 1/2" hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
OJAM	2851	3857	<input type="checkbox"/>			Possible water flows.
KRLD	3061	3647	<input type="checkbox"/>			
FRLD	3306	3402	<input type="checkbox"/>			Possible gas.
PCCF	3643	3065	<input type="checkbox"/>			
LEWS	3858	2850	<input type="checkbox"/>			
Intermediate Casing	3958	2750	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
HURF	4697	2011	<input type="checkbox"/>			
CHRA	4818	1890	<input type="checkbox"/>			
UCLFH	5297	1411	<input type="checkbox"/>			
CLFH	5315	1393	<input type="checkbox"/>			Gas; possibly wet
MENF	5516	1192	<input type="checkbox"/>			Gas.
PTLK	5825	883	<input type="checkbox"/>			Gas.
MNCS	6197	511	<input type="checkbox"/>			
GLLP	6989	-281	<input type="checkbox"/>			Gas. Possibly wet.
GRHN	7790	-1082	<input type="checkbox"/>			Gas possible, highly fractured
GRRS	7845	-1137	<input type="checkbox"/>			
TWLS	7909	-1201	<input type="checkbox"/>			Gas
PAGU	7957	-1249	<input type="checkbox"/>			Gas. Highly Fractured.
CBBO	7972	-1264	<input type="checkbox"/>			Gas
CBRL	8022	-1314	<input type="checkbox"/>			
OKCN	8093	-1385	<input type="checkbox"/>			
TD	8096	-1388	<input type="checkbox"/>			4-1/2" 11.6#/ft, N-80 LTC casing cemented to 100' above 7" shoe
Total Depth	8096	-1388	<input type="checkbox"/>			
ENCN	8108	-1400	<input type="checkbox"/>			

Reference Wells:

Reference Type	Well Name	Comments
Intermediate	San Juan 28 5 96	10-28N-5W, SE

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 29-5 5G

Intermediate	San Juan 28 5 223	33-29N-5W, NE
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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 - GRHN to TD has been cut from 350 to 300' due to potential water leg in L Cubero

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

Option 3	435 sx	Comp. Strength
	203.6 bbls	3 hrs 100 psi
	1143.2 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	

2.63 ft³/sx
11.7 ppq
15.92 gal/sx
Class G Cement
+ 3% D079 Extender
+ 0.20% D046 Antifoam
+ 1.0 lb/bbl CemNet

Option 3	240 sx	Comp. Strength
	54.7 bbls	24 hrs 1850 psi
	307.2 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 Gilsontite Extender	
	+ 2% S001 Calcium Chloride	
	+ 0.1% D046 Antifoamer	
	+ 0.15% D065 Dispersant	
	+ 1.0 lb/bbl CemNet	

- + 0.1% D046 Antifoamer
- + 0.15% D065 Dispersant
- + 1.0 lb/bbl CemNet

Option 2	456 sx	Comp. Strength
	117.6 bbls	50 psi
	660.5 cuft	500 psi
	1.45 ft ³ /sx	1026 psi
	13.1 ppg	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% Halacl-9 Fluid Loss Additive	
	+ 3.5 lb/sx Phenoxal	

Option 1	Comp. Strength
459 sx	7 hrs 500 psi
117.6 bbls	24 hrs 2100 psi
660.5 cuft	
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 Gilsontite Extender	
+ 0.25% D167 Fluid Loss	
+ 0.25% D065 Dispersant	
+ 0.1% D800 Retarder	
+ 0.1% D046 Antifoamer	
+ 3.5 lb/sx Phenoxal	

San Juan 29-5 #5G

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

397 sx
203.6 bbls
1143.2 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: 23 ppf
GRADE: J-55
EXCESS: 150 %
TAIL: 791.6'
DEPTH: 3958'

Option 5

544 sx
203.6 bbls
1143.2 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:

HOLE: 6.25 "
CSG OD: 4.5 "
CSG ID: 4 "
WGT: 11.6 ppf
GRADE: N-80
EXCESS: 50 %
DEPTH: 8086'

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

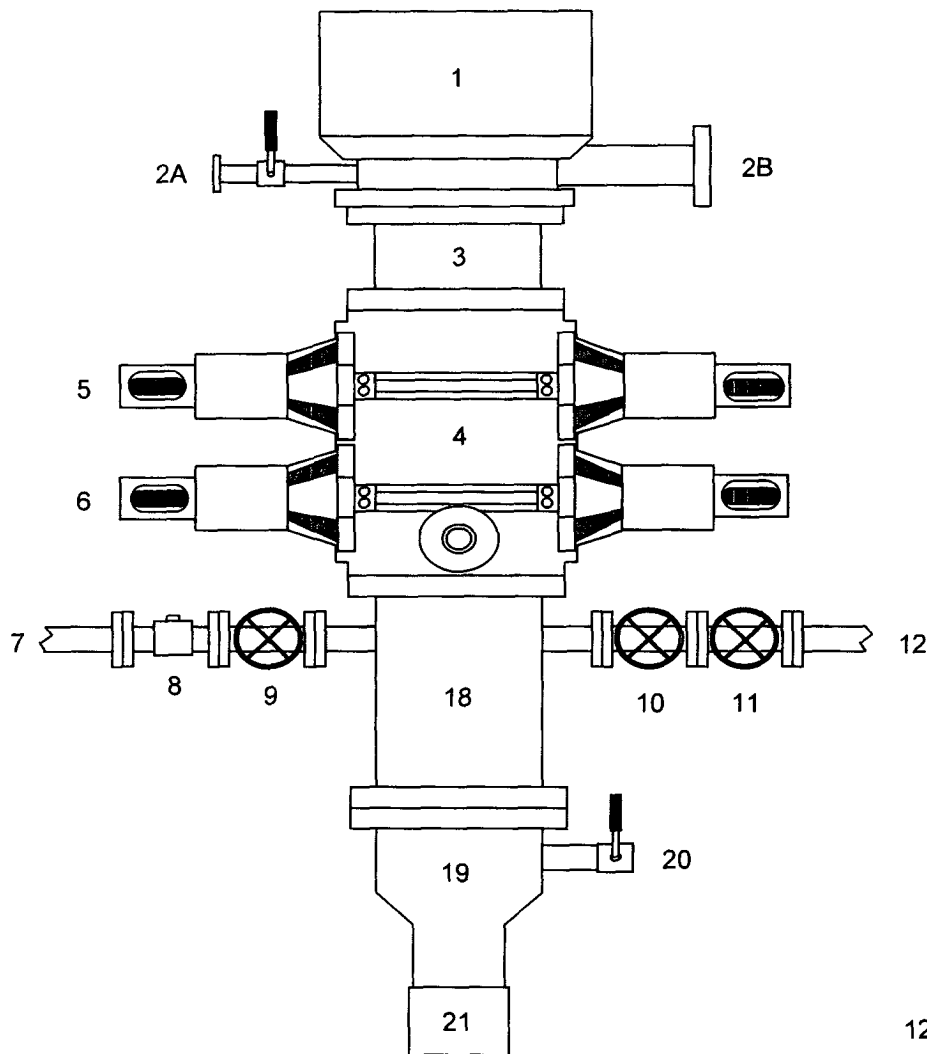
Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

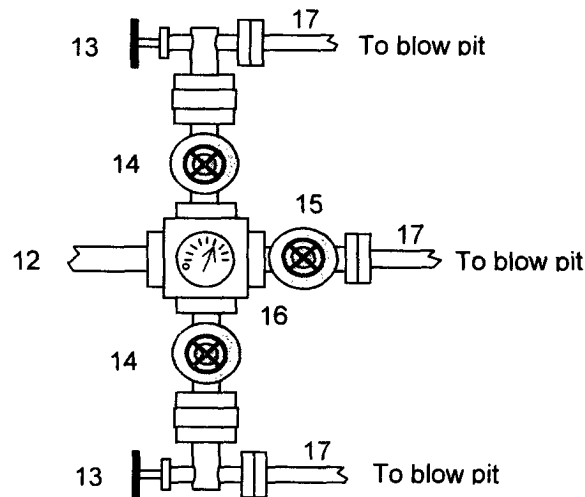
Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

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



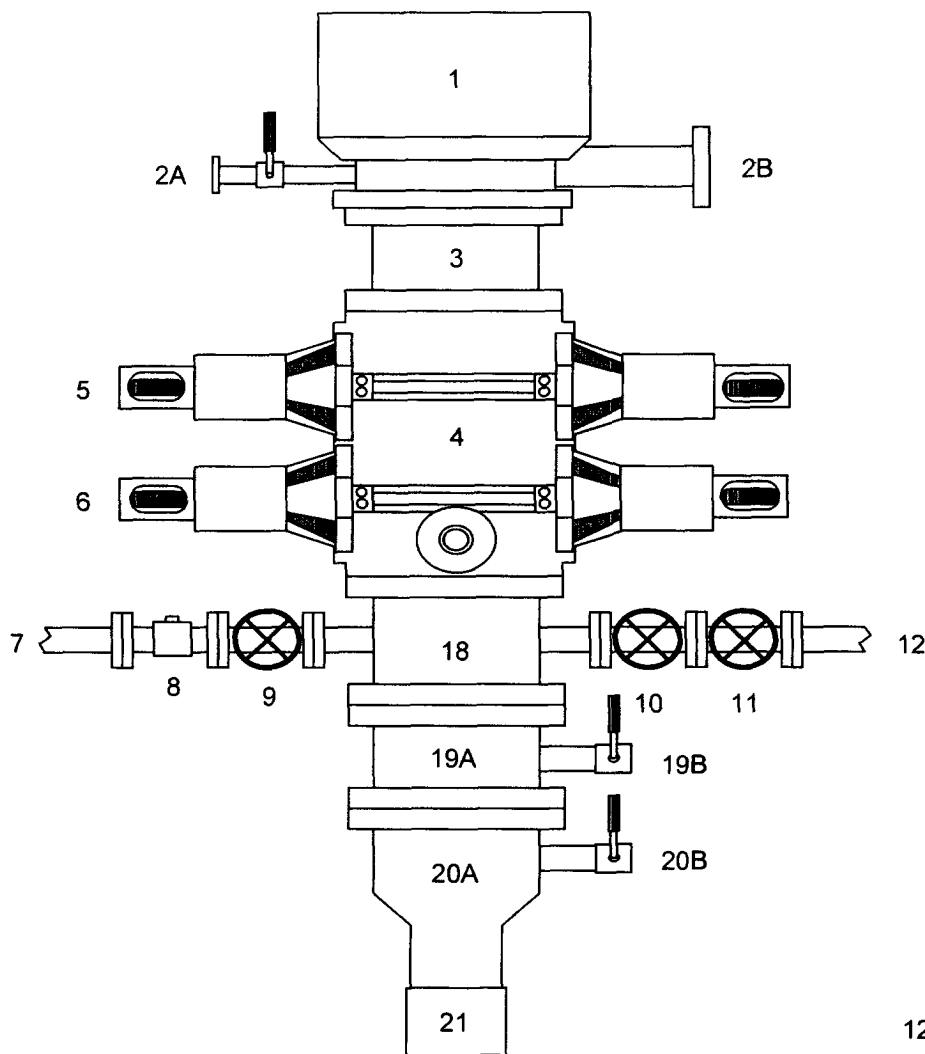
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

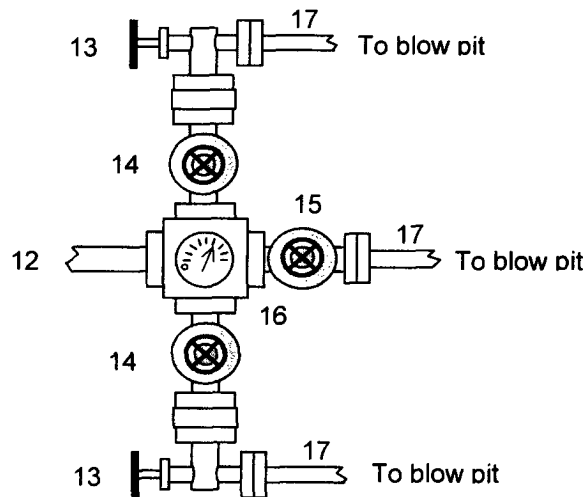
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

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