

2006 JAN 17 PM 3 18

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FARMINGTON NM

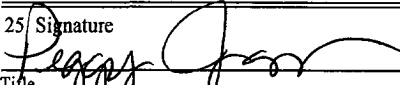
APPLICATION FOR PERMIT TO DRILL OR REENTER

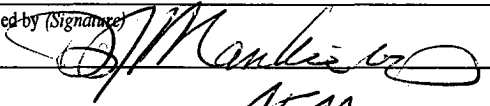
1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-05220
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator ConocoPhillips Company		7. If Unit or CA Agreement, Name and No. MV-NMNM-078416A DK-NMNM-078416B
3a. Address 4001 Penbrook, Odessa, TX 79762		8. Lease Name and Well No. SAN JUAN 29-6 UNIT #35F
3b. Phone No. (include area code) 432-368-1230		9. API Well No. 30-039-29752
4. Location of Well (Report location clearly and in accordance with any State requirements, *) At surface NWSW 2485' FSL - 25' FWL At proposed prod. zone		10. Field and Pool, or Exploratory BLANCO MESAVERDE / BASIN DAKOTA
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area SECTION 15, T29N, R6W NMPM L
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease 320 ACRES	12. County or Parish RIO ARRIBA
17. Spacing Unit dedicated to this well MV - W/2 - 320.0 ACRES DK - S/2 - 320.0 ACRES	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	13. State NM
19. Proposed Depth 7902'	20. BLM/BIA Bond No. on file ES0085	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6486' GL	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM~

25. Signature 	Name (Printed/Typed) Peggy James	Date 01/16/2006
Title Sr. Associate		

Approved by (Signature) 	Name (Printed/Typed) AFM	Date 5/22/06
Title	Office FFO	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 representations as to any matter within its jurisdiction.

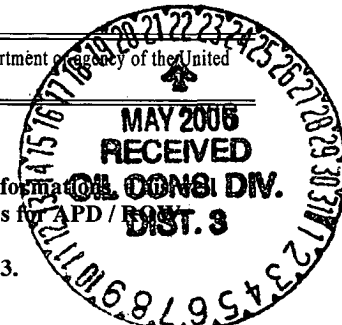
\*(Instructions on page 2)

ConocoPhillips Company proposes to drill a vertical wellbore to the Blanco Mesaverde / Basin Dakota formation. The well will be drilled and equipped in accordance with the attachments submitted herewith. This application is for APD / RPT.

This well will be downhole commingled pursuant to the terms and conditions outlined in Order R-11363.

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



NMCCD

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 DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

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

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

PO Box 2088  
Santa Fe, NM 87504-2088

2005 JAN 17 PM 3 18

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-029-29752</b>	*Pool Code <b>72319 \ 71599</b>	*Pool Name <b>BLANCO MESAVERDE \ BASIN, DAKOTA</b>
*Property Code <b>31326</b>	*Property Name <b>SAN JUAN 29-6 UNIT</b>	*Well Number <b>35F</b>
*GRID No. <b>217817</b>	*Operator Name <b>CONOCOPHILLIPS COMPANY</b>	*Elevation <b>6486'</b>

<sup>10</sup> Surface Location

UL or lot no. <b>L</b>	Section <b>15</b>	Township <b>29N</b>	Range <b>6W</b>	Lot Idn	Feet from the <b>2485</b>	North/South line <b>SOUTH</b>	Feet from the <b>25</b>	East/West line <b>WEST</b>	County <b>RIO ARriba</b>
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<sup>11</sup> 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
Dedicated Acres <b>320.0 Acres - W/2 (MV)</b> <b>320.0 Acres - S/2 (DK)</b>					Joint or Infill	Consolidation Code	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

16	5265.48'	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <b>Virgil E. Chavez</b> Signature Virgil E. Chavez Printed Name Projects & Operations Lead Title <b>December 29, 2005</b> Date	
LEASE SF-078278			
LEASE NM-05220			
LEASE NM-05220 320 acres			
LEASE SF-080377			
LEASE SF-080377			
5272.08'			

5280.00' 25' 15' 5280.00'

LAT: 36°43.5160' N  
LONG: 107°27.5153' W  
DATUM: NAD27

<sup>18</sup> 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: SEPTEMBER 21, 2005  
Signature and Seal of Professional Surveyor  
**JASON C. EDWARDS**  
15269  
REGISTERED PROFESSIONAL SURVEYOR  
NEW MEXICO  
Certificate Number 15269

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

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. <u>30-039-29752</u>	
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name SAN JUAN 29-6 UNIT	
8. Well Number	35F
9. OGRID Number	217817
10. Pool name or Wildcat BLANCO MESAVERDE/BASIN DAKOTA	

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 <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator ConocoPhillips Company	
3. Address of Operator 4001 Penbrook, Odessa, TX 79762	
4. Well Location Unit Letter <u>L</u> <u>2485</u> feet from the <u>SOUTH</u> line and <u>25</u> feet from the <u>WEST</u> line Section <u>15</u> Township <u>29N</u> Range <u>6W</u> NMPM <u>RIO ARRIBA</u> County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6486' GL	

Pit or Below-grade Tank Application <input checked="" type="checkbox"/> Closure <input type="checkbox"/>	
Pit type <u>DRILL</u>	Depth to Groundwater <u>50'</u>
Distance from nearest fresh water well <u>&gt;1000'</u>	
Distance from nearest surface water <u>&lt;200'</u>	
Liner Thickness: <u>12</u> mil	Below-Grade Tank: Volume <u>4400</u> bbls; Construction Material <u>SYNTHETIC</u>

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

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 COPC June 2005 General Pit Plan on file with the NMOCD. See the attached diagram that details the location of the pit in reference to the proposed wellhead. The drill 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 Peggy James TITLE Sr. Associate DATE 01/16/2006

Type or print name E-mail address peggy.s.james@conocophillips.com Telephone No.: (432)368-1230

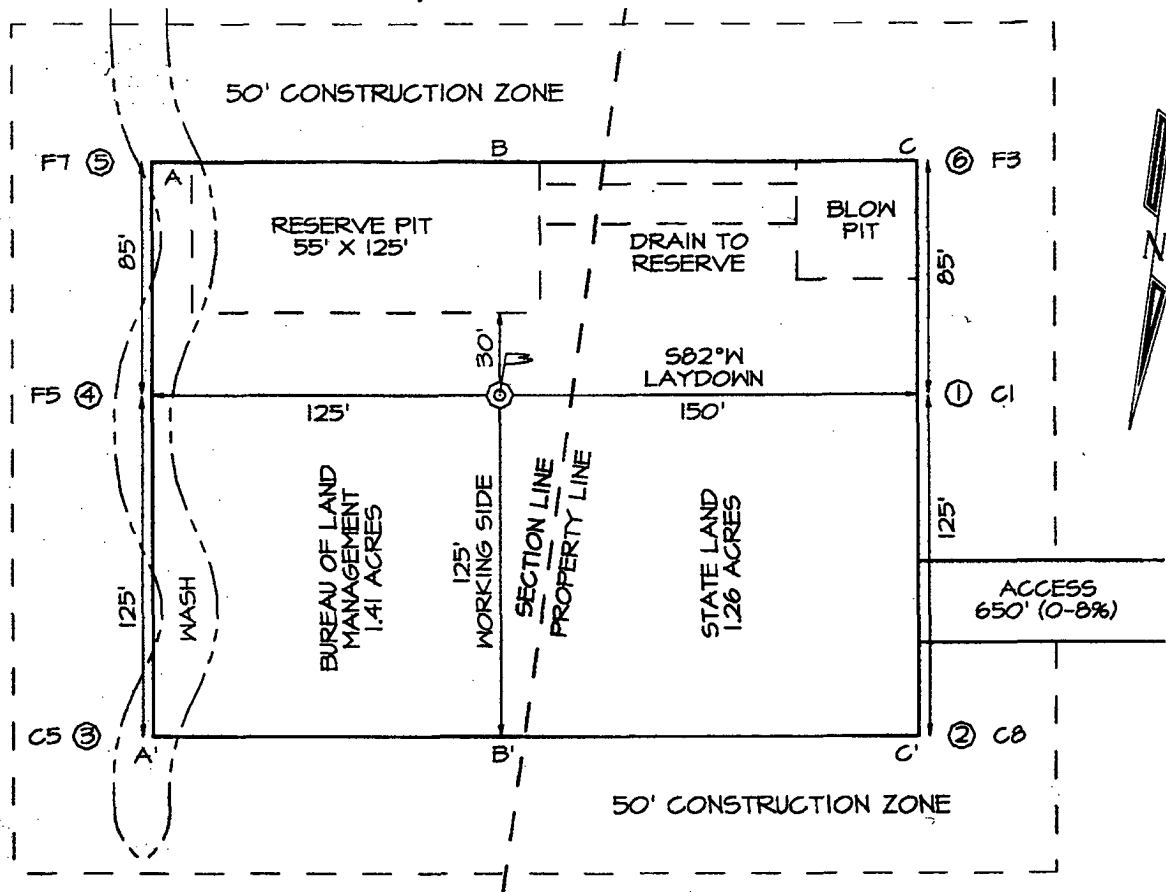
For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE MAY 22 2006

Conditions of Approval (if any):

CONOCOPHILLIPS COMPANY SAN JUAN 29-6 UNIT #35F  
 2485' FSL & 25' FWL, SECTION 15, T29N, R6W, NMPM  
 RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6486'

LATITUDE: 36.72527° N  
 LONGITUDE: 107.45859° W  
 DATUM: NAD1927



A-A'						
6496'						
6486'						
6476'						

B-B'						
6496'						
6486'						
6476'						

C-C'						
6496'						
6486'						
6476'						

# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 29-6 35F

Lease:		AFE #: WAN.CNV.6109		AFE \$:	
Field Name: 29-6		Rig: H&P 281		State: NM	County: RIO ARRIBA
Geoscientist: Glaser, Terry J		Phone: (281) 293 - 6538	Prod. Engineer: Moody, Craig E.		Phone: 486-2334
Res. Engineer: Hensley, Dan E		Phone: 832-486-2385	Proj. Field Lead: Fransen, Eric E.		Phone:
<b>Primary Objective (Zones):</b>					
Zone	Zone Name				
FRR	BASIN DAKOTA (PRORATED GAS)				
RON	BLANCO MESAVERDE (PRORATED GAS)				

<b>Location: Surface</b>					<b>Straight Hole</b>	
Latitude: 36.73	Longitude: -107.46	X:	Y:	Section: 15	Range: 6W	
Footage X: 25 FWL	Footage Y: 2485 FSL	Elevation: 6486	(FT)	Township: 29N		
Tolerance:						
Location Type: Year Round		Start Date (Est.):		Completion Date:	Date In Operation:	
Formation Data: Assume KB = 6502 Units = FT						
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	216	6286	<input type="checkbox"/>			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1202	5300	<input type="checkbox"/>			
CJAM	2462	4040	<input type="checkbox"/>			
KRLD	2662	3840	<input type="checkbox"/>			
FRLD	3102	3400	<input type="checkbox"/>			
PCCF	3382	3120	<input type="checkbox"/>			
LEWS	3582	2920	<input type="checkbox"/>			
Intermediate Casing	3682	2820	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4392	2110	<input type="checkbox"/>			
CLFH	5172	1330	<input type="checkbox"/>	1300		
MENF	5272	1230	<input type="checkbox"/>			
PTLK	5567	935	<input type="checkbox"/>			
MNCS	5817	685	<input type="checkbox"/>			
CLLP	6902	-400	<input type="checkbox"/>			
CRHN	7552	-1050	<input type="checkbox"/>			
TWLS	7662	-1160	<input type="checkbox"/>			
CBBO	7737	-1235	<input checked="" type="checkbox"/>			
TOTAL DEPTH DK	7902	-1400	<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.

<b>Reference Wells:</b>		
Reference Type	Well Name	Comments

# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 29-6 35F

## 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: Zones - Drill and equip the SAN JUAN 29-6 35F well as an 80-acre Mesaverde/Dakota infill well, to be located 10 FWL & 2600 FSL of Section 15-T29N-R6W, Rio Arriba County, NM. Once established and adequately tested, production will be downhole commingled.

### 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

General/Work Description - Drill and equip the SAN JUAN 29-6 35F well as an 80-acre Mesaverde/Dakota infill well, to be located 10 FWL & 2600 FSL of Section 15-T29N-R6W, Rio Arriba County, NM. Once established and adequately tested, production will be downhole commingled.

Lease:	AFE #: WAN.CNV.6109	AFE \$:
Field Name: 29-6	Rig:	State: NM County: RIO ARRIBA API #:
Geoscientist: Glaser, Terry J	Phone: (281) 293 - 6538	Prod. Engineer: Moody, Craig E. Phone: 486-2334
Res. Engineer: Hensley, Dan E	Phone: 832-486-2385	Proj. Field Lead: Fransen, Eric E. Phone:

## Primary Objective (Zones):

Zone	Zone Name
FRR	BASIN DAKOTA (PRORATED GAS)
RON	BLANCO MESAVERDE (PRORATED GAS)

## Location: Surface

## Straight Hole

Latitude: 36.73	Longitude: -107.46	X:	Y:	Section: 15	Range: 6W
Footage X: 25 FWL	Footage Y: 2485 FSL	Elevation: 6486	(FT)	Township: 29N	

## Tolerance:

Location Type: Year Round	Start Date (Est.):	Completion Date:	Date In Operation:
Formation Data: Assume KB = 6502	Units = FT		

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	216	6286	<input type="checkbox"/>			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1202	5300	<input type="checkbox"/>			
CJAM	2462	4040	<input type="checkbox"/>			
KRLD	2662	3840	<input type="checkbox"/>			
FRLD	3102	3400	<input type="checkbox"/>			

# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 29-6 35F

PCCF	3382	3120	<input type="checkbox"/>	
LEWS	3582	2920	<input type="checkbox"/>	
Intermediate Casing	3682	2820	<input type="checkbox"/>	8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4392	2110	<input type="checkbox"/>	
CLFH	5172	1330	<input type="checkbox"/>	1300
MENF	5272	1230	<input type="checkbox"/>	
PTLK	5567	935	<input type="checkbox"/>	
MNCS	5817	685	<input type="checkbox"/>	
CLLP	6902	-400	<input type="checkbox"/>	
CRHN	7552	-1050	<input type="checkbox"/>	
TWLS	7662	-1160	<input type="checkbox"/>	
CBBO	7737	-1235	<input checked="" type="checkbox"/>	
TOTAL DEPTH DK	7902	-1400	<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
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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: Zones - Drill and equip the SAN JUAN 29-6 35F well as an 80-acre Mesaverde/Dakota infill well, to be located 10 FWL & 2600 FSL of Section 15-T29N-R6W, Rio Arriba County, NM. Once established and adequately tested, production will be downhole commingled.

### 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

General/Work Description - Drill and equip the SAN JUAN 29-6 35F well as an 80-acre Mesaverde/Dakota infill well, to be located 10 FWL & 2600 FSL of Section 15-T29N-R6W, Rio Arriba County, NM. Once established and adequately tested, production will be downhole commingled.

### **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 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup>, & 10<sup>th</sup> 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 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> joints

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



**San Juan 29-6 # 35F**  
**Halliburton Cementing Program**

**SURFACE CASING :**

Drill Bit Diameter	12.25"	
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	%
<b>Cement Required</b>	<b>143</b>	<b>sx</b>

**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	3682'	
Lead Cement Yield	2.88	cuft/sk
Lead Cement Density	11.5	lb/gal
Lead Cement Excess	150	%
<b>Lead Cement Required</b>	<b>368</b>	<b>sx</b>
Tail Cement Length	736.4'	
Tail Cement Yield	1.33	cuft/sk
Tail Cement Density	13.5	lb/gal
Tail Cement Excess	150	%
<b>Tail Cement Required</b>	<b>215</b>	<b>sx</b>

**SHOE      3682 ',   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	3482'	200' inside intermediate casing
Shoe Depth	7902'	
Cement Yield	1.45	cuft/sk
Cement Density	13.1	lb/gal
Cement Excess	50	%
<b>Cement Required</b>	<b>464</b>	<b>sx</b>

**SHOE      7902 ',   4.5 ",   11.6 ppf,   N-80   LTC**

# SAN JUAN 29-6 #35F

## HALLIBURTON OPTION

9-5/8 Surface Casing		
Cement Recipe	Standard Cement	
	+ 3% Calcium Chloride	
	+ 0.25 lb/sx Flocele	
Cement Volume	143	sx
Cement Yield	1.21	cuft/sx
Slurry Volume	172.9	cuft
	30.8	bbls
Cement Density	15.6	ppg
Water Required	5.29	gal/sx

7" Intermediate Casing		
Lead Slurry		
Cement Recipe	Standard Cement	
	+ 3% Econolite (extender)	
	+ 10 lb/sx Pheno Seal	
Cement Required	368	sx
Cement Yield	2.88	cuft/sx
Slurry Volume	1060.2	cuft
	188.8	bbls
Cement Density	11.5	ppg
Water Required	16.85	gal/sx

7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ: Standard Cement	
	+ 2% Bentonite	
	+ 6 lb/sx Pheno Seal	
Cement Required	215	sx
Cement Yield	1.33	cuft/sx
Slurry Volume	286.4	cuft
	51.0	bbls
Cement Density	13.5	ppg
Water Required	5.52	gal/sx

4-1/2" Production Casing		
Cement Recipe	50 / 50 POZ: Standard Cement	
	+ 3% Bentonite	
	+ 3.5 lb/sx PhenoSeal	
	+ 0.2% CFR-3 Friction Reducer	
	+ 0.1% HR-5 Retarder	
	+ 0.8% Halad-9 Fluid Loss Additive	
Cement Quantity	464	sx
Cement Yield	1.45	cuft/sx
Cement Volume	673.1	cuft
	119.9	
Cement Density	13.1	ppg
Water Required	6.55	gal/sx

## SCHLUMBERGER OPTION 1

9-5/8 Surface Casing		
Cement Recipe	Class G Cement	
	+ 3% S001 Calcium Chloride	
	+ 0.25 lb/sx D029 Cellophane Flakes	
Cement Volume	148	sx
Cement Yield	1.17	cuft/sx
Cement Volume	172.9	cuft
Cement Density	15.8	ppg
Water Required	4.973	gal/sx

7" Intermediate Casing		
Lead Slurry		
Cement Recipe	Class G Cement	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D079 Extender	
	+ 0.20% D046 Antifoam	
	+ 10 lb/sx Pheno Seal	
Cement Required	390	sx
Cement Yield	2.72	cuft/sx
Slurry Volume	1060.2	cuft
	188.8	bbls
Cement Density	11.7	ppg
Water Required	15.74	gal/sx

7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ: Class G Cement	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 2% D020 Bentonite	
	+ 1.5 lb/sx D024 Gilsonite Extender	
	+ 2% S001 Calcium Chloride	
	+ 0.10% D046 Antifoam	
	+ 6 lb/sx Pheno Seal	
Cement Required	219	sx
Cement Yield	1.31	cuft/sx
Slurry Volume	286.4	cuft
	51.0	bbls
Cement Density	13.5	ppg
Water Required	5.317	gal/sx

4-1/2" Production Casing		
Cement Recipe	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	
	+ 0.15% D065 Dispersant	
	+ 0.1% D800 Retarder	
	+ 0.1% D046 Antifoamer	
	+ 3.5 lb/sx PhenoSeal	
Cement Quantity	467	sx
Cement Yield	1.44	cuft/sx
Cement Volume	673.1	cuft
	119.9	
Cement Density	13	ppg
Water Required	6.47	gal/sx

## SCHLUMBERGER OPTION 2

9-5/8 Surface Casing		
Cement Recipe	Type III Cement	
	+ 2% S001 Calcium Chloride	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 0.20% D046 Antifoam	
Cement Volume	130	sx
Cement Yield	1.33	cuft/sx
Cement Volume	172.9	cuft
Cement Density	14.8	ppg
Water Required	6.095	gal/sx

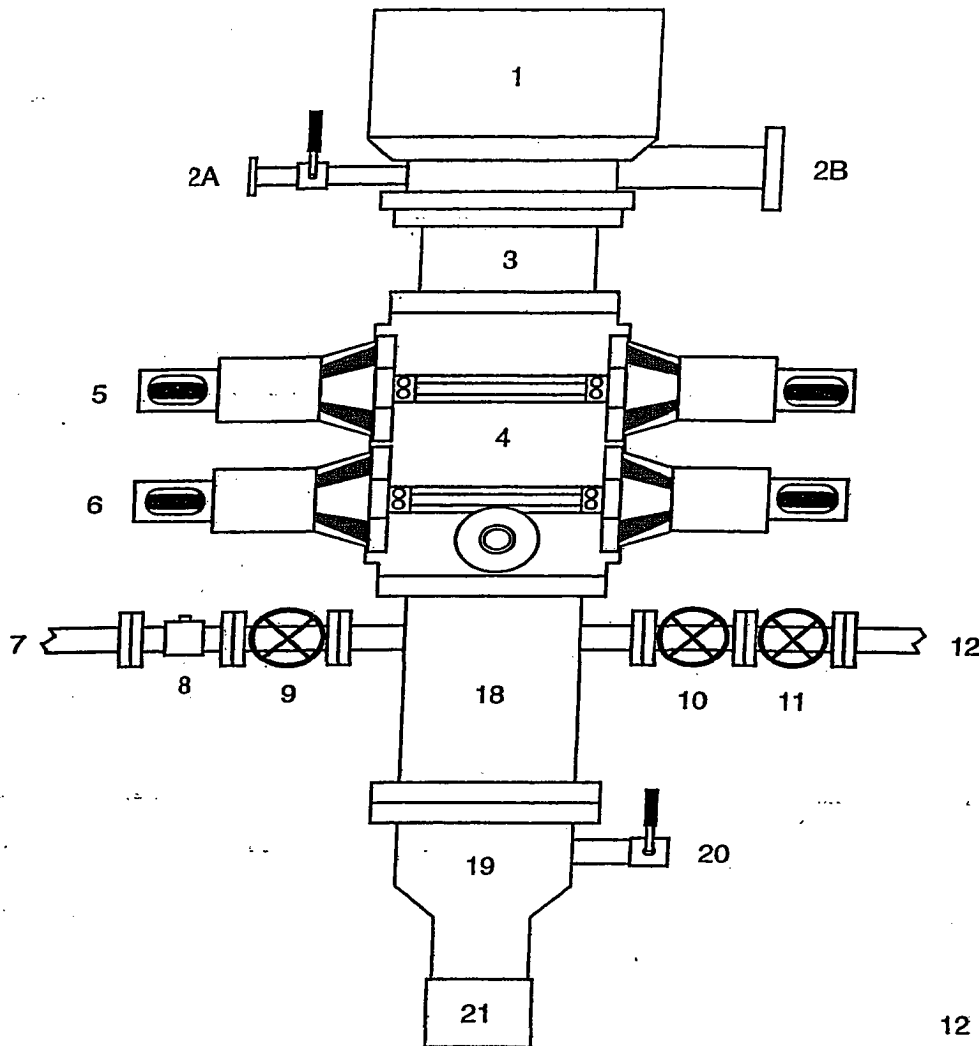
7" Intermediate Casing		
Lead Slurry		
Cement Recipe	75% Type XI / 25% Class G Cement	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D079 Extender	
	+ 0.20% D046 Antifoam	
Cement Required	505	sx
Cement Yield	2.1	cuft/sx
Slurry Volume	1060.2	cuft
	188.8	bbls
Cement Density	11.7	ppg
Water Required	11.724	gal/sx

7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ: Class G Cement	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 2% D020 Bentonite	
	+ 1.5 lb/sx D024 Gilsonite Extender	
	+ 2% S001 Calcium Chloride	
	+ 0.10% D046 Antifoam	
	+ 6 lb/sx Pheno Seal	
Cement Required	219	sx
Cement Yield	1.31	cuft/sx
Slurry Volume	286.4	cuft
	51.0	bbls
Cement Density	13.5	ppg
Water Required	5.317	gal/sx

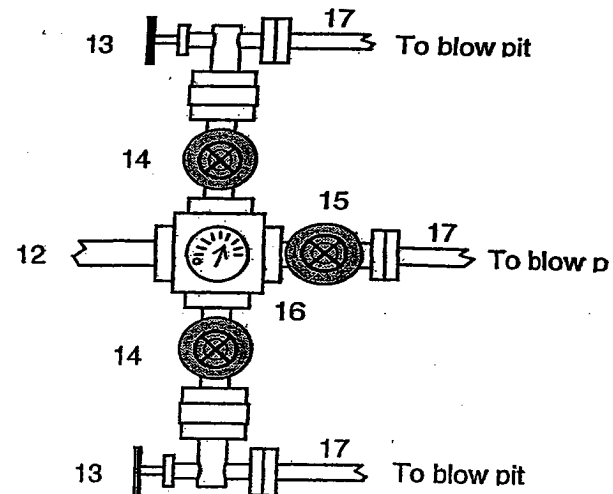
4-1/2" Production Casing		
Cement Recipe	50 / 50 POZ: Class G Cement	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D020 Bentonite	
	+ 1.0 lb/sx D024 Gilsonite Extender	
	+ 0.25% D167 Fluid Loss	
	+ 0.15% D065 Dispersant	
	+ 0.1% D800 Retarder	
	+ 0.1% D046 Antifoamer	
	+ 3.5 lb/sx PhenoSeal	
Cement Quantity	467	sx
Cement Yield	1.44	cuft/sx
Cement Volume	673.1	cuft
	119.9	
Cement Density	13	ppg
Water Required	6.47	gal/sx

# 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

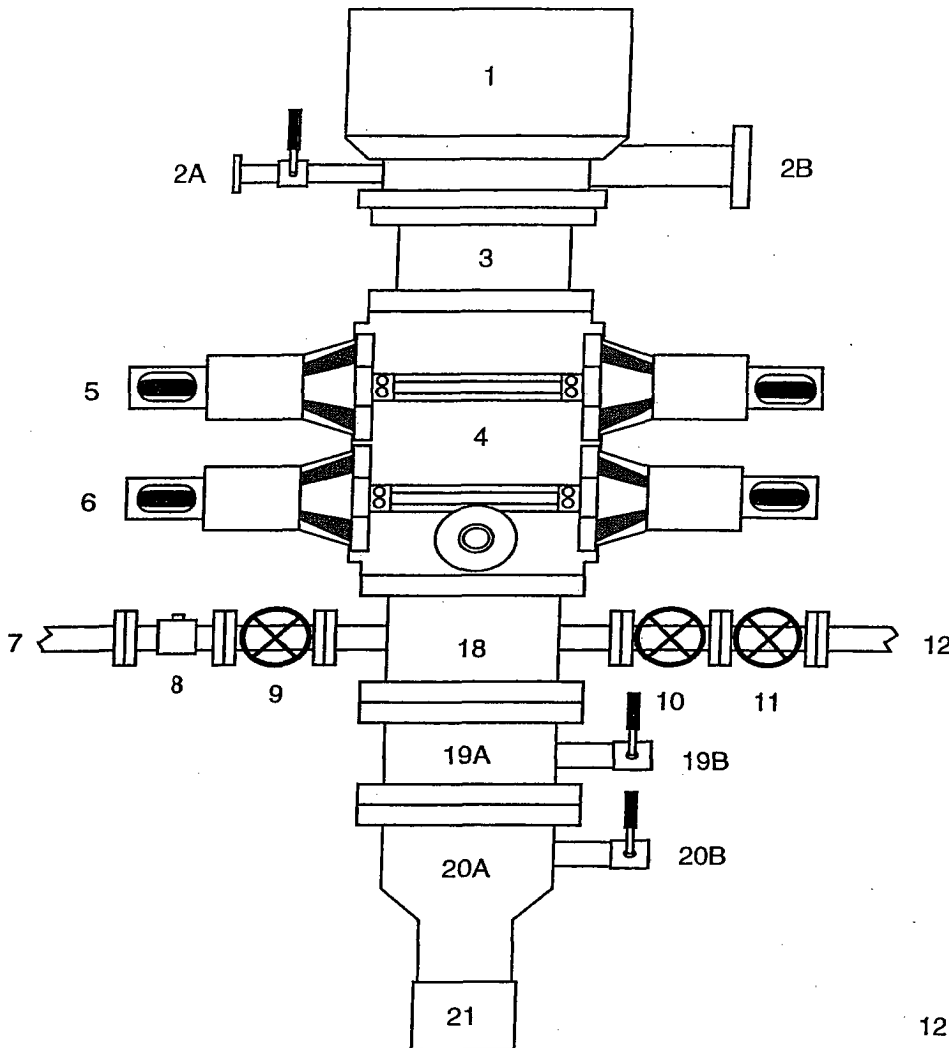


A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

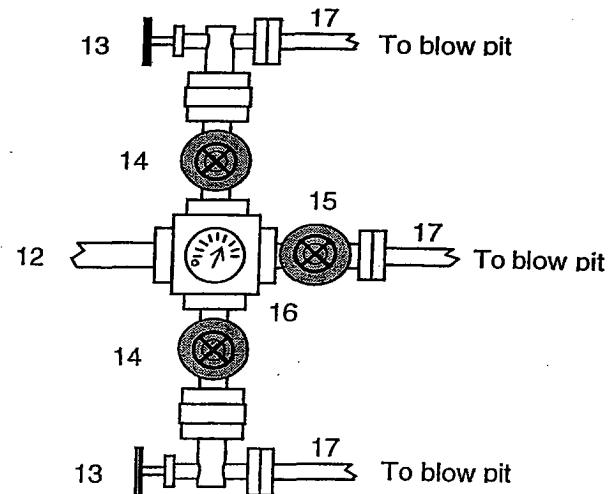
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

# 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

Property : SAN JUAN 29-6 UNIT Well #: 35F

**Surface Location:**

Unit: L Section: 15 Township: 29N Range: 6W

County: RIO ARRIBA State: New Mexico

Footage: 2485 from the SOUTH line, 25 from the WEST line.

**CATHODIC PROTECTION**

ConocoPhillips (COP) proposes to drill a cathodic protection deep well groundbed for the subject well. COP will drill a hole vertically at the surface large enough to accommodate 20 feet of 8 inch diameter PVC pipe for surface casing to assist in further drilling and loading. Casing may be cemented in place for stability if needed. COP will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on the existing well pad and a Farmington based company will be doing the drilling for ConocoPhillips.