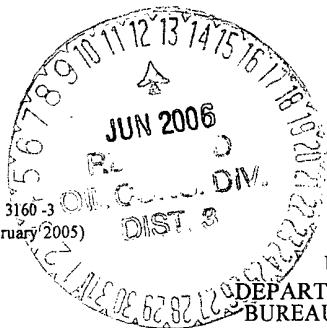


Form 3160-3  
(February 2005)



2005 DEC 20 PM 12 42

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
GTO 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. SF-078996
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. NM NM-078423B
3a. Address 4001 Penbrook, Odessa, TX 79762		8. Lease Name and Well No. SAN JUAN 32-7 UNIT #18A
3b. Phone No. (include area code) 432-368-1230		9. API Well No. 30-045-33491
4. Location of Well (Report location clearly and in accordance with any State requirements, *) At surface SE/SE 445 FSL - 445 FEL At proposed prod. zone		10. Field and Pool, or Exploratory BLANCO MESAVERDE
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Bk. and Survey or Area SECTION 5, T31N, R7W NMPM
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 2537.37 ACRES	12. County or Parish SAN JUAN
17. Spacing Unit dedicated to this well Lots 6, 7, 8 E2 SW4, SE4 E2 - 321.66 ACRES R-1066 Tract F	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 6210'	13. State NM
19. Proposed Depth	20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6578' 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:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service office). | 6. Such other site specific information and/or plans as may be required by the BLM-             |

25. Signature <i>Peggy James</i>	Name (Printed/Typed) Peggy James	Date 12/19/2005
Title Sr. Associate		
Approved by (Signature) <i>Jim Lovato</i>	Name (Printed/Typed)	Date 6/8/06
Title Acting AFM	Office	

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)

(PA)  
ConocoPhillips Company proposes to drill a vertical wellbore to the Blanco Mesaverde formation. This well will be drilled and equipped in accordance with the attachments submitted herewith. This application is for APD / ROW.

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

*Jo*

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

Form C-102  
Revised February 21, 1994

Submit to Appropriate District Office  
Instructions on back

State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

PO Box 2088  
Santa Fe, NM 87504-2088

DEC 20 PM 12 42

AMENDED REPORT

RECEIVED

070 FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-045-33491</b>		*Pool Code <b>72319</b>	*Pool Name <b>BLANCO MESAVERDE</b>
*Property Code <b>31329</b>	*Property Name <b>SAN JUAN 32-7 UNIT</b>		*Well Number <b>18A</b>
*GRID No. <b>217817</b>	*Operator Name <b>CONOCOPHILLIPS COMPANY</b>		*Elevation <b>6578'</b>

10 Surface Location

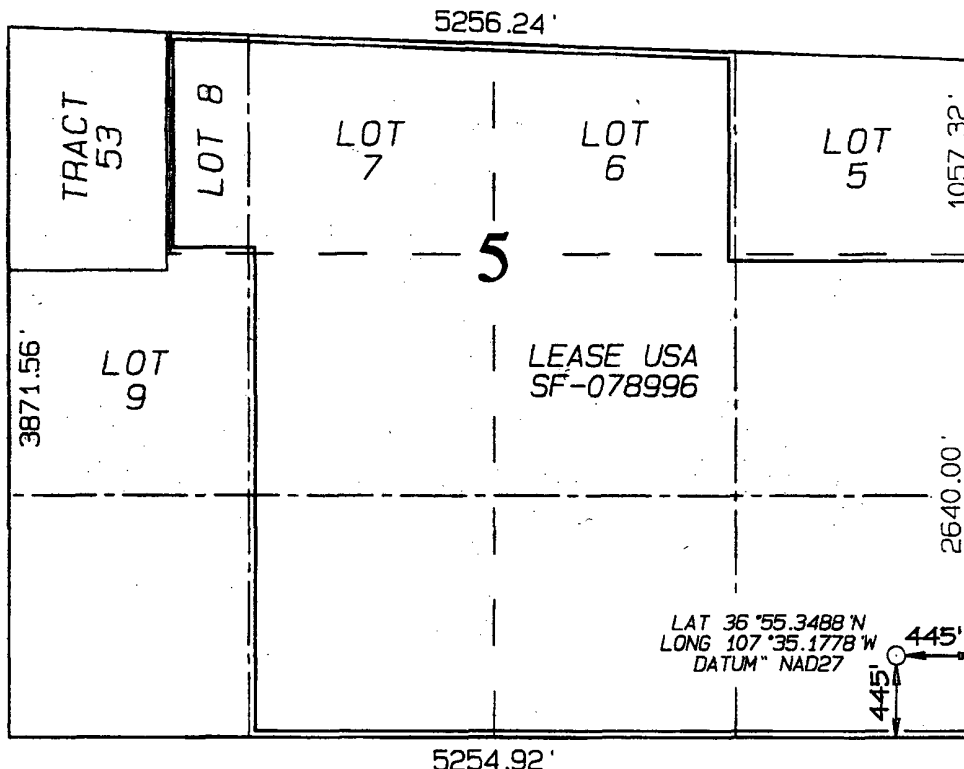
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	5	31N	7W		445	SOUTH	445	EAST	SAN JUAN

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

*Dedicated Acres <b>321.66 Acres</b>	*Joint or Infill	*Consolidation Code	*Order No. <b>R1066 Tract F</b>
---	------------------	---------------------	------------------------------------

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



17 OPERATOR CERTIFICATION

I hereby certify that the information  
contained herein is true and complete  
to the best of my knowledge and belief

*Virgil E. Chavez*

Signature

*Virgil E. Chavez*

Printed Name

*Projects & Operation Lead*

Title

*October 24, 2005*

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: **JULY 27, 2005**

Signature and Seal of Professional Surveyor



*Jason C. Edwards*

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

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

Form C-103  
May 27, 2004

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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. <u>30-045-33491</u>
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.
3. Address of Operator 4001 Penbrook, Odessa, TX 79762		7. Lease Name or Unit Agreement Name SAN JUAN 32-7 UNIT
4. Well Location Unit Letter <u>P</u> <u>445</u> feet from the <u>SOUTH</u> line and <u>445</u> feet from the <u>EAST</u> line Section <u>5</u> Township <u>31N</u> Range <u>7W</u> NMPM <u>SAN JUAN</u> County		8. Well Number 18A
I 1. Elevation (Show whether DR, RKB, RT, GR, etc.) 6578' GL		9. OGRID Number 217817
		10. Pool name or Wildcat BLANCO MESAVERDE

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>1.7 MILES</u>	
Distance from nearest surface water <u>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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

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

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE I 103. 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 12/19/2005

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. I

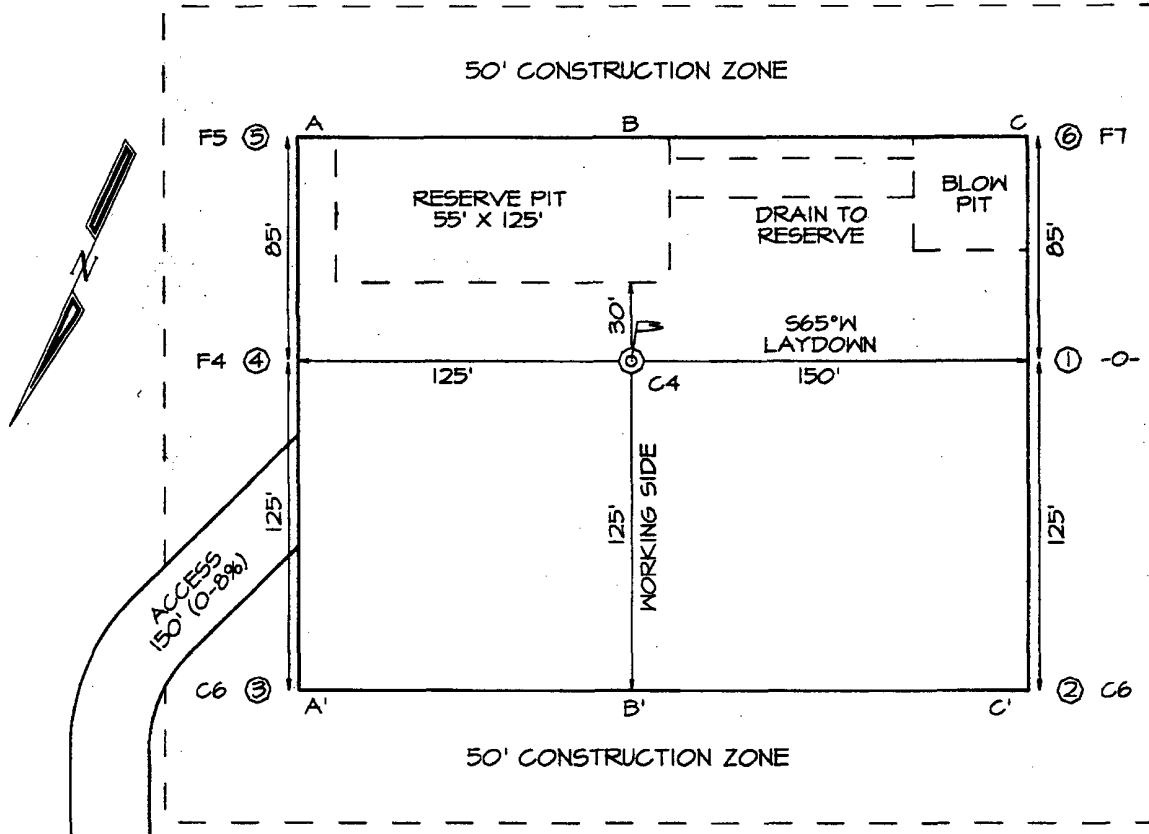
DATE

JUN 12 2006

Conditions of Approval (if any):

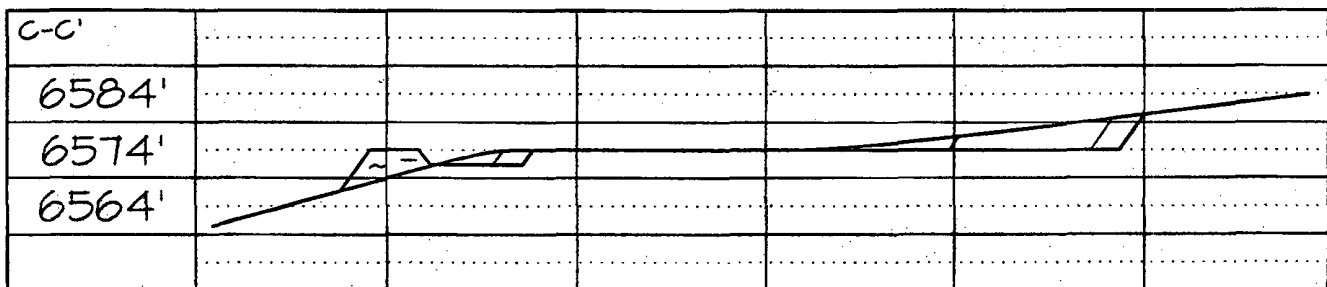
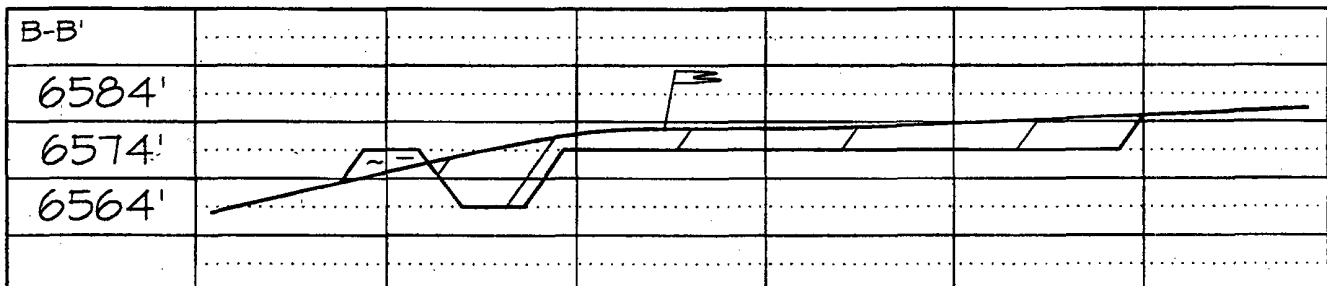
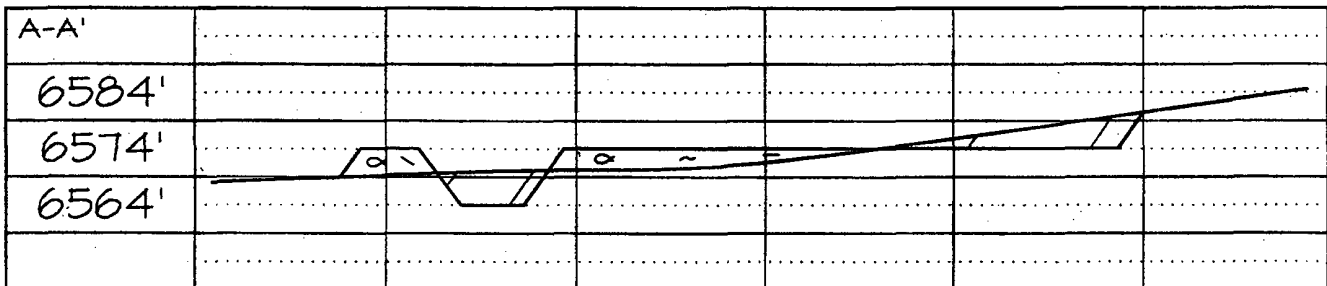
**CONOCOPHILLIPS COMPANY SAN JUAN 32-7 UNIT #18A**  
**445' FSL & 445' FEL, SECTION 5, T31N, R7W, NMPM**  
**SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6578'**

**LATITUDE: 36.92248° N**  
**LONGITUDE: 107.58630° W**  
 DATUM: NAD1927



PLAT NOTE:

\*SURFACE OWNER\*  
 Bureau of Land  
 Management



# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32-7 18A

Lease:		AFE #: WAN.CNV.6121		AFE \$:	
Field Name: 32-7		Rig: H&P 282		State: NM County: SAN JUAN	
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: Phone:	
<b>Primary Objective (Zones):</b>					
Zone	Zone Name				
R20002	MESAVERDE(R20002)				

<b>Location: Surface</b>				<b>Straight Hole</b>	
Latitude: 36.92	Longitude: -107.59	X:	Y:	Section: 5	Range: 7W
Footage X: 445 FEL	Footage Y: 445 FSL	Elevation: 6578	(FT)	Township: 31N	
Tolerance:					
Location Type: Summer Only		Start Date (Est.):		Completion Date:	
				Date In Operation:	
Formation Data: Assume KB = 6685 Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT
SURFACE CSG	216	6469	<input type="checkbox"/>		
NCMT	985	5700	<input type="checkbox"/>		
CJAM	2435	4250	<input type="checkbox"/>		
KRLD	2545	4140	<input type="checkbox"/>		
FRLD	3105	3580	<input type="checkbox"/>		
PCCF	3555	3130	<input type="checkbox"/>		
LEWS	3755	2930	<input type="checkbox"/>		
Intermediate Casing	3855	2830	<input type="checkbox"/>		
CHRA	4770	1915	<input type="checkbox"/>		
CLFH	5580	1105	<input type="checkbox"/>		
MENF	5635	1050	<input type="checkbox"/>		
PTLK	5860	825	<input type="checkbox"/>		
MNCS	6110	575	<input type="checkbox"/>		
Total Depth	6210	475	<input type="checkbox"/>		
Remarks					
12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.					
Possible water flows.					
Possible gas.					
8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.					
Gas; possibly wet					
Gas.					
Gas.					
6-1/4" Hole. 4-1/2", 10.5 ppf, J-55, STC 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

<b>Logging Program:</b>	
Intermediate Logs: <input type="checkbox"/> Log only if show <input type="checkbox"/> GR/ILD <input type="checkbox"/> Triple Combo	
TD Logs: <input type="checkbox"/> Triple Combo <input type="checkbox"/> Dipmeter <input type="checkbox"/> RFT <input type="checkbox"/> Sonic <input checked="" type="checkbox"/> VSP <input type="checkbox"/> TDT	

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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## PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32-7 18A

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Comments: Zones - 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

General/Work Description - Funds in the amount of \$872,715 gross (\$663,437 COPC net) are requested to drill and equip the referenced well as an 6,210' MV 160-acre well, to be located 500' FSL & 400' FEL of Section 5-T31N-R7W, San Juan Co., NM. COPC has 76.02/63.29% in the MV. The pre-drill charge code is WAN.RFE.PD06.59. The subject well is scheduled to spud on May 24, 2006.

Section 5-T31N-R7W is in an area with well-developed pay in the Point Lookout and Menefee members of the Mesaverde Group. It is estimated that this well will produce 1.07 Bcf, EUR. The commingled flowstream has an IP of 360 mcf/d and production for 40 years. The 13% economic indicators generated are: PI 1.1, NPV \$154M, AARR of 16.2%.

**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 32-7 # 18A**  
**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	12.1	cuft/sk
Excess Cement	125	%
Cement Required	14.1	sx

SHOE      235 ', 9.625 ", 32.3 ppf, H-40    STC

**INTERMEDIATE CASING :**

Drill Bit Diameter	8.75"	
Casing Outside Diameter	7"	Casing Inside Diam. 6.456"
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3855'	
Lead Cement Yield	2.38	cuft/sk
Lead Cement Excess	150	%
Tail Cement Length	7.1'	
Tail Cement Yield	1.33	cuft/sk
Tail Cement Excess	150	%
Lead Cement Required	3.85	sx
Tail Cement Required	2.25	sx

SHOE      3855 ', 7 ", 20 ppf, J-55    STC

**PRODUCTION CASING :**

Drill Bit Diameter	6.25"	
Casing Outside Diameter	4.5"	Casing Inside Diam. 4.052"
Casing Weight	10.5	ppf
Casing Grade	J-55	
Top of Cement	3855'	200' inside intermediate casing
Shoe Depth	6210'	
Cement Yield	3.46	cuft/sk
Cement Excess	50	%
Cement Required	2.86	sx

SHOE      6210 ', 4.5 ", 10.5 ppf, J-55    STC



**SAN JUAN 32-7 #18A**
**HALLIBURTON OPTION**

9-5/8 Surface Casing		
Cement Recipe	Class C Standard Cement	
	+ 3% Calcium Chloride	
	+0.25 lb/sx Flocele	
Cement Volume	141	sx
Cement Yield	1.21	cuft/sx
Slurry Volume	172.1	cuft
	30.6	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	385	sx
Cement Yield	2.88	cuft/sx
Slurry Volume	1109.6	cuft
	197.6	bbls
Cement Density	11.5	ppg
Water Required	16.91	gal/sx

7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ:Standard Cement	
	+ 2% Bentonite	
	+ 6 lb/sx Pheno Seal	
Cement Required	225	sx
Cement Yield	1.33	cuft/sx
Slurry Volume	299.4	cuft
	53.3	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	266	sx
Cement Yield	1.45	cuft/sx
Cement Volume	386.0	cuft
	68.7	
Cement Density	13.1	ppg
Water Required	6.47	gal/sx

**SCHLUMBER OPTION 1**

9-5/8 Surface Casing		
Cement Recipe	Class G Standard Cement	
	+ 2% S001 Calcium Chloride	
	+0.25 lb/sx D029 Cellophane Flakes	
Cement Volume	141	sx
Cement Yield	1.16	cuft/sx
Cement Volume	163.8	cuft
Cement Density	15.8	ppg
Water Required	4.983	gal/sx

7" Intermediate Casing		
Lead Slurry		
Cement Recipe	Class G Standard Cement	
	+0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D079 Extender	
	+ 0.20% D046 Antifoam	
	+ 10 lb/sx Pheno Seal	
Cement Required	408	sx
Cement Yield	2.72	cuft/sx
Slurry Volume	1110.9	cuft
	197.9	bbls
Cement Density	11.7	ppg
Water Required	15.74	gal/sx

7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ:Standard 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	228	sx
Cement Yield	1.31	cuft/sx
Slurry Volume	299.3	cuft
	53.3	bbls
Cement Density	13.5	ppg
Water Required	5.317	gal/sx

4-1/2" Production Casing		
Cement Recipe	50 / 50 POZ:Class G Standard 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	268	sx
Cement Yield	1.44	cuft/sx
Cement Volume	385.8	cuft
	68.7	
Cement Density	13	ppg
Water Required	6.43	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

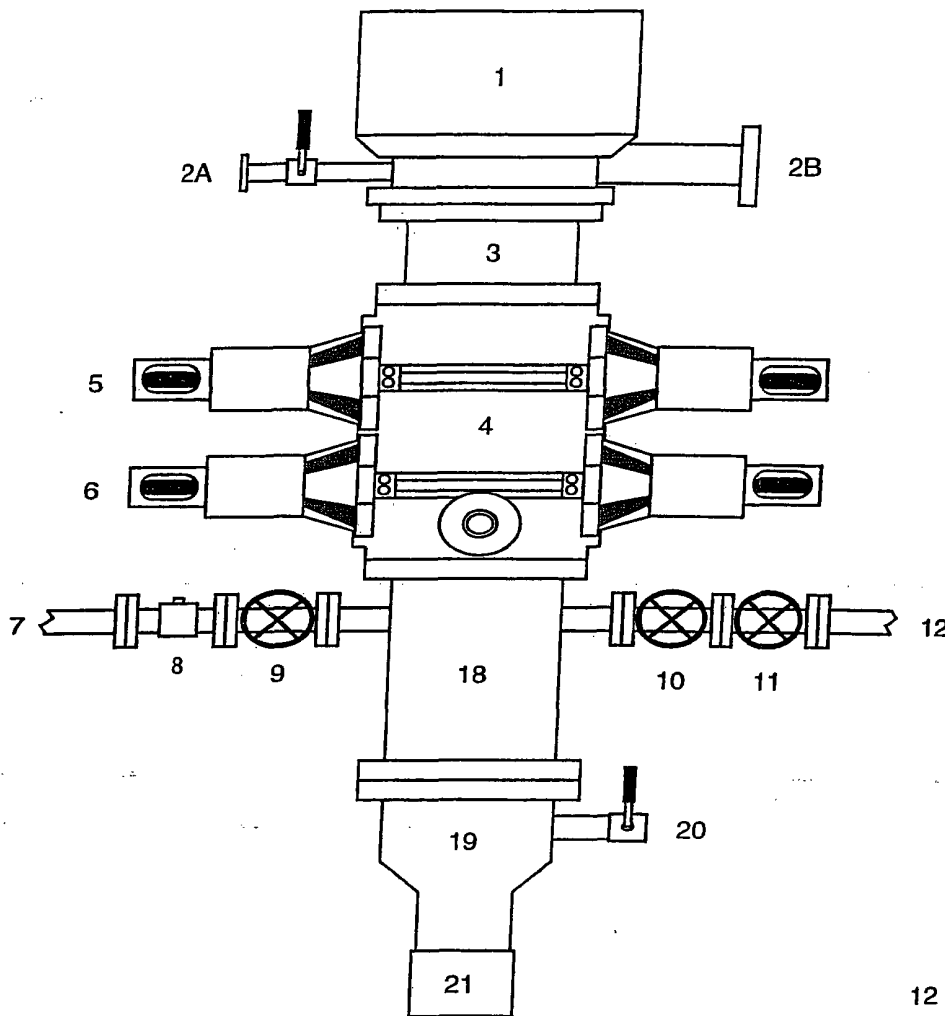
7" Intermediate Casing		
Lead Slurry		
Cement Recipe	75% Type XI / 25% Class G Cement	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D079 Extender	
	+ 0.20% D046 Antifoam	
Cement Required	530	sx
Cement Yield	2.1	cuft/sx
Slurry Volume	1112.2	cuft
	198.1	bbls
Cement Density	11.7	ppg
Water Required	11.724	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	229	sx
Cement Yield	1.31	cuft/sx
Slurry Volume	299.4	cuft
	53.3	bbls
Cement Density	13.5	ppg
Water Required	5.317	gal/sx

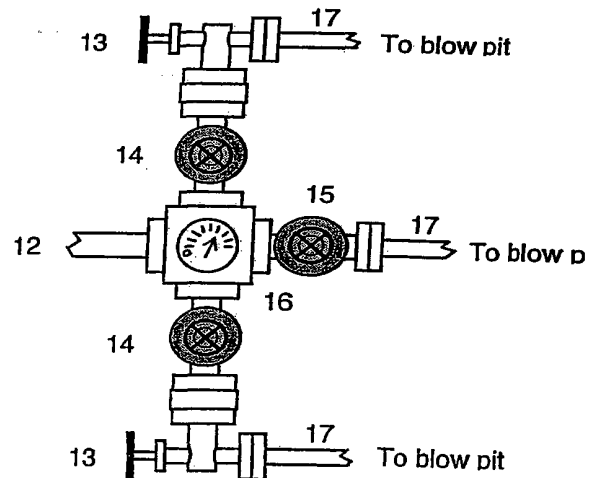
4-1/2" Production Casing		
Cement Recipe	50 / 50 POZ:Class G Cement	
	+ 0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D020 Bentonite	
	+ 1.0 lb/sx D024 Gilsonite Extender	
	+ 0.25% D167 Fluid Loss	
	+ 0.15% D065 Dispersant	
	+ 0.1% D800 Retarder	
	+ 0.1% D046 Antifoamer	
	+ 3.5 lb/sx PhenoSeal	
Cement Quantity	268	sx
Cement Yield	1.44	cuft/sx
Cement Volume	386.0	cuft
	68.7	
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



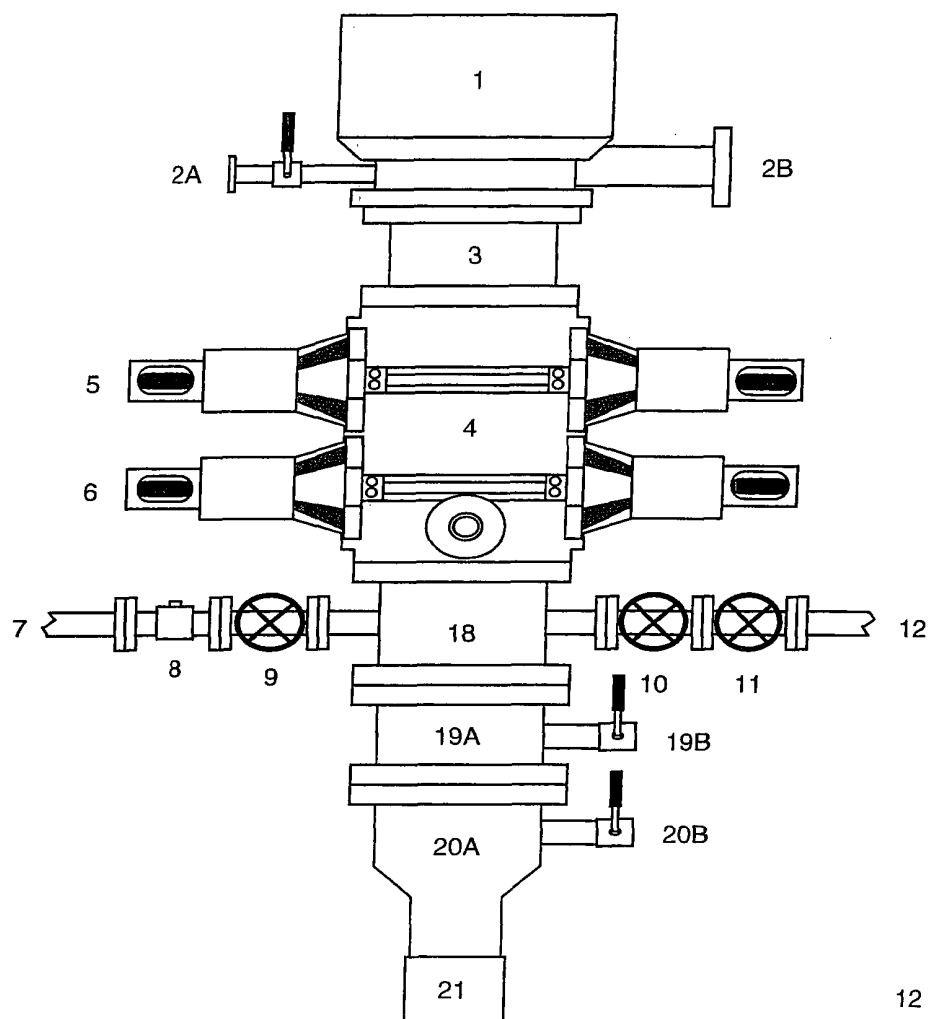
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

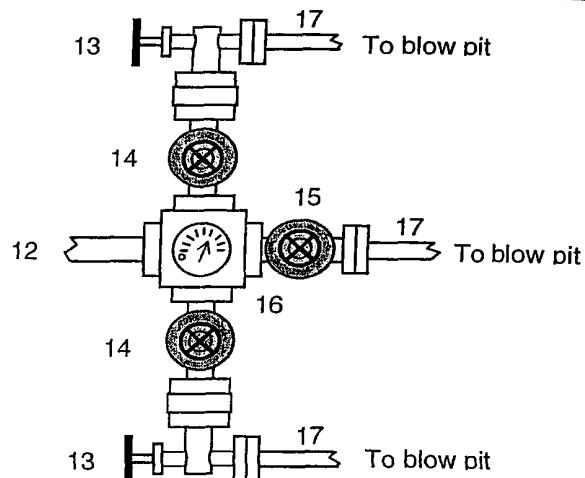
1. Inner Kelly cock Valve with handle

# 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

**Property :** SAN JUAN 32-7 **Well #:** 18A

**Surface Location:**

**Unit:** P **Section:** 5 **Township:** 31N **Range:** 7W

**County:** SAN JUAN **State:** New Mexico

**Footage:** 445 **from the** SOUTH **line,** 445 **from the** EAST **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.