



2006 APR 10 AM 10 00

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

070 FARMINGTON

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-078543	
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.	
3a. Address 4001 Penbrook, Odessa, TX 79762		8. Lease Name and Well No. SAN JUAN 32-7 UNIT #38	
3b. Phone No. (include area code) 432-368-1230		9. API Well No. 30-045-33690	
4. Location of Well (Report location clearly and in accordance with any State requirements, *) At surface SWNE 1685 FNL - 1960 FEL 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 33, T32N, R7W NMPM 6	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)		12. County or Parish SAN JUAN	
16. No. of acres in lease 953.48 ACRES		13. State NM	
17. Spacing Unit dedicated to this well MV & DK; 320.0 ACRES - E/2			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6639' GL		22. Estimated duration	
22. Approximate date work will start*			

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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM~

25. Signature 	Name (Printed/Typed) Peggy James	Date 04/06/2006
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Title  
Senior Associate

Approved by (Signature) 	Name (Printed/Typed)	Date 5/15/06
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Title  
AFM

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 directional wellbore to the Blanco Mesaverde / Basin Dakota formations. This well will be drilled and equipped in accordance with the attachments submitted herewith. This application is for APD / ROW.

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

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

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

NMOCD

8

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer DD, Artesia, NM 88211-0719

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102

Revised February 21, 1994

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-045-33690</b>		*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 31329	*Property Name SAN JUAN 32-7 UNIT		*Well Number 38
*OGRID No. 217817	*Operator Name CONOCOPHILLIPS COMPANY		*Elevation 6639'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	33	32N	7W		1685	NORTH	1960	EAST	SAN JUAN

<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
<sup>12</sup> Dedicated Acres					<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.
320.0 Acres - E/2 (MV)									
320.0 Acres - N/2 (DK)									

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



<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

*Virgil E. Chavez*  
Signature

Virgil E. Chavez  
Printed Name

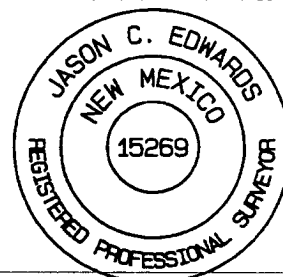
Projects & Operations Lead  
Title

*March 21, 2006*  
Date

<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: JANUARY 5, 2006

Signature and Seal of Professional Surveyor



*JASON C. EDWARDS*  
Certificate Number 15269

30-045-25392

32-7# 81

N/2 MV in onguard.

Well Rile shows E/2.

MEV will change -

This well has the right  
dedication for MV

lt

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- 1 03  
May 27, 2004

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

WELL API NO.	30-045 33690
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 32-7 UNIT
8. Well Number	38
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 ☐ Gas Well ☒ Other

2. Name of Operator  
ConocoPhillips Company

3. Address of Operator  
4001 Penbrook, Odessa, TX 79762

4. Well Location  
Unit Letter G 1685 feet from the NORTH line and 1960 feet from the EAST line  
Section 33 Township 32N Range 7W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
6639' GL

Pit or Below-grade Tank Application <input checked="" type="checkbox"/> Closure <input type="checkbox"/>	
Pit type DRILL Depth to Groundwater 100' Distance from nearest fresh water well 2832' Distance from nearest surface water 621'	
Liner Thickness: 12 mil Below-Grade Tank: Volume: 4400 bbls; Construction Material: Synthetic	

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 11 03. 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 Senior Associate

DATE 04/06/2006

Type or print name

E-mail address peggy.s.james@conocophillips.com:

Telephone No.: (432)368-1230

For State Use Only

APPROVED BY:

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 85

DATE

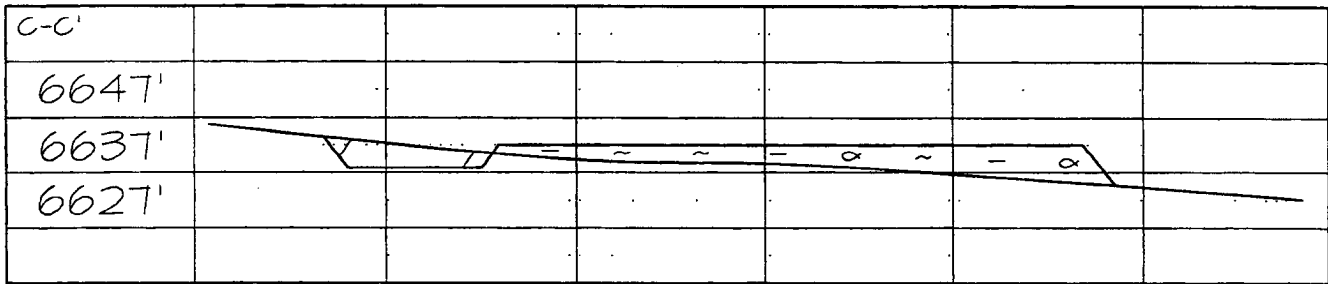
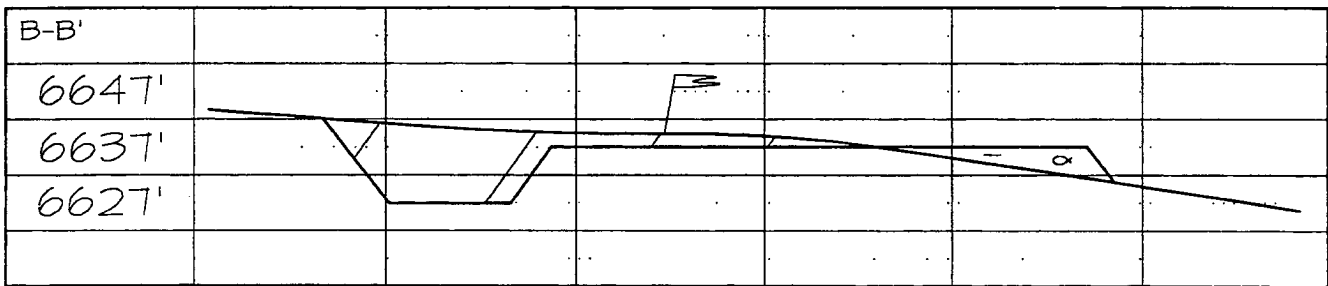
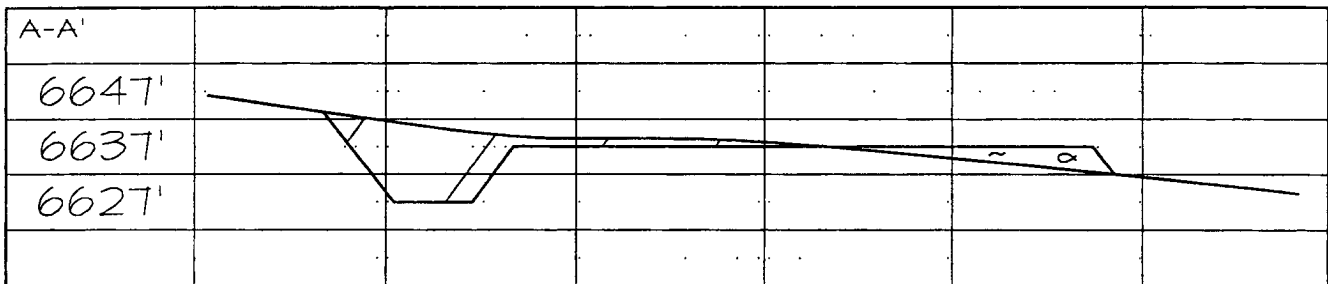
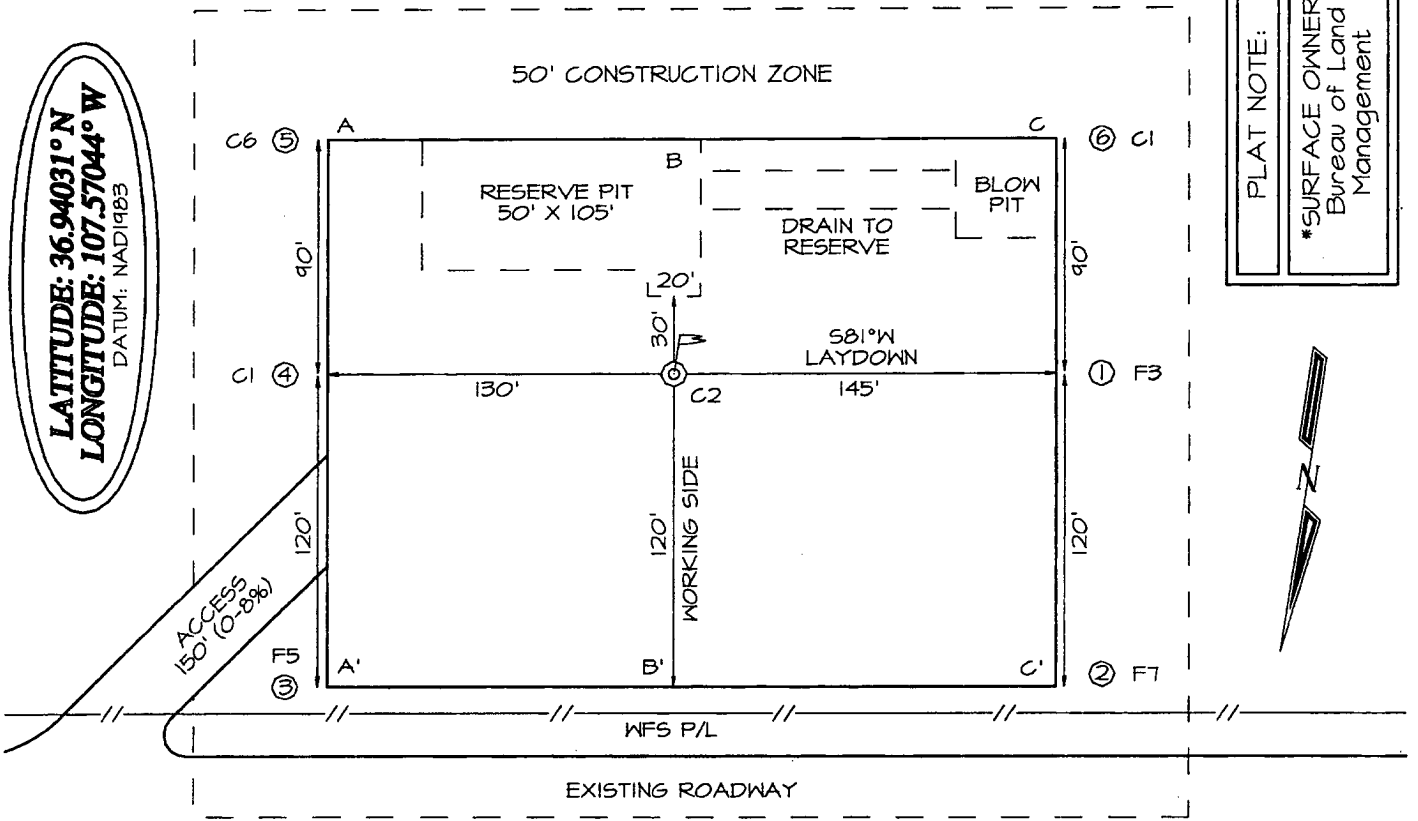
MAY 17 2006

Conditions of Approval (if any):

**CONOCOPHILLIPS COMPANY SAN JUAN 32-7 UNIT #38**  
**1685' FNL & 1960' FEL, SECTION 33, T32N, R7W, NMPM**  
**SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6639'**

PLAT NOTE:  
 \*SURFACE OWNER\*  
 Bureau of Land  
 Management

LATITUDE: 36.94031° N  
 LONGITUDE: 107.57044° W  
 DATUM: NAD1983



# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32-7 38

Lease:		AFE #: WAN.CNV.6247		AFE \$:	
Field Name: 32-7	Rig: H&P 282	State: NM	County: SAN JUAN	API #:	
Geoscientist: Brain, Ted H.	Phone: 832-486-2592	Prod. Engineer: Piotrowicz, Greg M.	Phone: +1 832-486-3486		
Res. Engineer: Skinner, Steve E	Phone: 832 486-2651	Proj. Field Lead: Fransen, Eric E.	Phone:		

## Primary Objective (Zones):

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

## Location: Surface Datum Code: NAD 27 Straight Hole

Latitude: 36.939937	Longitude: -107.569682	X:	Y:	Section: 33	Range: 7W
Footage X: 1960 FEL	Footage Y: 1685 FNL	Elevation: 6639 (FT)	Township: 32N		

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

Formation Data: Assume KB = 6655 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	216	6439	<input type="checkbox"/>			13-1/2 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1085	5570	<input type="checkbox"/>			
CJAM	2385	4270	<input type="checkbox"/>			Possible water flows.
KRLD	2535	4120	<input type="checkbox"/>			
FRLD	3175	3480	<input type="checkbox"/>			Possible gas.
PCCF	3505	3150	<input type="checkbox"/>			Gas. Highly Fractured.
LEWS	3705	2950	<input type="checkbox"/>			
Intermediate Casing	3805	2850	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4785	1870	<input type="checkbox"/>			
CLFH	5215	1440	<input type="checkbox"/>			Gas; possibly wet
MENF	5610	1045	<input type="checkbox"/>			Gas.
PTLK	5855	800	<input type="checkbox"/>			Gas.
CLLP	7185	-530	<input type="checkbox"/>			Gas. Possibly wet.
CRHN	7905	-1250	<input type="checkbox"/>			Gas possible, highly fractured
CBBO	8095	-1440	<input type="checkbox"/>			Gas. Highly Fractured.
Total Depth	8205	-1550	<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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# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32-7 38

## 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: General/Work Description - Funds in the amount of \$1,103,905 gross (\$772,455 COPC net) are requested to drill and equip the referenced well as an 8,210' MV 80/DK 320-acre well, to be located 1500' FNL & 1980' FEL of Section 33-T32N-R7W, San Juan Co., NM. COPC has 41.0/33.83% in the MV and 100/82.5% in the DK. The pre-drill charge code is WAN.RFE.PD06.D5. The subject well is scheduled to spud on June 20, 2006.

Section 33-T32N-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 1.44 Bcf EUR, 0.73 Bcf from the Mesaverde and 0.71 from the Dakota. The commingled flowstream has an IP of 432 mcf/d and production for 40 years. The 13% economic indicators generated are: PI 1.1, NPV \$78M, AARR of 15.6%.

**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 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

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

Production: 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

**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



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  
195.4 bbls  
1097.2 cuft  
2.72 ft<sup>3</sup>/sx  
11.7 ppg  
15.74 gal/sx  
Class G Cement  
+ 3% D079 Extender  
+ 0.20% D046 Antifoam  
+ 10 lb/sx Phenoseal

Comp. Strength  
9 hrs 300 psi  
48 hrs 525 psi

Option 2  
214 sx  
195.4 bbls  
1097.2 cuft  
2.60 ft<sup>3</sup>/sx  
11.5 ppg  
14.82 gal/sx  
Type III Ashgrove Cement  
+ 30 lb/sx San Juan Poz  
+ 3% Bentonite  
+ 5.0 lb/sx Phenoseal

Comp. Strength  
1:47 hrs 50 psi  
12 hrs 350 psi  
24 hrs 450 psi

Option 3  
417 sx  
195.4 bbls  
1097.2 cuft  
2.63 ft<sup>3</sup>/sx  
11.7 ppg  
15.92 gal/sx  
Class G Cement  
+ 3% D079 Extender  
+ 0.20% D046 Antifoam  
+ 1.0 lb/bbl CemNet

Comp. Strength  
3 hrs 100 psi  
24 hrs 443 psi

INTERMEDIATE LEAD:

HOLE: 8.75 "  
CSG OD: 7 "  
CSG ID: 6.456 "  
WGT: 20 ppf  
GRADE: J-55  
EXCESS: 150 %  
TAIL: 761'  
DEPTH: 3805'

Option 1  
403 sx  
195.4 bbls  
1097.2 cuft  
2.72 ft<sup>3</sup>/sx  
11.7 ppg  
15.74 gal/sx  
Class G Cement  
+ 3% D079 Extender  
+ 0.20% D046 Antifoam  
+ 10 lb/sx Phenoseal

Comp. Strength  
9 hrs 300 psi  
48 hrs 525 psi

Option 2  
422 sx  
195.4 bbls  
1097.2 cuft  
2.60 ft<sup>3</sup>/sx  
11.5 ppg  
14.82 gal/sx  
Type III Ashgrove Cement  
+ 30 lb/sx San Juan Poz  
+ 3% Bentonite  
+ 5.0 lb/sx Phenoseal

Comp. Strength  
1:47 hrs 50 psi  
12 hrs 350 psi  
24 hrs 450 psi

Option 3  
417 sx  
195.4 bbls  
1097.2 cuft  
2.63 ft<sup>3</sup>/sx  
11.7 ppg  
15.92 gal/sx  
Class G Cement  
+ 3% D079 Extender  
+ 0.20% D046 Antifoam  
+ 1.0 lb/bbl CemNet

Comp. Strength  
3 hrs 100 psi  
24 hrs 443 psi

INTERMEDIATE TAIL:

HOLE: 6.25 "  
CSG OD: 4.5 "  
CSG ID: 4 "  
WGT: 11.6 ppf  
GRADE: N-80  
EXCESS: 50 %  
DEPTH: 8205'

Option 1  
226 sx  
195.4 bbls  
1097.2 cuft  
2.72 ft<sup>3</sup>/sx  
11.7 ppg  
15.74 gal/sx  
Class G Cement  
+ 3% D079 Extender  
+ 0.20% D046 Antifoam  
+ 10 lb/sx Phenoseal

Comp. Strength  
3:53 500 psi  
8:22 1000 psi  
24 hrs 3170 psi  
48 hrs 5399 psi

Option 2  
222 sx  
195.4 bbls  
1097.2 cuft  
2.60 ft<sup>3</sup>/sx  
11.5 ppg  
14.82 gal/sx  
Type III Ashgrove Cement  
+ 30 lb/sx San Juan Poz  
+ 3% Bentonite  
+ 5.0 lb/sx Phenoseal

Comp. Strength  
2:05 50 psi  
4:06 500 psi  
12 hrs 1250 psi  
24 hrs 1819 psi

Option 3  
231 sx  
195.4 bbls  
1097.2 cuft  
2.63 ft<sup>3</sup>/sx  
11.7 ppg  
15.92 gal/sx  
Class G Cement  
+ 3% D079 Extender  
+ 0.20% D046 Antifoam  
+ 1.0 lb/bbl CemNet

Comp. Strength  
24 hrs 1850 psi  
48 hrs 3411 psi

PRODUCTION:

Option 1  
487 sx  
124.8 bbls  
700.8 cuft  
1.44 ft<sup>3</sup>/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 Antifoam  
+ 3.5 lb/sx Phenoseal

Comp. Strength  
7 hrs 500 psi  
24 hrs 2100 psi

Option 2  
483 sx  
124.8 bbls  
700.8 cuft  
1.45 ft<sup>3</sup>/sx  
13.1 ppg  
6.55 gal/sx  
50/50 Poz: Standard Cement  
+ 3% Bentonite  
+ 0.2% CFR-3 Friction Reducer  
+ 0.1% HR-5 Retarder  
+ 0.8% Halad-9 Fluid Loss Additive  
+ 3.5 lb/sx Phenoseal

Comp. Strength  
9:32 50 psi  
12 hrs 500 psi  
13:29 1026 psi  
24 hrs 2300 psi

Option 3  
500 sx  
124.8 bbls  
700.8 cuft  
1.48 ft<sup>3</sup>/sx  
13.5 ppg  
6.85 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 Antifoam  
+ 0.15% D065 Dispersant  
+ 1.0 lb/bbl CemNet

Comp. Strength  
24 hrs 1850 psi  
48 hrs 3411 psi

San Juan 32-7 #38

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

SURFACE:

INTERMEDIATE LEAD:

Option 4

381 sx  
195.4 bbls  
1097.2 cuft  
2.88 ft<sup>3</sup>/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: 20 ppf  
GRADE: J-55  
EXCESS: 150 %

TAIL: 761'

DEPTH: 3805'

Option 5

522 sx  
195.4 bbls  
1097.2 cuft  
2.10 ft<sup>3</sup>/sx  
11.7 ppg  
11.724 gal/sx  
75% Type XI / 25% Class G Cement  
+ 0.25 lb/sx D029 Cellophane Flakes  
+ 3% D079 Extender  
+ 0.20% D046 Antifoam

Comp. Strength  
10:56 500 psi  
42 hrs 1012 psi

INTERMEDIATE TAIL:

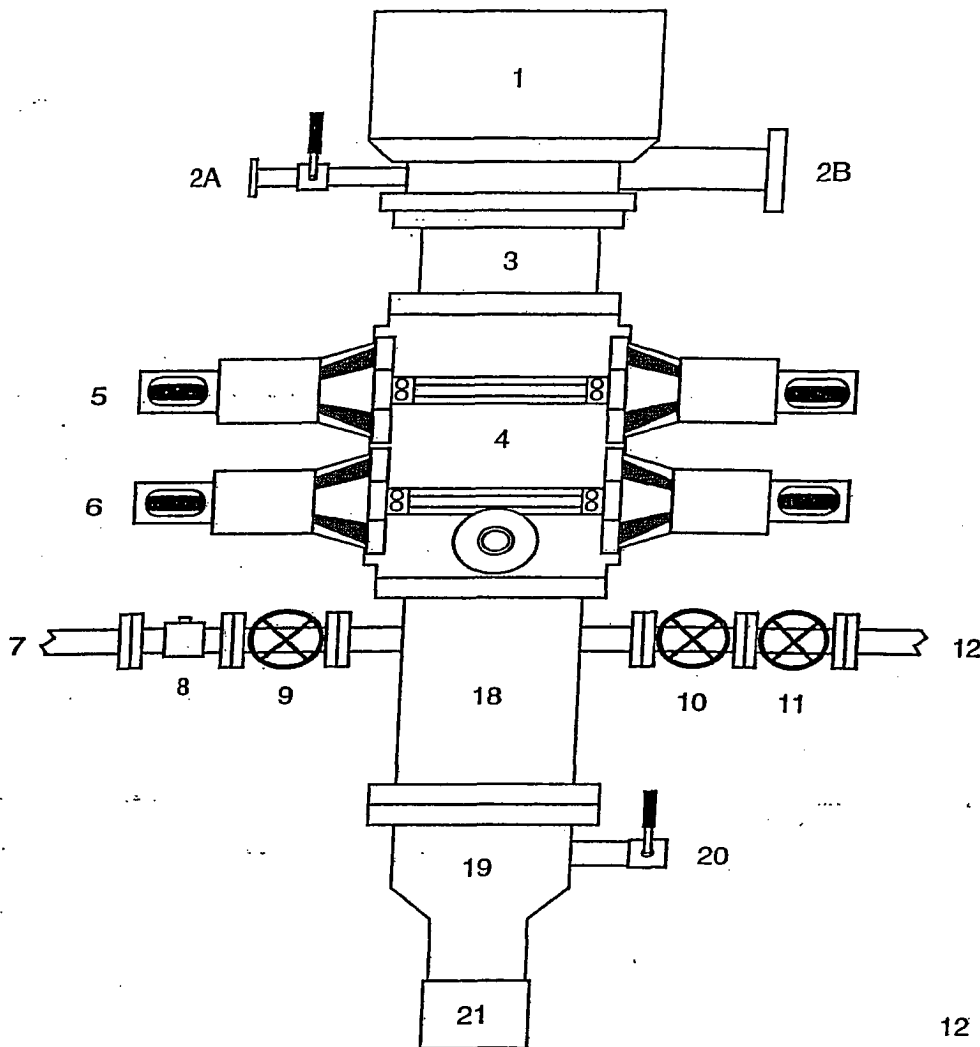
PRODUCTION:

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

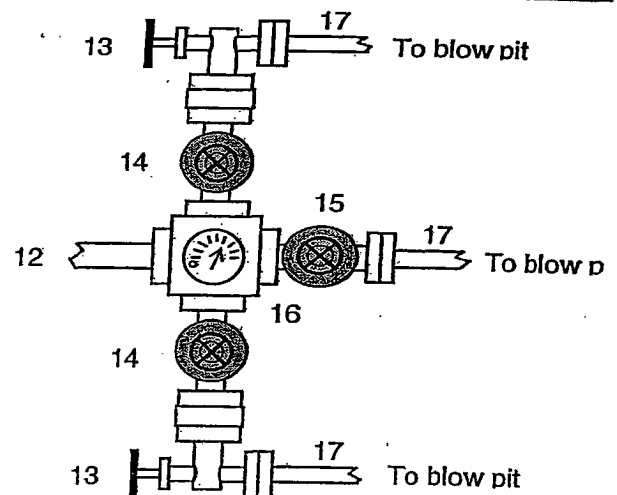
DEPTH: 8205'

# 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

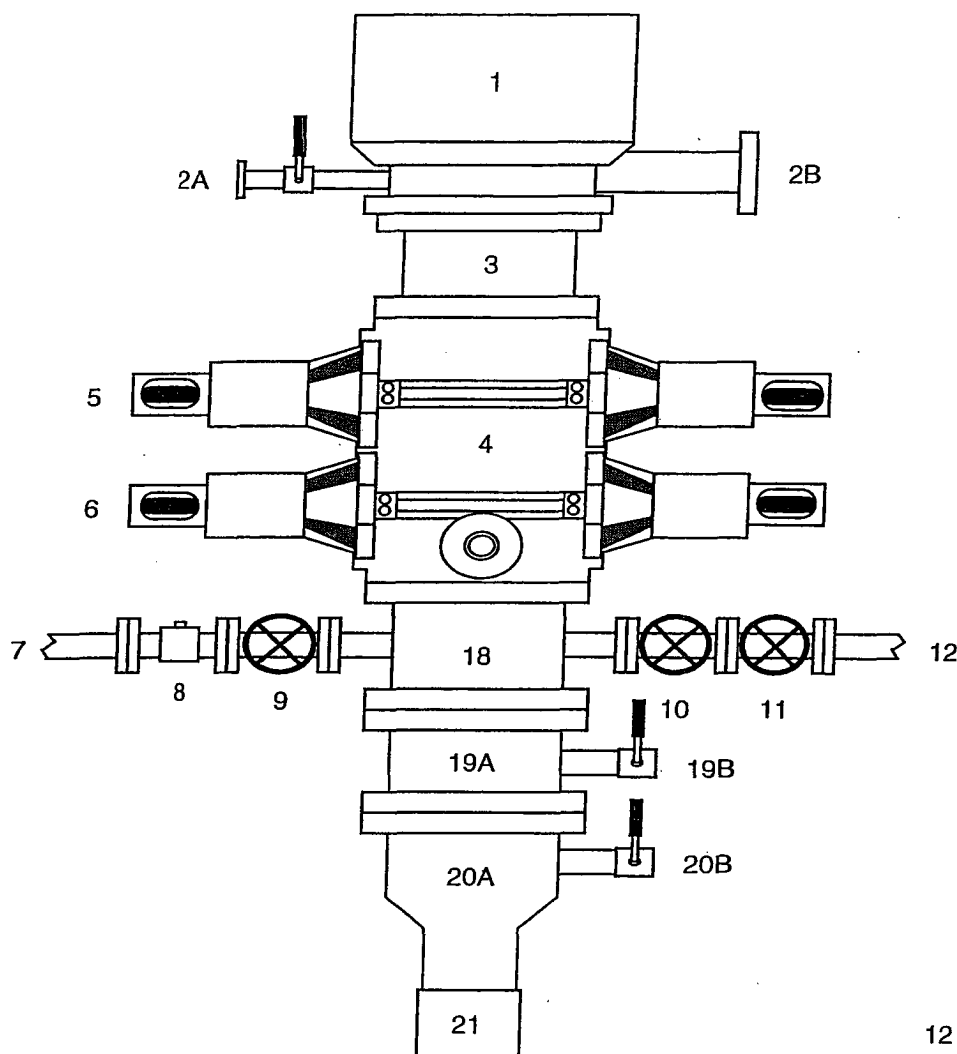


A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

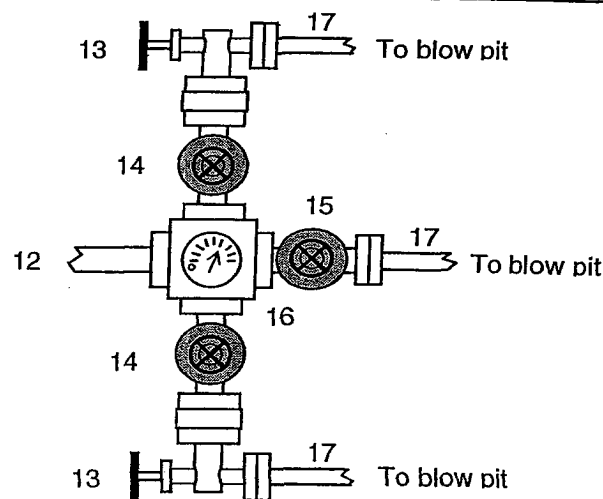
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

## BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Bleeie 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 UNIT Well #: 38

**Surface Location:**

Unit: G Section: 33 Township: 32N Range: 7W

County: SAN JUAN State: New Mexico

Footage: 1685 from the NORTH line, 1960 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.