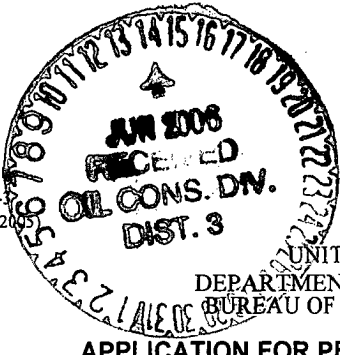


Form 3160 -  
(February 2005)



2006 APR 11 PM 12 30

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

OTC FARMINGTON NM

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator  
ConocoPhillips Company

3a. Address  
4001 Penbrook, Odessa, TX 79762

3b. Phone No. (include area code)  
432-368-1230

4. Location of Well (Report location clearly and in accordance with any State requirements, \*)

At surface

NESW 1340 FSL - 665 FWL

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office\*

5. Lease Serial No.

SF-078998

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

SANJUAN 32-7 UNIT #20

9. API Well No.

30-045-33698

10. Field and Pool, or Exploratory  
BLANCO MESAVERDE / BASIN  
DAKOTA

11. Sec., T. R. M. or Blk. and Survey or Area

SECTION 18, T31N, R7W NMPM

K

12. County or Parish

SAN JUAN

13. State

NM

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

1718.91 ACRES

17. Spacing Unit dedicated to this well

MV & DK: 321.61 ACRES - S/2 AND S/2  
NW/4

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

19. Proposed Depth

8169'

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.

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

04/07/2006

Title

Senior Associate

Approved by (Signature)

Original Signed: Stephen Mason

Name (Printed/Typed)

Date

JUN 12 2006

Title

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)

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.

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

NMOC

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

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

RECEIVED

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33698		*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 31329	*Property Name SAN JUAN 32-7 UNIT		*Well Number 20
*GRID No. 217817	*Operator Name CONOCOPHILLIPS COMPANY		*Elevation 6578'

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
K	18	31N	7W		1340	SOUTH	665	WEST	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
12 Dedicated Acres 321.61 Acres S/2 & S/2 NW/4					13 Joint or Infill		14 Consolidation Code		15 Order No. R-1066A-MV R2046K-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

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 & Operations Lead

Title  
March 20, 2006  
Date

18 SURVEYOR CERTIFICATION

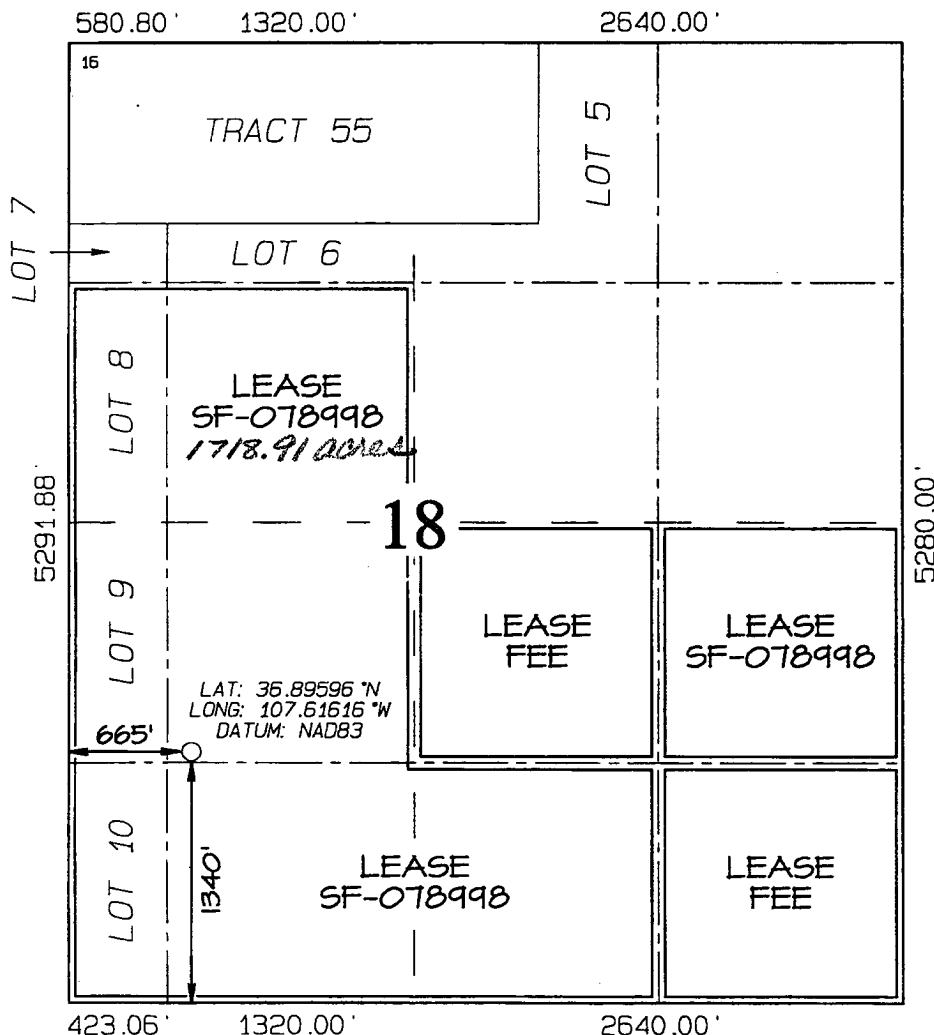
I hereby certify that the well location  
shown on this plat was plotted from field  
notes of actual surveys made by me or under  
my supervision, and that the same is true  
and correct to the best of my belief

Survey Date: SEPTEMBER 1, 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

WELL API NO. <b>30-045-33698</b>
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 <b>SAN JUAN 32-7 UNIT</b>
8. Well Number <b>20</b>
9. OGRID Number <b>217817</b>
10. Pool name or Wildcat

<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.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator <b>ConocoPhillips Company</b>	
3. Address of Operator <b>4001 Penbrook, Odessa, TX 79762</b>	
4. Well Location Unit Letter <b>K</b> <b>1340</b> feet from the <b>SOUTH</b> line and <b>665</b> feet from the <b>WEST</b> line Section <b>18</b> Township <b>31N</b> Range <b>7W</b> NMPM <b>SAN JUAN</b> County	

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**6578' GL**

Pit or Below-grade Tank Application <input checked="" type="checkbox"/> Closure <input type="checkbox"/>	
Pit type <b>DRILL</b>	Depth to Groundwater <b>190'</b>
Distance from nearest fresh water well <b>5,414'</b>	
Distance from nearest surface water <b>136'</b>	
Liner Thickness: <b>12</b> mil	Below-Grade Tank: Volume: <b>4400</b> bbls; Construction Material: <b>Synthetic</b>

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 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 **Senior Associate**

DATE **04/07/2006**

Type or print name

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

Telephone No.: **(432)368-1230**

**For State Use Only**

APPROVED BY:

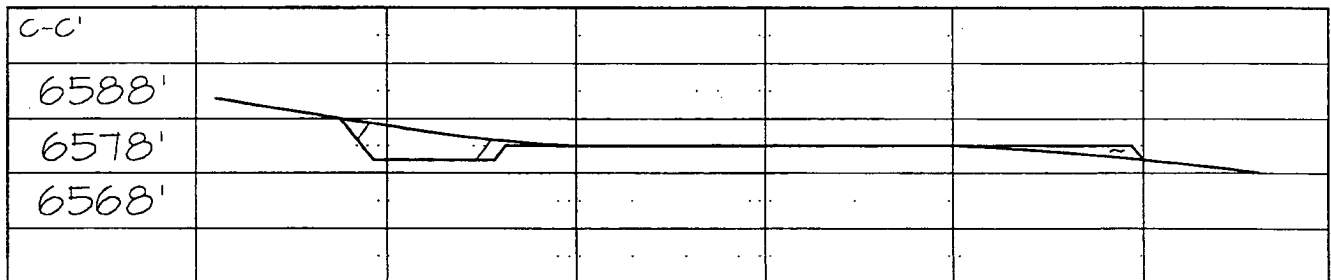
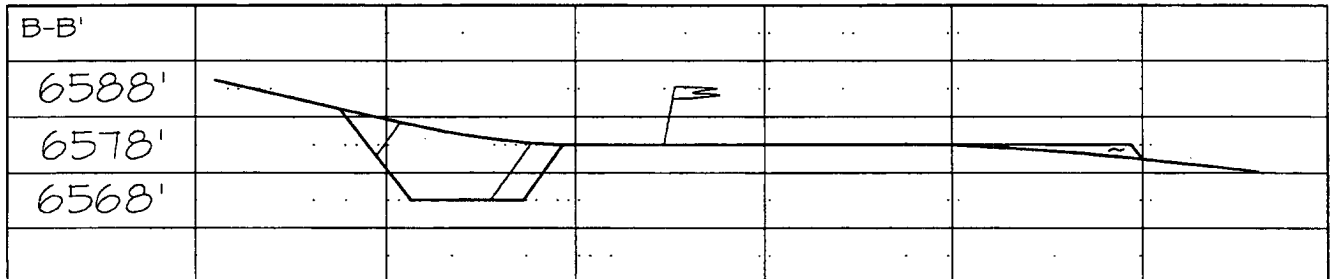
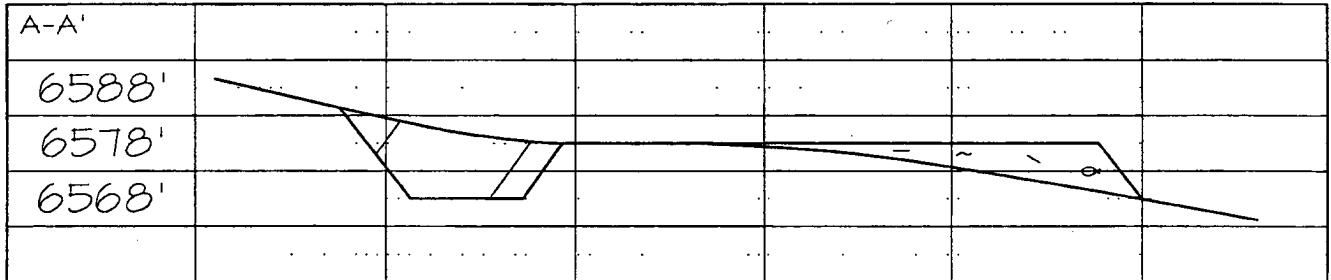
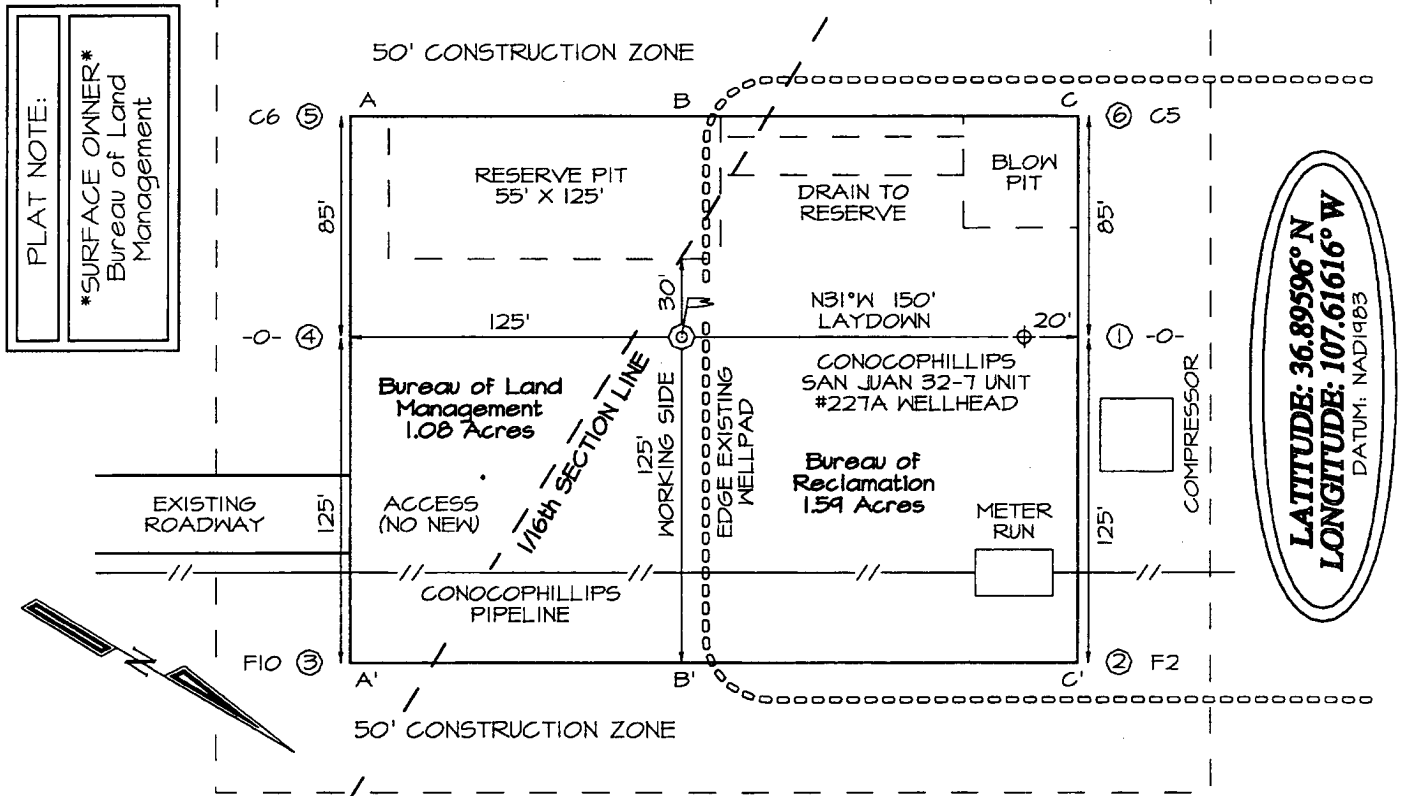
Conditions of Approval (if any):

TITLE

**DEPUTY OIL & GAS INSPECTOR, DIST. 4**

DATE **JUN 14 2006**

**CONOCOPHILLIPS COMPANY SAN JUAN 32-7 UNIT #20**  
**1340' FSL & 665' FWL, SECTION 18, T31N, R7W, NMPM**  
**SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6578'**



# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32-7 20

Lease:		AFE #:		AFE \$:	
Field Name: 32-7	Rig: H&P 283	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: Prabowo, Wahyu	Phone: 832-486-2275	Proj. Field Lead:	Phone:		

## Primary Objective (Zones):

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

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

Latitude: 36.895955	Longitude: -107.615549	X:	Y:	Section: 18	Range: 7W
Footage X: 665 FWL	Footage Y: 1340 FSL	Elevation: 6578	(FT)	Township: 31N	
Tolerance:					

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

Formation Data: Assume KB = 6594 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	216	6378	<input type="checkbox"/>			13-1/2 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1069	5525	<input type="checkbox"/>			
CJAM	2344	4250	<input type="checkbox"/>			Possible water flows.
KRLD	2449	4145	<input type="checkbox"/>			
FRLD	3119	3475	<input type="checkbox"/>			Possible gas.
PCCF	3519	3075	<input type="checkbox"/>			
LEWS	3719	2875	<input type="checkbox"/>			
Intermediate Casing	3819	2775	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4684	1910	<input type="checkbox"/>			
CLFH	5494	1100	<input type="checkbox"/>			Gas; possibly wet
MENF	5544	1050	<input type="checkbox"/>			Gas.
PTLK	5824	770	<input type="checkbox"/>			Gas.
CLLP	7144	-550	<input type="checkbox"/>			Gas. Possibly wet.
CRHN	7819	-1225	<input type="checkbox"/>			Gas possible, highly fractured
PAGU	8019	-1425	<input type="checkbox"/>			Gas. Highly Fractured.
Total Depth	8169	-1575	<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 32-7 20

## 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 - 500' north of #227 FC well

General/Work Description - Newly drilled section Not in MV or DK PA

**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: 9.825 "  
CSG ID: 9.001 "  
WGT: 32.3 ppf  
GRADE: H-40  
EXCESS: 125 %  
DEPTH: 235'

**SURFACE:**  
Option 1  
222 sx  
Comp. Strength  
6 hrs 250 psi  
8 hrs 500 psi  
1.17 ft<sup>3</sup>/sx  
15.8 ppg  
4.973 gal/sx  
Class G Cement  
+ 3% S001 Calcium Chloride  
+ 0.25 lb/sx D029 Cellophane Flakes

Option 2  
214 sx  
Comp. Strength  
6 hrs 250 psi  
8 hrs 500 psi  
1.21 ft<sup>3</sup>/sx  
15.6 ppg  
5.29 gal/sx  
Standard Cement  
+ 3% Calcium Chloride  
+ 0.25 lb/sx Flocele

**INTERMEDIATE LEAD:**

Option 1  
405 sx  
Comp. Strength  
9 hrs 300 psi  
48 hrs 525 psi  
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

Option 2  
424 sx  
Comp. Strength  
1:47 hrs 50 psi  
12 hrs 350 psi  
24 hrs 450 psi  
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

Option 3  
419 sx  
Comp. Strength  
3 hrs 100 psi  
24 hrs 443 psi  
1101.4 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

HOLE: 8.75 "  
CSG OD: 7 "  
CSG ID: 6.456 "  
WGT: 20 ppf  
GRADE: J-55  
EXCESS: 150 %  
TAIL: 763.8'

DEPTH: 3819'

**INTERMEDIATE TAIL:**

Option 1  
227 sx  
Comp. Strength  
3:53 500 psi  
8:22 1000 psi  
24 hrs 3170 psi  
13.5 ppg  
5.317 gal/sx  
50/50 Poz: Class G Cement  
+ 0.25 lb/sx D029 Cellophane Flakes  
+ 3% S001 Calcium Chloride  
+ 2% D020 Bentonite  
+ 1.5 lb/sx D024 Gilsomite Extender  
+ 0.1% D046 Antifoamer  
+ 6 lb/sx Phenoseal

Option 2  
223 sx  
Comp. Strength  
2:05 50 psi  
4:06 500 psi  
12 hrs 1250 psi  
24 hrs 1819 psi  
13.5 ppg  
5.52 gal/sx  
50/50 Poz: Standard Cement  
+ 2% Bentonite  
+ 6.0 lb/sx Phenoseal

Option 3  
232 sx  
Comp. Strength  
24 hrs 1850 psi  
48 hrs 3411 psi  
52.8 bbls  
296.7 cuft  
1.28 ft<sup>3</sup>/sx  
13.5 ppg  
5.255 gal/sx  
50/50 Poz: Class G Cement  
+ 2% D020 Bentonite  
+ 5.0 lb/sx D024 Gilsomite Extender  
+ 2% S001 Calcium Chloride  
+ 0.1% D046 Antifoamer  
+ 0.15% D065 Dispersant  
+ 1.0 lb/bbl CemNet

HOLE: 6.25 "  
CSG OD: 4.5 "  
CSG ID: 4 "  
WGT: 11.6 ppf  
GRADE: N-80  
EXCESS: 50 %  
DEPTH: 8169'

**PRODUCTION:**

Option 1  
481 sx  
Comp. Strength  
7 hrs 500 psi  
24 hrs 2100 psi  
693.2 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 Gilsomite Extender  
+ 0.25% D167 Fluid Loss  
+ 0.25% D065 Dispersant  
+ 0.1% D800 Retarder  
+ 0.1% D046 Antifoamer  
+ 3.5 lb/sx Phenoseal

Option 2  
478 sx  
Comp. Strength  
9:32 50 psi  
12 hrs 500 psi  
13:29 1026 psi  
24 hrs 2300 psi  
123.5 bbls  
693.2 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



San Juan 32-7 #20

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

382 sx  
196.2 bbls  
1101.4 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

Option 5

524 sx  
196.2 bbls  
1101.4 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:

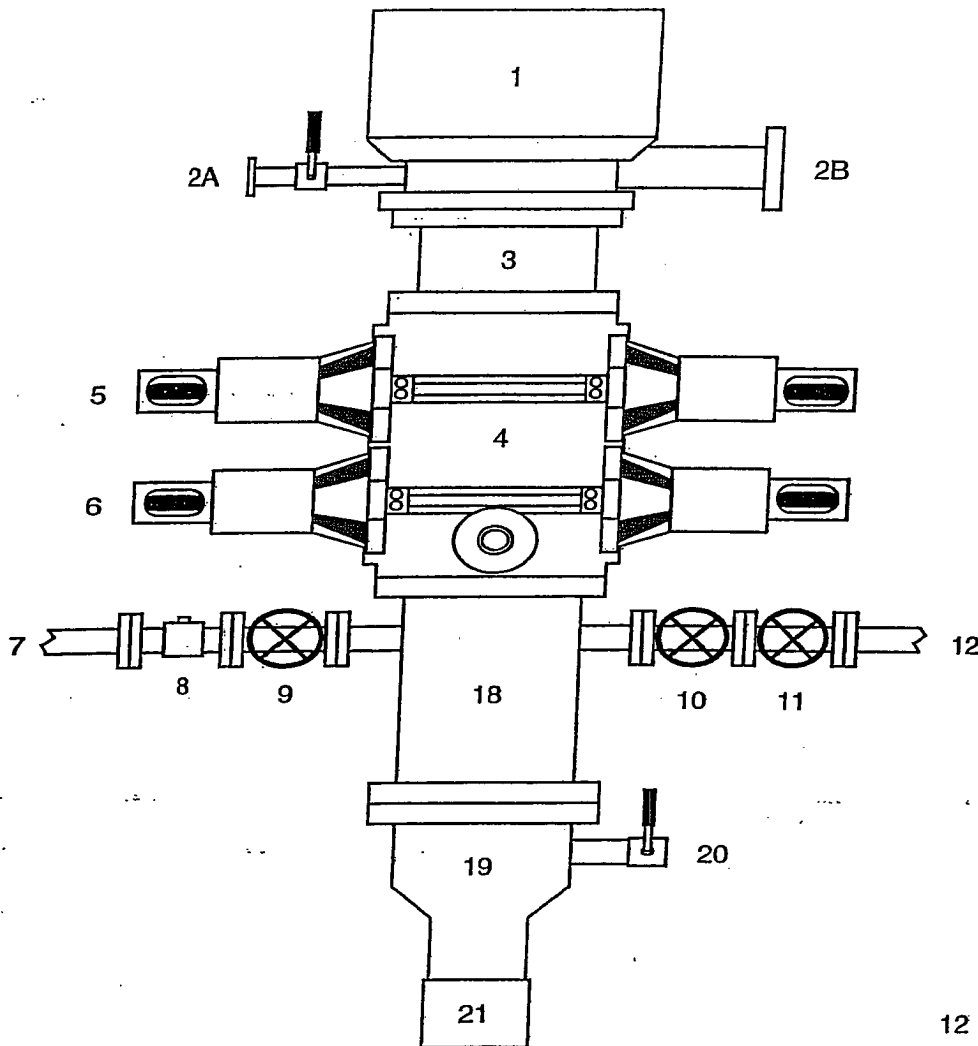
TAIL: 763.8'  
DEPTH: 3819'

PRODUCTION:

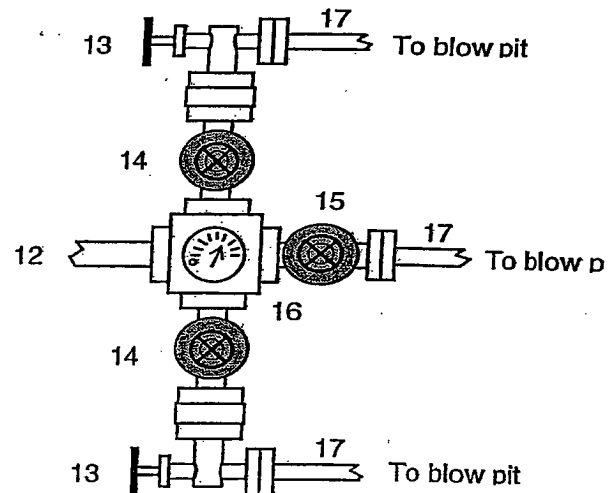
HOLE: 6.25 "  
CSG OD: 4.5 "  
CSG ID: 4 "  
WGT: 11.6 ppf  
GRADE: N-80  
EXCESS: 50 %  
DEPTH: 8169'

# 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

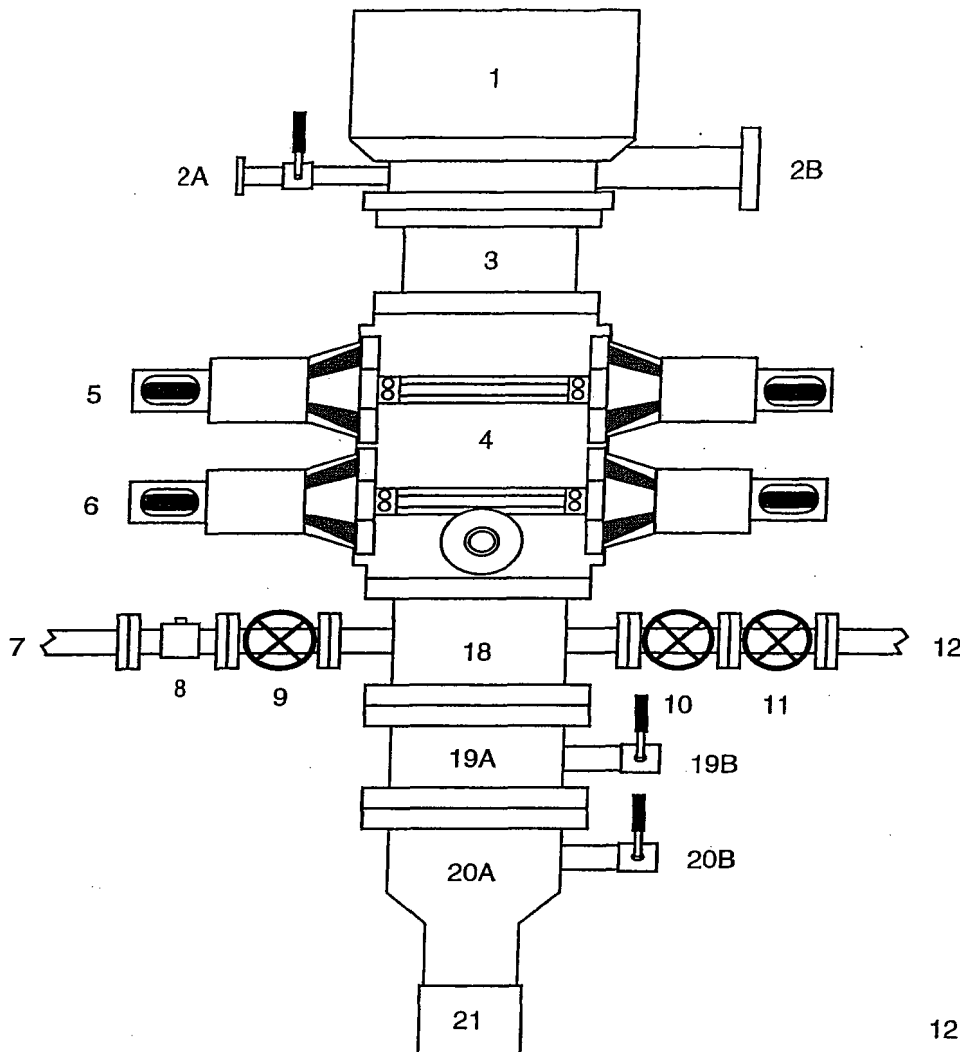


A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

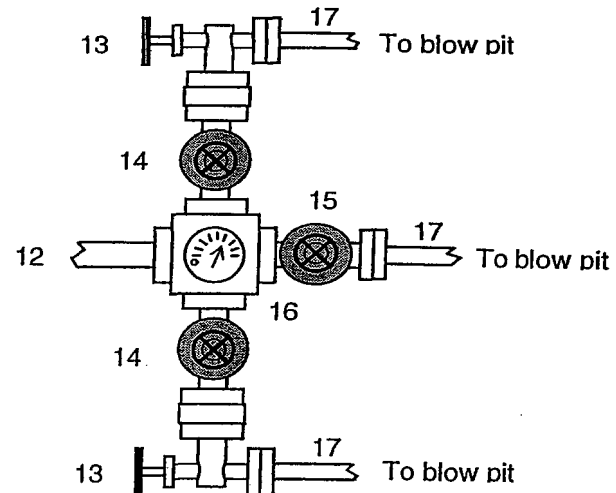
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

# 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 #:** 20

**Surface Location:**

**Unit:** K **Section:** 18 **Township:** 31N **Range:** 7W

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

**Footage:** 1340 **from the** SOUTH **line,** 665 **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.