

2005 MAY 10 PM 2 11

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2006

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

OTO FARMING

5. Lease Serial No.  
SF-079380

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.  
SAN JUAN 32-8 UNIT #267

9. API Well No.  
30-045-33075

10. Field and Pool, or Exploratory  
BASIN FRUITLAND COAL

11. Sec., T. R. M. or Blk. and Survey or Area  
SECTION 23, T32N, R8W

A

12. County or Parish  
SAN JUAN

13. State  
NM

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)  
432-368-1352

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

At surface NENE 61 FNL - 391 FEL

At proposed prod. zone

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

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  
1760

17. Spacing Unit dedicated to this well  
E/2 320.0 ACRES

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

19. Proposed Depth  
3983'

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
7040' 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

Vicki Westby (pj)

Name (Printed/Typed)

Vicki Westby

Date

5/6/2005

Title

Staff Agent

Approved by (Signature)

John Lovato

Name (Printed/Typed)

Office

Date

8/25/05

Title

Acting Field Manager Minerals

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)

HOLD C104 FOR NSL

ConocoPhillips Company proposes to drill a vertical wellbore to the Basin Fruitland Coal formation. This well will be drilled  
and equipped in accordance with the attachments submitted herewith. This application is for APD/ROW.

ConocoPhillips will use mudloggers to prevent us from accessing the Pictured Cliffs formation.

This well does not require HPA notification

NMOCD

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

Form C-102  
Revised June 10, 2003  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|               |                        |           |                            |  |
|---------------|------------------------|-----------|----------------------------|--|
| API Number    |                        | Pool Code | Pool Name                  |  |
|               |                        | 71629     | BASIN FRUITLAND COAL (GAS) |  |
| Property Code | Property Name          |           | Well Number                |  |
| 31330         | SAN JUAN 32-8 UNIT     |           | 267                        |  |
| OGRID No.     | Operator Name          |           | Elevation                  |  |
| 217817        | CONOCOPHILLIPS COMPANY |           | 7040                       |  |

Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the North/South line | Feet from the East/West line | County   |
|---------------|---------|----------|-------|---------|--------------------------------|------------------------------|----------|
| A             | 23      | 32N      | 08W   | 61      | NORTH                          | 391                          | SAN JUAN |

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 | Joint or Infill | Consolidation Code | Order No. |
| E/2 320.0       |                 |                    |           |

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

|   |  |  |
|---|--|--|
| <p>16</p> <p>N88°44'W 5194.88'</p> <p>5285.94'</p> <p>5257.56'</p> <p>5208.06'</p> <p>N88°48'W</p> <p>100°33'E</p> <p>100°27'E</p> <p>LEASE<br/>SF-079380<br/>1760 total acres</p> <p>LAT: 36.97603° N<br/>LONG: 107.63735° W<br/>DATUM: NAD27</p> <p>23</p> <p>LAT: 36°58'33.7" N<br/>LONG: 107°38'14.5" W<br/>DATUM: NAD83</p> <p>RECEIVED<br/>MAY 10 2 11 PM '05</p> |  | <p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature: <u>Vicki Westby</u><br/>Printed Name: Vicki Westby<br/>Title and E-mail Address: Staff Agent<br/>Date: <u>April 25, 2005</u></p> <p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey: 03/07/05<br/>Signature and Seal: <u>[Signature]</u><br/>Date: <u>4/21/05</u></p> <p>NEW MEXICO<br/>REGISTERED PROFESSIONAL SURVEYOR<br/>1333</p> <p>Certificate Number: NM 14003</p> |
|---|--|--|

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

|  |  |  |
|--|--|--|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br>(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.   |
| 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other  |  | 5. Indicate Type of Lease<br>STATE <input type="checkbox"/> FEE <input type="checkbox"/> |
| 2. Name of Operator<br>ConocoPhillips Company  |  | 6. State Oil & Gas Lease No.   |
| 3. Address of Operator<br>4001 Penbrook, Odessa, TX 79762  |  | 7. Lease Name or Unit Agreement Name<br>SAN JUAN 32-8 UNIT                               |
| 4. Well Location<br>Unit Letter A 61 feet from the North line and 391 feet from the East line<br>Section 23 Township 32N Range 8W NMPM San Juan County   |  | 8. Well Number<br>267  |
|  |  | 9. OGRID Number<br>217817  |
|  |  | 10. Pool name or Wildcat<br>BASIN FRUITLAND COAL   |

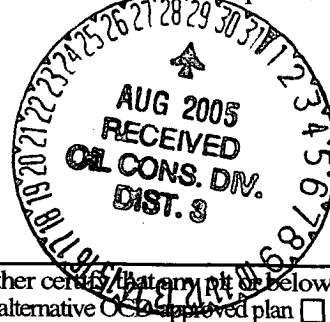
|   |  |
|---|--|
| I 1. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>7040' GL   |  |
| Pit or Below-grade Tank Application <input checked="" type="checkbox"/> Closure <input type="checkbox"/>                        |  |
| Pit type Drill Depth to Groundwater 70' Distance from nearest fresh water well > 1 mile Distance from nearest surface water 50' |  |
| Liner Thickness: mil  | Below-Grade Tank: Volume bbls; Construction Material |

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

|  |   |  |  |
|--|---|--|--|
| <b>NOTICE OF INTENTION TO:</b>                 |   | <b>SUBSEQUENT REPORT OF:</b>                     |  |
| 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 I 1 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 the Nov. 1, 2004 Guidelines. 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 OCS approved plan ☐

SIGNATURE Vicki Westby

TITLE Staff Agent

DATE 5/6/2005

Type or print name  
For State Use Only

E-mail address:

Telephone No.

APPROVED BY:

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 3

DATE

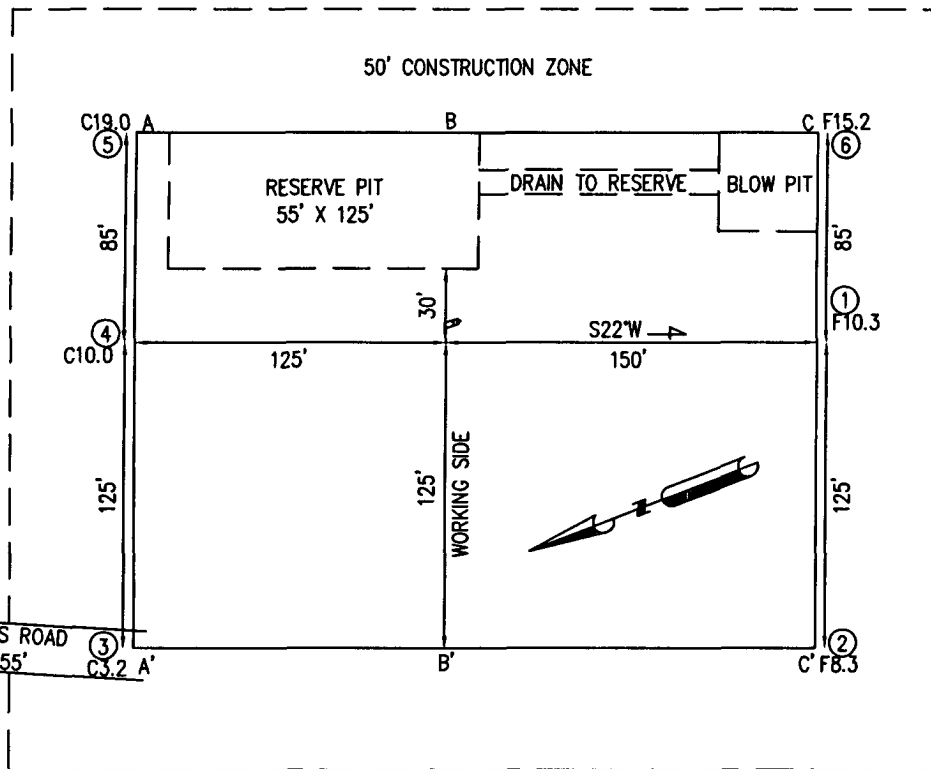
AUG 29 2005

Conditions of Approval (if any):

Vulnerable area

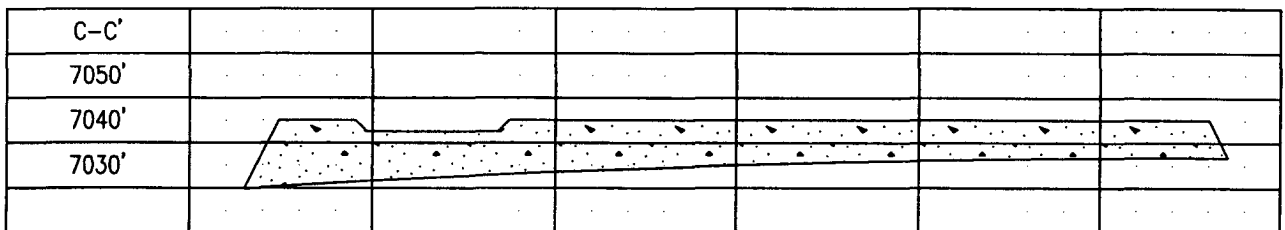
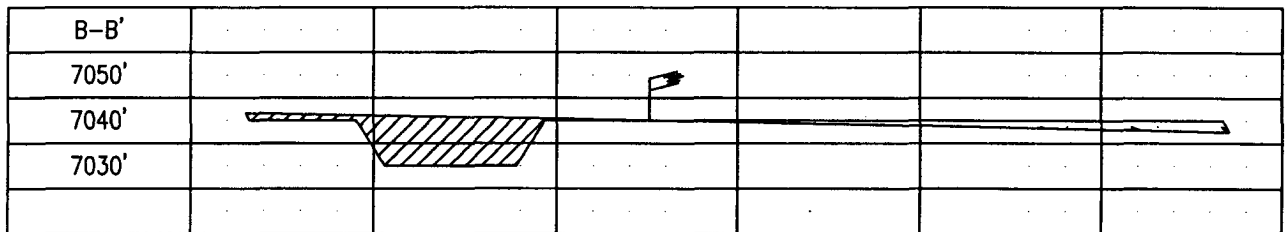
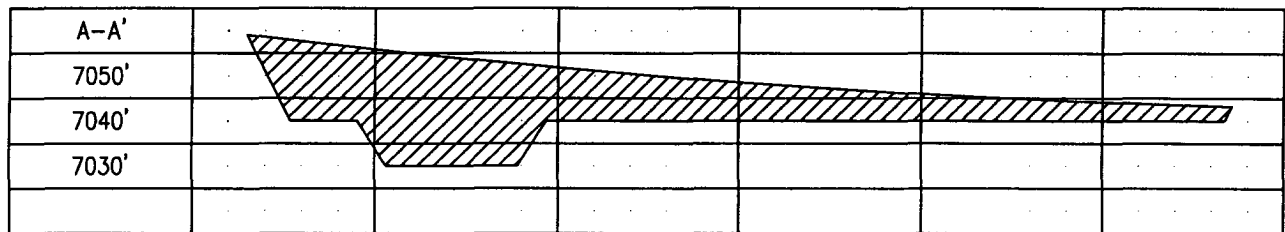
CONOCOPHILLIPS COMPANY SAN JUAN 32-8 UNIT #267  
 61' FNL & 391' FEL, SECTION 23, T32N, R08W, NMPM  
 SAN JUAN COUNTY, NEW MEXICO ELEVATION: 7040'

LATITUDE: 36.97603° N  
 LONGITUDE: 107.63735° W  
 DATUM: NAD27



PLAT NOTE:

\*SURFACE OWNER\*  
 BLM



# PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32-8 267

|   |                            |                        |                          |                                     |  |
|---|----------------------------|------------------------|--------------------------|-------------------------------------|--|
| Lease:                                      |                            | AFE #:                 |                          | AFE \$:                             |  |
| Field Name: hPHILLIPS 32-8                  |                            | Rig:                   |                          | State: NM                           | County: SAN JUAN   |
| Geoscientist: Cloud, Tom A                  |                            | Phone: +1 832 486-2377 |                          | Prod. Engineer: Phone: 832-486-2254 |  |
| Res. Engineer: Peterson, Brad T             |                            | Phone: 486-2055        |                          | Proj. Field Lead: Phone:            |  |
| <b>Primary Objective (Zones):</b>           |                            |                        |                          |                                     |  |
| <b>Zone</b>                                 | <b>Zone Name</b>           |                        |                          |                                     |  |
| JCV   | BASIN FRUITLAND COAL (GAS) |                        |                          |                                     |  |
| <b>Location: Surface</b>                    |                            |                        |                          |                                     |  |
| <b>Straight Hole</b>                        |                            |                        |                          |                                     |  |
| Latitude: 36.98                             | Longitude: -107.64         | X:                     | Y:                       | Section: 23                         | Range: 8W  |
| Footage X: 391 FEL                          | Footage Y: 61 FNL          | Elevation: 7040        | (FT)                     | Township: 32N                       |  |
| Tolerance:                                  |                            |                        |                          |                                     |  |
| Location Type:                              |                            | Start Date (Est.):     |                          | Completion Date:                    |  |
|   |                            |                        |                          | Date In Operation:                  |  |
| Formation Data: Assume KB = 7053 Units = FT |                            |                        |                          |                                     |  |
| Formation Call & Casing Points              | Depth (TVD in Ft)          | SS (Ft)                | Depletion (Yes/No)       | BHP (PSIG)                          | BHT  |
| SAN JOSE                                    | 13                         | 7040                   | <input type="checkbox"/> |                                     |  |
| Surface Casing                              | 213                        | 6840                   | <input type="checkbox"/> |                                     | 12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.                       |
| NCMT  | 1233                       | 5820                   | <input type="checkbox"/> |                                     |  |
| OJAM  | 2778                       | 4275                   | <input type="checkbox"/> |                                     | Possible water flows.  |
| KRLD  | 2903                       | 4150                   | <input type="checkbox"/> |                                     |  |
| FRLD  | 3483                       | 3570                   | <input type="checkbox"/> |                                     | Possible gas.  |
| Intermediate Casing                         | 3533                       | 3520                   | <input type="checkbox"/> |                                     | 8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.                            |
| TOP COAL                                    | 3563                       | 3490                   | <input type="checkbox"/> |                                     |  |
| BASE MAIN COAL                              | 3723                       | 3330                   | <input type="checkbox"/> | 1250                                |  |
| PC TONGUE                                   | 3733                       | 3320                   | <input type="checkbox"/> |                                     |  |
| BASE LOWEST COAL                            | 3903                       | 3150                   | <input type="checkbox"/> |                                     |  |
| PCCF  | 3911                       | 3142                   | <input type="checkbox"/> |                                     |  |
| Total Depth                                 | 3983                       | 3070                   | <input type="checkbox"/> |                                     | 6-1/4" hole possibly underreamed to 9.5". Optional Liner: 5.5", 15.5#, J-55 LTC - left uncemented. |
| <b>Reference Wells:</b>                     |                            |                        |                          |                                     |  |
| Reference Type                              | Well Name                  | Comments               |                          |                                     |  |
| Intermediate                                | COP 32-8 #259A             |                        |                          |                                     |  |
| Intermediate                                | NWPL 32-8 #41              |                        |                          |                                     |  |
| Intermediate                                | NWPL 32-8 #37              |                        |                          |                                     |  |
| Intermediate                                | Southland Wilmer Canyon #3 |                        |                          |                                     |  |

# PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32-8 267

| <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 type="checkbox"/> VSP <input type="checkbox"/> TDT |       |           |         |                |         |
| TD includes 80 feet sump/rathole & COPC will comply with   |       |           |         |                |         |
| Additional Information: the BLM's Conditions of Approval for the proposed sump/rathole in this non-producing Pictured Cliffs formation   |       |           |         |                |         |
| Log Type   | Stage | From (Ft) | To (Ft) | Tool Type/Name | Remarks |

Comments: Zones - No PCCF PA or gas pool.

Obtain mudlog from intermediate casing to TD.

This is a NSL.

**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

**San Juan 32-8 # 267**  
**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              | 230'   |                            |
| Cement Yield            | 1.21   | cuft/sk                    |
| Cement Density          | 15.6   | lb/gal                     |
| Excess Cement           | 125    | %                          |
| Cement Required         | 141    | sx                         |

SHOE 230 ', 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              | 3533' |                            |
| Lead Cement Yield       | 2.91  | cuft/sk                    |
| Lead Cement Density     | 11.5  | lb/gal                     |
| Lead Cement Excess      | 160   | %                          |
| Tail Cement Length      | 315'  |                            |
| Tail Cement Yield       | 1.33  | cuft/sk                    |
| Tail Cement Density     | 13.5  | lb/gal                     |
| Tail Cement Excess      | 160   | %                          |
| Lead Cement Required    | 415   | sx                         |
| Tail Cement Required    | 100   | sx                         |

LINER TOP 3513 '

SHOE 3533 ', 7 ", 20 ppf, J-55

LINER BOTTOM 3983' (Uncemented)

**SAN JUAN 32-8 #267**
**HALLIBURTON OPTION**

| 9-5/8 Surface Casing |                       |         |
|----------------------|-----------------------|---------|
| Cement Recipe        | Standard Cement       |         |
|                      | + 3% Calcium Chloride |         |
|                      | + 0.25 lb/sx Flocele  |         |
| Cement Volume        | 141                   | sx      |
| Cement Yield         | 1.21                  | cuft/sx |
| Slurry Volume        | 170.7                 | cuft    |
|                      | 30.4                  | bbls    |
| Cement Density       | 15.6                  | ppg     |
| Water Required       | 5.29                  | gal/sx  |

| 7" Intermediate Casing |  |         |
|------------------------|--|---------|
| Lead Slurry            |  |         |
| Cement Recipe          | Standard Cement                            |         |
|                        | + 3% Econolite (Lost Circulation Additive) |         |
|                        | + 10 lb/sx Gilsonite (Lost Circ. Additive) |         |
|                        | + 0.25 lb/sx Flocele (Lost Circ. Additive) |         |
| Cement Required        | 415  | sx      |
| Cement Yield           | 2.91                                       | cuft/sx |
| Slurry Volume          | 1206.2                                     | cuft    |
|                        | 214.8                                      | bbls    |
| Cement Density         | 11.5                                       | ppg     |
| Water Required         | 16.88                                      | gal/sx  |

| 7" Intermediate Casing |   |         |
|------------------------|---|---------|
| Tail Slurry            |   |         |
| Cement Slurry          | 50 / 50 POZ:Standard Cement                 |         |
|                        | + 2% Bentonite (Light Weight Additive)      |         |
|                        | + 5 lbm/sk Gilsonite (Lost Circ. Additive)  |         |
|                        | + 0.25 lbm/sk Flocele (lost Circ. Additive) |         |
|                        | + 2% Calcium Chloride (Accelerator)         |         |
| Cement Required        | 100   | sx      |
| Cement Yield           | 1.33  | cuft/sx |
| Slurry Volume          | 132.7                                       | cuft    |
|                        | 23.6  | bbls    |
| Cement Density         | 13.5  | ppg     |
| Water Required         | 5.36  | gal/sx  |

**SCHLUMBERGER OPTION**

| 9-5/8 Surface Casing |                                     |         |
|----------------------|-------------------------------------|---------|
| Cement Recipe        | Class G Cement                      |         |
|                      | + 3% S001 Calcium Chloride          |         |
|                      | + 0.25 lb/sx D029 Cellophane Flakes |         |
| Cement Volume        | 147                                 | sx      |
| Cement Yield         | 1.16                                | cuft/sx |
| Slurry Volume        | 170.7                               | cuft    |
|                      | 30.4                                | bbls    |
| Cement Density       | 15.8                                | ppg     |
| Water Required       | 4.983                               | gal/sx  |

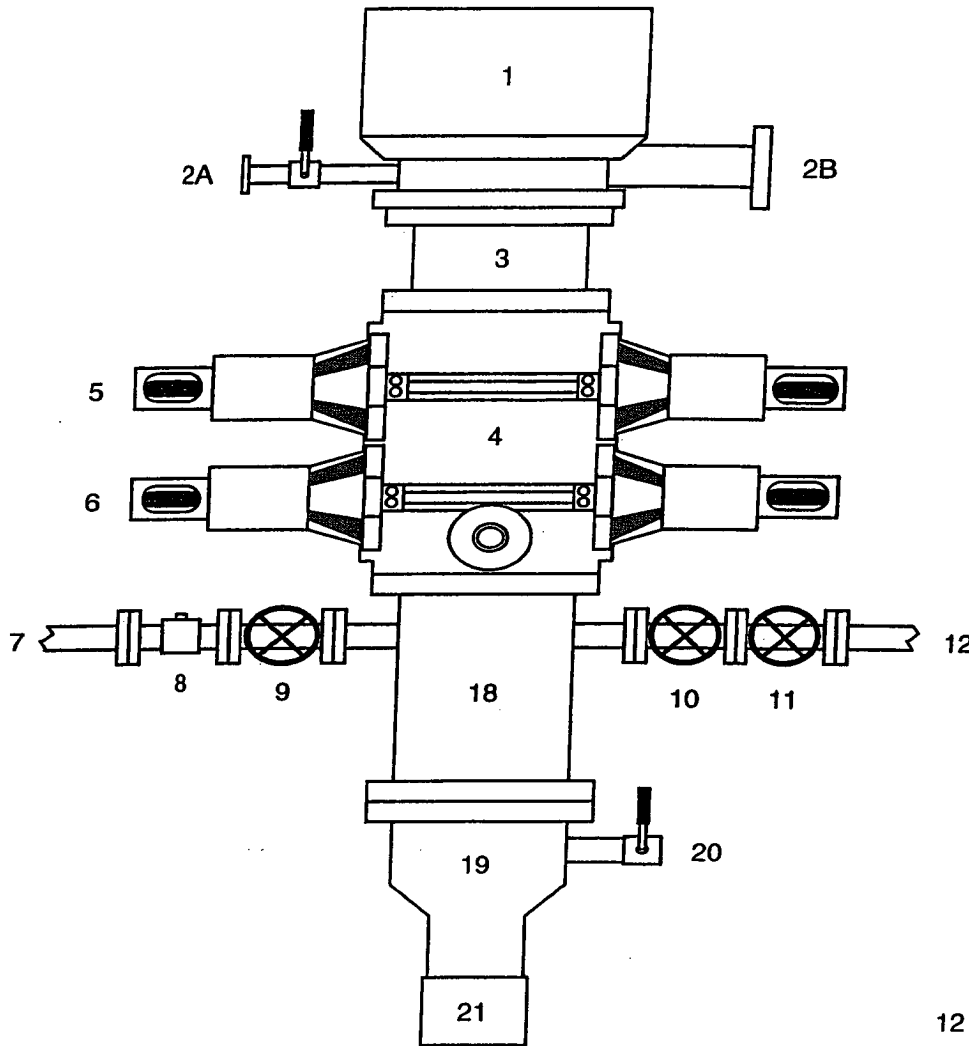
| 7" Intermediate Casing |                                     |         |
|------------------------|-------------------------------------|---------|
| Lead Slurry            |                                     |         |
| Cement Recipe          | Class G Cement                      |         |
|                        | + 3% D079 Extender                  |         |
|                        | + 0.25 lb/sx D029 Cellophane Flakes |         |
|                        | + 0.2% D046 Antifoam                |         |
| Cement Required        | 464                                 | sx      |
| Cement Yield           | 2.61                                | cuft/sx |
| Slurry Volume          | 1212.1                              | cuft    |
|                        | 215.9                               | bbls    |
| Cement Density         | 11.7                                | ppg     |
| Water Required         | 15.876                              | gal/sx  |

| 7" Intermediate Casing |                                     |         |
|------------------------|-------------------------------------|---------|
| Tail Slurry            |                                     |         |
| Cement Slurry          | 50 / 50 POZ : Class G Cement        |         |
|                        | + 2% D020 Bentonite                 |         |
|                        | + 5 lb/sx D024 Gilsonite extender   |         |
|                        | + 0.25 lb/sx D029 Cellophane Flakes |         |
|                        | + 2% S001 Calcium Chloride          |         |
|                        | + 0.2% D046 Antifoam                |         |
| Cement Required        | 100                                 | sx      |
| Cement Yield           | 1.27                                | cuft/sx |
| Slurry Volume          | 126.9                               | cuft    |
|                        | 22.6                                | bbls    |
| Cement Density         | 13.5                                | ppg     |
| Water Required         | 5.182                               | gal/sx  |

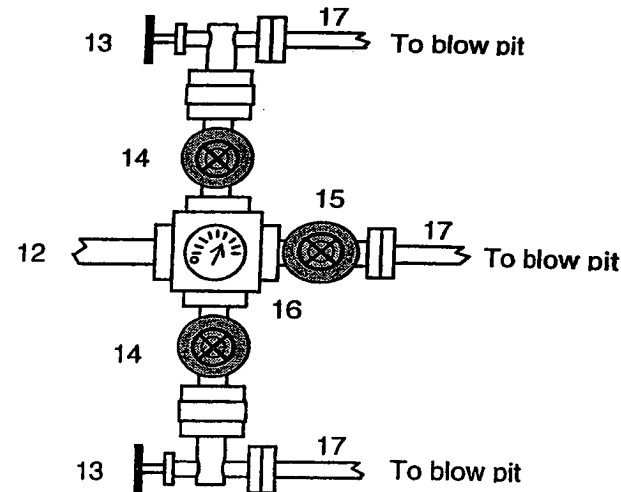


# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

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



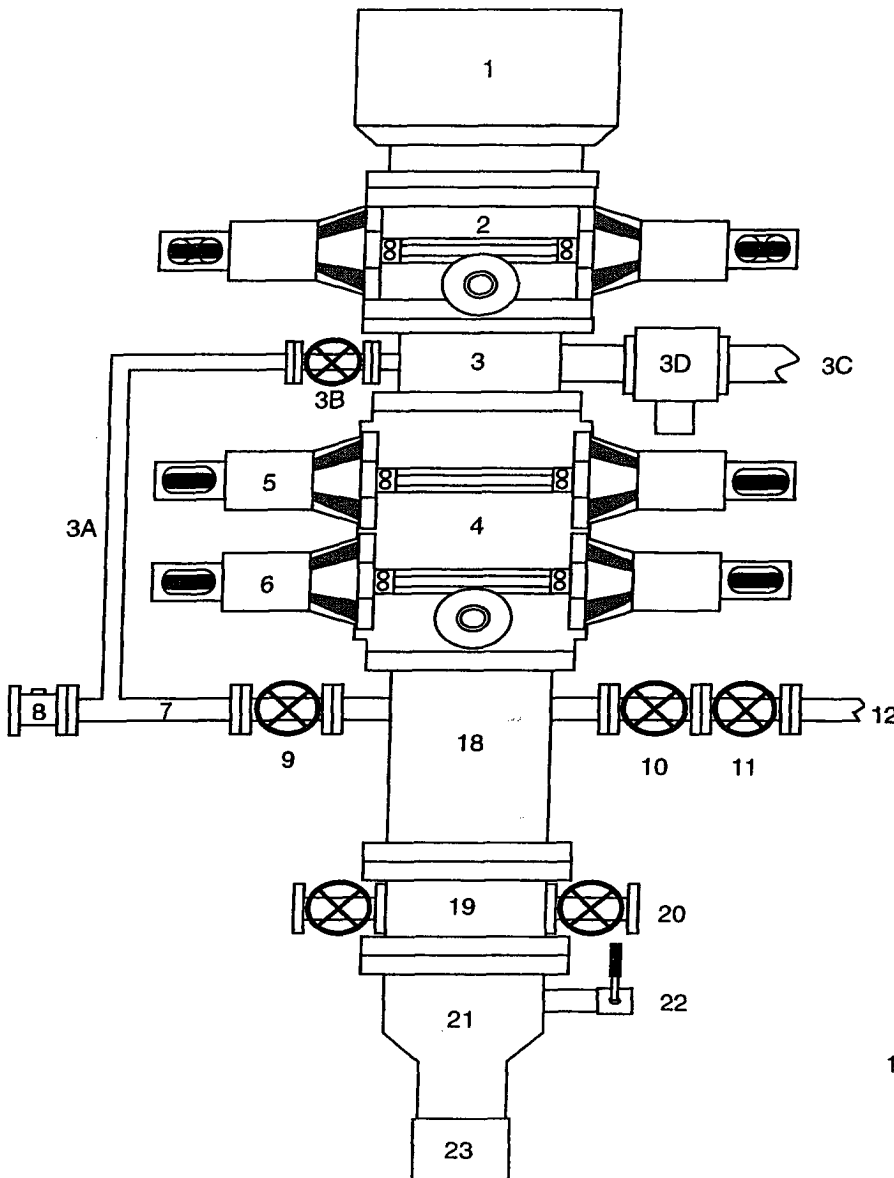
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

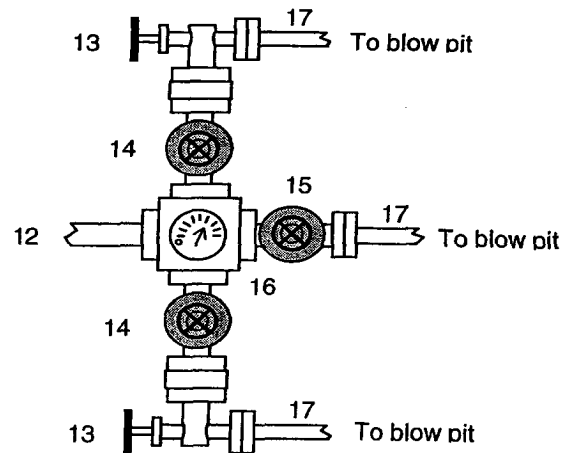
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

## For Cavitation Program



1. Stripping Head
2. Single Ram BOP (7-1/16", 3M)
3. Mud Cross
- 3A. Equalizing Line (2")
- 3B. Wing Valve (2-1/16", 3M)
- 3C. Bloopie Line (2 ea, 5" OD)
- 3D. HCR Valve (1 ea per line, 4-1/16")
4. Double Ram BOP (7-1/16", 3M)
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. Vent Line (2")
18. Spacer Spool
19. Tubing Head
20. Tubing Head Valves (2- 9/16")
21. Casing Head "A" Section
22. Casing Head "A" Section 2" Valve
23. 9-5/8" Casing Collar



This BOP arrangement and test program is for the cavitation program. The BOP will be installed on the tubing head. 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. The pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 1800 psi (high pressure test) for 10 minutes - This test will be done with a test plug or possibly without a test plug (ie against casing). If we conduct this test without a test plug we will ensure that we have sufficient drillstring weight in the hole to exceed the upward force generated by the test.

We use a power swivel and air/mist to drill the 6-1/4" hole in our cavitation program. We do not use a kelly. In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. String floats will be used inside the drillpipe
2. Stab-in TIW valve for all drillstrings in use
3. Each bloopie line is equipped with a hydraulically controlled valve (HCR valve).

Property : San Juan 32-8 Unit Well #: 267

**Surface Location:**

Unit: A Section: 23 Township: 32N Range: 8W

County: San Juan State: New Mexico

Footage: 61 from the North line, 391 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.