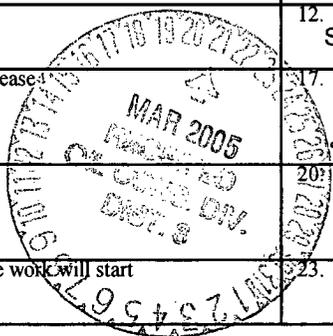


UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

|  |   |   |
|--|---|---|
| 1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER   |   | 5. Lease Serial No.<br>SF-078687  |
| 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 checked="" type="checkbox"/> Multiple Zone |   | 6. If Indian, Allottee or Tribe Name  |
| 2. Name of Operator<br>CONOCOPHILLIPS COMPANY  |   | 7. If Unit or CA Agreement, Name and No.                                      |
| Contact: VICKI WESTBY<br>E-Mail: Vicki.R.Westby@conocophillips.com   |   | 8. Lease Name and Well No.<br>SAN JUAN 32 FED 15 #1A                          |
| 3a. Address<br>4001 PENBROOK<br>ODESSA, TX 79762   | 3b. Phone No. (include area code)<br>Ph: 915.368.1352 | 9. API Well No.<br>30-045-32850   |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *)<br>At surface NESE 2434FSL 120FEL<br>At proposed prod. zone NESE 2434FSL 120FEL   |   | 10. Field and Pool, or Exploratory<br>BASIN FRUITLAND COAL                    |
| 14. Distance in miles and direction from nearest town or post office*  |   | 11. Sec., T., R., M., or Blk. and Survey or Area<br>I Sec 15 T32N R9W Mer NMP |
| 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<br>1305.00                  | 12. County or Parish<br>SAN JUAN ✓  |
| 18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.  | 19. Proposed Depth<br>3718 MD                         | 13. State<br>NM   |
| 21. Elevations (Show whether DF, KB, RT, GL, etc.)<br>6850 GL  | 22. Approximate date work will start                  | 17. Spacing Unit dedicated to this well<br>317655 E/L                         |
| 23. Estimated duration   |   | 20. BLM/BIA Bond No. on file  |



24. Attachments

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

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

|   |   |                    |
|---|---|--------------------|
| 25. Signature<br>(Electronic Submission)      | Name (Printed/Typed)<br>VICKI WESTBY Ph: 915.368.1352 | Date<br>01/24/2005 |
| Title<br>AGENT                                |   |                    |
| Approved by (Signature)<br><i>[Signature]</i> | Name (Printed/Typed)                                  | Date<br>3-17-05    |
| Title<br>AFM                                  | Office<br>FFO   |                    |

Application approval does not warrant or certify 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.

Additional Operator Remarks (see next page)

HOLD C104 FOR WSL

Electronic Submission #53317 verified by the BLM Well Information System  
For CONOCOPHILLIPS COMPANY, sent to the Farmington

✓ 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".

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

NMOC D

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

AMMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|   |   |  |
|---|---|--|
| <sup>1</sup> API Number<br>30-045-32850 | <sup>2</sup> Pool Code<br>71629                                 | <sup>3</sup> Pool Name<br>BASIN FRUITLAND COAL (GAS) |
| <sup>4</sup> Property Code<br>31354     | <sup>5</sup> Property Name<br>SAN JUAN 32 FED <sup>ent</sup> 15 | <sup>6</sup> Well Number<br>#1A                      |
| <sup>7</sup> OGRID No.<br>217817        | <sup>8</sup> Operator Name<br>CONOCOPHILLIPS COMPANY            | <sup>9</sup> Elevation<br>6850                       |

<sup>10</sup>Surface Location

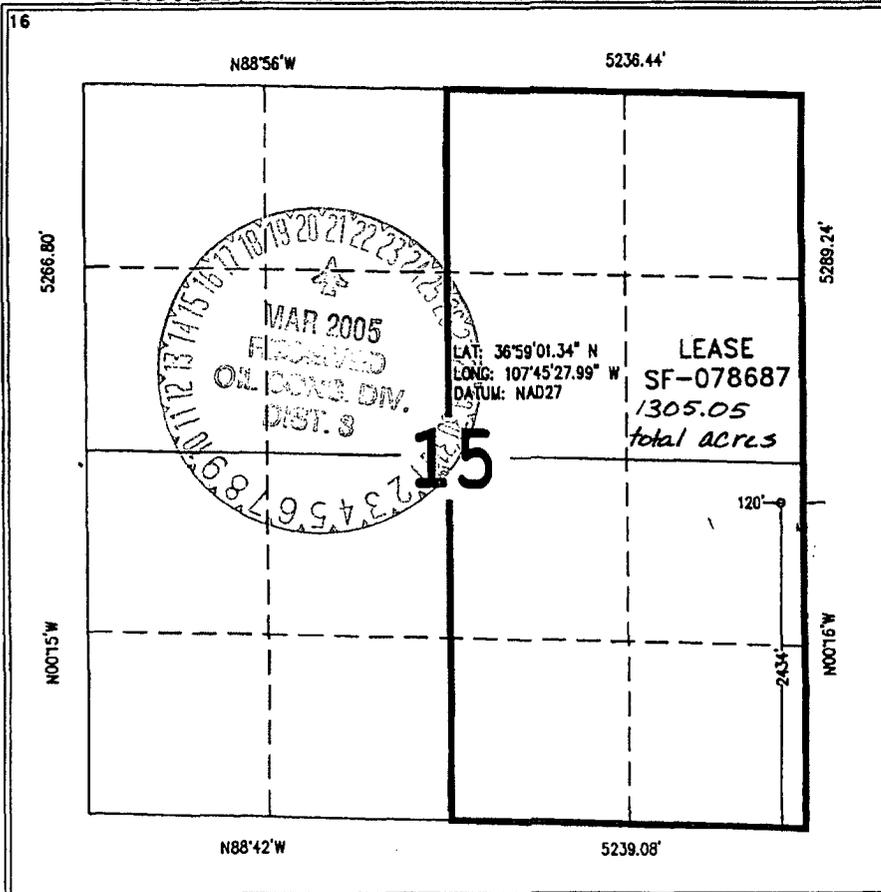
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the North/South line | Feet from the East/West line | County   |
|---------------|---------|----------|-------|---------|--------------------------------|------------------------------|----------|
| 1             | 15      | 32N      | 09W   |         | 2434                           | SOUTH 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<br>317.55 | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|---|-------------------------------|----------------------------------|-------------------------|

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<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.

*Vicki Westby (nj)*  
 Signature  
 Vicki Westby  
 Printed Name  
 Staff Agent  
 Title and E-mail Address  
 1/18/05  
 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.

Date of Survey: 10/18/04  
 Signature and Seal: *Henry P. Broadhurst*  
  
 Certificate Number: NM 11393

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 FED                                  |
| 4. Well Location<br>Unit Letter I 2434 feet from the South line and 120 feet from the East line<br>Section 15 Township 32N Range 9W NMPM SAN JUAN County  |  | 8. Well Number<br>15 # 1A  |
|   |  | 9. OGRID Number<br>217817  |
|   |  | 10. Pool name or Wildcat<br>Basin Fruitland Coal   |

|   |  |
|---|--|
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>6850 GL   |  |
| Pit or Below-grade Tank Application <input checked="" type="checkbox"/> Closure <input type="checkbox"/>                          |  |
| Pit type DRILL Depth to Groundwater 80' Distance from nearest fresh water well >1 MILE Distance from nearest surface water 0-100' |  |
| 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><br>PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/><br>TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/><br>PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/><br>OTHER: <input type="checkbox"/> |  | <b>SUBSEQUENT REPORT OF:</b><br>REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/><br>COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/><br>CASING/CEMENT JOB <input type="checkbox"/><br>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 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 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. The solids left after the water has been disposed of will be sampled and NMOCD approval will be obtained prior to closure of this pit.

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

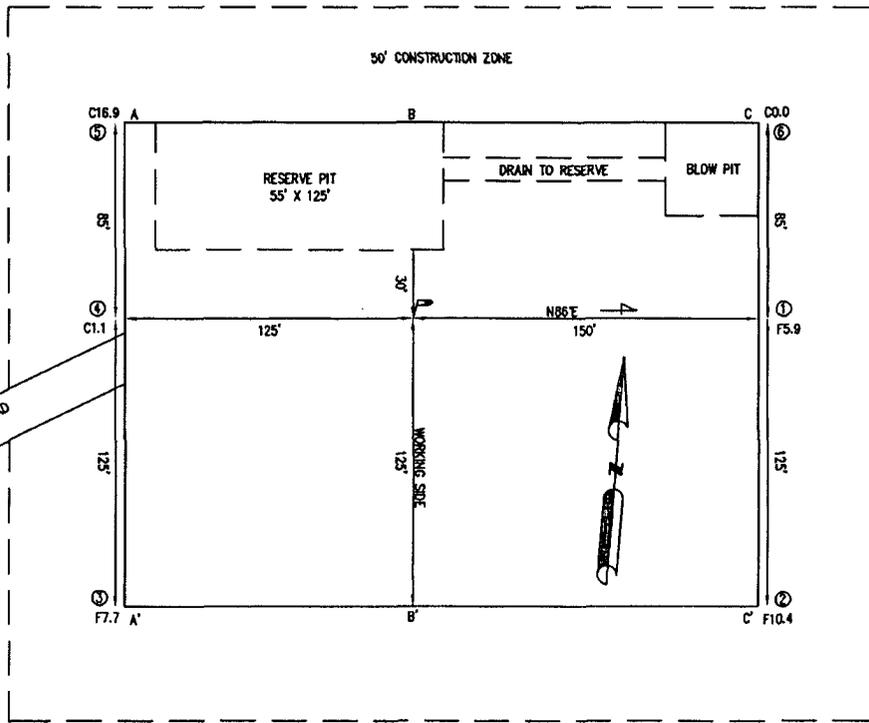
SIGNATURE Vicki Westby TITLE Staff Agent DATE 1/18/05

Type or print name For State Use Only E-mail address: Telephone No.

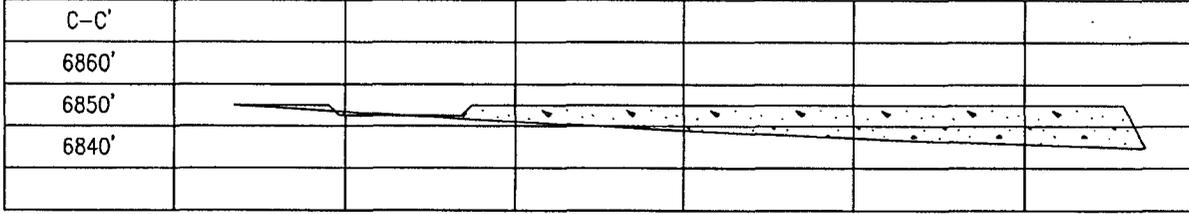
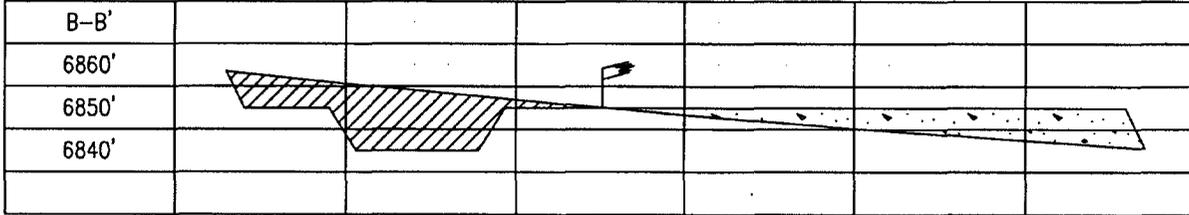
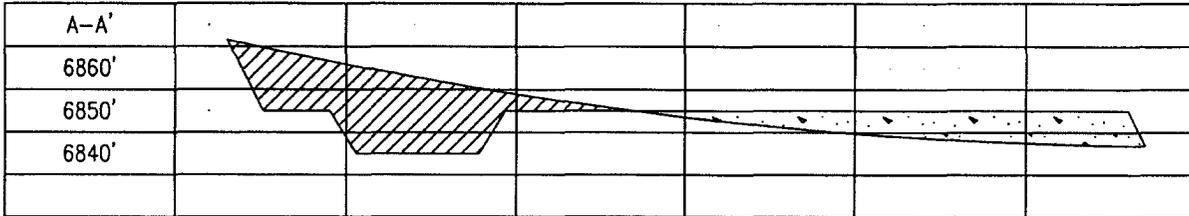
APPROVED BY:  TITLE DEPUTY OIL & GAS INSPECTOR, DIST. # DATE MAR 21 2005  
 Conditions of Approval (if any):

CONOCOPHILLIPS COMPANY SAN JUAN 32 FED 15 #1A  
 2434' FSL & 120' FEL, SECTION 15, T32N, R09W, NMPM  
 SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6850'

LATITUDE: 36°59'01.34" N  
 LONGITUDE: 107°45'27.99" W  
 DATUM: NAD27



PLAT NOTE:  
 \*SURFACE OWNER\*  
 BLM





# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32 FED 15 1A

|                                 |  |                        |  |                                     |                  |
|---------------------------------|--|------------------------|--|-------------------------------------|------------------|
| Lease:                          |  | AFE #:                 |  | AFE \$:                             |                  |
| Field Name: CBM DRILL BLOCKS    |  | 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:            |                  |

**Primary Objective (Zones):**

| Zone | Zone Name                  |
|------|----------------------------|
| JCV  | BASIN FRUITLAND COAL (GAS) |

|                          |                     |                 |      |                      |           |
|--------------------------|---------------------|-----------------|------|----------------------|-----------|
| <b>Location: Surface</b> |                     |                 |      | <b>Straight Hole</b> |           |
| Latitude: 36.98          | Longitude: -107.76  | X:              | Y:   | Section: 15          | Range: 9W |
| Footage X: 120 FEL       | Footage Y: 2434 FSL | Elevation: 6850 | (FT) | Township: 32N        |           |

|   |                    |                  |                    |
|---|--------------------|------------------|--------------------|
| Tolerance:                                  |                    |                  |                    |
| Location Type:                              | Start Date (Est.): | Completion Date: | Date In Operation: |
| Formation Data: Assume KB = 6863 Units = FT |                    |                  |                    |

| Formation Call & Casing Points | Depth (TVD in Ft) | SS (Ft) | Depletion (Yes/No)       | BHP (PSIG) | BHT | Remarks  |
|--------------------------------|-------------------|---------|--------------------------|------------|-----|--|
| SAN JOSE                       | 13                | 6850    | <input type="checkbox"/> |            |     |  |
| Surface Casing                 | 213               | 6650    | <input type="checkbox"/> |            |     | 12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.                       |
| NCMT                           | 963               | 5900    | <input type="checkbox"/> |            |     |  |
| OJAM                           | 2213              | 4650    | <input type="checkbox"/> |            |     | Possible water flows.  |
| KRLD                           | 2293              | 4570    | <input type="checkbox"/> |            |     |  |
| FRLD                           | 3313              | 3550    | <input type="checkbox"/> |            |     | Possible gas.  |
| Intermediate Casing            | 3343              | 3520    | <input type="checkbox"/> |            |     | 8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.                            |
| TOP COAL                       | 3363              | 3500    | <input type="checkbox"/> |            |     |  |
| BASE MAIN COAL                 | 3513              | 3350    | <input type="checkbox"/> | 900        |     |  |
| PC TONGUE                      | 3563              | 3300    | <input type="checkbox"/> |            |     |  |
| BASE LOWEST COAL               | 3638              | 3225    | <input type="checkbox"/> |            |     |  |
| PCCF                           | 3643              | 3220    | <input type="checkbox"/> |            |     |  |
| Total Depth                    | 3718              | 3145    | <input type="checkbox"/> |            |     | 6-1/4" hole possibly underreamed to 9.5". Optional Liner: 5.5", 15.5#, J-55 LTC - left uncemented. |

**Reference Wells:**

| Reference Type | Well Name            | Comments |
|----------------|----------------------|----------|
| Intermediate   | EPNG SJ 32-9 #66     |          |
| Intermediate   | Pacific NW SJ #54-14 |          |



San Juan Business Unit

# PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32 FED 15 1A

| <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 |       |           |         |                |         |
| Additional Information: TD includes 80 feet sump/rathole & COPC will comply with 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: General/Work Description - Non-standard location.

Mud Log from intermediate casing shoe to TD will be obtained.

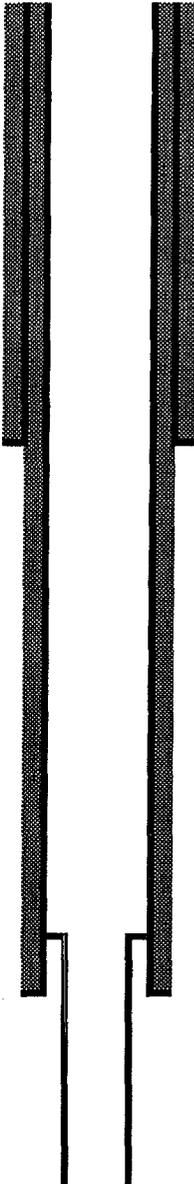
**Drilling Mud Program:**

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

**San Juan 32 Fed 15 # 1A**



**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                    |
| Excess Cement           | 125%       |                            |
| <b>Cement Required</b>  | <b>147</b> | <b>sx</b>                  |

**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                  | 3343'       |                            |
| Lead Cement Yield           | 2.91        | cuft/sk                    |
| Lead Cement Excess          | 160%        |                            |
| <b>Tail Cement Length</b>   | <b>315'</b> |                            |
| Tail Cement Yield           | 1.33        | cuft/sk                    |
| Tail Cement Excess          | 160%        |                            |
| <b>Lead Cement Required</b> | <b>389</b>  | <b>sx</b>                  |
| <b>Tail Cement Required</b> | <b>100</b>  | <b>sx</b>                  |

**LINER TOP                      3323 '                      '**

**SHOE      3343 ' , 7 " , 20 ppf, J-55**

**LINER BOTTOM      3718 ' (Uncemented)**

**SAN JUAN 32 FED 15 #1A**

**OPTION 1**

| 9-5/8 Surface Casing |                         |         |
|----------------------|-------------------------|---------|
| Cement Recipe        | Class C Standard Cement |         |
|                      | + 3% Calcium Chloride   |         |
|                      | +0.25 lb/sx Flocele     |         |
| Cement Volume        | 147                     | sx      |
| Cement Yield         | 1.21                    | cuft/sx |
| Slurry Volume        | 179.8                   | cuft    |
|                      | 32.0                    | 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        | 389  | sx      |
| Cement Yield           | 2.91                                       | cuft/sx |
| Slurry Volume          | 132.7                                      | cuft    |
|                        | 201.7                                      | 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  |

**OPTION 2**

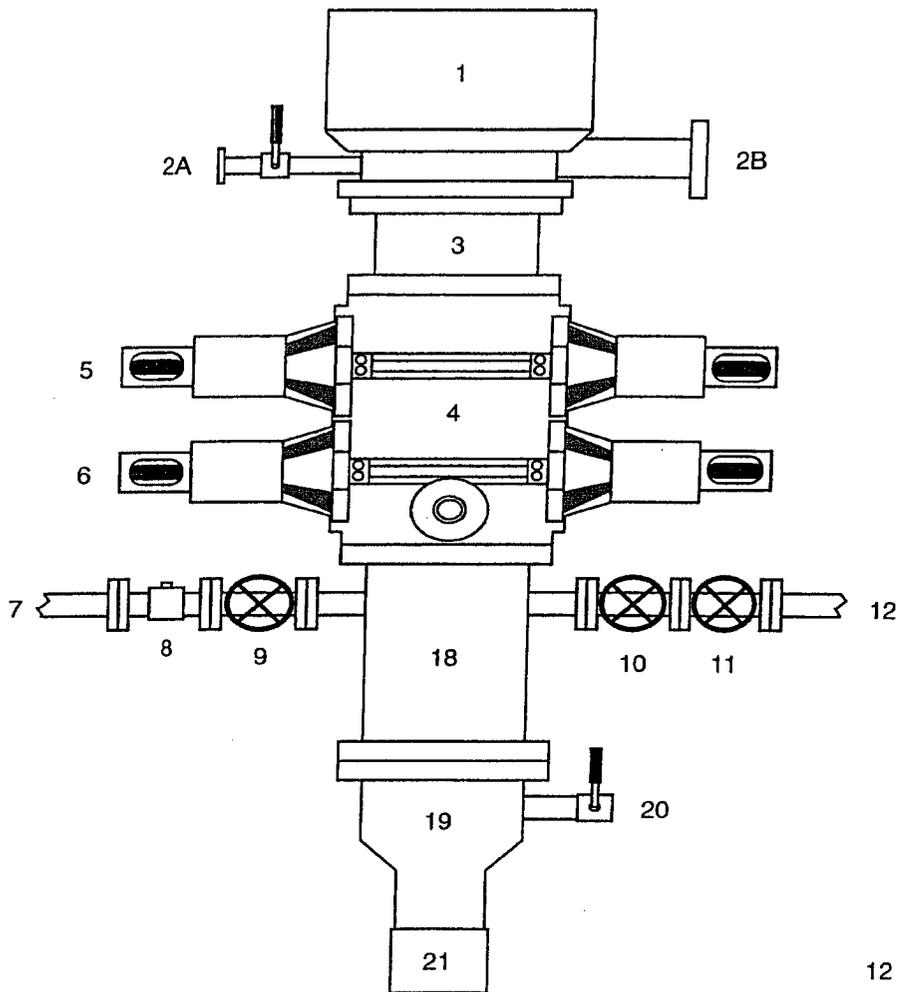
| 9-5/8" Surface Casing |                                     |         |
|-----------------------|-------------------------------------|---------|
| Cement Slurry         | Class G                             |         |
|                       | + 2% S001 Calcium Chloride          |         |
|                       | + 0.25 lb/sx D029 Cellophane Flakes |         |
| Cement Volume         | 147                                 | sx      |
| Cement Yield          | 1.16                                | cuft/sx |
| Cement Volume         | 170.59                              | cuft    |
| Cement Density        | 15.8                                | ppg     |
| Water Required        | 4.983                               | gal/sx  |

| 7" Intermediate Casing |                                     |         |
|------------------------|-------------------------------------|---------|
| Lead Slurry            |                                     |         |
| Cement Slurry          | Class G                             |         |
|                        | + 3% D079 Extender                  |         |
|                        | + 0.25 lb/sx D029 Cellophane Flakes |         |
|                        | + 0.2% D046 Antifoam                |         |
| Cement Volume          | 437                                 | sx      |
| Cement Yield           | 2.61                                | cuft/sx |
| Cement Volume          | 1139.57                             | cuft    |
| Cement Density         | 11.7                                | ppg     |
| Water Required         | 15.876                              | gal/sx  |

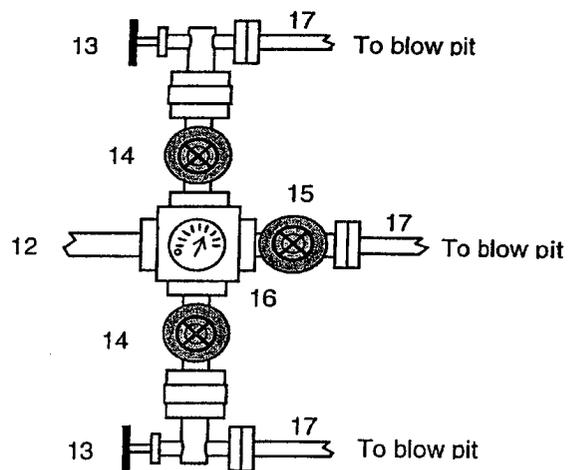
| 7" Intermediate Casing |                                     |         |
|------------------------|-------------------------------------|---------|
| Tail Slurry            |                                     |         |
| Cement Slurry          | 50% POZ / 50% Class G cement        |         |
|                        | + 2% D020 Bentonite                 |         |
|                        | + 2% S001 Calcium Chloride          |         |
|                        | + 0.25 lb/sx D029 Cellophane Flakes |         |
|                        | + 5 lb/sx Gilsonite Extender        |         |
|                        | + 0.2% D046 Antifoam                |         |
|                        | Cement Volume                       | 100     |
| Cement Yield           | 1.27                                | cuft/sx |
| Cement Volume          | 126.80                              | cuft    |
| 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

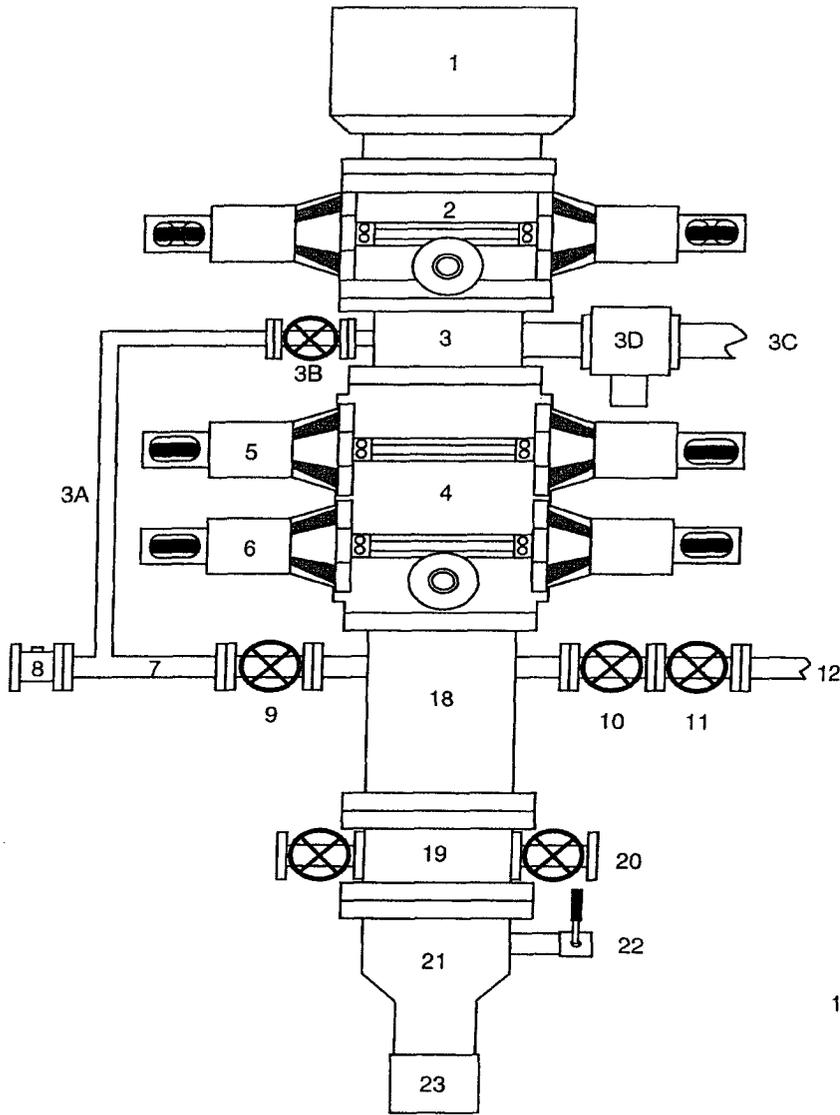


A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

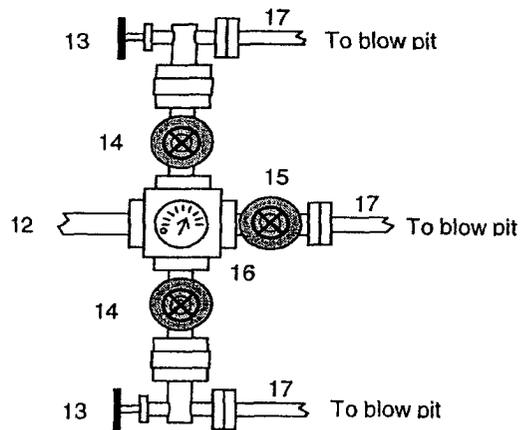
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

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. Blooie 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 blooie line is equipped with a hydraulically controlled valve (HCR valve).

**Property :** SAN JUAN 32 FED **Well #:** 15 # 1A

**Surface Location:**

**Unit:** 1 **Section:** 15 **Township:** 32N **Range:** 9W

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

**Footage:** 2434 **from the** South **line,** 120 **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.