Form 316J-3 (August 1999)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

Lease Serial No.

| politic of bird variables.   | SF- <del>078977</del> -07 <i>89</i> 97   |                    |  |
|--|--|--------------------|--|
| APPLICATION FOR PERMIT TO DRILL OR REENTER   | 6. If Indian, Allottee or Tribe No   | ame                |  |
| Ia. Type of Work: ☑ DRILL ☐ REENTER  | 7. If Unit or CA Agreement, Na   | me and No.         |  |
| 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone  | 8. Lease Name and Well No.<br>SAN JUAN 30-5 UNIT 243   | Α                  |  |
| Name of Operator Contact: VICKI WESTBY     CONOCOPHILLIPS COMPANY E-Mail: Vicki.R.Westby@conocophillips.com  |  | 805                |  |
| 3a. Address 4001 PENBROOK, SUITE 346 ODESSA, TX 79762  3b. Phone No. (include area code) Ph: 915.368.1352  | 10. Field and Pool, or Explorate BASIN FRUITLAND CC  |                    |  |
| 4. Location of Well (Report location clearly and in accordance with any State requirements)  | 11. Sec., T., R., M., or Blk. and  | Survey or Area     |  |
| At surface SWSE 900FSL 1500FEL At proposed prod. zone  | Sec 15 T30N R5W Mer  | NMP                |  |
| 14. Distance in miles and direction from nearest town or post office*  | 12. County or Parish<br>RIO ARRIBA   | 13. State<br>NM    |  |
| 15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)   | 17. Spacing Unit dedicated to the Second Sec | nis well           |  |
| 18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.  19. Proposed Depth 3410 MD  | 20. BLM/BIA Bond No. on file   |                    |  |
| 21. Elevations (Show whether DF, KB, RT, GL, etc. 22. Approximate date work will start 6590 GL   | 23. Estimated duration   |                    |  |
| 24. Attachments  |  |                    |  |
| The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to  | o this form:   |                    |  |
| 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification   | ons unless covered by an existing l  | •                  |  |
| 25. Signature (Electronic Submission)  Name (Printed/Typed) VICKI WESTBY   |  | Date<br>06/18/2004 |  |
| Title<br>AGENT   |  |                    |  |
| Approved by (Signature)  Name (Printed/Typed)  |  | Date<br>8-23 0     |  |
| Title AFM Office FFO   |  | 7                  |  |
| Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject operations thereon.  Conditions of approval, if any, are attached.  | ease which would entitle the applic  | ant to conduct     |  |
| 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 States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. | to make to any department or agence  | cy of the United   |  |

Additional Operator Remarks (see next page)

Electronic Submission #32125 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".

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

OIL CONSERVATION DIVISION 1220 South 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 Coples

CI ANNENDED REPORT

District. J.
1825 M. French Dr., Hobbs, NM 58240
District. J.
1801 W. Grund Avenue, Arlesia, NM 68215
District. JR
1000 Bio Brozos Rd., Axles, NM 67410
District N
1220 S. St. Frencis Dr., Sprin Fs, NM 87505

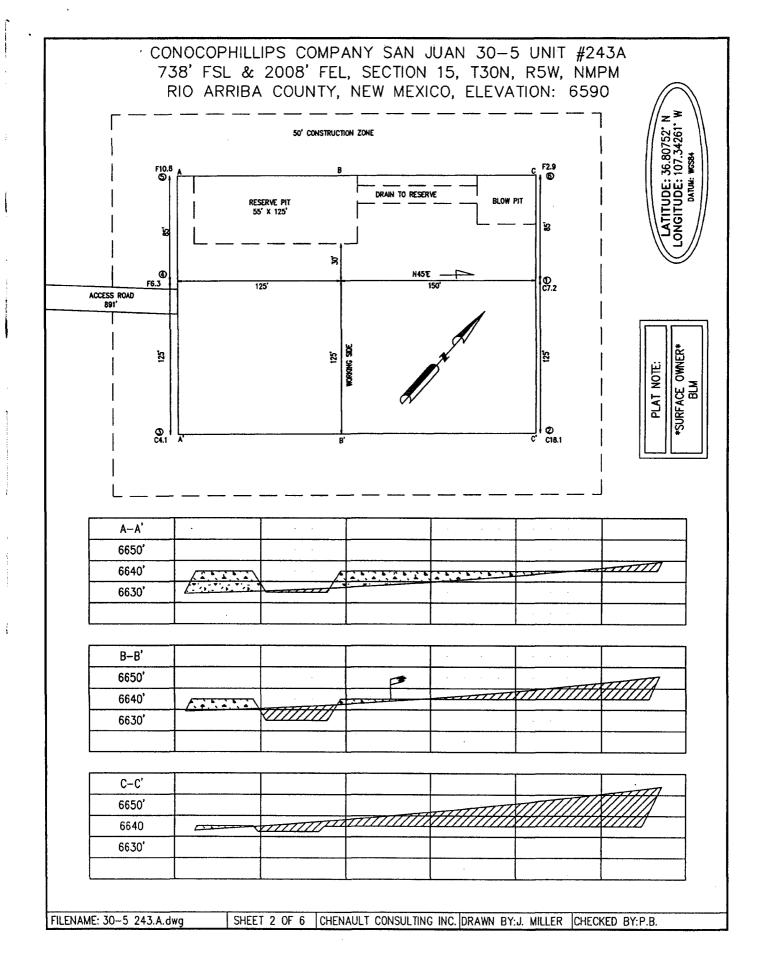
LOCATION AND ACREAGE DEDICATION PLAT BASIN FRUITLAND COAL (GAS) 71629 243A SAN JUAN 30-5 UNIT 217817 CONGCOPHILLIPS COMPANY 6590 <sup>10</sup>Surface <u>.acatlon</u> 2008 30N 5W 738 SOUTH EAST RIO ARRIBA 0 Bottom Hole Surface <u>ocation</u> UL or lot no. 320.0

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

100 OPERATOR CERTIFICATION I have been considered to be the control of the contro

and the state of t

| Office   | State of New Mexico  | roini C-103   |
|--|--|---|
| District I   | Energy, Minerals and Natural Resources   | WELL API NO.  |
| 1625 N. French Dr., Hobbs, NM 88240<br>District II   |  | WELL API NO.  |
| 1301 W. Grand Ave., Artesia, NM 88210  | OIL CONSERVATION DIVISION  | 5. Indicate Type of Lease   |
| District III   | 1220 South St. Francis Dr.   | STATE FEE   |
| 1000 Rio Brazos Rd., Aztec, NM 87410   | Santa Fe, NM 87505   | 6. State Oil & Gas Lease No.  |
| <u>District IV</u><br>1220 S. St. Francis Dr., Santa Fe, NM  | 541141 1 4, 1 1112 5 7 6 6 6   | 0. State Off & Gas Lease No.  |
| 87505  |  |   |
|  | ES AND REPORTS ON WELLS ALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  | 7. Lease Name or Unit Agreement Name  |
|  | ALS TO DRILL OR TO DEEFEN OR FLOOD BACK TO A ATTION FOR PERMIT" (FORM C-101) FOR SUCH  | G 10 20 511 '4  |
| PROPOSALS.)  | (  | San Juan 30-5 Unit  |
| 1. Type of Well:   |  | 8. Well Number  |
| Oil Well Gas Well X  | Other  | 243A  |
| 2. Name of Operator  |  | 9. OGRID Number   |
| Common Distriction Common or the Common of t |  | 217817  |
| 3. Address of Operator   |  | 10. Pool name or Wildcat  |
| 4001 Penbrook, Odessa, TX 79762  |  | Basin Fruitland Coal  |
| 4. Well Location   | *** **********************************   |   |
| ., ., ., ., ., ., ., ., ., ., ., ., ., .   |  |   |
| Unit Letter O:   | 738 feet from the South line and 2008 f  | eet from the East line  |
|  |  |   |
| Section 15   | Township 30N Range 5V  | V NMPM Rio Arriba County  |
|  | 11. Elevation (Show whether DR, RKB, RT, GR, etc.  | 2.)   |
|  | 6590' GL   |   |
| Pit or Below-grade Tank Application (For p   | it or below-grade tank closures, a form C-144 must be attach   | led)  |
| rit Location: UL O Sect 15 Twp 30N   | Rng 5W Pit type <u>Drill Pit</u> Depth to Groundwater >1   | 00' Distance from nearest fresh water well >1 000'  |
| Distance from nearest surface water >200<1   | 000' Below-grade Tank Location ULSectTv  | vn Rng : feet from the  |
|  |  | ·p,,,   |
| line andfeet from the  | une  |   |
| PULL OR ALTER CASING   | PLUG AND ABANDON   REMEDIAL WOR  CHANGE PLANS   COMMENCE DR  MULTIPLE   CASING TEST A  | RILLING OPNS. PLUG AND ABANDONMENT  |
|  | COMPLETION CEMENT JOB  |   |
| OTHER: Drill Pit Notification  | √ OTHER:   |   |
| of starting any proposed work or recompletion.   | ted operations. (Clearly state all pertinent details, and state of the | attach wellbore diagram of proposed completion  |
| conocor mines company s Generic Pa   | it Plan is on file at NMOCD in Aztec, NM. See the  | attached diagram that details the location of the   |
| it in reference to the proposed wellhe   | it Plan is on file at NMOCD in Aztec, NM. See the rad. The drill pit will be lined. The drill pit will be coosed of will be sampled and NMOCD approval will  | closed after the well has been completed. The   |
| oit in reference to the proposed wellhe colids left after the water has been disputed the beautiful that the information above the control of | ad. The drill pit will be lined. The drill pit will be a   | closed after the well has been completed. The l be obtained prior to closure of this pit.  ge and belief. I further certify that any pit or below-  |
| hereby certify that the information ab   | and. The drill pit will be lined. The drill pit will be coosed of will be sampled and NMOCD approval will be sampled and the s | closed after the well has been completed. The l be obtained prior to closure of this pit.  ge and belief. I further certify that any pit or below-  |
| oit in reference to the proposed wellhe solids left after the water has been disputed in the solids left after the water has been disputed in the solid section of the solid section in the solid sect | ad. The drill pit will be lined. The drill pit will be coosed of will be sampled and NMOCD approval will be sampled and NMOCD approval will be sampled and complete to the best of my knowled osed according to NMOCD guidelines , a general permit  | closed after the well has been completed. The l be obtained prior to closure of this pit.  ge and belief. I further certify that any pit or below- or an (attached) alternative OCD-approved plan  DATE 6/17/04                                       |
| the reference to the proposed wellhe solids left after the water has been dispended by the constructed or clear that has been/will be constructed or clear that the information above the constructed or clear that the  | and. The drill pit will be lined. The drill pit will be coosed of will be sampled and NMOCD approval will be sampled and NMOCD approval will be cover is true and complete to the best of my knowled osed according to NMOCD guidelines , a general permit   TITLE Sr. Analyst   | closed after the well has been completed. The l be obtained prior to closure of this pit.  ge and belief. I further certify that any pit or belowdor an (attached) alternative OCD-approved plan .  DATE 6/17/04                                      |
| oit in reference to the proposed wellhe solids left after the water has been disputed by the constructed or closed the constructed or closed by the constructed by the constructed or closed by the constructed by the constructed or closed by the constructed by t | and. The drill pit will be lined. The drill pit will be coosed of will be sampled and NMOCD approval will be sampled and NMOCD approval will be cover is true and complete to the best of my knowled osed according to NMOCD guidelines , a general permit   TITLE Sr. Analyst   | closed after the well has been completed. The I be obtained prior to closure of this pit.  ge and belief. I further certify that any pit or below- or an (attached) alternative OCD-approved plan   DATE 6/17/04  lips.com Telephone No. 432-368-1352 |
| oit in reference to the proposed wellhe solids left after the water has been disputed the solids left after the water has been disputed in the solid section of the solid section in the solid section | and. The drill pit will be lined. The drill pit will be coosed of will be sampled and NMOCD approval will be sampled and NMOCD approval will be cover is true and complete to the best of my knowled osed according to NMOCD guidelines , a general permit   TITLE Sr. Analyst   | closed after the well has been completed. The l be obtained prior to closure of this pit.  ge and belief. I further certify that any pit or belowdor an (attached) alternative OCD-approved plan .  DATE 6/17/04                                      |





## PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

| S | Δ | N | J | u | AN | 13 | 0-5 | 2 | 43/ | ١ |
|---|---|---|---|---|----|----|-----|---|-----|---|
|   |   |   |   |   |    |    |     |   |     |   |

| Lease:               |   |                  |         | Al              | E #:WA        | N.CBM.4    | 1192               |                               | AFE \$:                     |
|----------------------|---|------------------|---------|-----------------|---------------|------------|--------------------|-------------------------------|-----------------------------|
| Field Name: hPHILL   | IPS 30-5  |                  | Rig: 48 | 6-0597          |               |            | State:             | NM   County: RIO ARRIBA       | API #:                      |
| Geoscientist: Murph  | ny, Jim O.  |                  | Phone:  | 832-486-236     | <b>i</b>      | Prod. E    | Engineer:          |                               | Phone:                      |
| Res. Engineer: Kole  | sar, James E  | •                | Phone:  | (832) 486 - 3   | 2336          | Proj. F    | ield Lead:         |                               | Phone:                      |
| Primary Objective    | (Zones):  |                  |         |                 | u e e         |            |                    |                               |                             |
| Zone                 | Zone Name   |                  |         |                 | ]             |            |                    |                               |                             |
| JCV E                | BASIN FRUIT   | LAND COAL        | (GAS)   |                 |               |            |                    |                               |                             |
|                      |   |                  |         |                 |               |            |                    |                               |                             |
|                      |   |                  |         |                 |               |            |                    |                               |                             |
|                      |   |                  |         |                 |               |            | •                  |                               |                             |
| Location: Surface    |   |                  |         |                 |               |            |                    |                               | Straightiffele              |
| Latitude: 36.81      | Longitu   | ide: -107.34     |         | X:              | j             | <b>Y</b> : |                    | Section: 15                   | Range: 5W                   |
| Footage X: 2008 FE   | L Footag  | e Y: 738 FSL     |         | Elevation: 65   | 90            | (FT)       | Fownship:          | 30N                           |                             |
| Tolerance:           |   |                  |         |                 |               |            |                    |                               |                             |
| Location Type:       |   |                  | Start D | ate (Est.):     |               | Com        | pletion Da         | ate: Date In                  | Operation:                  |
| Formation Data: A    | \ssume KB =   | = 6603 U         | Inits = | FT              |               |            |                    |                               |                             |
| Formation Call &     |   | Depth            | SS      | Depletion       | BHP           | внт        |                    | Remarks                       |                             |
| Casing Points        |   | (TVD in Ft)      | (Ft)    | (Yes/No)        | (PSIG)        | On         |                    | Remarks                       |                             |
| SAN JOSE             |   | 13               | 6590    | Ц               |               |            | 40 4741            | 1 0 7/01/20 2 6 11 40 6       |                             |
| Surface Casing       |   | 213              | 6390    |                 |               |            | to surfac          |                               | TC casing. Circulate cement |
| OJAM                 |   | 2633             | 3970    |                 |               |            | Possible           | water flows.                  |                             |
| KRLD                 |   | 2833             | 3770    |                 |               |            |                    |                               |                             |
| FRLD                 |   | 3118             | 3485    |                 |               |            | Possible           | <del>-</del>                  |                             |
| Intermediate Casing  |   | 3188             | 3415    |                 |               |            | 8 3/4" Ho surface. | ole. 7", 20 ppf, J-55, STC Ca | sing. Circulate cement to   |
| BASE MAIN COAL       |   | 3318             | 3285    |                 | 200           |            | Juliace.           |                               |                             |
| PC TONGUE            |   | 3358             | 3245    |                 |               |            |                    |                               |                             |
| Total Depth          |   | 3410             | 3193    |                 |               |            |                    | le possibly underreamed to    | 9.5". Optional Liner: 5.5", |
| PCCF                 |   | 3508             | 3095    | П               |               |            | 15.5#, )-          | 55 LTC - left uncemented.     |                             |
| Reference Wells      |   | 3300             | 3073    | ب               |               |            |                    |                               |                             |
| Reference Type V     | COLUMN CONTRACTOR OF THE PARTY |                  |         | Comments        |               |            |                    |                               |                             |
|                      |   |                  |         |                 |               |            |                    |                               |                             |
| Logging Program      |   |                  |         |                 | Politica<br>1 |            |                    | 1.5                           |                             |
| Intermediate Logs:   | Log only  | if show 🔲        | GR/ILD  | ☐ Triple        | Combo         |            |                    |                               |                             |
| TD Logs:             |   | ombo 🔲 Di        | pmeter  | RFT _           | Sonic [       | ] VSP      | ☐ TDT              |                               |                             |
| Additional Informati | on:   |                  |         |                 |               |            |                    |                               |                             |
|                      |   |                  |         |                 |               |            |                    |                               |                             |
| Comments: General    | /Work Descr   | intion - Fruitla | and Coa | al 160-acre inf | ill well.     |            |                    |                               |                             |

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

Printed on: 06/15/2004 1:13:03 PM

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.

|                |                                  | ran 30-5# 243A             |  |  |  |
|----------------|----------------------------------|----------------------------|--|--|--|
|                | 9-5/8"                           | Surface Casing             |  |  |  |
| Cement Slurry  | Class G<br>+ 3% Calcium Chloride |                            |  |  |  |
|                |                                  |                            |  |  |  |
|                | + 0.25 lb                        | /sx D029 Cellophane Flakes |  |  |  |
| Cement Volume  | 149                              | sx                         |  |  |  |
| Cement Yield   | 1.21                             | cuft/sx                    |  |  |  |
| Cement Volume  | 179.75                           | cuft                       |  |  |  |
| Cement Density | 15.6                             | ppg                        |  |  |  |
| Water Required | 5.29                             | gal/sx                     |  |  |  |
|                |                                  |                            |  |  |  |

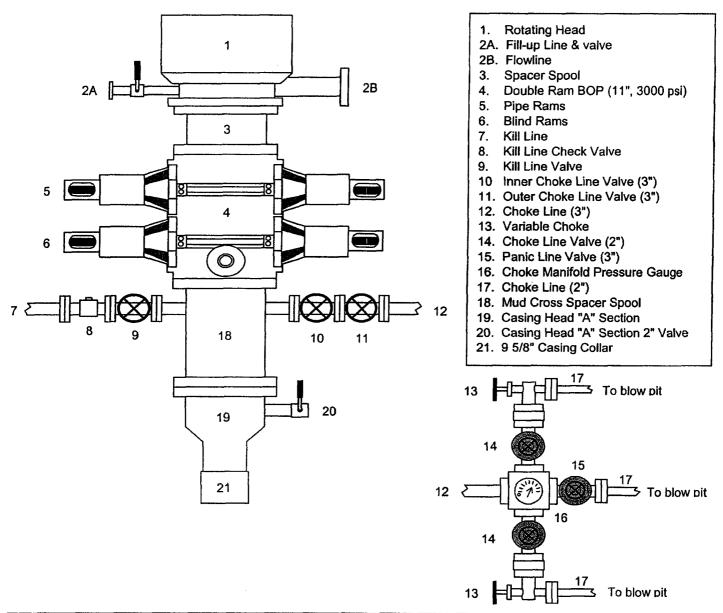
### San Juan 30-5 # 243A

| gggangu angganangust (1970-19<br>Sgrippanaringsanaringsani ggan 80 | 7" Interme     | diate Casing      |  |  |  |
|--|----------------|-------------------|--|--|--|
|  | Lead           | Slurny            |  |  |  |
| Cement Slurry  | Class G        |                   |  |  |  |
|  | + 3% Econolite |                   |  |  |  |
|  | + 10 lb/sx     | 0 lb/sx Gilsonite |  |  |  |
|  | + 0.5% Flocele |                   |  |  |  |
| Cement Volume  | 369            | sx                |  |  |  |
| Cement Yield   | 2.91           | cuft/sx           |  |  |  |
| Cement Volume  | 1073.12        | cuft              |  |  |  |
| Cement Density   | 11.4           | ppg               |  |  |  |
| Water Required   | 16.88          | gal/sx            |  |  |  |
|  |                |                   |  |  |  |

|                            | 7" Interme          | diate Casing                 |  |  |  |  |  |
|----------------------------|---------------------|------------------------------|--|--|--|--|--|
|                            |                     | Slurry                       |  |  |  |  |  |
| Cement Slurry              | 40% POZ             | 40% POZ / 60% Class G cement |  |  |  |  |  |
|                            | + 2% Ber            | + 2% Bentonite               |  |  |  |  |  |
|                            | + 2% Cal            | + 2% Calcium Chloride        |  |  |  |  |  |
|                            | + 5 lb/sx Gilsonite |                              |  |  |  |  |  |
|                            | + 0.25 lb/          | + 0.25 lb/sx Flocele         |  |  |  |  |  |
|                            |                     |                              |  |  |  |  |  |
| Cement Volume              | 100                 | sx                           |  |  |  |  |  |
| Cement Yield               | 1.33                | cuft/sx                      |  |  |  |  |  |
| Cement Volume              | 132.67              | 132.67 cuft                  |  |  |  |  |  |
| Cement Density             | 13.5                | 13.5 ppg                     |  |  |  |  |  |
| Water Required 5.36 gal/sx |                     |                              |  |  |  |  |  |
|                            |                     |                              |  |  |  |  |  |

#### **BLOWOUT PREVENTER ARRANGEMENT & PROGRAM**

For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing



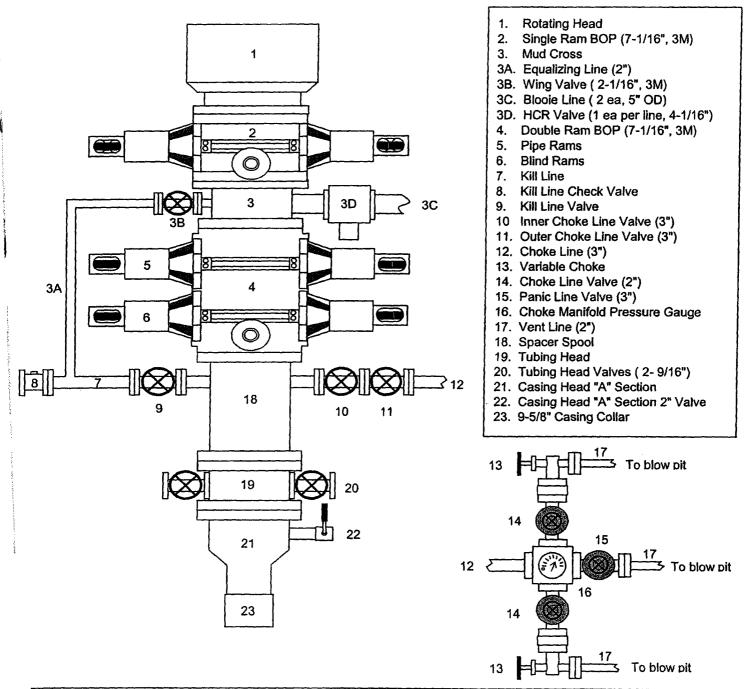
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 2-3 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 2-3 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



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 2-3 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 2-3 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).