

2005 MAY 24 AM 10 32

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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>NM-03188   |
| 1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone |   | 6. If Indian, Allottee or Tribe Name  |
| 2. Name of Operator<br>ConocoPhillips Company   |   | 7. If Unit or CA Agreement, Name and No.  |
| 3a. Address<br>4001 Penbrook, Odessa, TX 79762  | 3b. Phone No. (include area code)<br>432-368-1352 | 8. Lease Name and Well No.<br>San Juan 29-5 Unit #65F                                       |
| 4. Location of Well (Report location clearly and in accordance with any State requirements, *)<br>At surface NWNW 480 FNL - 15 FWL<br>At proposed prod. zone  |   | 9. API Well No.<br>30-039-29554   |
| 10. Field and Pool, or Exploratory<br>Blanco Mesaverde / Basin Dakota   |   | 11. Sec., T. R. M. or Blk. and Survey or Area<br>Section 28, T29N, R5W NMPM<br>D            |
| 14. Distance in miles and direction from nearest town or post office*   |   | 12. County or Parish<br>Rio Arriba  |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)   |   | 13. State<br>NM   |
| 16. No. of acres in lease<br>1280 acres   |   | 17. Spacing Unit dedicated to this well<br>W/2 - 320.0 acres (MV)<br>W/2 - 320.0 acres (DK) |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  |   | 20. BLM/BIA Bond No. on file  |
| 19. Proposed Depth<br>8178' TVD   |   | 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>6734' 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<br>Vicki Westby (pj) | Name (Printed/Typed)<br>Vicki Westby | Date<br>5/23/2005 |
| Title<br>Staff Agent               |                                      |                   |

|  |                             |                |
|--|-----------------------------|----------------|
| Approved by (Signature)<br>[Signature] | Name (Printed/Typed)<br>AFM | Date<br>6-6-05 |
| Title<br>AFM                           | Office<br>FFO               |                |

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

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

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

This action is subject to technical and procedural review pursuant to 43 CFR 3165.5 and appeal pursuant to 43 CFR 3165.4

NMOC

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

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

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

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

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

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                  |   |                                    |  |
|----------------------------------|---|------------------------------------|--|
| *API Number<br><b>3003929554</b> |   | *Pool Code<br><b>72319 \ 71599</b> | *Pool Name<br><b>BLANCO MESAVERDE BASIN DAKOTA</b> |
| *Property Code<br><b>31325</b>   | *Property Name<br><b>SAN JUAN 29-5 UNIT</b>     |                                    | *Well Number<br><b>65F</b>                         |
| *GRID No.<br><b>217817</b>       | *Operator Name<br><b>CONOCOPHILLIPS COMPANY</b> |                                    | *Elevation<br><b>6734'</b>                         |

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            |
|---------------|-----------|------------|-----------|---------|---------------|------------------|---------------|----------------|-------------------|
| <b>0</b>      | <b>28</b> | <b>29N</b> | <b>5W</b> |         | <b>480</b>    | <b>NORTH</b>     | <b>15</b>     | <b>WEST</b>    | <b>RIO ARriba</b> |

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<br><b>320.0 Acres - W/2 (MV)<br/>320.0 Acres - W/2 (DK)</b> | 13 Joint or Infill | 14 Consolidation Code | 15 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

|   |   |
|---|---|
| <p>480'</p> <p>LAT: 36°42.1510' N<br/>LONG: 107°22.2655' W<br/>DATUM: NAD27</p> <p>15'</p> <p>5280.00'</p> <p>28</p> <p>5287.92'</p> <p>LEASE<br/>NM-03188<br/>1280 total acres</p> | 17 OPERATOR CERTIFICATION<br>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.<br><i>Vicki Westby</i><br>Signature<br>Vicki R. Westby<br>Printed Name<br>Sr. Analyst<br>Title<br><i>April 4, 2005</i><br>Date   |
|   | 18 SURVEYOR CERTIFICATION<br>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.<br>Date of Survey: JULY 17, 2004<br>Signature and Seal of Professional Surveyor<br><br><i>JASON C. EDWARDS</i><br>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

|   |  |  |
|---|--|--|
| <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 <input type="checkbox"/>  |  | 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 29-5 Unit                               |
| 4. Well Location<br>Unit Letter D 480 feet from the North line and 15 feet from the West line<br>Section 28 Township 29N Range 5W NMPM Rio Arriba County  |  | 8. Well Number<br>65F  |
| I 1. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>6734' GL   |  | 9. OGRID Number<br>217817  |
| Pit or Below-grade Tank Application <input checked="" type="checkbox"/> Closure <input type="checkbox"/>  |  | 10. Pool name or Wildcat<br>Blanco Mesaverde / Basin Dakota                              |
| Pit type drill Depth to Groundwater 40' Distance from nearest fresh water well < 0.5 mile Distance from nearest surface water 250'  |  |  |
| Liner Thickness: mil Below-Grade Tank: Volume bbls; Construction Material   |  |  |

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 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 NMOCDC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Vicki Westby

TITLE Staff Agent

DATE 5/23/2005

Type or print name  
For State Use Only

E-mail address:

Telephone No.

APPROVED BY:   
Conditions of Approval (if any):

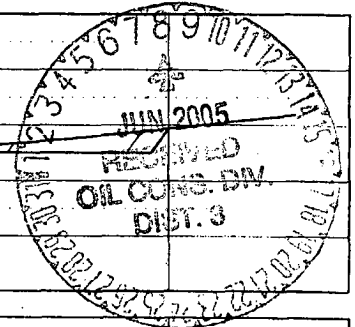
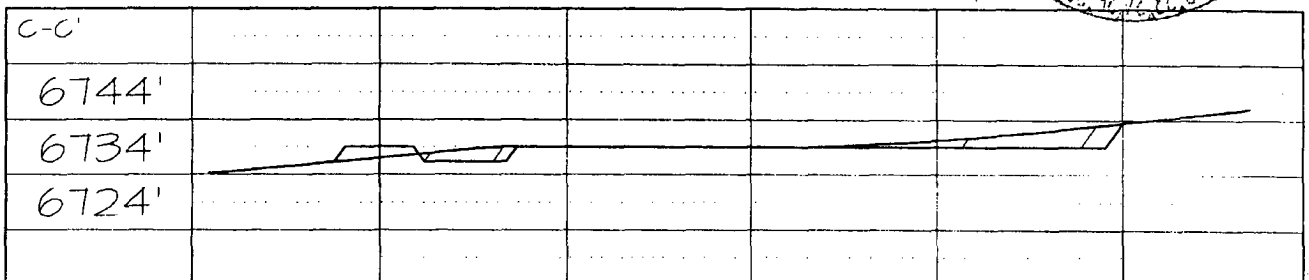
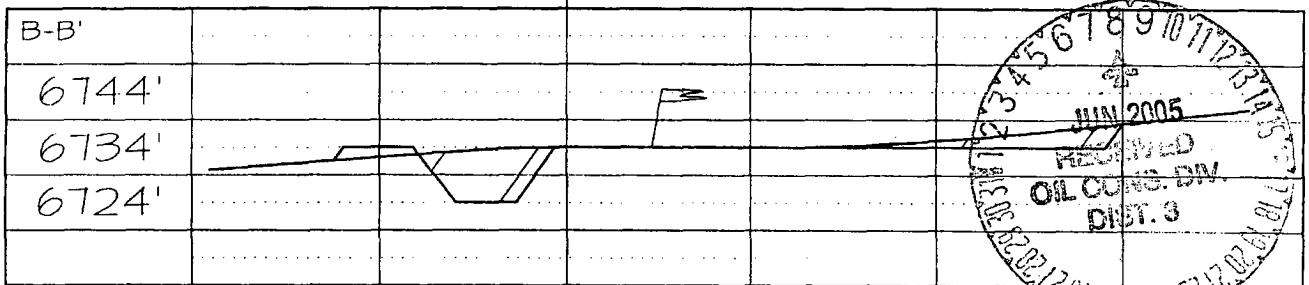
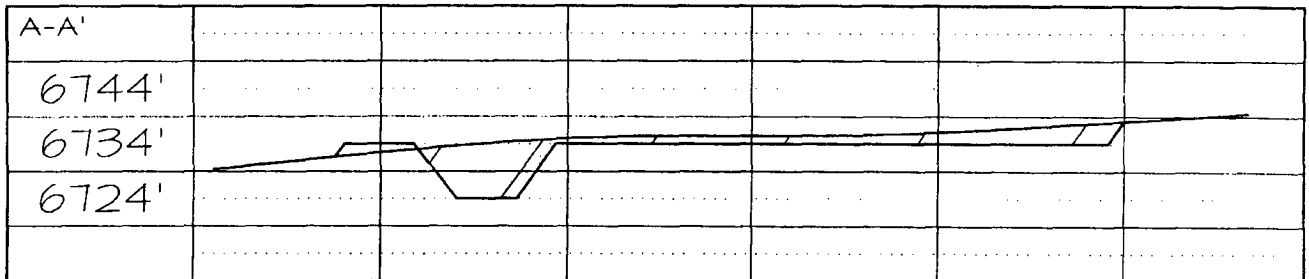
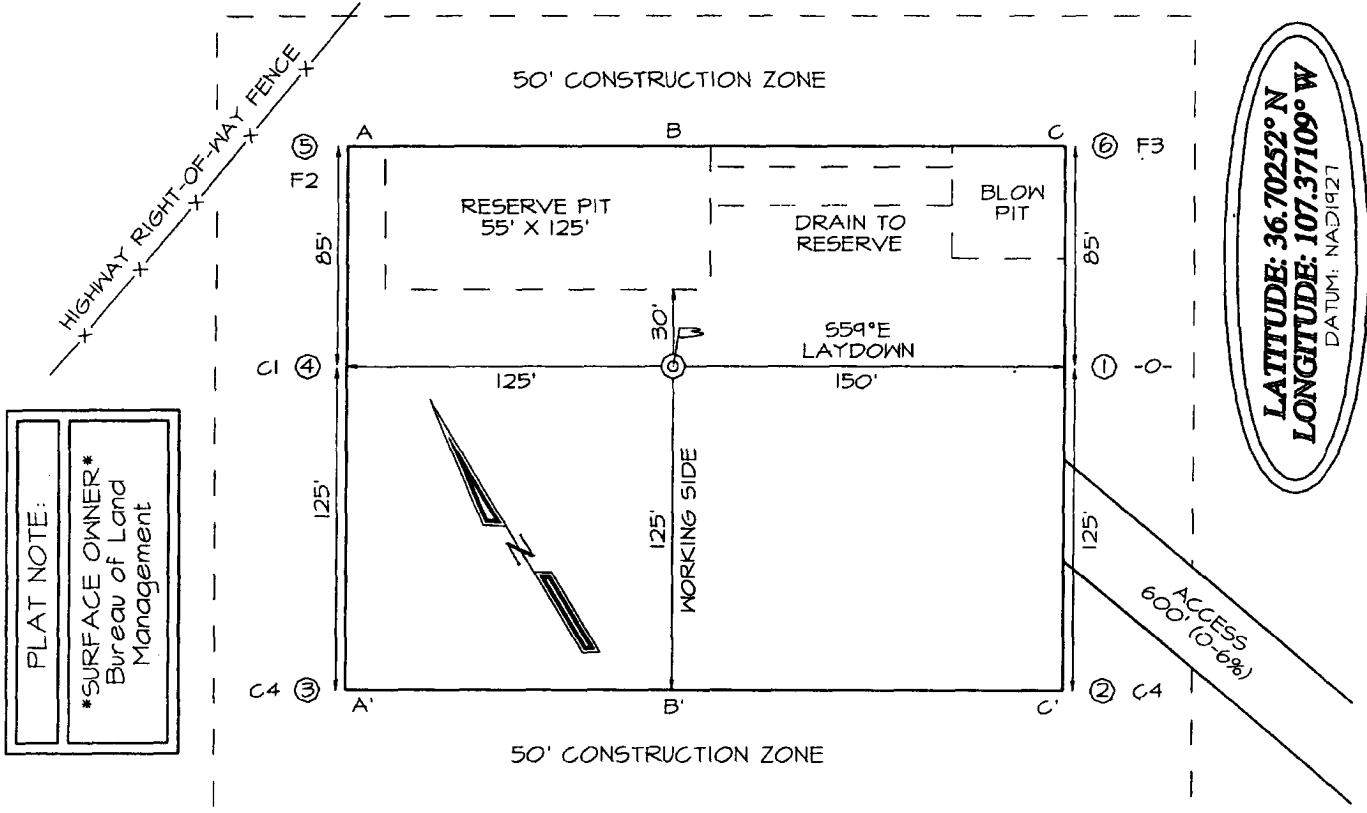
TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. IV

DATE

JUN - 8 2005

**CONOCOPHILLIPS COMPANY SAN JUAN 29-5 UNIT #65F**  
**480' FNL & 15' FWL, SECTION 28, T29N, R5W, NMPM**  
**RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6734'**



# PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 29-5 65F

|                                |  |                       |  |   |                    |
|--------------------------------|--|-----------------------|--|---|--------------------|
| Lease:                         |  | AFE #:                |  | AFE \$:   |                    |
| Field Name: hPHILLIPS 29-5     |  | Rig:                  |  | State: NM                                       | County: RIO ARRIBA |
| Geoscientist: Glaser, Terry J  |  | Phone: (832)486-2332  |  | Prod. Engineer: Moody, Craig E. Phone: 486-2334 |                    |
| Res. Engineer: Johnson, Tom B. |  | Phone: (832)-486-2347 |  | Proj. Field Lead: Fransen, Eric E. Phone:       |                    |

## Primary Objective (Zones):

| Zone | Zone Name                       |
|------|---------------------------------|
| FRR  | BASIN DAKOTA (PRORATED GAS)     |
| RON  | BLANCO MESAVERDE (PRORATED GAS) |

|                   |                    |                 |      |               |               |  |
|-------------------|--------------------|-----------------|------|---------------|---------------|--|
| Location: Surface |                    |                 |      |               | Straight Hole |  |
| Latitude: 36.70   | Longitude: -107.37 | X:              | Y:   | Section: 28   | Range: 5W     |  |
| Footage X: 15 FWL | Footage Y: 480 FNL | Elevation: 6735 | (FT) | Township: 29N |               |  |
| Tolerance:        |                    |                 |      |               |               |  |

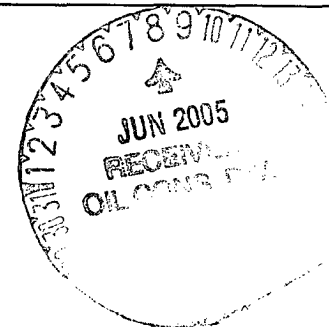
|   |                    |                  |                    |
|---|--------------------|------------------|--------------------|
| Location Type: Year Round                   | Start Date (Est.): | Completion Date: | Date In Operation: |
| Formation Data: Assume KB = 6748 Units = FT |                    |                  |                    |

| Formation Call & Casing Points | Depth (TVD in Ft) | SS (Ft) | Depletion (Yes/No)       | BHP (PSIG) | BHT | Remarks  |
|--------------------------------|-------------------|---------|--------------------------|------------|-----|--|
| Surface Casing                 | 213               | 6535    | <input type="checkbox"/> |            |     | Possible lost circulation. 12 1/4" Hole. 9 5/8", 32.3 ppf, H-40, STC casing. Circulate cement to surface.  |
| NCMT                           | 1598              | 5150    | <input type="checkbox"/> |            |     |  |
| OJAM                           | 2873              | 3875    | <input type="checkbox"/> |            |     | Possible water flows.  |
| KRLD                           | 3073              | 3675    | <input type="checkbox"/> |            |     |  |
| FRLD                           | 3378              | 3370    | <input type="checkbox"/> |            |     | Possible gas.  |
| PCCF                           | 3678              | 3070    | <input type="checkbox"/> |            |     |  |
| LEWS                           | 3878              | 2870    | <input type="checkbox"/> |            |     |  |
| Intermediate Casing            | 4078              | 2670    | <input type="checkbox"/> |            |     | 8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.  |
| CHRA                           | 4683              | 2065    | <input type="checkbox"/> |            |     |  |
| CLFH                           | 5273              | 1475    | <input type="checkbox"/> |            |     | Gas; possibly wet  |
| MENF                           | 5593              | 1155    | <input type="checkbox"/> |            |     | Gas.   |
| PTLK                           | 5868              | 880     | <input type="checkbox"/> |            |     | Gas.   |
| GLLP                           | 7128              | -380    | <input type="checkbox"/> |            |     | Gas. Possibly wet.   |
| GRHN                           | 7828              | -1080   | <input type="checkbox"/> |            |     | Gas possible, highly fractured   |
| CBBO                           | 8003              | -1255   | <input type="checkbox"/> |            |     | Gas  |
| Total Depth                    | 8178              | -1430   | <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. |

2500 psi

## Reference Wells:

| Reference Type | Well Name | Comments |
|----------------|-----------|----------|
|----------------|-----------|----------|



# PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 29-5 65F

| <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 checked="" type="checkbox"/> TDT |       |           |         |                |         |
|   |       |           |         |                |         |
| Additional Information:   |       |           |         |                |         |
|   |       |           |         |                |         |
| Log Type  | Stage | From (Ft) | To (Ft) | Tool Type/Name | Remarks |

Comments: Zones - 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

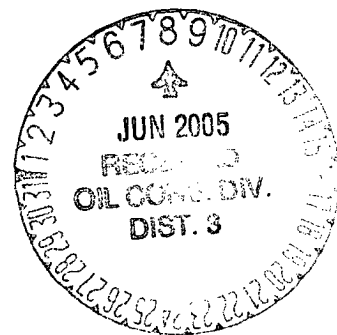
Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 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

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately



**San Juan 29-5 #65F**  
**Halliburton Cement Calculations**

**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                  | 4078'         |                            |
| Lead Cement Yield           | 2.88          | cuft/sk                    |
| Lead Cement Excess          | 150           | %                          |
| <b>Tail Cement Length</b>   | <b>815.6'</b> |                            |
| Tail Cement Yield           | 1.33          | cuft/sk                    |
| Tail Cement Excess          | 150           | %                          |
| <b>Lead Cement Required</b> | <b>409</b>    | <b>sx</b>                  |
| <b>Tail Cement Required</b> | <b>238</b>    | <b>sx</b>                  |

SHOE      4078 ', 7 ", 20 ppf, J-55    STC

**PRODUCTION CASING :**

|                         |            |                                 |
|-------------------------|------------|---------------------------------|
| Drill Bit Diameter      | 6.25"      |                                 |
| Casing Outside Diameter | 4.5"       | Casing Inside Diam. 4.052"      |
| Casing Weight           | 11.6       | ppf                             |
| Casing Grade            | N-80       |                                 |
| Top of Cement           | 3878'      | 200' inside intermediate casing |
| Shoe Depth              | 8178'      |                                 |
| Cement Yield            | 1.45       | cuft/sk                         |
| Cement Excess           | 50         | %                               |
| <b>Cement Required</b>  | <b>451</b> | <b>sx</b>                       |

SHOE      8178 ', 4.5 ", 11.6 ppf, N-80    LTC



## HALLIBURTON OPTION

| 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 (extender) |         |
|                 | + 10 lb/sx Pheno Seal     |         |
| Cement Required | 409                       | sx      |
| Cement Yield    | 2.88                      | cuft/sx |
| Slurry Volume   | 1178.5                    | cuft    |
|                 | 209.9                     | bbls    |
| Cement Density  | 11.5                      | ppg     |
| Water Required  | 16.91                     | gal/sx  |

## 7" Intermediate Casing

## Tail Slurry

|                 |                             |         |
|-----------------|-----------------------------|---------|
| Cement Slurry   | 50 / 50 POZ:Standard Cement |         |
|                 | + 2% Bentonite              |         |
|                 | + 6 lb/sx Pheno Seal        |         |
| Cement Required | 238                         | sx      |
| Cement Yield    | 1.33                        | cuft/sx |
| Slurry Volume   | 316.2                       | cuft    |
|                 | 56.3                        | bbls    |
| Cement Density  | 13.5                        | ppg     |
| Water Required  | 5.52                        | gal/sx  |

## 4-1/2" Production Casing

|                 |                                    |         |
|-----------------|------------------------------------|---------|
| Cement Recipe   | 50 / 50 POZ:Standard Cement        |         |
|                 | + 3% Bentonite                     |         |
|                 | + 3.5 lb/sx PhenoSeal              |         |
|                 | + 0.2% CFR-3 Friction Reducer      |         |
|                 | + 0.1% HR-5 Retarder               |         |
|                 | + 0.8% Halad-9 Fluid Loss Additive |         |
| Cement Quantity | 451                                | sx      |
| Cement Yield    | 1.45                               | cuft/sx |
| Cement Volume   | 654.7                              | cuft    |
|                 | 116.6                              |         |
| Cement Density  | 13.1                               | ppg     |
| Water Required  | 6.47                               | gal/sx  |

## SCHLUMBERGER OPTION

## 9-5/8 Surface Casing

|                |                                    |         |
|----------------|------------------------------------|---------|
| Cement Recipe  | Class G Standard Cement            |         |
|                | + 2% S001 Calcium Chloride         |         |
|                | +0.25 lb/sx D029 Cellophane Flakes |         |
| Cement Volume  | 148                                | sx      |
| Cement Yield   | 1.16                               | cuft/sx |
| Cement Volume  | 171.5                              | cuft    |
| Cement Density | 15.8                               | ppg     |
| Water Required | 4.983                              | gal/sx  |

## 7" Intermediate Casing

## Lead Slurry

|                 |                                    |         |
|-----------------|------------------------------------|---------|
| Cement Recipe   | Class G Standard Cement            |         |
|                 | +0.25 lb/sx D029 Cellophane Flakes |         |
|                 | + 3% D079 Extender                 |         |
|                 | + 0.20% D046 Antifoam              |         |
|                 | + 10 lb/sx Pheno Seal              |         |
| Cement Required | 434                                | sx      |
| Cement Yield    | 2.72                               | cuft/sx |
| Slurry Volume   | 1179.8                             | cuft    |
|                 | 210.1                              | bbls    |
| Cement Density  | 11.7                               | ppg     |
| Water Required  | 15.74                              | gal/sx  |

## 7" Intermediate Casing

## Tail Slurry

|                 |                                     |         |
|-----------------|-------------------------------------|---------|
| Cement Slurry   | 50 / 50 POZ:Standard Cement         |         |
|                 | +0.25 lb/sx D029 Cellophane Flakes  |         |
|                 | + 2% D020 Bentonite                 |         |
|                 | + 1.5 lb/sx D024 Gilsonite Extender |         |
|                 | + 2% S001 Calcium Chloride          |         |
|                 | + 0.10% D046 Antifoam               |         |
|                 | + 6 lb/sx Pheno Seal                |         |
| Cement Required | 241                                 | sx      |
| Cement Yield    | 1.31                                | cuft/sx |
| Slurry Volume   | 316.1                               | cuft    |
|                 | 56.3                                | bbls    |
| Cement Density  | 13.5                                | ppg     |
| Water Required  | 5.317                               | gal/sx  |

## 4-1/2" Production Casing

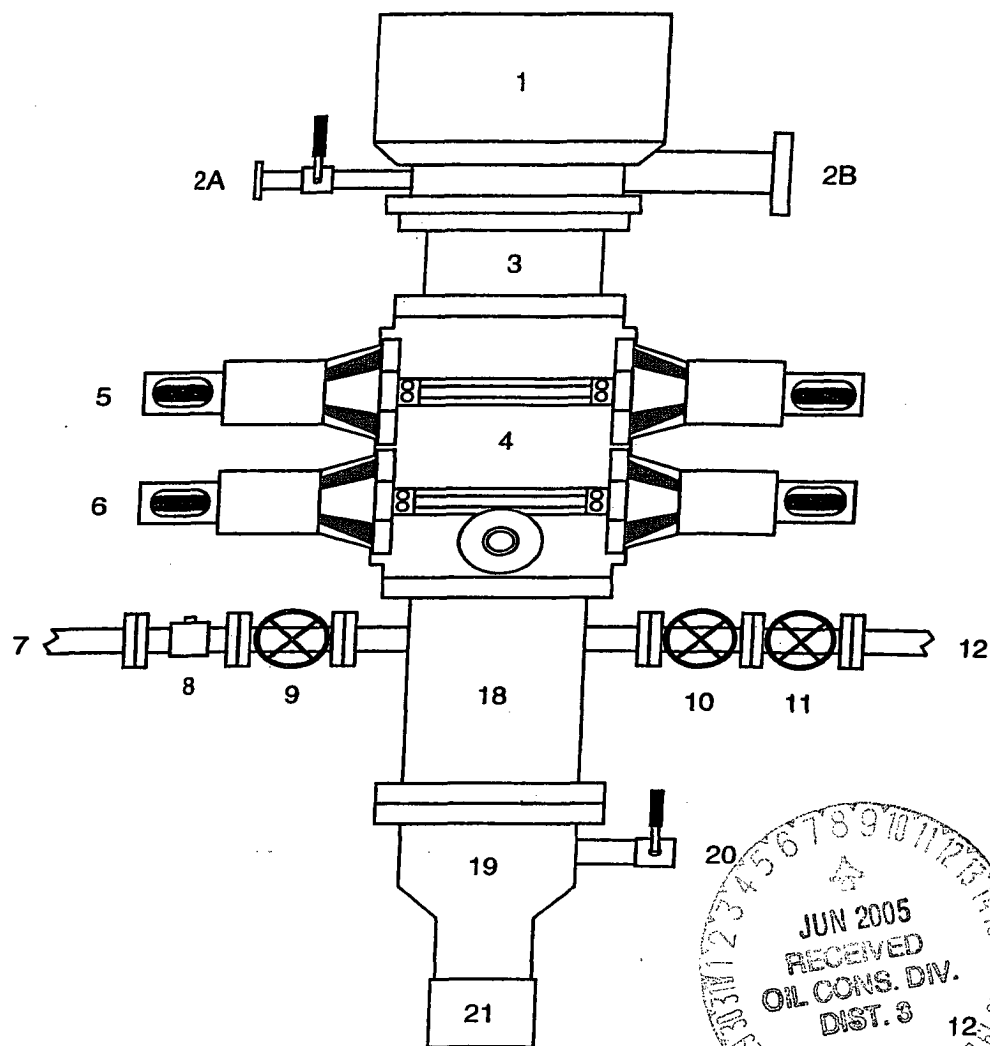
|                 |                                     |         |
|-----------------|-------------------------------------|---------|
| Cement Recipe   | 50 / 50 POZ:Class G Standard Cement |         |
|                 | +0.25 lb/sx D029 Cellophane Flakes  |         |
|                 | + 3% D020 Bentonite                 |         |
|                 | + 1.0 lb/sx D024 Gilsonite Extender |         |
|                 | + 0.25% D167 Fluid Loss             |         |
|                 | + 0.15% D065 Dispersant             |         |
|                 | + 0.1% D800 Retarder                |         |
|                 | + 0.1% D046 Antifoamer              |         |
|                 | + 3.5 lb/sx PhenoSeal               |         |
|                 |                                     |         |
| Cement Quantity | 454                                 | sx      |
| Cement Yield    | 1.44                                | cuft/sx |
| Cement Volume   | 654.4                               | cuft    |
|                 | 116.6                               |         |
| Cement Density  | 13                                  | ppg     |
| Water Required  | 6.43                                | gal/sx  |



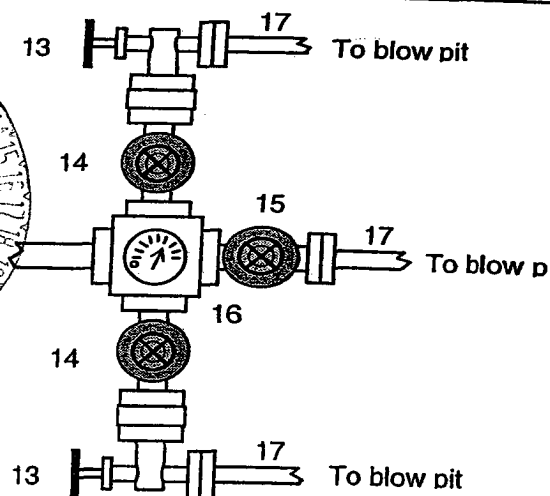
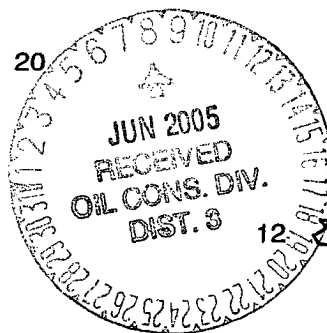


# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

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



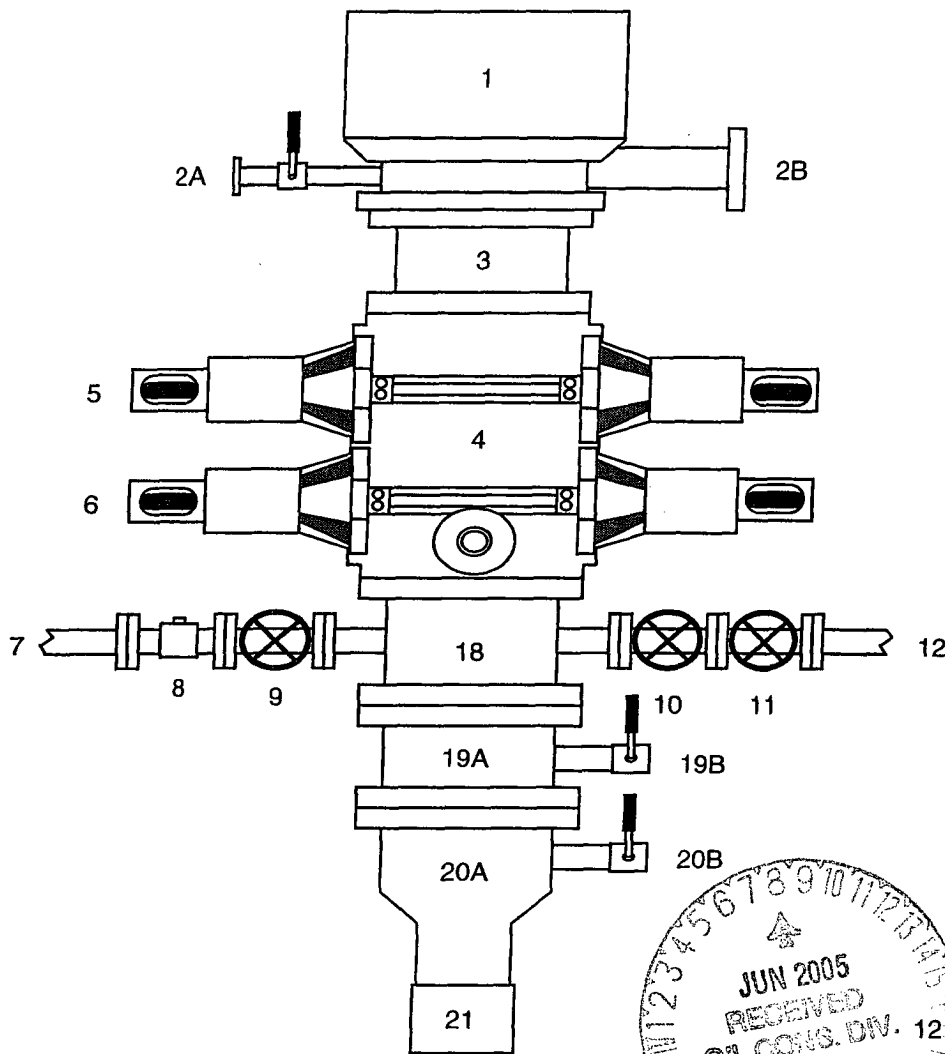
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

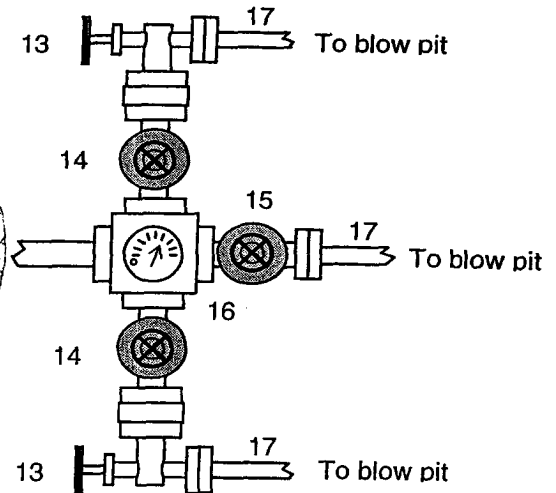
1. Upper Kelly cock Valve with handle

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Bloopie 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:

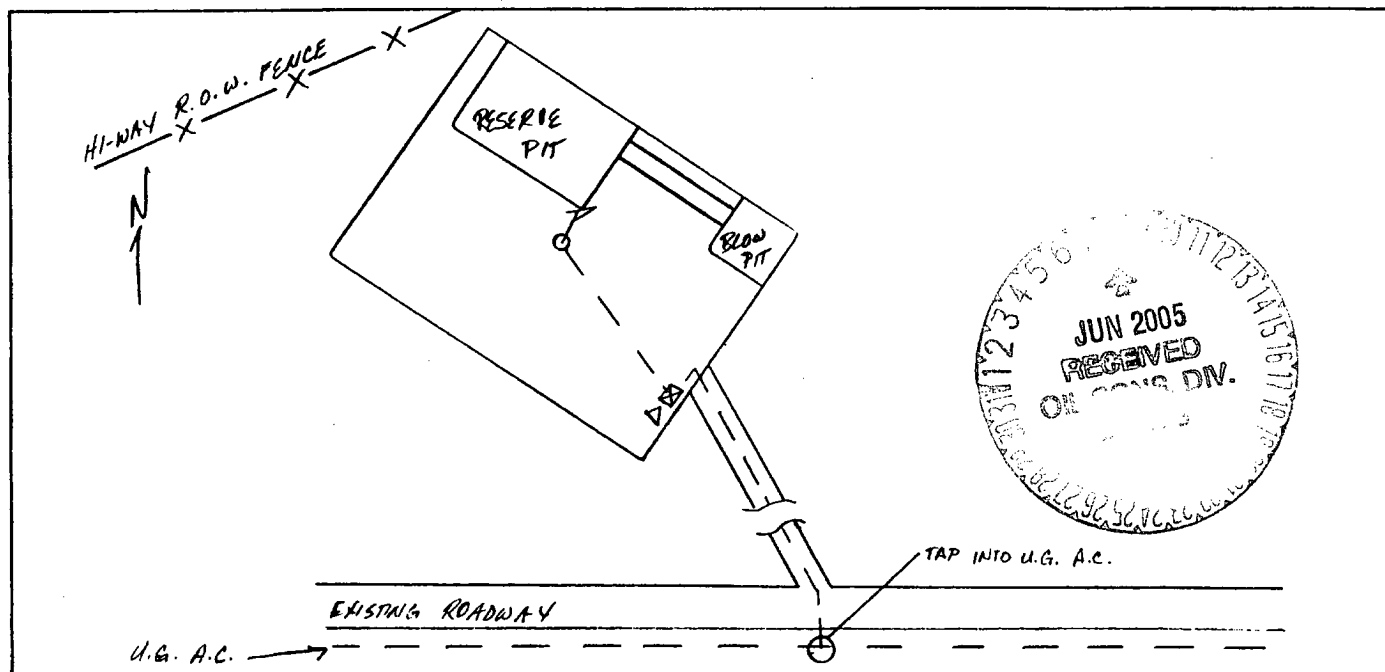
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

# H & H TECHNICAL SERVICES A CORROSION COMPANY

## CATHODIC PROTECTION PLAN FOR NEW WELLS

WELL NAME: S.J. 29-5 #66F LEGALS: D-28-29-5 COUNTY: R.A.

PURPOSED C.P. SYSTEM: DRILL G.B. & SET RECT. @ SOUTH CORNER OF LOCATION. TRENCH 200' X 8  
NEG FROM RECT. ALSO TRENCH @ 850' OF A.C. FROM MAIN RD TO RECT.



| EXISTING WELLHEAD | METER HOUSE | G.B. | POWER SOURCE | CABLE | NEW WELL | OVERHEAD A.C. |
|-------------------|-------------|------|--------------|-------|----------|---------------|
|                   |             |      |              |       |          |               |

COMMENTS: \_\_\_\_\_

NEAREST POWER SOURCE: U.G. A.C. DISTANCE: 850'

PIPELINES IN THE AREA: \_\_\_\_\_

TECHNICIAN: *[Signature]* DATE: 4-17-05

Property : San Juan 29-5 Unit Well #: 65F

**Surface Location:**

Unit: D Section: 28 Township: 29N Range: 5W

County: Rio Arriba State: New Mexico

Footage: 480 from the North line, 15 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.

