Form 3160-3
(August 1999)

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: ☒ DRILL ☐ REENTER | 5. Lease Serial No. SF-078835-A |
| | 6. If Indian, Allottee or Tribe Name |
| | 7. If Unit or CA Agreement, Name and No. |
| 1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone | 8. Lease Name and Well No. SAN JUAN 28-7 UNIT 244M |
| 2. Name of Operator CONOCO INC. Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conoco.com | 9. API Well No. 30-039-26873 |
| 3a. Address 10 DESTA DR., ROOM 608W MIDLAND, TX 79705 / 3b. Phone No. (include area code) Ph: 915.686.5799 Ext: 5799 | 10. Field and Pool, or Exploratory BLANCO MESAVERDE/BASIN DAKO |
| 4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface NWNW 850FNL 965FWL At proposed prod. zone | 11. Sec., T., R., M., or Blk. and Survey or Area D Sec 7 T27N R7W Mer NMP |
| 14. Distance in miles and direction from nearest town or post office* | 12. County or Parish RIO ARRIBA / 13. State NM |
| 15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) / 16. No. of Acres in Lease | 17. Spacing Unit dedicated to this well 320.26 W/2 |
| 18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. / 19. Proposed Depth 7862 MD | 20. BLM/BIA Bond No. on file |
| 21. Elevations (Show whether DF, KB, RT, GL, etc.) 6894 GL / 22. Approximate date work will start | 23. Estimated duration |

DEC 2001

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall 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 shall 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 authorized officer.

| 25. Signature | Name (Printed/Typed) | Date |
|---|---|---|
| (Electronic Submission) | VICKI WESTBY | 11/30/2001 |

Title: AUTHORIZED SIGNATURE

| Approved by (Signature) | Name (Printed/Typed) | Date |
|---|---|---|
| /s/ Bill Mankiewicz | | 12/17/01 |
| Title: AFM | Office: 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)**

**Electronic Submission #9484 verified by the BLM Well Information System**
**For CONOCO INC., sent to the Farmington**
**Committed to AFMSS for processing by Maurice Johnson on 11/30/2001 ()**

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

NMOCD

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

| 1 API Number | 2 Pool Code | 3 Pool Name |
|---|---|---|
| 30-039-26873 | 72319 / 71599 | BLANCO MESAVERDE / BASIN DAKOTA |

| 4 Property Code | 5 Property Name | 6 Well Number |
|---|---|---|
| 016608 | SAN JUAN 28-7 UNIT | 244M |

| 7 OGRID No. | 8 Operator Name | 9 Elevation |
|---|---|---|
| 005073 | CONOCO, INC. | 6894' |

## 10 Surface Location

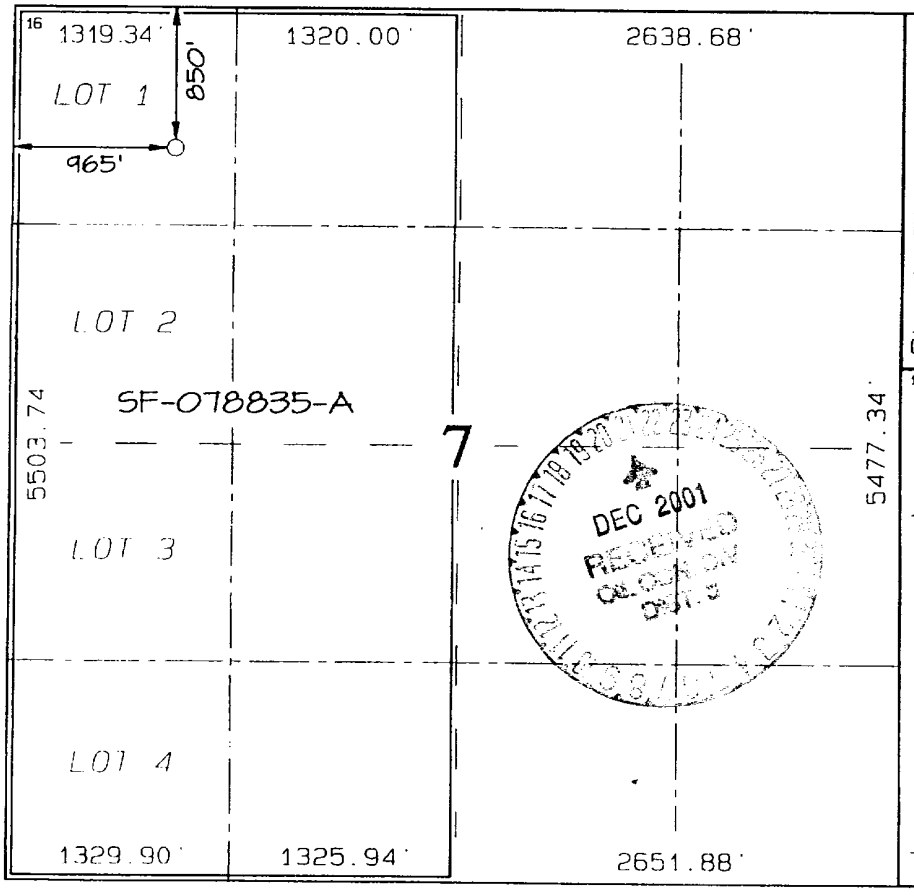
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| D | 7 | 27N | 7W | | 850 | NORTH | 965 | WEST | RIO ARRIBA |

## 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 | 13 Joint or Infill | 14 Consolidation Code | 15 Order No. |
|---|---|---|---|
| 320.26 Acres - W/2 | | | |

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




## 17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature: Vicki Westby

Vicki R. Westby
Printed Name

Sr. Title Analyst
Title

November 16, 2001
Date

## 18 SURVEYOR CERTIFICATION

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

Survey Date: OCTOBER 13, 2001

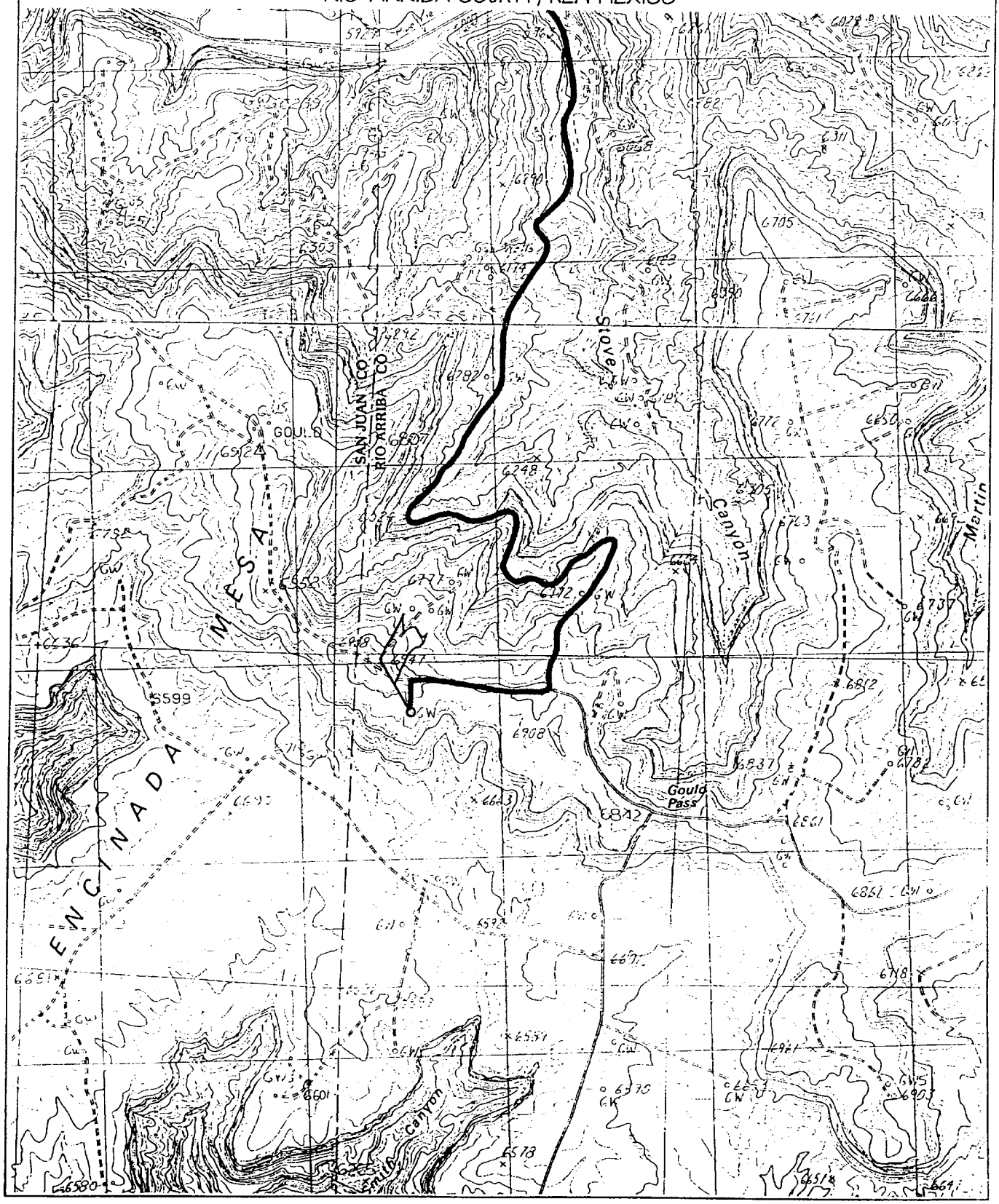
Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

# CONOCO, INC. SAN JUAN 28-7 UNIT #244M

850' FNL & 965' FWL, SECTION 7, T27N, R7W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO



# PROJECT PROPOSAL - New Drill / Sidetrack

conoco

| | | | | | |
|---|---|---|---|---|---|
| Well : SAN JUAN 28-7 244M | Lease : SAN JUAN 28-7 | | AFE # : 3394 (MV) | | AFE $ : |
| Field Name : EAST 28-7 | Rig : Key 43 | State : NM | County : Rio Arriba | | API # : |
| Geoscientist : Glaser, Terry J | Phone : (281) 293 - 6538 | | Prod. Engineer : Moody, Craig E. | | Phone : (281) 293 - 6559 |
| Res. Engineer : Valvatne, Christine K. | Phone : | | Proj. Field Lead : Bergman, Pat W. | | Phone : (281) 293 - 6517 |

**Primary Objective (Zones) :**

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

"Air Drill"

**Surface Location :**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Latitude : 36.593364 | Longtitude : -107.6205 | X : | Y : | Section : 7 | Survey : 27N | Abstract : 7W | |
| Footage X : 965 FWL | Footage Y : 850 FNL | Elevation: 6894 (FT) | | | | | |

**Bottom Hole Location :**

| | | | | | | |
|---|---|---|---|---|---|---|
| Latitude : | Longtitude : | X : | Y : | Section : | Survey : | Abstract : |
| Location Type : Year Round | Start Date (Est.) : | | Completion Date : | | Date In Operation : | |

Formation Data : Assume KB = 6907 Units = FT

| Formation Call & Casing Points | Depth (TVD in Ft) | SS (Ft) | Depletion (Yes/No) | BHP (PSIG) | BHT | Remarks |
|---|---|---|---|---|---|---|
| Surface Casing | 297 | 6610 | | | | Severe lost circulation is possible. 9 5/8", 36 ppf, J-55, STC casing. Circulate cement to surface. |
| OJAM | 2427 | 4480 | | | | Possible water flows |
| KRLD | 2577 | 4330 | | | | |
| FRLD | 3067 | 3840 | | | | Possible gas |
| PCCF | 3317 | 3590 | | | | |
| LEWS | 3712 | 3195 | | | | |
| Intermediate Casing | 3812 | 3095 | | | | 7", 20 ppf, J-55, STC Casing. Circulate cement to surface. |
| CHRA | 4267 | 2640 | | | | |
| CLFH | 4972 | 1935 | | 1300 | | Gas; possibly wet |
| MENF | 5037 | 1870 | | | | Gas |
| PTLK | 5567 | 1340 | | | | Gas |
| MNCS | 5867 | 1040 | | | | |
| GLLP | 6807 | 100 | | | | |
| GRHN | 7512 | -605 | | | | Gas possible, highly fractured |
| TWLS | 7602 | -695 | | | | Gas |
| CBBO | 7737 | -830 | | | | Gas |

# PROJECT PROPOSAL - New Drill / Sidetrack

| | | | | | |
|---|---|---|---|---|---|
| Total Depth | 7862 | -955 | [ ] | 3000 | 4 1/2", 10.5 ppf, J-55, STC casing. Circulate cement a minimum of 100' inside the previous casing string. No open hole logs. Cased hole TDT with GR to surface. |

**Logging Program :**

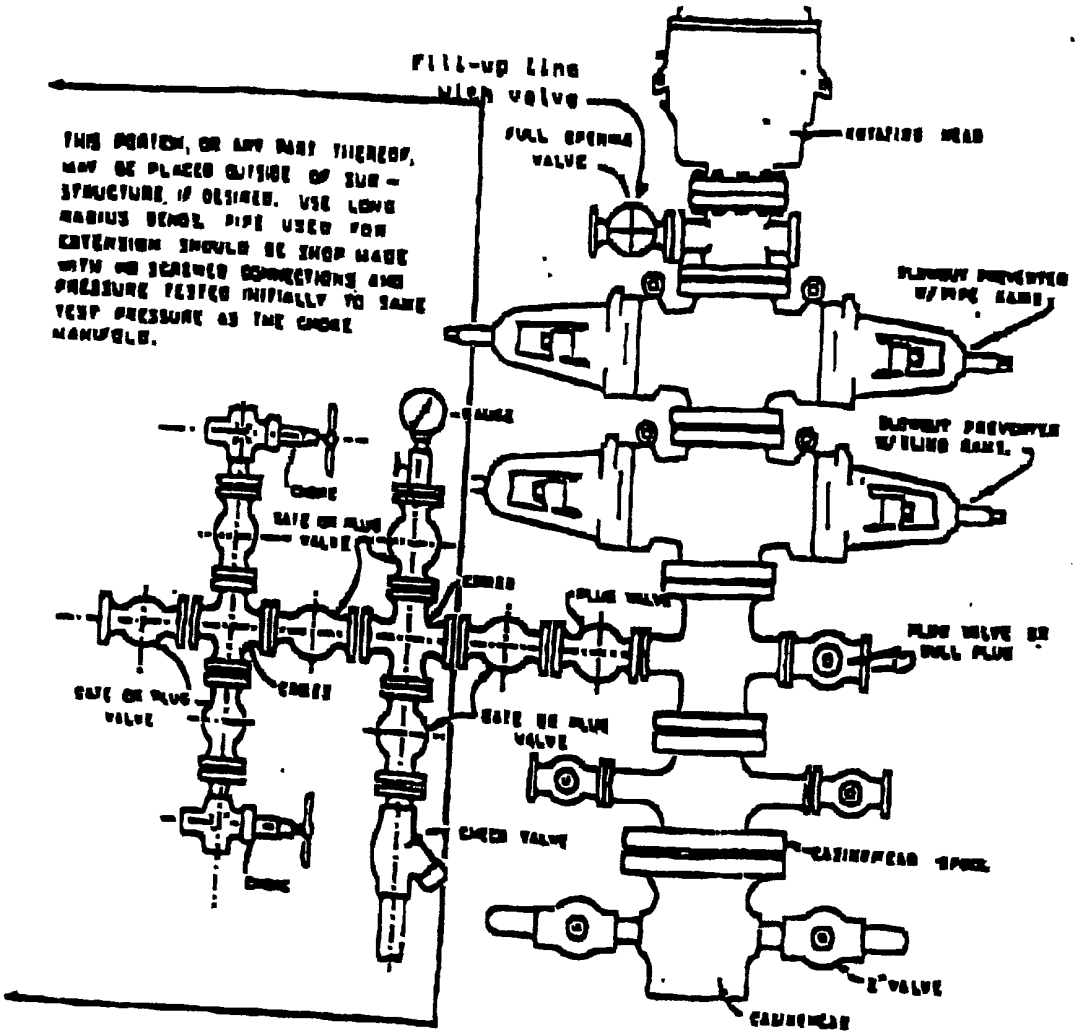
Intermediate Logs : [ ] Log only if show [ ] GR / ILD [ ] Triple Combo

TD Logs : [ ] Triple Combo [ ] Dipmeter [ ] RFT [ ] Sonic [ ] VSP [x] TDT

Additional Information : Logging company to provide a sketch with all lengths, OD's & ID's of all tools prior to running in the hole.

Cased hole TDT with GR to surface.

Comments :




THIS PORTION, OR ANY PART THEREOF, MAY BE PLACED OUTSIDE OF SUB-STRUCTURE IF DESIRED. USE LONG RADIUS BENDS. PIPE USED FOR EXTENSION SHOULD BE SHOP MADE WITH WELDED CONNECTIONS AND PRESSURE TESTED INITIALLY TO SAME TEST PRESSURE AS THE CHOKE MANIFOLD.

## BLOWOUT PREVENTER HOOKUP

Drilling contractors used in the San Juan Basing supply 3000 psi equipment, but cannot provide annular preventors because of sub-structure limitations. Maximum anticipated surface pressures for this well will not exceed the working pressure of the proposed BOP system. Please see the attached BOP diagram details 2000 psi equipment according to Onshore Order No. 2 even though the equipment will test to 3000 psi. The 2000 psi system allows deletion of the annular preventor and fulfills your requirements (note diagram No. 1). In addition, the following equipment will comprise the 2000 psi system:

1. Two rams with one blind and one pipe ram.
2. Kill line (2 inch maximum).
3. One kill line valve.
4. One choke line valve.
5. Two chokes (reference diagram No. 1).
6. Upper kelly cock valve with handle.
7. Safety valve and subs to fit all drill strings in use.
8. Two-inch minimum choke line.
9. Pressure gauge on choke manifold.
10. Fill-up line above the upper most preventor.
11. Rotating head.

# Cathodic Protection System Description

| | | |
|---|---|---|
| **Anode Bed Type** | Deep Well | |
| **Hole Size** | 8" | |
| **Hole Depth** | 200' - 500' | As required to place anodes below moisture and in low resistance strata. |
| **Surface Casing** | 8" Diam., ≥ 20' Length. Cemented In Annular Space | When needed, casing will be installed at an adequate depth to control ground water flow. Casing will extend a minimum of 2' above grade, be surrounded by a concrete pad, and sealed with a PVC cap. Steel casing will be substituted when boulders are encountered. |
| **Vent Pipe** | 1" Diam. PVC | Vent pipe will extend from bottom of hole, through top of casing cap, and sealed with a 1" perforated PVC cap. |
| **Type Of Anodes** | Cast Iron Or Graphite | |
| **Number Of Anodes** | 8 - 20 | Sufficient quantity to achieve a total anode bed resistance of <1 ohm and a design life ≥ 20 years. |
| **Anode Bed Backfill** | Loresco SW Calcined Petroleum Coke Breeze | Installed from bottom of hole to 10' above top anode. |
| **Anode Junction Box** | 8 - 20 Circuit Fiberglass Or Metal | Sealed to prevent insect & rodent intrusion. |
| **Current Splitter Box** | 2 - 5 Circuit Metal | Sealed to prevent insect & rodent intrusion. |
| **DC / AC Cable** | DC: #2, #4, #6, #8 Stranded Copper (One Size Or Any Combination Of) With High Molecular Weight Polyethylene (HMWPE) Insulation.<br><br>AC: #8 Stranded Copper HMWPE | 18" depth in typical situation, 24" depth in roadway, & 36" depth in arroyo's and streams. EXCEPTION: If trenching is in extremely hard substratum, depth will be 8 - 12" with cable installed in conduit. Installed above foreign pipelines if 1' clearance is available, If not, installed under foreign pipeline with 1' clearance (AC cable always installed under foreign pipeline in conduit). |
| **Power Source** | 1) Rectifier<br>2) Solar Power Unit<br>3) Thermoelectric Generator | Choice of power source depending on availability of AC & other economic factors. |
| **External Painting** | Color to be selected according to BLM specifications. | Paint applied to any surface equipment associated with the CP system which can reasonably be painted. |