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

DEC 2001 RECEIVED OIL CON. DIV DIST. 3

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. SF-078049-A
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No. 16207
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. BOLIN HARDIE 1M
2. Name of Operator CONOCO INC. Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conoco.com	9. API Well No. 30-045-30425
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 BASIN DAKOTA
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SWSW 745FSL 940FWL At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area M Sec 34 T29N R8W Mer NMP
14. Distance in miles and direction from nearest town or post office*	12. County or Parish SAN JUAN / 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 320.00 W/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. / 19. Proposed Depth 7344 MD	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 6278 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, 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 (Electronic Submission)	Name (Printed/Typed) VICKI WESTBY	Date 11/08/2001
Title AUTHORIZED SIGNATURE		
Approved by (Signature) /s/ Maurice Johnson	Name (Printed/Typed)	Date 12/11/01
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 #8712 verified by the BLM Well Information System
For CONOCO INC., sent to the Farmington
Committed to AFMSS for processing by Maurice Johnson on 11/15/2001 ()

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"

**** 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

¹API Number	²Pool Code	³Pool Name
30-045- 30925	71599	BASIN DAKOTA

⁴Property Code	⁵Property Name	⁶Well Number
16207	BOLIN HARDIE	1M
⁷OGRID No.	⁸Operator Name	⁹Elevation
005073	CONOCO, INC.	6278

¹⁰ Surface Location

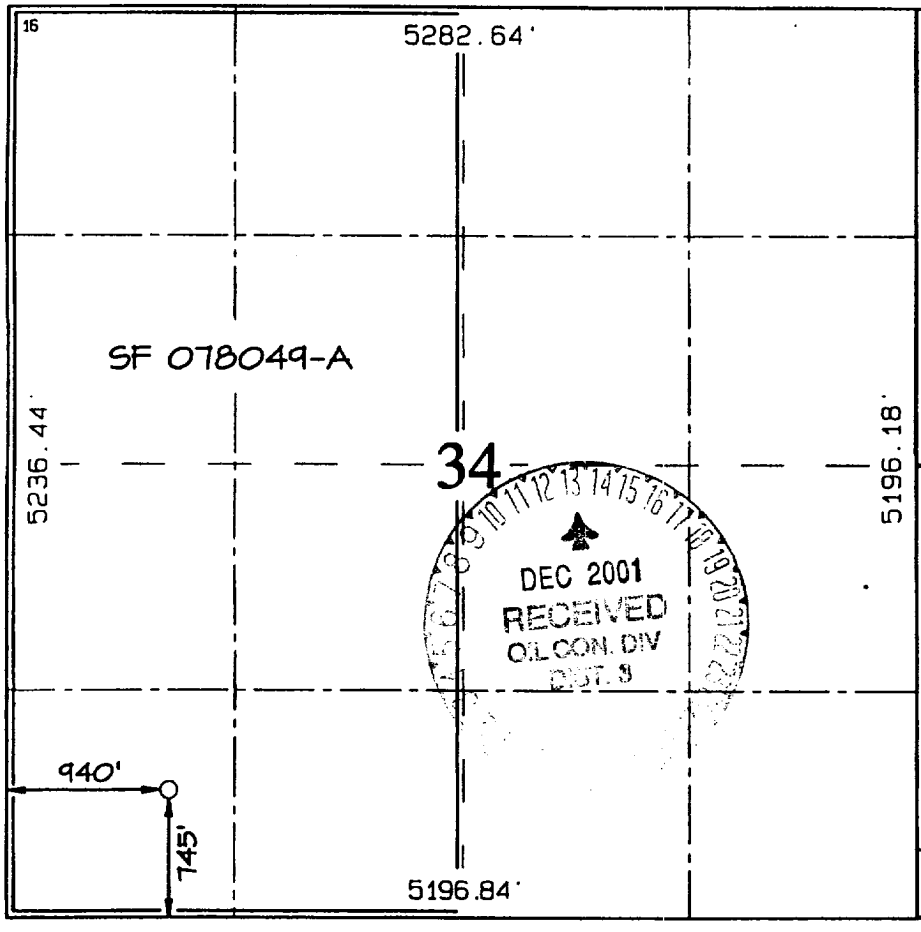
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	34	29N	8W		745	SOUTH	940	WEST	SAN JUAN

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.
320.0 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: Kim Southall

Kim Southall

Printed Name

Property Analyst

Title

July 27, 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.

JUNE 29, 2001

Date of Survey

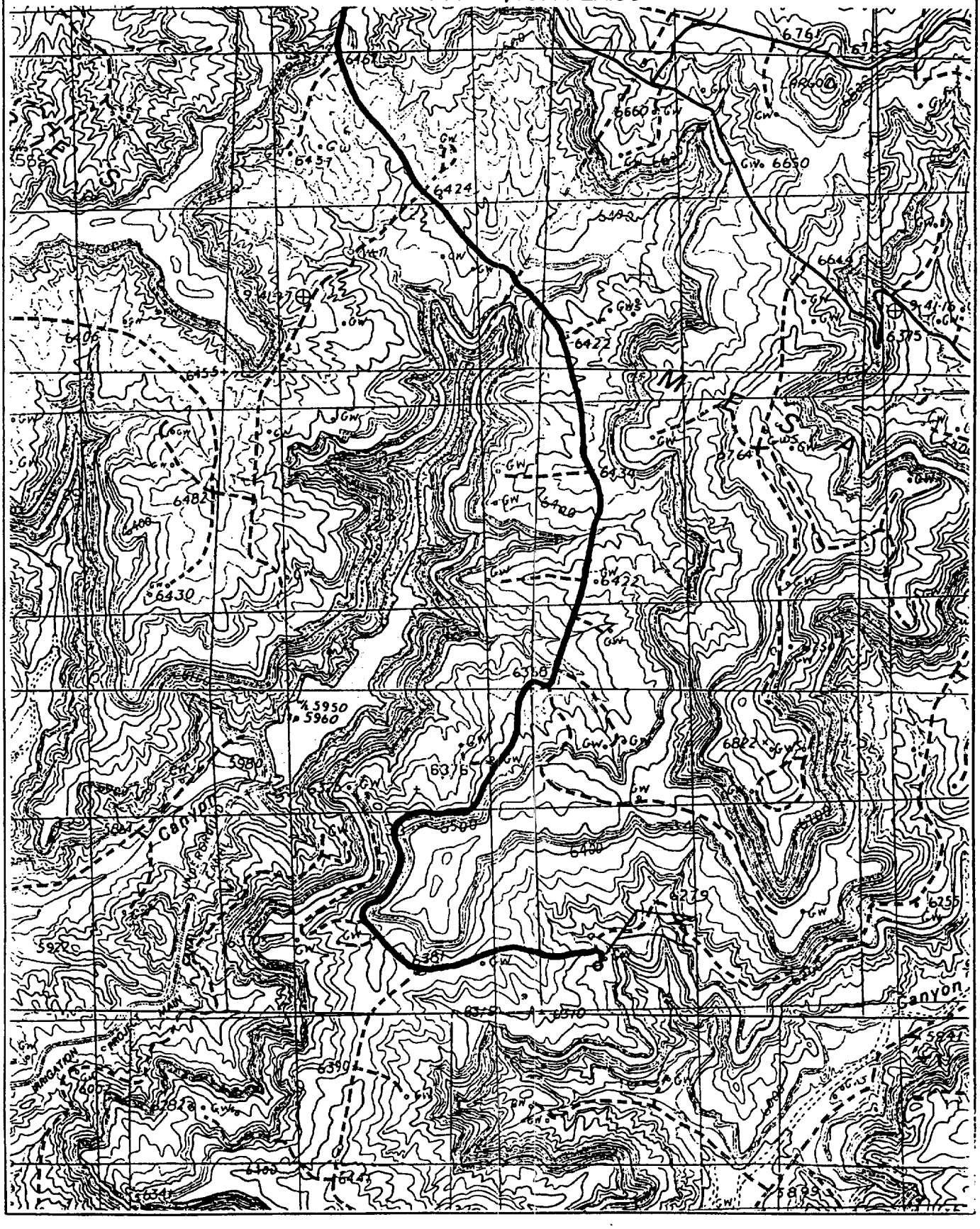
Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
PROFESSIONAL SURVEYOR

Certificate Number 6857

CONOCO, INC. BOLIN HARDIE #1M

745' FSL & 940' FWL, SECTION 34, T29N, R8W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO



PROJECT PROPOSAL - New Drill / Sidetrack

conoco

Well : BOLIN HARDIE 1M	Lease : BOLIN HARDIE	AFE # :	AFE $:
Field Name : EAST NON 28-7	Rig :	State : NM	County : San Juan	API # :
Geoscientist : Glaser, Terry J	Phone : (281) 293 - 6538	Prod. Engineer : Moody, Craig E.	Phone : (281) 293 - 6559
Res. Engineer : Shannon, Marc	Phone : (281) 293 - 6564	Proj. Field Lead :	Phone :

Primary Objective (Zones) :

Pool	Pool Name
FRR	BASIN DAKOTA (PRORATED GAS)

"Mud Drill"

Surface Location :

Latitude : 36.677386	Longtitude : -107.6687	X :	Y :	Section : 34	Survey : 29N	Abstract : 8W
Footage X : 940 FWL	Footage Y : 745 FSL	Elevation: 6278 (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 = 6291 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	284	6007				Severe lost circulation is possible. 9 5/8", 36 ppf, J-55, STC casing. Circulate cement to surface.
OJAM	1857	4434				Possible water flows"
KRLD	1969	4322				
FRLD	2529	3762				Possible gas
PCCF	2801	3490				
LEWS	3099	3192				
Intermediate Casing	3199	3092				7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	3749	2542				
CLFH	4399	1892		1300		Gas; possibly wet
MENF	4596	1695				Gas
PTLK	4949	1342				Gas
MNCS	5249	1042				
GLLP	6149	142				
GRHN	6994	-703				Gas possible, highly fractured
TWLS	7096	-805				Gas
CBBO	7246	-955				Gas

PROJECT PROPOSAL - New Drill / Sidetrack

Total Depth	7344	-1053	☐	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 :

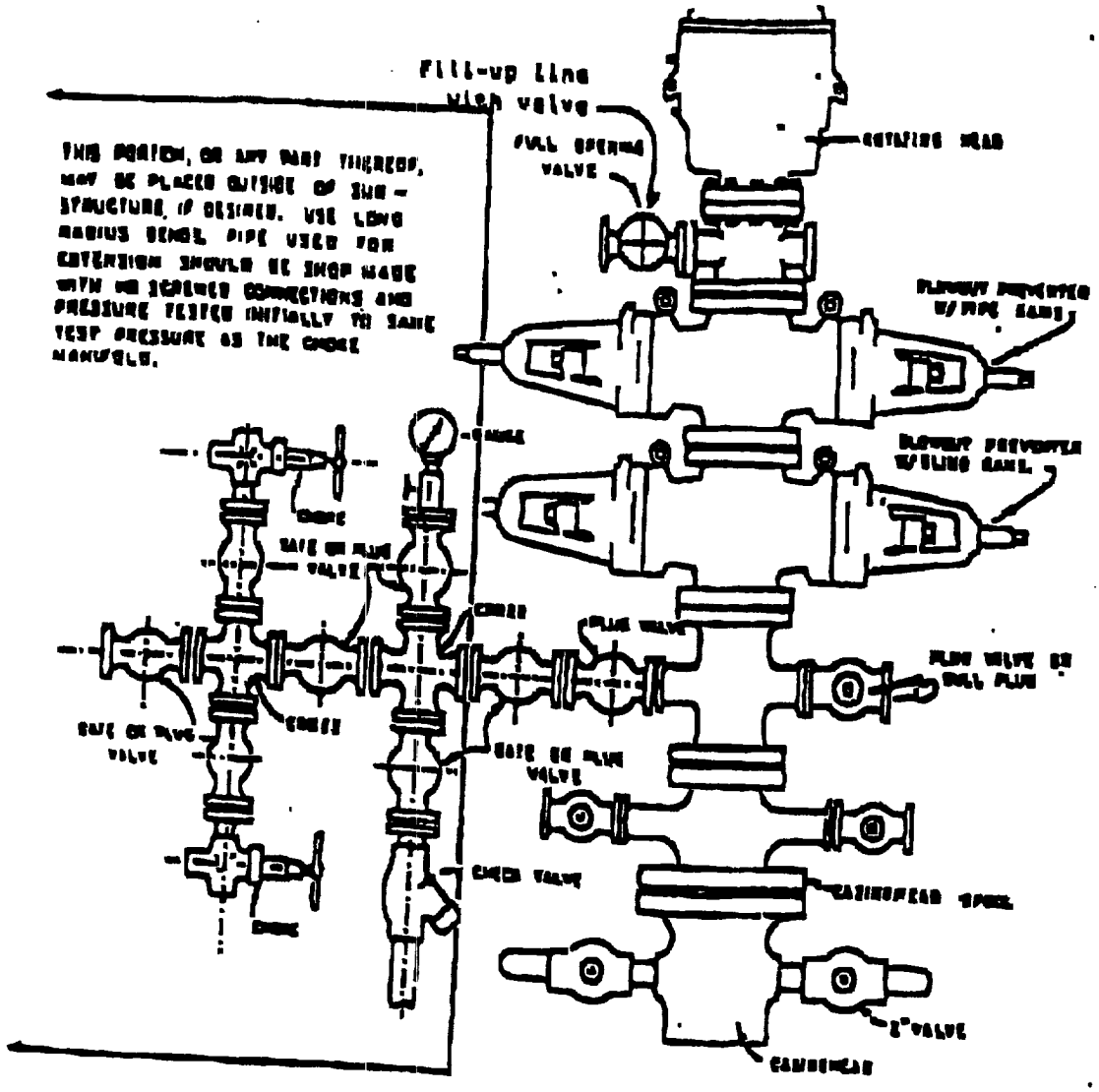
Intermediate Logs : ☐ Log only if show ☐ GR / ILD ☐ Triple Combo

TD Logs : ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☑ 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 : Same well pad as Bolin A #3



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. 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 6 - 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 2) Solar Power Unit 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.