Form 3160-3
(August 1999)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SF-078496-A

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

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 214G

2. Name of Operator
CONOCO INC.

Contact: VICKI WESTBY
E-Mail: Vicki.R.Westby@conoco.com

9. API Well No.
30 039 27053

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 NENE 410FNL 360FEL

At proposed prod. zone

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 4 T27N R7W Mer NMP
A

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
		320.17 E/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 7744 MD	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 6669 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	Name (Printed/Typed)	Date
(Electronic Submission)	VICKI WESTBY	07/19/2002

Title
AUTHORIZED SIGNATURE

Approved by (Signature) /s/ David J. Mankiewicz	Name (Printed/Typed)	Date SEP 24 2002
Title	Office	

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 #12912 verified by the BLM Well Information System
For CONOCO INC., sent to the Farmington

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

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

** 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
30-039-27053	72319 / 71599	BLANCO MESAVERDE / BASIN DAKOTA

4 Property Code	5 Property Name	6 Well Number
016608	SAN JUAN 28-7 UNIT	214G
7 OGRID No.	**8 Operator Name**	**9 Elevation**
005073	CONOCO, INC.	6669'

10 Surface Location

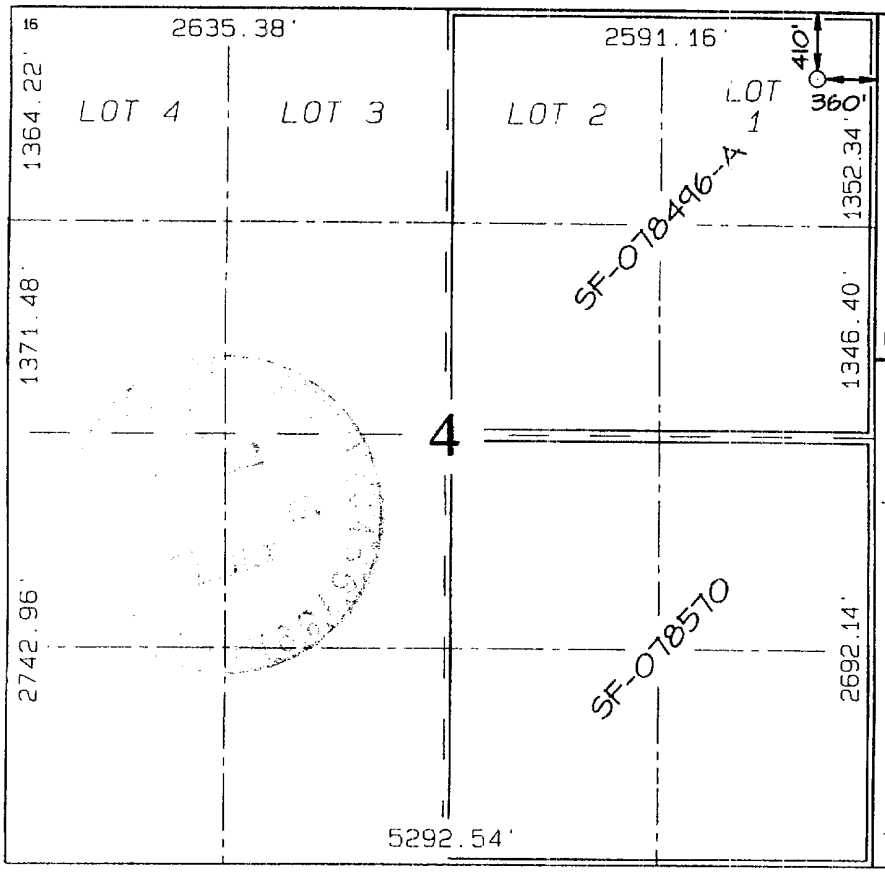
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	4	27N	7W		410	NORTH	360	EAST	RIO ARRIBA

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.
320.17 Acres - (E/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

Vicki Westby
Signature

Vicki R. Westby
Printed Name

Sr. Title Analyst
Title

July 16, 2002
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.

Date of Survey: JUNE 13, 2002

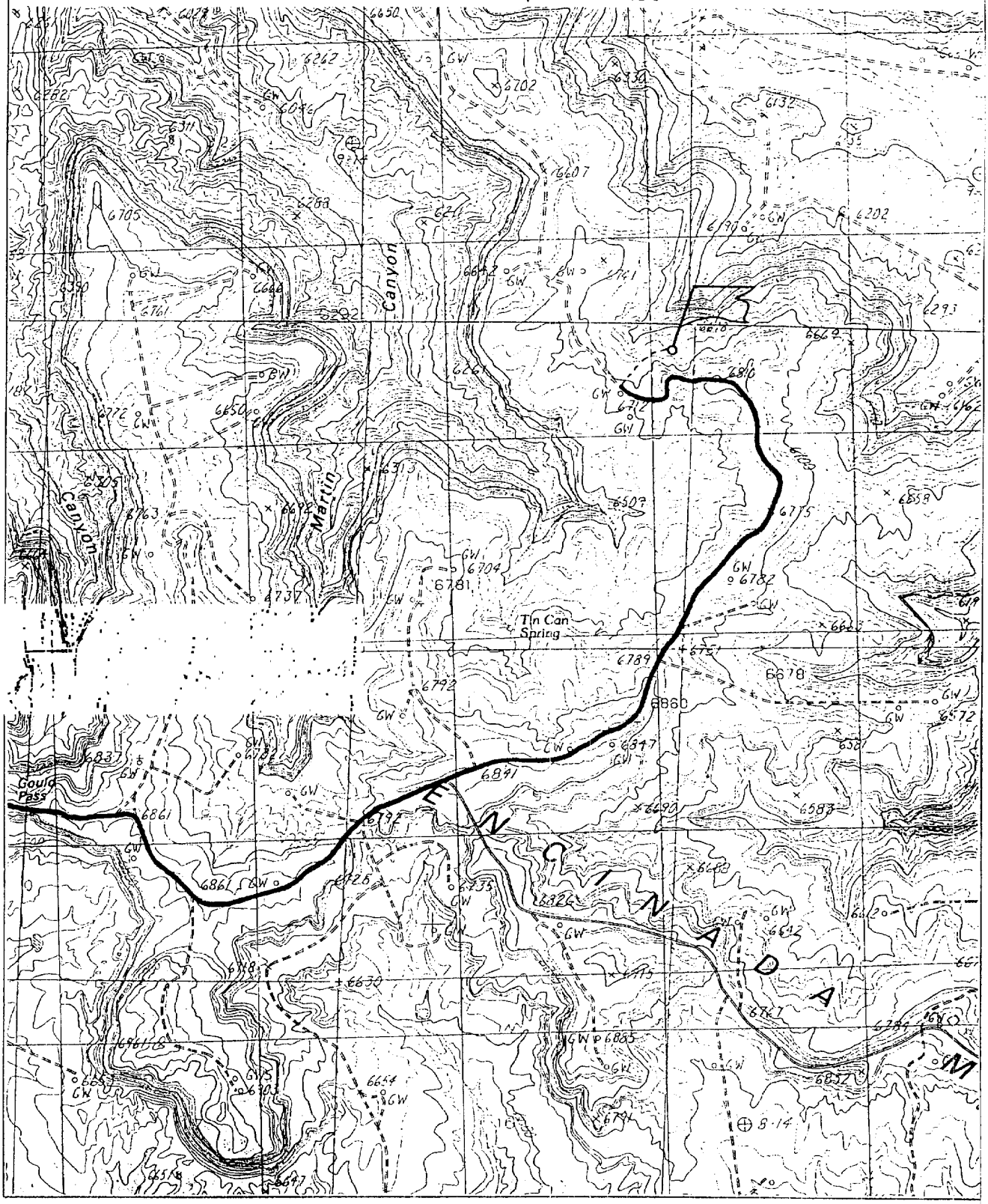
Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

CONOCO, INC. SAN JUAN 28-7 UNIT #214G

410' FNL & 360' FEL, SECTION 4, T27N, R7W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO



DRILLING PROGRAM - SAN JUAN 28-7 214G

conoco

San Juan Business Unit

Well: SAN JUAN 28-7 214G	Area: EAST	AFE #s: 4233/4234	AFE $: 340496.21
Field EAST 28-7	Rig: Key 43	State: NM	County Rio Arriba	API

Location: Surface

Lat. 36.609538	Long: -107.57017	Footage X: 360 FEL	Footage 410 FNL	Sec.: 4	Survey: 27N	Abstract: 7W

ERA (Emergency Response Area):

Lat: | Long: | Air Drilled

Formation Data Ground Level 6669 FT Assume KB 6682 FT

Formation Call && Casing Points	Depth (TVD in Ft)	BHP (PSIG)	BHT	Remarks
Surface Casing	229			Severe lost circulation is possible. 9 5/8", 36 ppf, J-55, STC casing. Circulate cement to surface.
OJAM	2372			Possible water flows
KRLD	2522			
FRLD	3002			Possible gas
PCCF	3252			
LEWS	3452			
Intermediate Casing	3552			7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4202			
CLFH	4897	1300		Gas; possibly wet
MENF	5042			Gas
PTLK	5492			Gas
MNCS	5792			
GLLP	6717			
GRHN	7394			Gas possible, highly fractured
TWLS	7477			Gas
CBBO	7612			Gas
Total Depth	7744	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 ☐ Other

TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☑ TDT ☐ Other

Additional Information:

Comments:

Printed On: 07/19/2002 7:50:39 AM

Well: San Juan 28-7 214G
County: San Juan
Area: East 28-1
Rig: Key Rig 43

Company: Conoco, Inc.
Engineer: Mr. Tom Schaefer
Date: 18-Jul-02

Surface Casing:

93 sx — Type III Cement + 2%bwoc Calcium Chloride + 0.25 lbs/sk Cello Flake + 59.2% H2(

Slurry Weight:	13.5	ppg
Slurry Yield	1.73	cf/sk
Amount of Mix Water	9.08	gps
Pump Time	4:22	
Compressives		
8 hrs @ 80 F	440	psi
24 hrs @ 80 F	1000	psi
48 hrs @ 80 F	1400	psi

Intermediate Casing:

Slurry 1 451 sx — Premium Lite Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sc Cello Flake + 8% bwoc Bentonite + 115.5% H20

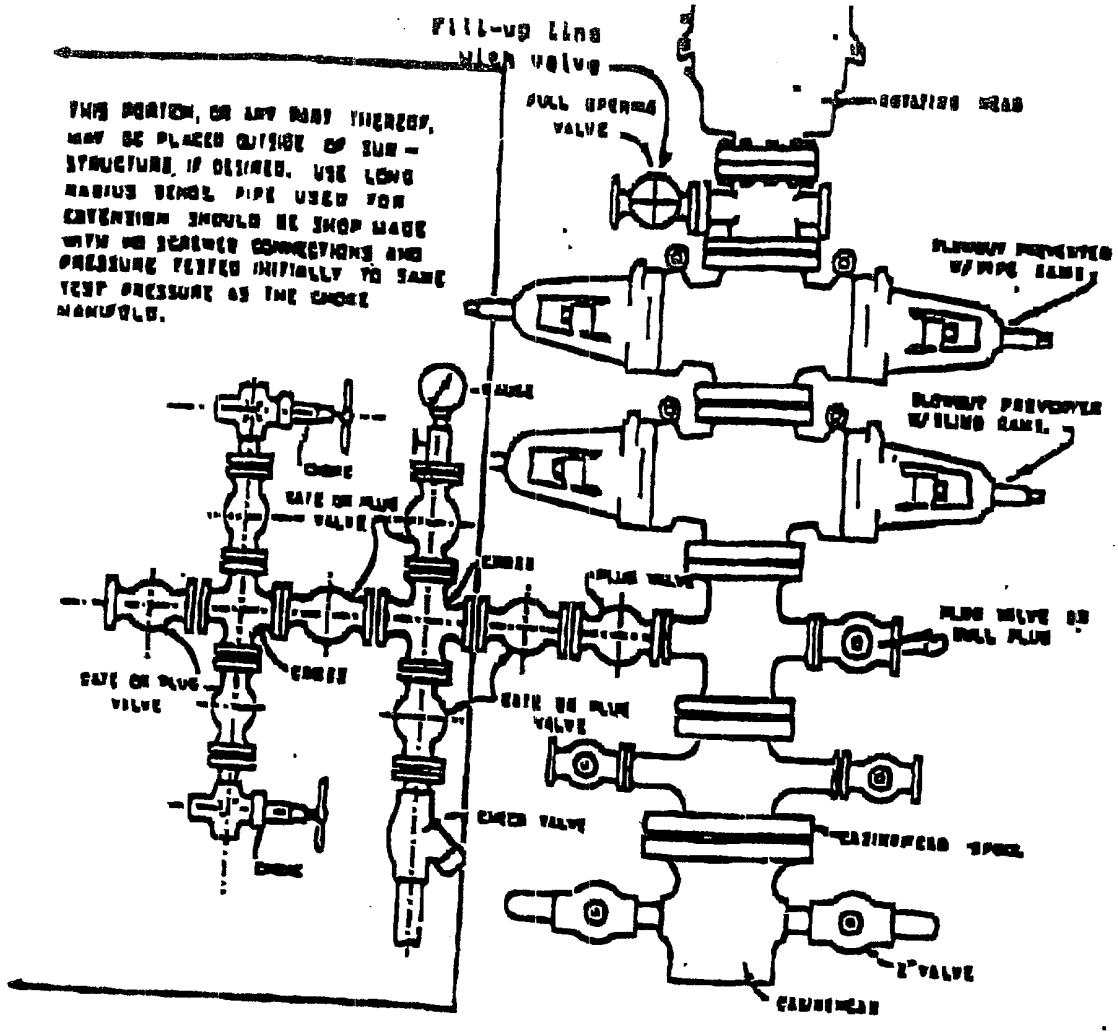
Slurry 2 73 sx — Type III Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sk Cello Flake + 59.2% H2(

Slurry 1			Slurry 2		
Slurry Weight:	12.1	ppg	Slurry Weight:	14.5	ppg
Slurry Yield	2.23	cf/sk	Slurry Yield	1.41	cf/sk
Amount of Mix Water	12.05	gps	Amount of Mix Water	6.67	gps
Pump Time	3:00		Pump Time	2:15	
Compressives			Compressives		
8 hrs @ 80 F		psi	8 hrs @ 80 F	800	psi
24 hrs @ 80 F	250	psi	24 hrs @ 80 F	2150	psi
48 hrs @ 80 F	525	psi	48 hrs @ 80 F	3625	psi

Production Casing:

331 sx — Premium Lite High Strength + 0.25 lbs/sk Cello Flake + .2% bwoc CD-32 + 0.65% bwoc FL-62 + 105.4% H20

Slurry Weight:	12.5	ppg
Slurry Yield	2.02	cf/sk
Amount of Mix Water	11	gps
Pump Time	3:00	
Compressives		
8 hrs @ 140 F		psi
24 hrs @ 140 F	1600	psi
48 hrs @ 140 F	2000	psi



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 delation 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	9 - 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 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 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.