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

AUG 2001 RECEIVED OIL CON. DIV DIST. 3

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. SF-079289
	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 218E
2. Name of Operator CONOCO INC. Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conoco.com	9. API Well No. 30-039-26781
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 PICTURED CLIFFS SOUTH/DAKOTA Basin Dakota Gas
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SESE 1030FSL 1025FEL At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area P Sec 12 T28N 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
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8399 MD / 20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6817 GL	22. Approximate date work will start / 23. Estimated duration

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"

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) VICKI WESTBY	Date 07/13/2001
Title AUTHORIZED SIGNATURE		
Approved by (Signature) /s/ Joel Farrell	Name (Printed/Typed)	Date AUG - 6
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 #5666 verified by the BLM Well Information System
For CONOCO INC., sent to the Farmington
Committed to AFMSS for processing by Lucy Bee on 07/18/2001 ()

**** 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

99 JUN 19 PM 2:48

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-039-26781	[redacted]/72439/71599	Basin Dakota / Blanco PC South

4 Property Code	5 Property Name	6 Well Number
016608	SAN JUAN 28-7 UNIT	218E

7 OGRID No.	8 Operator Name	9 Elevation
005073	CONOCO, INC.	6817

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
P	12	28N	7W		1030	South	1025	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.
321.22 / 143.60 (PC)	Y	U	Non-standard Spacing Order No. R-2948 NSP-1799 L

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

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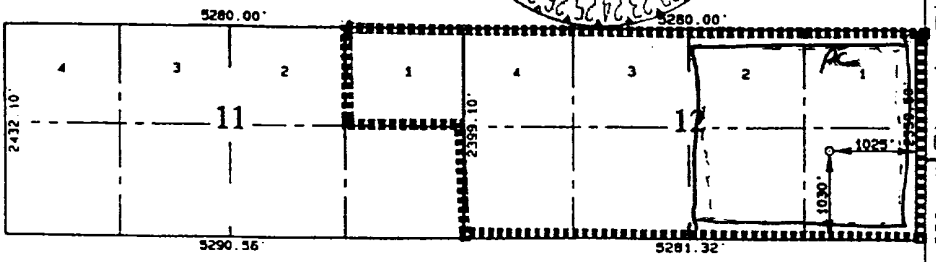

AUG 2001
RECEIVED
OIL CON. DIV.
DIST. 3

17 OPERATOR CERTIFICATION

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

Jo Ann Johnson
Signature

Jo Ann Johnson
Printed Name

Sr. Property Analyst
Title

12-17-98
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.

NOVEMBER 8, 1997
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
PROFESSIONAL SURVEYOR

Certificate Number

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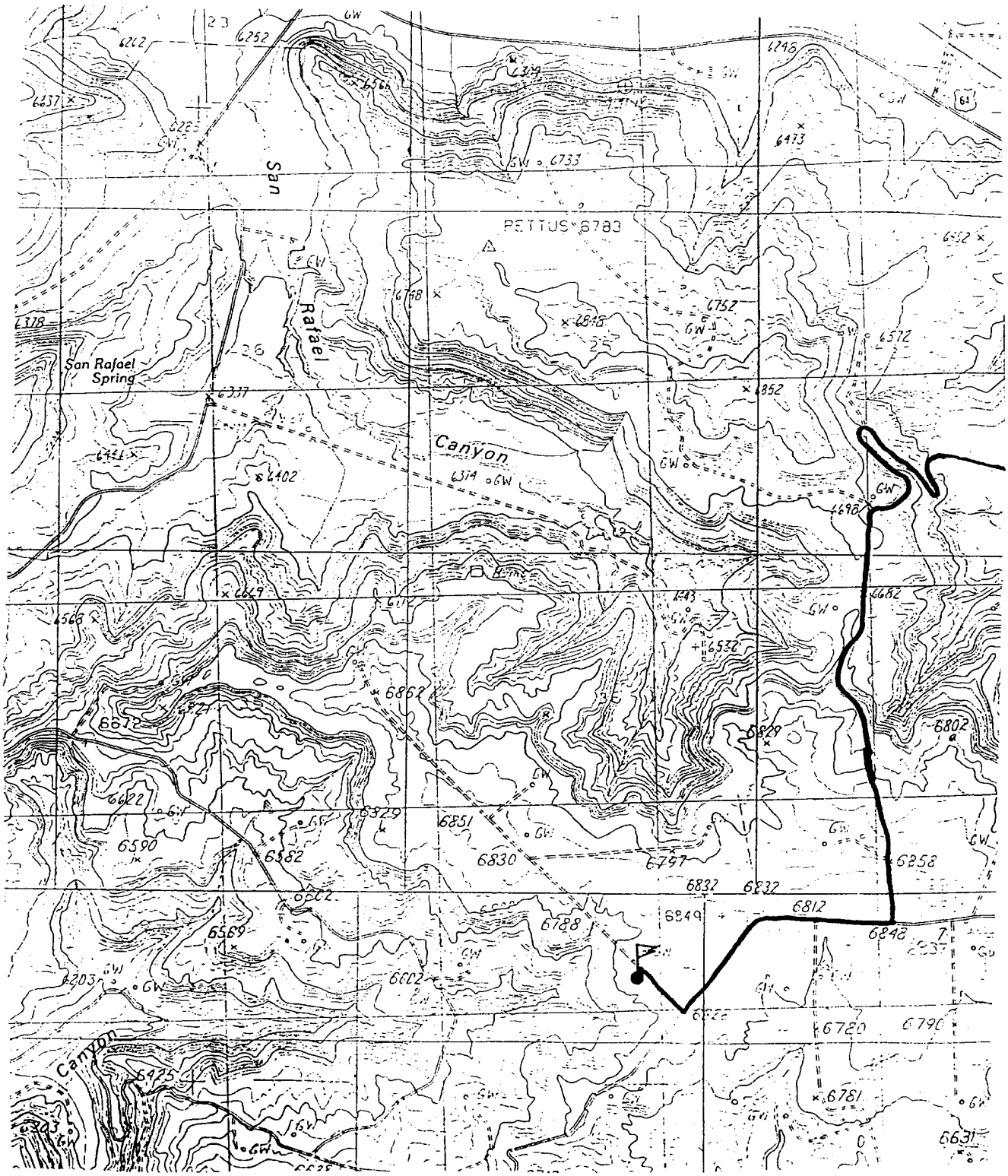
CONOCO, INC. SAN JUAN 28-7 UNIT #218E

1030' FSL 1025' FEL SEC 12, T28N, R7W
RIO ARRIBA COUNTY, NEW MEXICO



Schlumberger
Dowell

9.625" Surface Pipe

Big A Rig 42
Conoco Inc.
Phone 320-8107

SJU 28-7 218E

Set 9.625" Casing at +/- 250' lifting Cement up to SURFACE in a 12.25" Hole.

CLASS G + 2% CALCIUM CHLORIDE + 0.25 PPS CELLOPHANE

(250)*(2.00%)*(0.3132 ft/cu.ft.) Divided by 1.19 yield = 150 sacks Cement

1 Pump 20 bbl Water

2 Mix and pump 150 sx Cement Slurry

3 Drop Wooden plug and displace with fresh water

System #1:	Type		
Class	B	Conce	UOM
Add 1	S1	2.00	%BWOC
Add 2	D29	0.25	PPS
	System #1 Mix	15.60	PPG
	Yield :	1.19	Ft.3/Sk.
	Mix Water :	5.19	Gals./sk.
	Total Liquid :	5.19	Gals./sk.
	Fluid loss	800 ml	30 min.
	Thickening time		3 hr
	Comp. Strength		1000 psi in 12 hours
	Comp. Strength		2200 psi in 24 hours
	Free Water		<1.0 ml in 2 hours

Marty Hupp
Sales Engineer
505-325-5096
Fax: 505-327-0317

Dowell

7" intermediate

Conoco Inc.
Phone 320-8107

SJU 28-7 218E

Set 7" Casing at +/- 4136' lifting Cement up to surface in a 8.75" Hole.

125% excess

(4136)*(2.25%)*(0.1503 ft/cu.ft.) = 1400 cubic feet.

100 sacks of tail cement = 138 cubic feet

1400 cubic feet - 138 cubic feet = 1260 cubic feet of lead cement

1260 cubic feet divided by 2.86 yield for 440 sacks lead cement

1 Pump 10 bbl Water

2 Pump 20 bbl CW100 water spacer

3 Pump 10 bbl Water

4 Mix and pump 440 sx Lead Cement Slurry AT 11.4 PPG

5 Mix and pump 100 sx tail cement at 13.5 ppg

6 Drop plug and displace with fresh water

440 SACKS LEAD CEMENT

System #1:	LEAD SLURRY B + 3% D79 + 0.25#/SK + 0.1% D46		
Class	B	Concentr.	UOM
	D79 EXTENDER	3	%BWOC
Add 1	D29 Cellophane	0.25	PPS
Add 2	D46 Antifoam	0.1	%BWOC
	System #1 Mix Weight :	11.4	PPG
	Yield :	2.86	Ft.3/Sk.
	Mix Water :	17.64	Gals./sk.
	Total Liquid :	17.64	Gals./sk.
	Fluid Loss :	700	ml/30 min.
	Free Water	1	ml/2 hour
	Compressive Strength:	250	psi/12 hour
	Compressive Strength:	600	psi/24 hour
	Thickening Time	6	hours @120 f

100 SACKS TAIL SLURRY

System #	Type		
Class	B	Concentr.	UOM
Poz	D35	50.00	%BWOC
Add 1	D20	2.00	%BWOC
Add 2	S1	2.00	%BWOC
Add 3	D42	5.00	PPS
Add 4	D29	0.25	PPS
Add 5	D46	0.10	%BWOC
Add 6	D65	0.15	%BWOC
	System #1 Mix Weight :	13.50	PPG
	Yield :	1.38	Ft.3/Sk.
	Mix Water :	6.07	Gals./sk.
	Total Liquid :	6.07	Gals./sk.
	Fluid Loss :	550	ml/30 min.
	Free Water	1	ml/2 hour
	Compressive Strength:	800	psi/12 hour
	Compressive Strength:	1250	psi/24 hour
	Thickening Time	3.5	hours @120 f

Marty Hupp
Sales Engineer
505-325-5096
Fax: 505-327-0317

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Schlumberger
Dowell

4.5" production string

Conoco Inc.
Phone 320-8107

SJU 28-7 218E

Set 4.5" Casing at +/- 8099' lifting Cement up to 3836' in a 6.25" Hole.

One Cement Slurry mixed at 13.5 ppg with 75% excess

(8099-3836)*(1.75%)*(0.1026 ft/cu.ft.) Divided by 1.37 yield = 560 sacks Cement

1 Pump 10 bbls w/10 gallons D122a and 5 gal J477

2 Pump 20 bbl CW100

3 Pump 10 bbl Water with 1 gallon L64

4 Mix and pump 560 sx Cement Slurry AT 13.5 PPG

5 Drop plug and displace with fresh water

	560 SACKS	
System	50/50 + 2% Gel	4.5" LONGSTRING
Class	B	Concentr. UOM
Poz	D48 POZ	50 %BWOC
Add 1	D20 Gel	2 %BWOC
Add 2	D29 Cellophane	0.25 PPS
Add 3	D46 Antifoam	0.1 %BWOC
Add 4	B14 Fluid Loss	0.4 %BWOC
Add 5	D65 Dispersant	0.2 %BWOC
Add 6	D800 RETARDER	0.1 %BWOC
	System #1 Mix Weight :	13.5 PPG
	Yield :	1.37 Ft.3/Sk.
	Mix Water :	6.05 Gals./sk.
	Total Liquid :	6.05 Gals./sk.
	Fluid Loss :	336 ml/30 min.
	Free Water	0.5 ml/2 hour
	Compressive Strength:	750 psi/12 hour
	Compressive Strength:	1250 psi/24 hour
	Thickening Time	3.5 hours @ 150 f

Marty Hupp
Sales Engineer
505-325-5096
Fax: 505-327-0317

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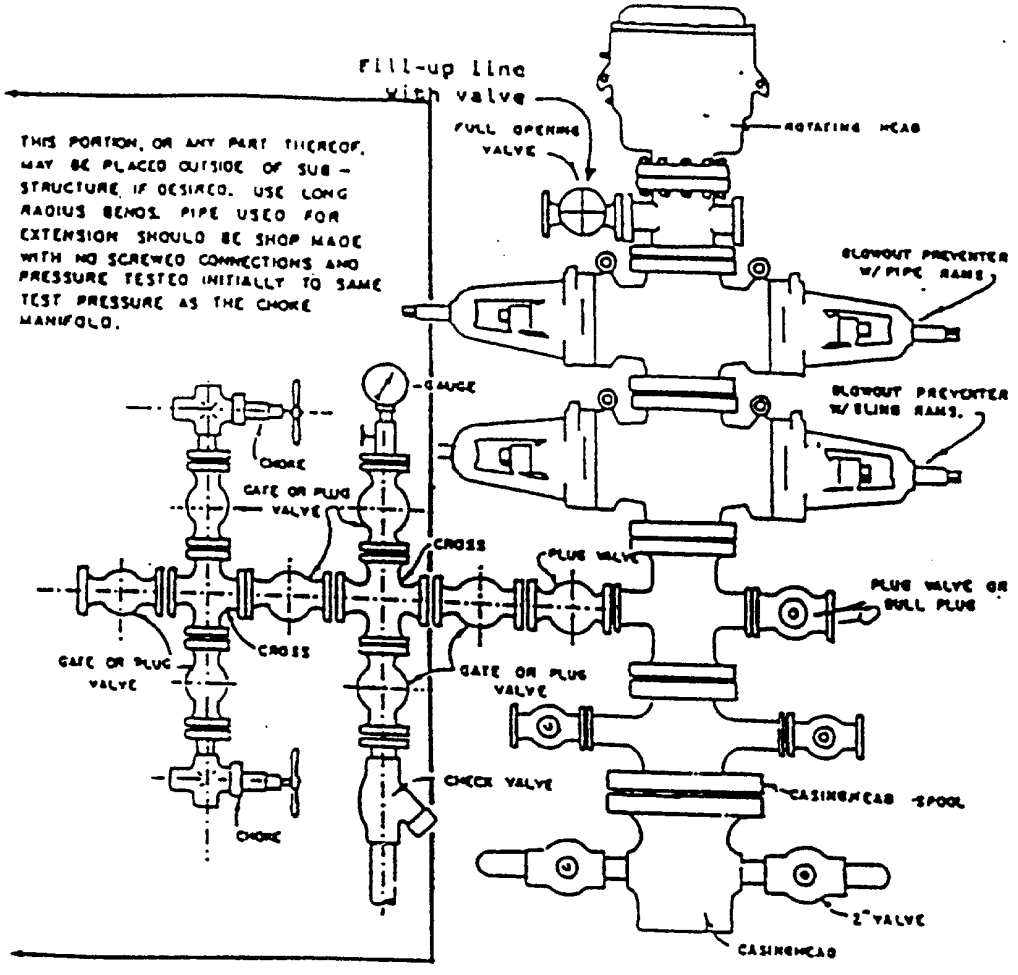

BLOWOUT PREVENTER HOOKUP

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.

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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.