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-078496
	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 181G
2. Name of Operator CONOCO INC. Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conoco.com	9. API Well No. 30-039-26880
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 DAKOTA
4. Location of Well (*Report location clearly and in accordance with any State requirements.**) At surface NENW 820FNL 1925FWL At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Sec 3 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 319.99 W/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 7725 MD — 20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 6690 GL	22. Approximate date work will start — 23. Estimated duration

MAR 2002 RECEIVED OIL CON. DIV. DIST. 3

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 12/10/2001
Title AUTHORIZED SIGNATURE		
Approved by (Signature) JL	Name (Printed/Typed)	Date 3-13-2
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 #9710 verified by the BLM Well Information System
For CONOCO INC., will be sent to the Farmington

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

OPERATOR SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

** DRAFT ** DRAFT ** DRAFT ** DRAFT ** DRAFT ** DRAFT ** DRAFT **

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
30-039-26880	72319 / 71599	BLANCO MESAVERDE / BASIN DAKOTA

4 Property Code	5 Property Name	6 Well Number
016608	SAN JUAN 28-7 UNIT	181G

7 OGRID No.	8 Operator Name	9 Elevation
005073	CONOCO, INC.	6690'

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
C	3	27N	7W		820	NORTH	1925	WEST	RIO ARRIBA

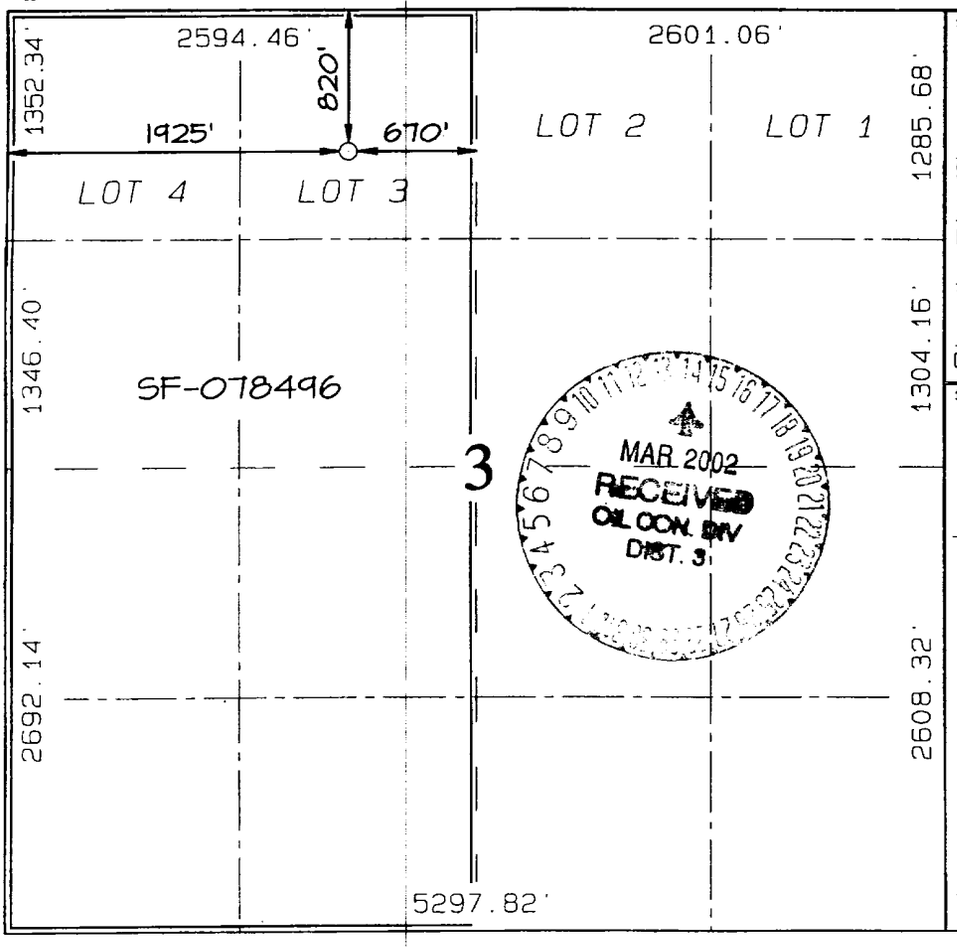
11 Bottom Hole Location If Different From Surface

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.
319.99 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

16



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

November 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.

Survey Date: OCTOBER 31, 2001

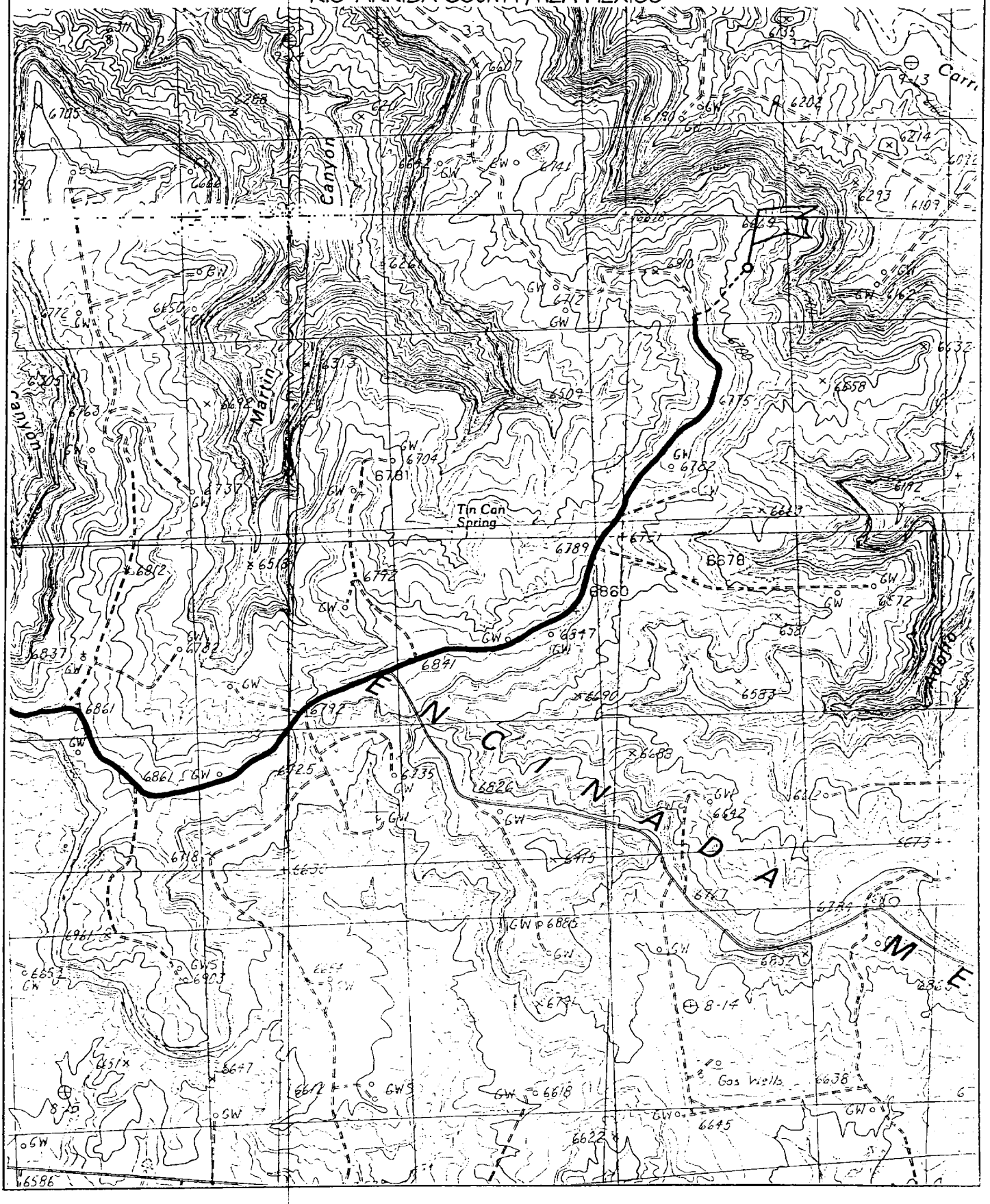
Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

CONOCO, INC. SAN JUAN 28-7 UNIT #181G

820' FNL & 1925' FWL, SECTION 3, T27N, R7W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO



PROJECT PROPOSAL - New Drill / Sidetrack

conoco

Well : SAN JUAN 28-7 181G	Lease : SAN JUAN 28-7	AFE # : 3334 (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 : (281) 293 - 5767	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)

"for Drill"

Surface Location :

Latitude : 36.608283	Longtitude : -107.5624	X :	Y :	Section : 3	Survey : 27N	Abstract : 7W
Footage X : 1925 FWL	Footage Y : 820 FNL	Elevation: 6690 (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 = 6703 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion	BHP (PSIG)	BHT	Remarks
Surface Casing	285	6418				Severe lost circulation is possible. 9 5/8", 36 ppf, J-55, STC casing. Circulate cement to surface.
OJAM	2503	4230				Possible water flows"
KRLD	2608	4125				
FRLD	3063	3670				Possible gas
PCCF	3313	3420				
LEWS	3713	3020				7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
Intermediate Casing	3813	2920				7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4258	2475				
CLFH	4953	1780		1300		Gas; possibly wet
MENF	5083	1650				Gas
PTLK	5543	1190				Gas
MNCS	5843	890				
GLLP	6773	-40				
GRHN	7458	-725				Gas possible, highly fractured
TWLS	7533	-800				Gas
PAGU	7658	-925				Gas

PROJECT PROPOSAL - New Drill / Sidetrack

conoco

CBBO	7673	-940	☒			Gas
Total Depth	7725	-992	☒	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 : The TD of this well is set shallower (58') than normal due to potential lower Dakota water

Well: San Juan 28-7 181G
County: San Juan
Area: East 28-1
Rig: Key Rig 43

Company: Conoco, Inc.
Engineer: Mr. Ricky Joyce
Date: 10-Dec-01

Surface Casing:

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

Slurry Weight:	14.5	ppg
Slurry Yield	1.41	cf/sk
Amount of Mix Water	6.67	gps
Pump Time	2:30	
Compressives		
8 hrs @ 80 F	800	psi
24 hrs @ 80 F	2150	psi
48 hrs @ 80 F	3625	psi

Intermediate Casing:

Slurry 1 554 sx — Premium Lite Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sc Cello Flake + 8% bwoc Bentonite + 115.5% H20

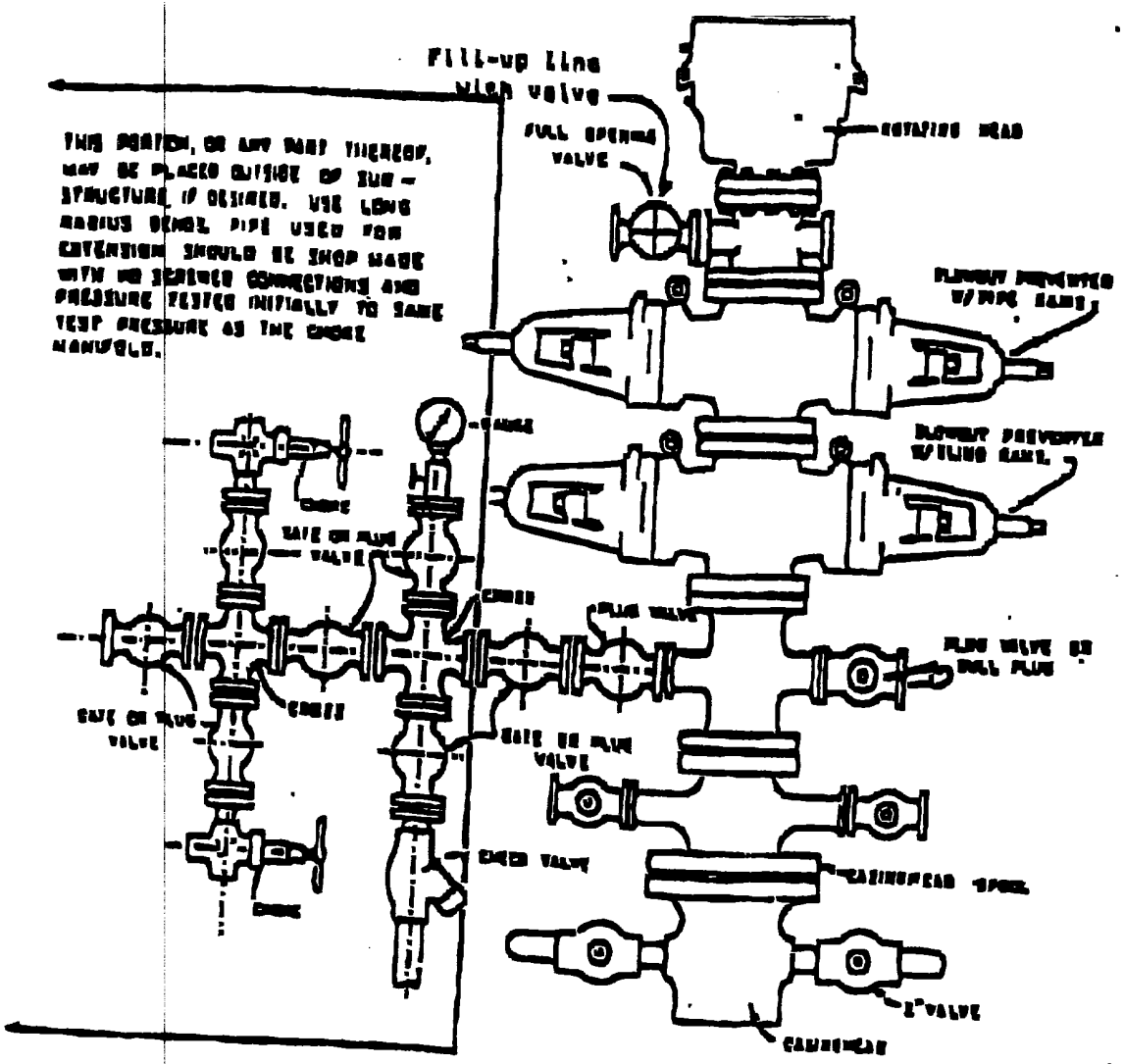
Slurry 2 83 sx — Type III Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sk Cello Flake + 59.2% H2(

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:

376 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



BLOWOUT PREVENTER HOOKUP

Drilling contractors used in the San Juan Basing supply 3000 psi equipment, but cannot provide annular preventors because of substructure 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.