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

RECEIVED
2002 MAY -9 PM 12:38
070 FARMINGTON, NM

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. SF-078497-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 199G
2. Name of Operator CONOCO INC. Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conoco.com	9. API Well No. 30039 27004
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 NESW 2430FSL 2240FWL At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Sec 18 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 345.30 NGP - R 2948
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8024 MD / 20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 6886 GL	22. Approximate date work will start / 23. Estimated duration

JUL 2002

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) Vicki R Westby	Name (Printed/Typed) VICKI WESTBY	Date 05/06/2002
Title AUTHORIZED SIGNATURE		
Approved by (Signature) /s/ David J. Mankiewicz	Name (Printed/Typed)	Date JUL - 3
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 #10185 verified by the BLM Well Information System
For CONOCO INC., will be 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

** 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
30-039-27004	71599	BASIN DAKOTA

[4] Property Code	[5] Property Name	[6] Well Number
016608	SAN JUAN 28-7 UNIT	199G

[7] OGRID No.	[8] Operator Name	[9] Elevation
005073	CONOCO, INC.	6886'

[10] Surface Location

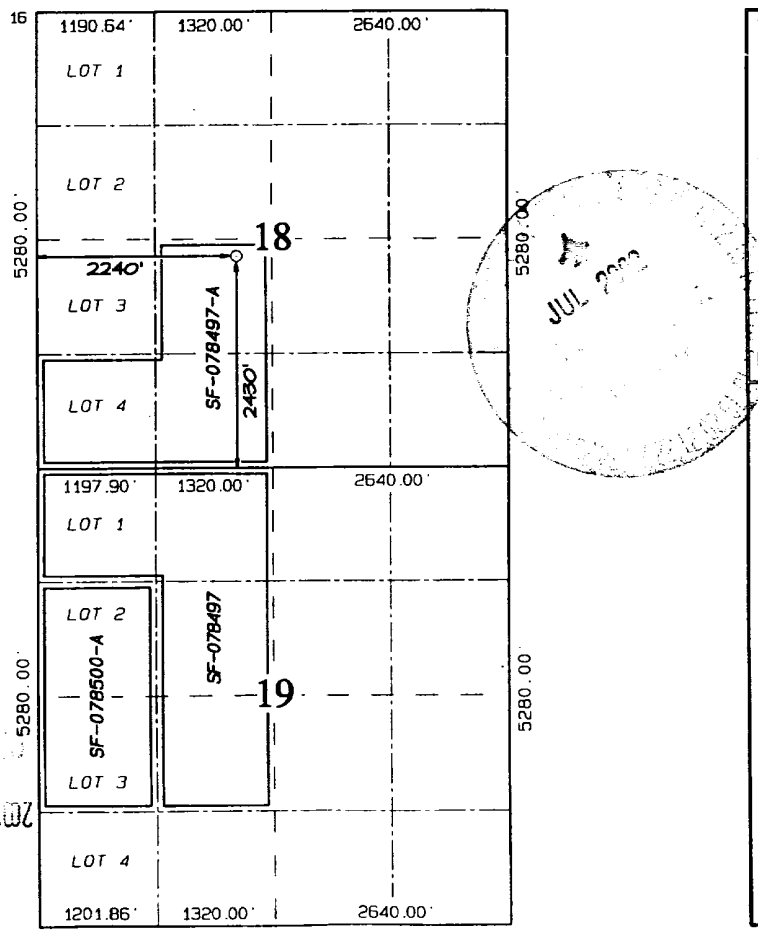
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	18	28N	7W		2430	SOUTH	2240	WEST	RIO ARRIBA

[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.
345.30 Acres			R-2948 Non Standard Dakota Only

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

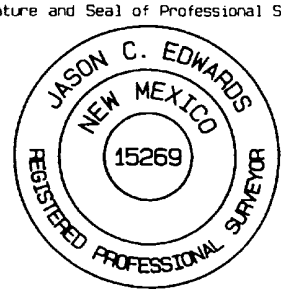
May 16, 2002
Date

[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.

Revised: MAY 16, 2002
Date of Survey: MARCH 8, 2002

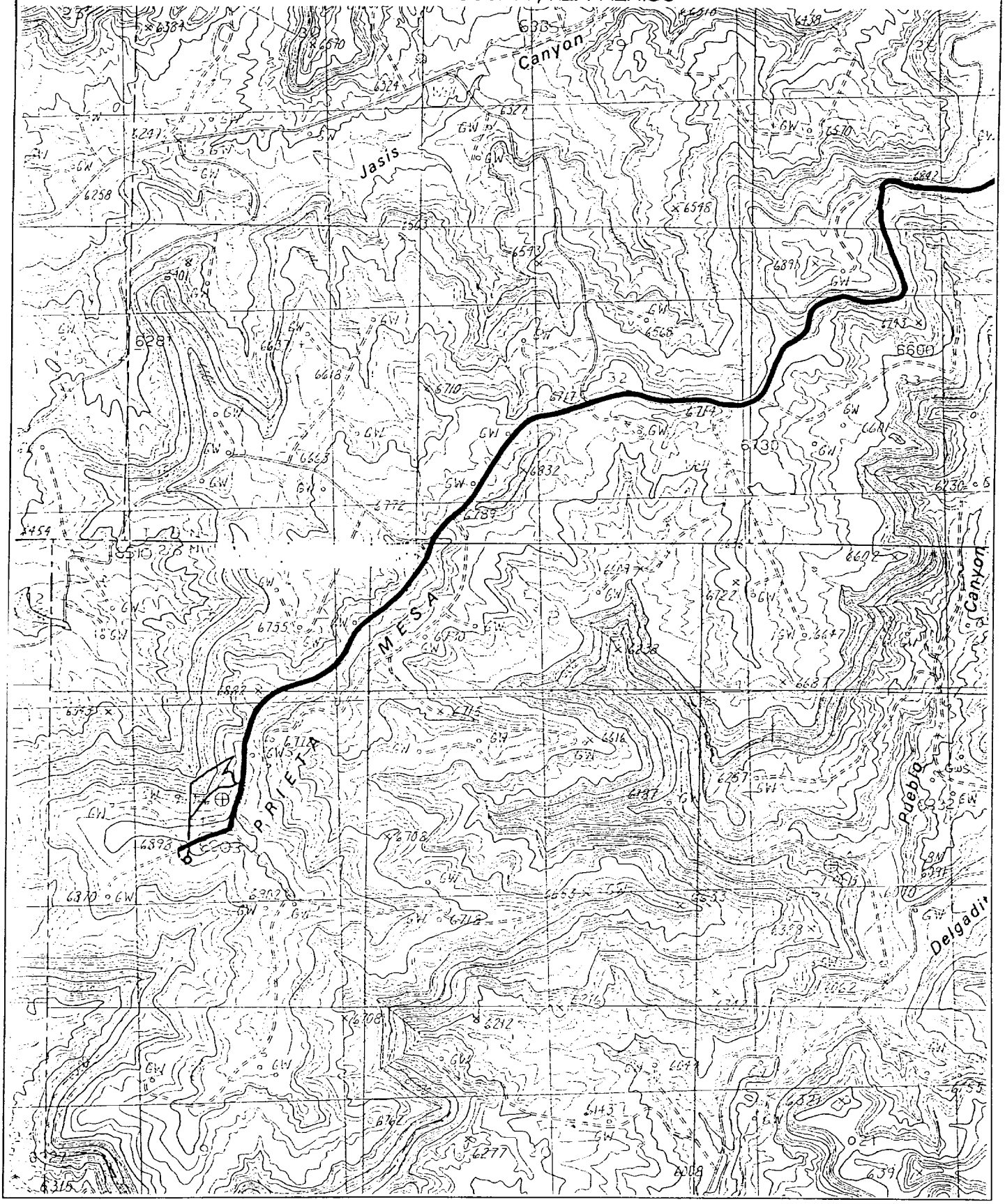
Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

CONOCO, INC. SAN JUAN 28-7 UNIT #199G

2430' FSL & 2240' FWL, SECTION 18, T28N, R7W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO



DRILLING PROGRAM - SAN JUAN 28-7 199G

conoco

San Juan Business Unit

Well: SAN JUAN 28-7 199G	Area: EAST	AFE #s:	AFE $: 6331955.5
Field Name: EAST 28-7	Rig: Key 49	State: NM	County: Rio Arriba	API #:

Location: Surface

Lat.: 36.660630	Long: -107.615141	Footage X: 2240 FWL	Footage Y: 2430 FSL	Sec.: 18	Survey: 28N	Abstract: 7W

ERA (Emergency Response Area):

Lat:	Long:

"Air Drilled"

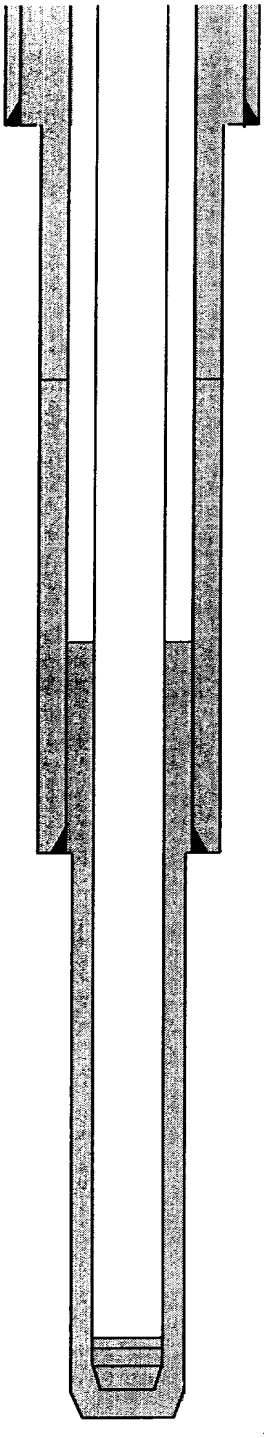
Formation Data : Ground Level = 6886 FT Assume KB = 6899 FT

Formation Call && Casing Points	Depth (TVD in Ft)	BHP (PSIG)	BHT	Remarks
Surface Casing	236			Severe lost circulation is possible. 9 5/8", 36 ppf, J-55, STC casing. Circulate cement to surface.
OJAM	2499			Possible water flows
KRLD	2599			
FRLD	3259			Possible gas
PCCF	3509			
LEWS	3709			
Intermediate Casing	3809			7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4444			
CLFH	5019	1300		Gas; possibly wet
MENF	5269			Gas
PTLK	5699			Gas
MNCS	5999			
GLLP	6974			
GRHN	7674			Gas possible, highly fractured
TWLS	7769			Gas
CBBO	7919			Gas
Total Depth	8024	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 :

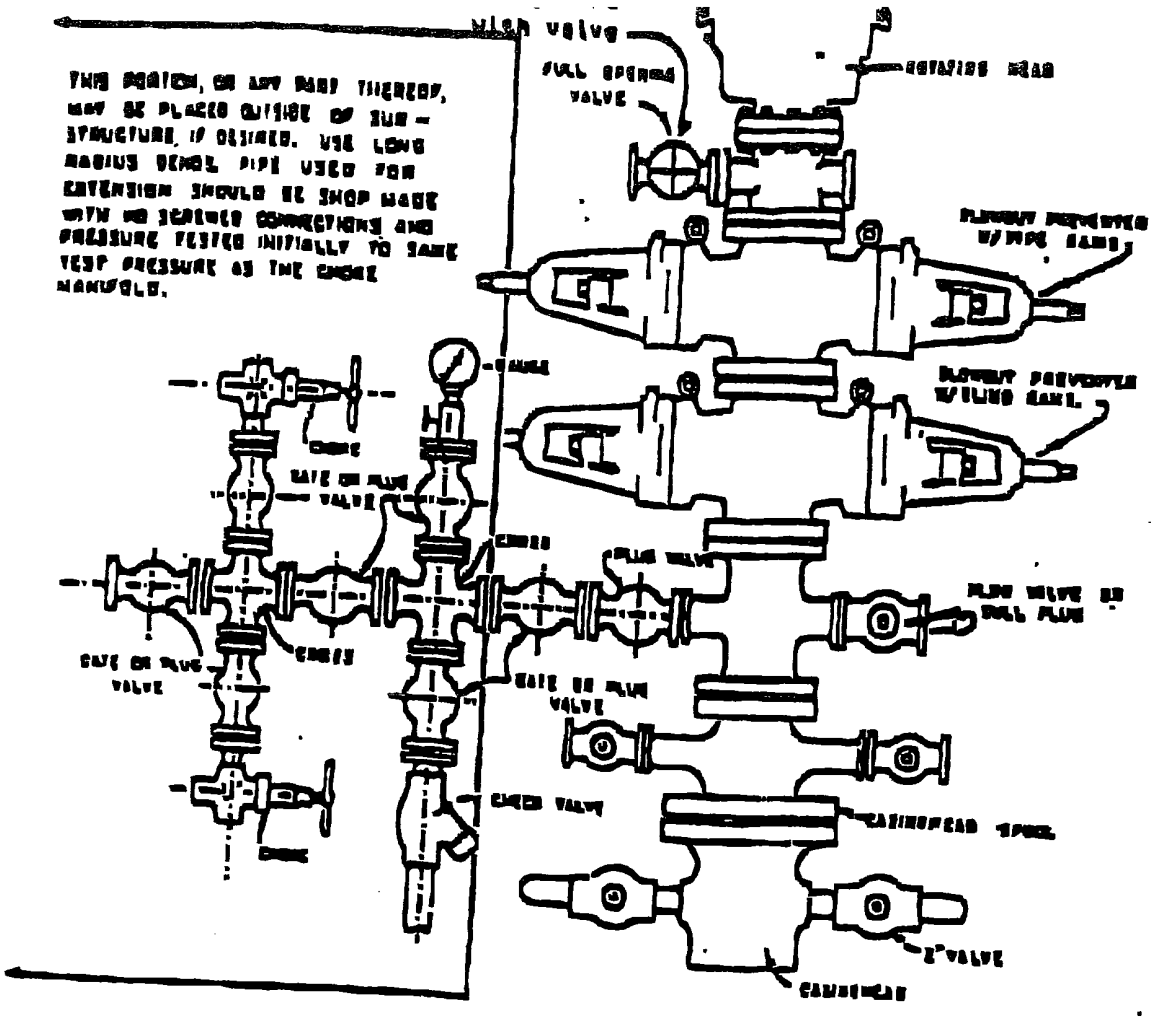
Intermediate Logs:	☐ Log only if show ☐ GR / ILD ☐ Triple Combo ☐ Other
TD Logs:	☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☑ TDT ☐ Other
Additional Information:	
Comments	

Cementing Summary **San Juan 28-7 199G (v1.0)**



	Depth	OH Excess					
9-5/8" Sfc Casing	0		Class 'H' Cement	134.6	sx	Slurry Volume	142.6 cu ft
			Flocele (if req'd)	0.25	lb/sk		25.4 bbl
			CaCl2	2.0%	bwoc-db	Slurry Density	16.5 ppg
			Defoamer (if req'd)	0.05	gal/bbl	Slurry Yield	1.06 cu ft/sk
9-5/8" shoe	200	100%				Mix Fluid	4.22 gal/sk
7" Lead Cement		150%	Blend	419.88	sx	Slurry Volume	1188.3 cu ft
			Class 'H' Cement	84	lb/sk		211.6 bbl
			San Juan Poz		lb/sk	Slurry Density	11.4 ppg
			Econolite	3.0%	bwob	Slurry Yield	2.83 cu ft/sk
			CaCl2		bwob	Mix Fluid	17.29 gal/sk
			CFR-3		bwob		
			HR-5		bwob		
7" Top of Tail	3,273		Silicalite-blended	10	lb/sk		
			Flocele	0.5	lb/sk		
			Defoamer (if req'd)	0.05	gal/bbl		
7" Tail Cement		150%	Blend	173.96	sx	Slurry Volume	207.0 cu ft
			Class 'H' Cement	100%	bwob		36.9 bbl
			San Juan Poz		lb/sk	Slurry Density	15.6 ppg
			Econolite		bwob	Slurry Yield	1.19 cu ft/sk
			CaCl2	1.00%	bwob	Mix Fluid	5.2 gal/sk
4.5" TOC	2,773		CFR-3		bwob		
			HR-5		bwob		
			Silicalite-blended		bwob		
			Flocele	0.25	lb/sk		
			Gilsonite		lb/sk		
			Defoamer (if req'd)	0.05	gal/bbl		
7" Casing Intermediate	3,773	150%					
4.5" Cement		50%	Blend	450.89	sx	Slurry Volume	766.5 cu ft
			Class 'H' Cement	47	lb/sk		136.5 bbl
			San Juan Poz	24	lb/sk	Slurry Density	12.8 ppg
			Bentonite	3.00%	bwob	Slurry Yield	1.70 cu ft/sk
			Halad-344	0.40%	bwoc	Mix Fluid	8.26 gal/sk
			CFR-3	0.20%	bwoc		
			HR-5	0.10%	bwoc		
			Silicalite-blended	20	lb/sk		
			Flocele	0.25	lb/sk		
			Defoamer (if req'd)	0.05	gal/bbl		
4-1/2" Casing Production	7,988	50%					

Note: Conoco to verify casing depths.



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 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.