

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: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF079290
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator CONOCO INC		7. If Unit or CA Agreement, Name and No.
Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conoco.com		8. Lease Name and Well No. SAN JUAN 28-7 UNIT 164F
3a. Address PO BOX 2197, DU 3084 HOUSTON, TX 77252-2197	3b. Phone No. (include area code) Ph: 915.686.5799 Ext: 5799	9. API Well No. 30-039-27031
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SESE 475FSL 850FEL At proposed prod. zone		10. Field and Pool, or Exploratory UNKNOWN MV/DK
14. Distance in miles and direction from nearest town or post office*		11. Sec., T., R., M., or Blk. and Survey or Area P Sec 13 T28N R7W Mer NMP
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 BY 16	12. County or Parish RIO ARRIBA
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 7883 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6635 GL	22. Approximate date work will start	17. Spacing Unit dedicated to this well 320.00 E/2
23. Estimated duration DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".		20. BLM/BIA Bond No. on file ES0085
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- 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 06/03/2002
Title AUTHORIZED SIGNATURE		
Approved by (Signature) David J. Mankiewicz	Name (Printed/Typed)	Date OCT 16 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 #11686 verified by the BLM Well Information System
For CONOCO INC, sent to the Farmington
Committed to AFMSS for processing by Lucy Bee on 06/04/2002 (02LXB0945AE)

** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED **

NMCCD

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer 00, 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

*API Number 30-039-27031		*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 016608	*Property Name SAN JUAN 28-7 UNIT		*Well Number 164F
*OGRID No. 005073	*Operator Name CONOCO, INC.		*Elevation 6635'

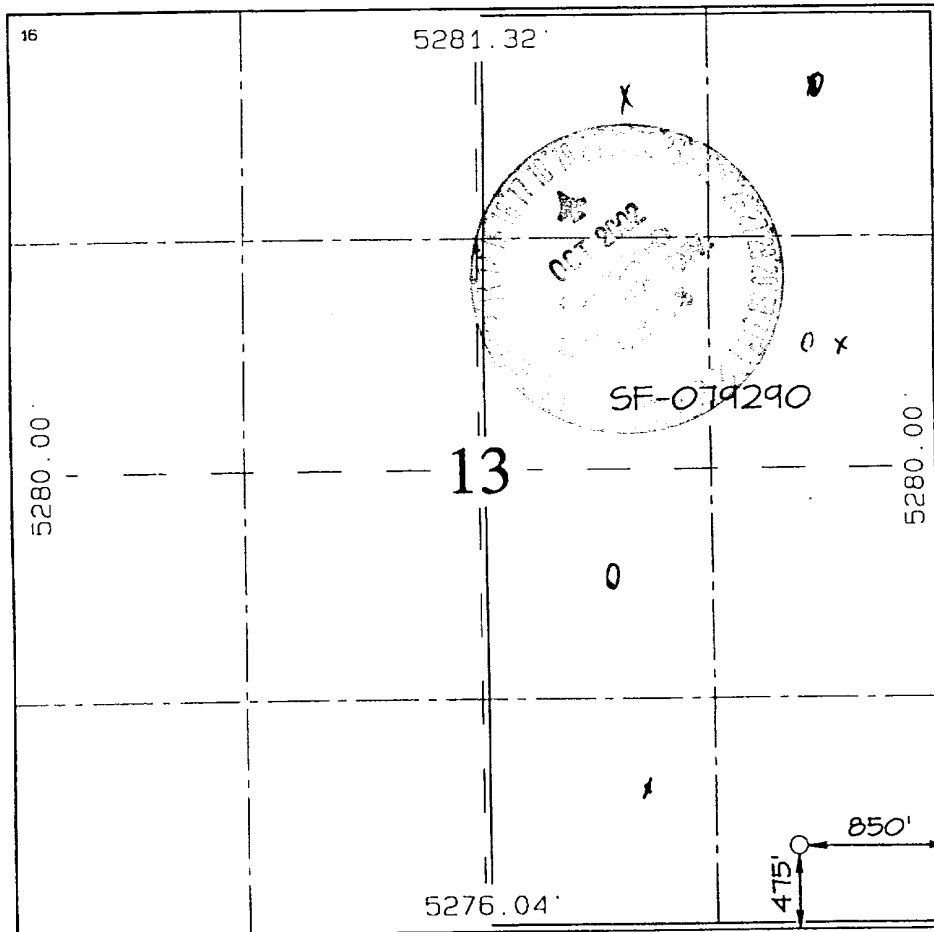
¹⁰ Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	13	28N	7W		475	SOUTH	850	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 320.0 Acres - (E/2)					¹³ Joint or Infill	¹⁴ Consolidation Code		¹⁵ Order No.	

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

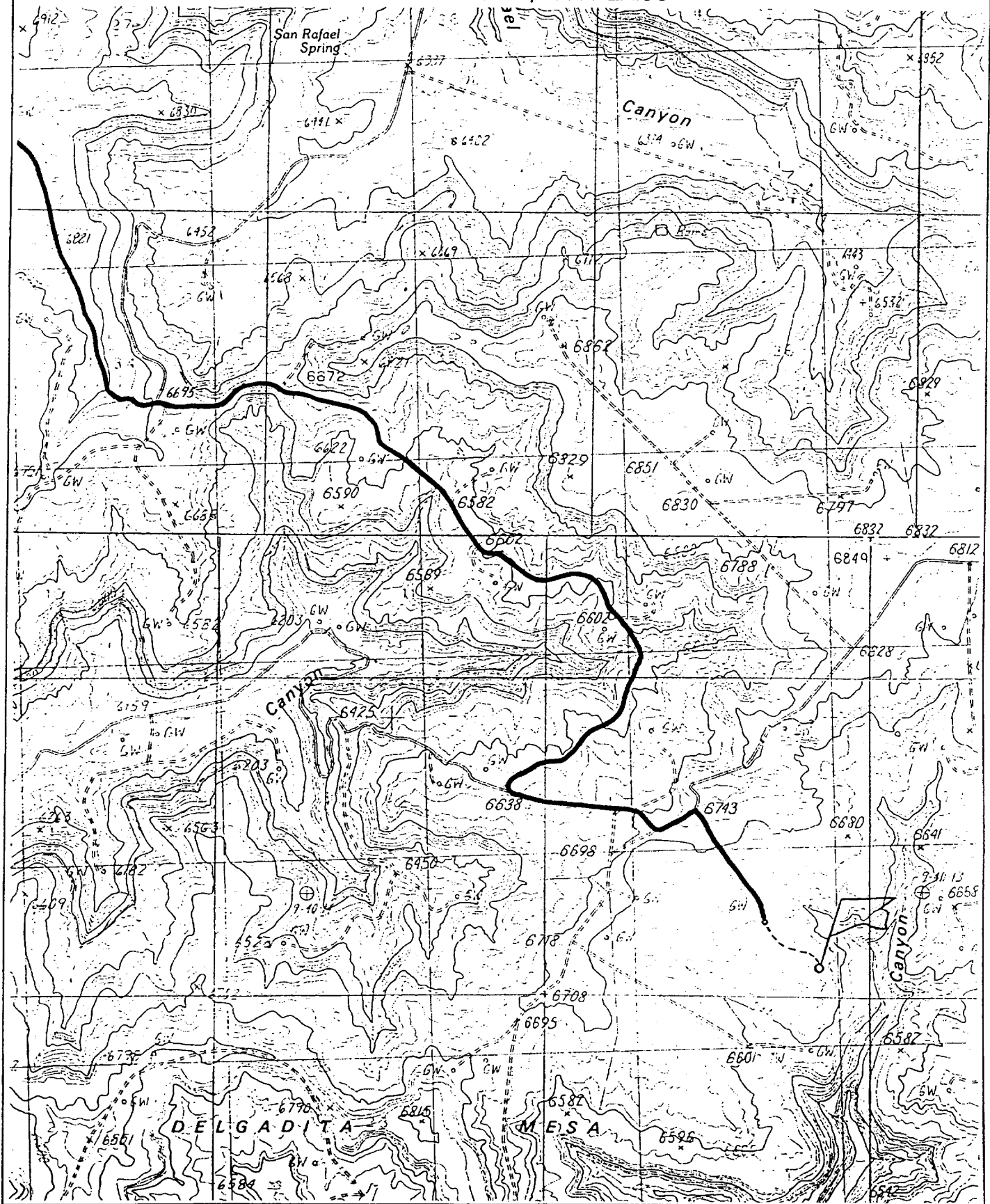


¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
Vicki Westby
Signature
Vicki R. Westby
Printed Name
Sr. Title Analyst
Title
May 16, 2002
Date

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.
Date of Survey: MARCH 13, 2002
Signature and Seal of Professional Surveyor

JASON C. EDWARDS
Certificate Number 15269

CONOCO, INC. SAN JUAN 28-7 UNIT #164F
475' FSL & 850' FEL, SECTION 13, T28N, R7W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO



PROJECT PROPOSAL - Completion



SAN JUAN 28-7 164F

(Not Assigned) San Juan Business Unit

Lease :

AFE # :

AFE \$:

Field Name : EAST 28-7

Rig :

State : NM

County : RIO ARRIBA

API # :

Geoscientist :

Phone

Prod. Engineer

Phone :

Res. Engineer :

Phone

Proj. Field Lead

Phone :

Primary Objective (Zones) :

Zone	Zone Name
FRR	BASIN DAKOTA (PRORATED GAS)
RON	BLANCO MESAVERDE (PRORATED GAS)

Location : Surface

Latitude : 36.66

Longitude : -107.52

X :

Y :

Section : 13

Abstract : 7W

Footage X : 850 FEL

Footage Y : 475 FSL

Elevation: 6635

(FT)

Survey : 28N

Tolerance

Location Type :

Start Date (Est.)

Completion Date :

Date In Operation :

Formation Data Assume KB 6648 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200	6448	<input type="checkbox"/>			Severe lost circulation is possible. 12 1/4" Hole. 9 5/8", 36 ppf, J-55, STC casing. Will test to 500 psi. Circulate cement to surface.
OJAM	2523	4125	<input type="checkbox"/>			Possible water flows
KRLD	2673	3975	<input type="checkbox"/>			
FRLD	3148	3500	<input type="checkbox"/>			Possible gas
PCCF	3398	3250	<input type="checkbox"/>			
LEWS	3598	3050	<input type="checkbox"/>			
Intermediate Casing	3698	2950	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface. Will test to 1500 psi.
CHRA	4338	2310	<input type="checkbox"/>			
CLFH	5058	1590	<input type="checkbox"/>	1300		Gas; possibly wet
MENF	5228	1420	<input type="checkbox"/>			Gas
PTLK	5583	1065	<input type="checkbox"/>			Gas
MNCS	5883	765	<input type="checkbox"/>			
GLLP	6848	-200	<input type="checkbox"/>			
Re GRHN	7533	-885	<input type="checkbox"/>			Gas possible, highly fractured
Ir TWLS	Well Name 7628	-980	Comments			Gas
CBBO	7768	-1120	<input type="checkbox"/>			Gas
Total Depth	7883	-1235	<input type="checkbox"/>	3000		6 1/4" Hole. 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.
Production:	Well Name	Comments				

PROJECT PROPOSAL - Completion



SAN JUAN 28-7 164F

(Not Assigned) San Juan Business Unit

Logging Program :

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

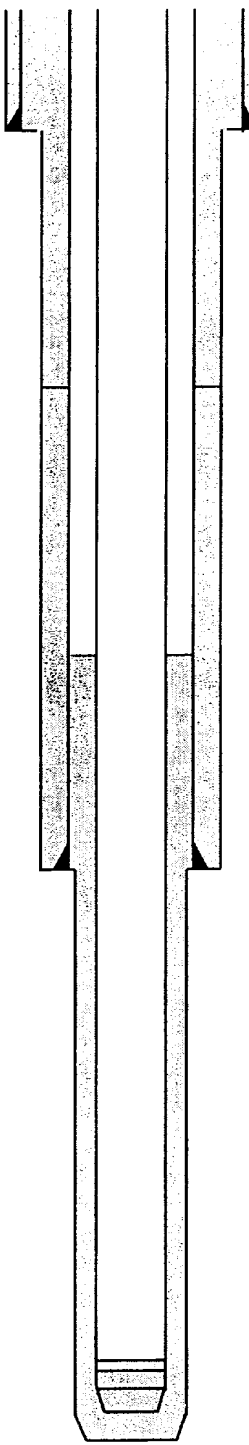
TD Logs ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☐ TDT ☐ Other

Additional Information

Comments

Cementing Summary

San Juan 28-7 164F (v1.0)

		OH					
		Depth	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	16.4 ppg
				Defoamer (if req'd)	0.05 gal/bbl	Slurry Yield	1.06 cu ft/sk
	9-5/8" shoe	200	100%			Mix Fluid	4.33 gal/sk
<hr/>							
	7" Lead Cement	150%		Blend	409.92 sx	Slurry Volume	1160.1 cu ft
				Class 'H' Cement	84 lb/sk		206.6 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	3,198		Silicalite-blended	10 lb/sk		
				Flocele	0.5 lb/sk		
				Defoamer (if req'd)	0.05 gal/bbl		
<hr/>							
	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	2,698		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		
<hr/>							
	7" Casing Intermediate	3,698	150%				
<hr/>							
	4.5" Cement	50%		Blend	448.17 sx	Slurry Volume	761.9 cu ft
				Class 'H' Cement	47 lb/sk		135.7 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		
<hr/>							
	4-1/2" Casing Production	7,883	50%				

Note: Conoco to verify casing depths.

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 NO SCARRED CONNECTIONS AND PRESSURE TESTED INITIALLY TO SAME TEST PRESSURE AS THE CHOCK MANIFOLD.

Labels in diagram include:

- HIGH VALVE
- FULL OPENING VALVE
- ROTATING HEAD
- FLIGHT PREVENTER W/ PIPE GAGE
- SHOCK PREVENTER W/ LINE GAGE
- GAGE
- GAGE VALVE
- SAFE ON PLUG VALVE
- SAFE ON PLUG VALVE
- PLUG VALVE OR FULL PLUG
- SAFE VALVE
- REINFORCED TUBES
- CAMMERMAN

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., \geq 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 \geq 20 years.
Anode Bed Backfill	Lorasco 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 arroyos 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.