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-078498
	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 191G
2. Name of Operator CONOCO INC. Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conoco.com	9. API Well No. 30 039 27060
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 DAKC
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SWNE 2145FNL 1960FEL At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Sec 33 T28N R7W Mer NMP H
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 316.32 E/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. / 19. Proposed Depth 7722 MD	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 6634 GL / 22. Approximate date work will start	23. Estimated duration

DEC 2002
RECEIVED
OIL CONS. 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	Name (Printed/Typed)	Date
(Electronic Submission)	VICKI WESTBY	08/07/2002

Title: AUTHORIZED SIGNATURE

Approved by (Signature)	Name (Printed/Typed)	Date
/s/ David J. Mankiewicz		DEC - 6 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 #13426 verified by the BLM Well Information System
For CONOCO INC., 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

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

**** 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
30-039-27060	72319 / 71599	BLANCO MESAVERDE / BASIN DAKOTA

[4] Property Code	[5] Property Name	[6] Well Number
016608	SAN JUAN 28-7 UNIT	191G

[7] OGRID No.	[8] Operator Name	[9] Elevation
005073	CONOCO, INC.	6634'

[10] Surface Location

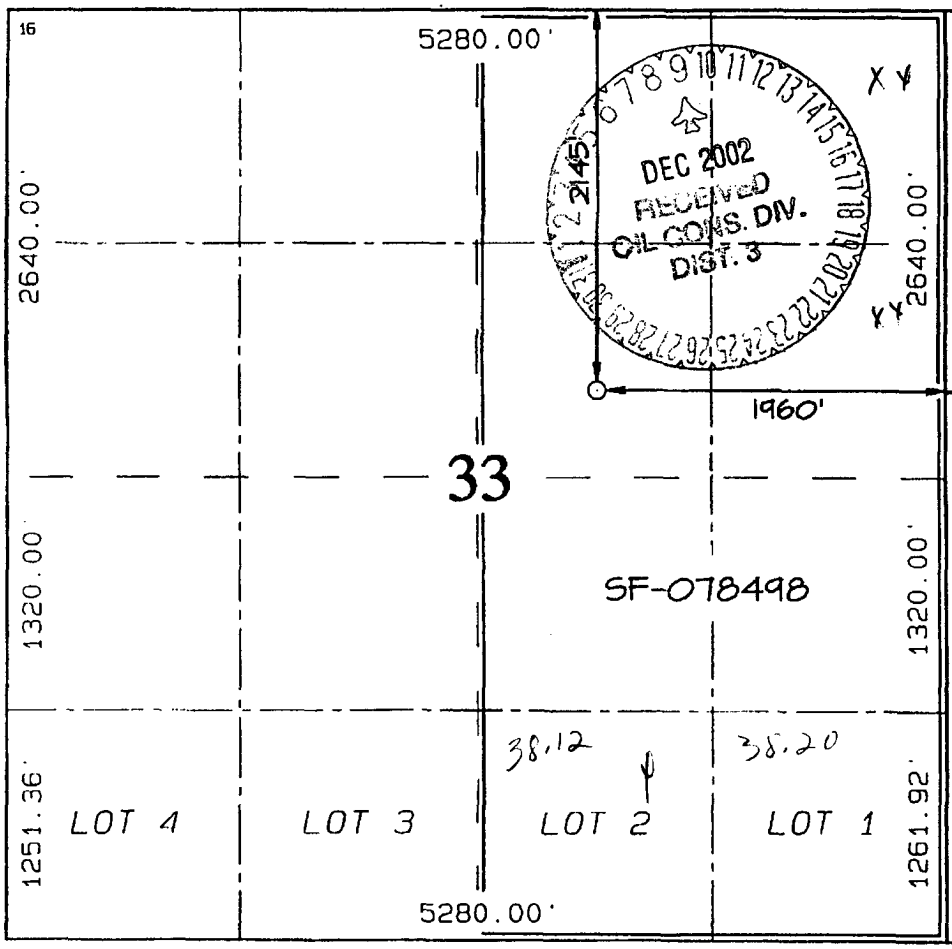
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	33	28N	7W		2145	NORTH	1960	EAST	RIO ARRIBA

[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.
316.32 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

August 1, 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: JULY 4, 2002

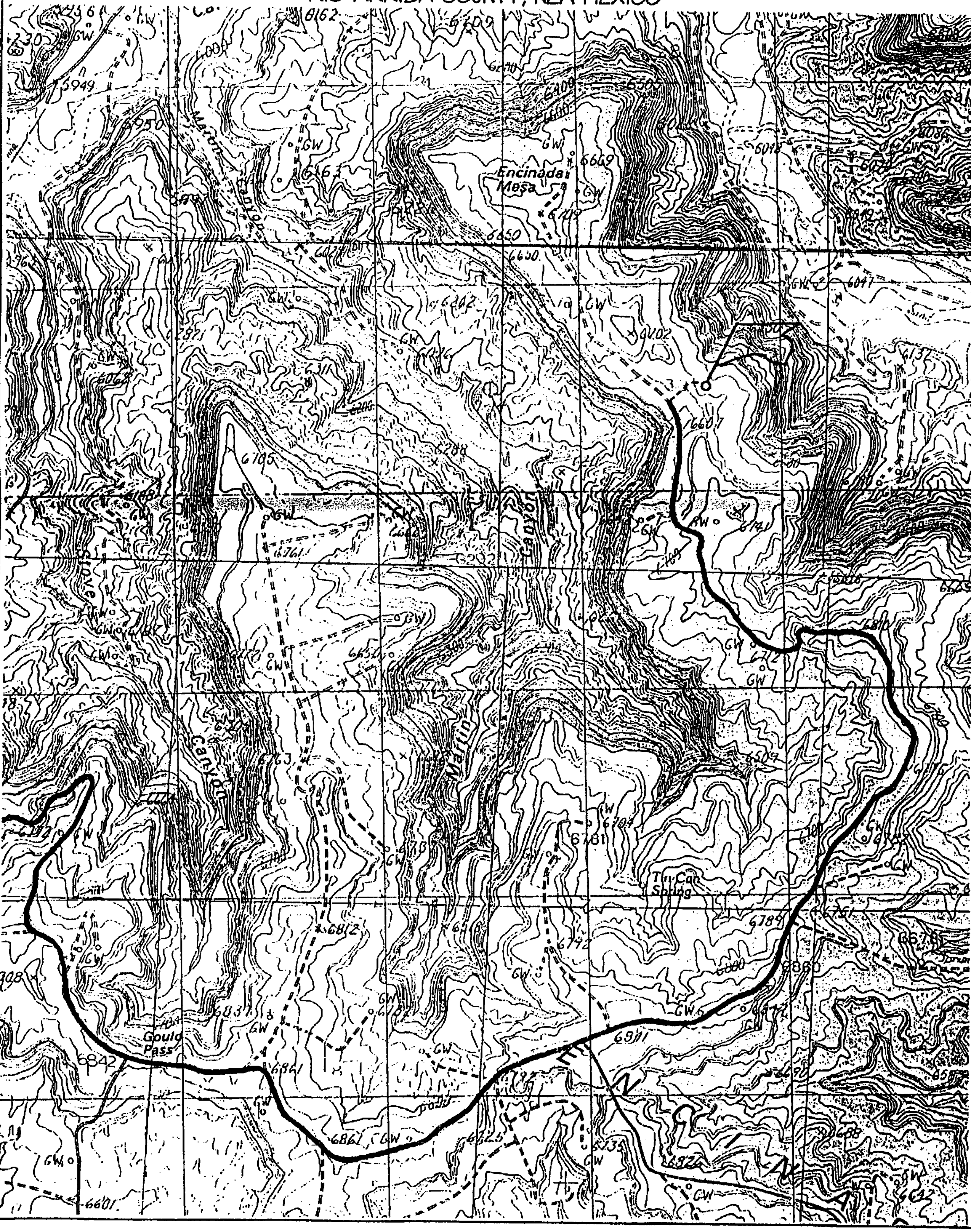
Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

CONOCO, INC. SAN JUAN 28-7 UNIT #191G

2145' FNL & 1960' FEL, SECTION 33, T28N, R7W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO



PROJECT PROPOSAL - New Drill / Sidetrack

conoco

SAN JUAN 28-7 191G (Not Assigned)

San Juan Business Unit

Lease :		AFE # :		AFE $:	
Field Name : EAST 28-7	Rig :	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	Proj. Field Lead Bergman, Pat W.		Phone : (281) 293 - 6517	

Primary Objective (Zones):

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

"Air Drilled"

Location: Surface

Latitude : 36.62	Longitude : -107.58	X :	Y :	Section : 33	Abstract: 7W
Footage X : 1960 FEL	Footage Y : 2145 FNL	Elevation: 6634 (FT)	Survey : 28N		

Tolerance

Location Type : Year Round Start Date (Est.) Completion Date : Date In Operation :

Formation Data Assume KB 6647 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200	6447	☐			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	2347	4300	☐			Possible water flows
KRLD	2497	4150	☐			
FRLD	2967	3680	☐			Possible gas
PCCF	3217	3430	☐			
LEWS	3417	3230	☐			
Intermediate Casing	3517	3130	☐			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface. Will test to 1500 psi.
CHRA	4167	2480	☐			
CLFH	4862	1785	☐			Gas; possibly wet
MENF	5007	1640	☐			Gas
PTLK	5462	1185	☐	1300		Gas
MNCS	5712	935	☐			
GLLP	6707	-60	☐			
GRHN	7372	-725	☐			Gas possible, highly fractured
TWLS	7457	-810	☐			Gas
CBBO	7587	-940	☐			Gas
Total Depth	7722	-1075	☐	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.

Reference Wells:

	Well Name	Comments
Intermediate:		
Production:		

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 28-7 191G **(Not Assigned)**

conoco **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

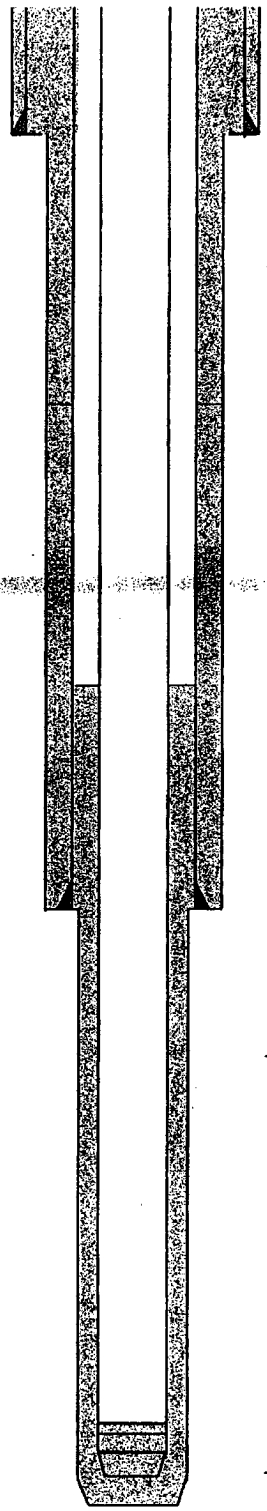
Additional Information

Comments General/Work Description - To produce the Kmv in this well the Kmv will have to be plugged in well #1. Currently the Kmv in well # 1 is producing 15mcf/d.

HALLIBURTON

Conoco Inc. - San Juan Operations

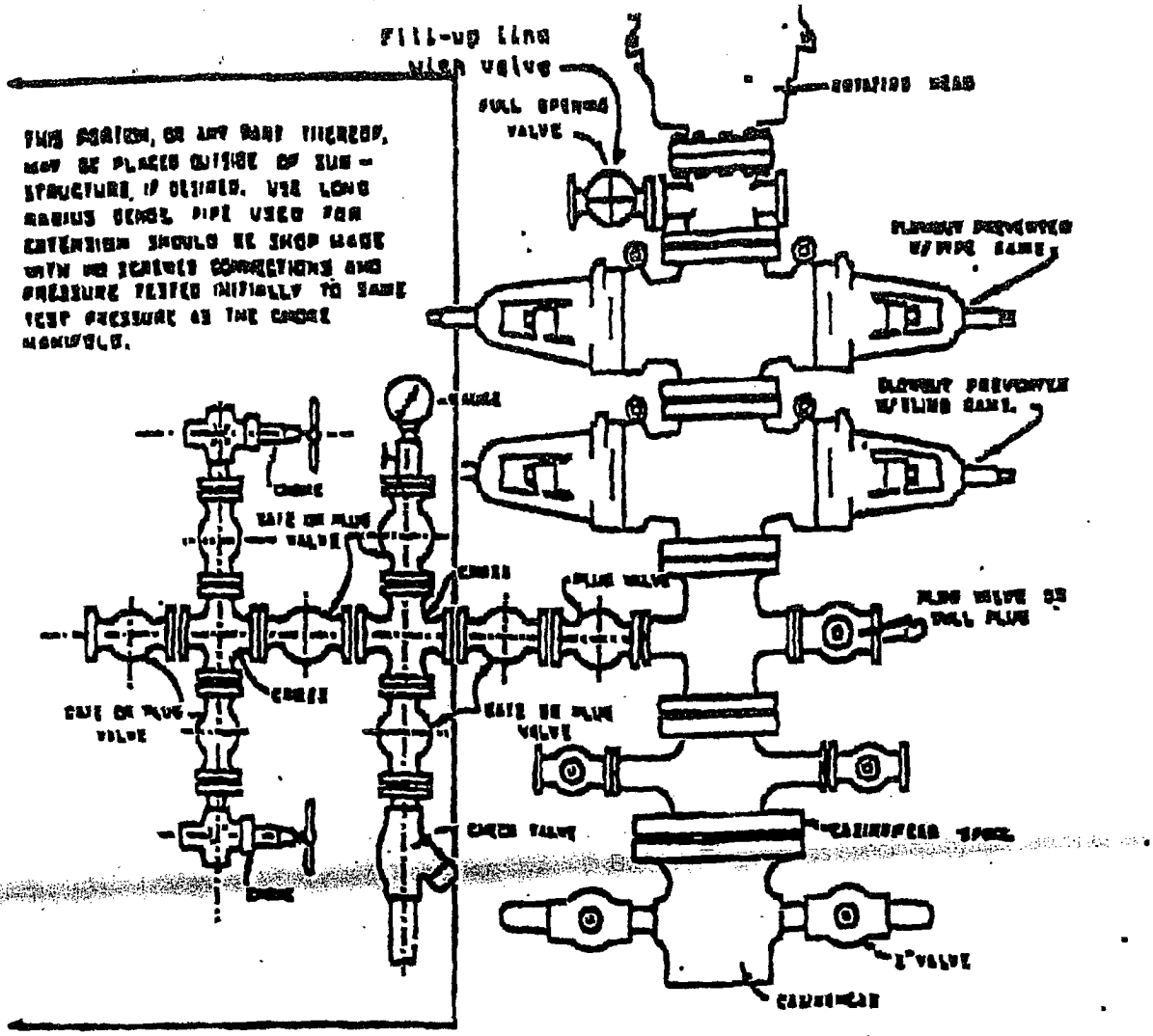
Cementing Summary **San Juan 28-7 191G (v1.0)**



	Depth	OH Excess					
9-5/8" Sfc Casing	0		50:50 Poz Standar	106.4	sx	Slurry Volume	142.6 cu ft
			Cement	47	lb/sk		25.4 bbl
			San Juan Poz	34	lb/sk	Slurry Density	13.5 ppg
			Gel (Bentonite)	2.0%	bwoc-db	Slurry Yield	1.34 cu ft/sk
			Gilsonite	5.0	lb/sk	Mix Fluid	5.35 gal/sk
			CaCl2	3.0%	bwoc-db		
			Flocele	0.25	bwoc-db		
			Defoamer (if req'd)	0.05	gal/bbl		
9-5/8" shoe	200	100%					
7" Lead Cement		150%	Standard Cement	376.57	sx	Slurry Volume	1092.1 cu ft
			Standard Cement	94	lb/sk		194.5 bbl
			San Juan Poz		lb/sk	Slurry Density	11.4 ppg
			Econolite	3.0%	bwoc	Slurry Yield	2.9 cu ft/sk
			CaCl2		bwoc	Mix Fluid	16.78 gal/sk
			Bentonite-Gel		bwoc		
			Flocele	0.5	lb/sk		
7" Top of Tail	3,017		Gilsonite	10.0	lb/sk		
			Defoamer (if req'd)	0.05	gal/bbl		
7" Tail Cement		150%	50:50 Poz Standar	155.65	sx	Slurry Volume	207.0 cu ft
			Standard Cement	47.0	bwob		36.9 bbl
			San Juan Poz	34.0	lb/sk	Slurry Density	13.5 ppg
			Econolite		bwob	Slurry Yield	1.33 cu ft/sk
			CaCl2	2.00%	bwob	Mix Fluid	5.32 gal/sk
4.5" TOC	2,517		Bentonite-Gel	2.00%	bwob		
			Flocele	0.25	lb/sk		
			Gilsonite	5.0	lb/sk		
			Defoamer (if req'd)	0.05	gal/bbl		
7" Casing Intermediate	3,517	150%					
4.5" Cement		50%	Blend	523.95	sx	Slurry Volume	765.0 cu ft
			Standard Cement	47	lb/sk		136.2 bbl
			San Juan Poz	37	lb/sk	Slurry Density	13.0 ppg
			Bentonite	3.00%	bwob	Slurry Yield	1.46 cu ft/sk
			CFR-3	0.20%	bwoc	Mix Fluid	6.42 gal/sk
			Halad-9	0.80%	bwoc		
			HR-5	0.10%	bwoc		
			Gilsonite	5.0	lb/sk		
			Flocele	0.25	lb/sk		
			Defoamer (if req'd)	0.05	gal/bbl		
4-1/2" Casing Production	7,722	50%					

Conoco to verify casing depths.

Note:



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	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.