

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. SF-078496
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 190G
3a. Address 10 DESTA DR., ROOM 608W MIDLAND, TX 79705	3b. Phone No. (include area code) Ph: 915.686.5799 Ext: 5799	9. API Well No. 30039 272 55
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENE 300FNL 1165FEL At proposed prod. zone		10. Field and Pool, or Exploratory BLANCO MESAVERDE/BASIN DAKOTA
14. Distance in miles and direction from nearest town or post office*		11. Sec., T., R., M., or Blk. and Survey or Area A Sec 27 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	12. County or Parish RIO ARRIBA ✓
17. Spacing Unit dedicated to this well 320.00 E/2	13. State NM	
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 7761 MD	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6588 GL	22. Approximate date work will start	23. Estimated duration

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 12/11/2002
Title AUTHORIZED SIGNATURE		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 12/17/04
Title AFM	Office FPO	

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 #16841 verified by the BLM Well Information System  
For CONOCO INC., 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

NMOC

\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\*

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

*API Number <b>30039-71255</b>		*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code <del>018608</del> <b>31739</b>		*Property Name SAN JUAN 28-7 UNIT	
*Well Number 190G		*Elevation 6588'	
*DGRID No. 005073		*Operator Name CONOCO, INC.	



<sup>10</sup> Surface Location

UL or lot no. A	Section 27	Township 28N	Range 7W	Lot Idn	Feet from the 300	North/South line NORTH	Feet from the 1165	East/West line EAST	County RIO ARriba
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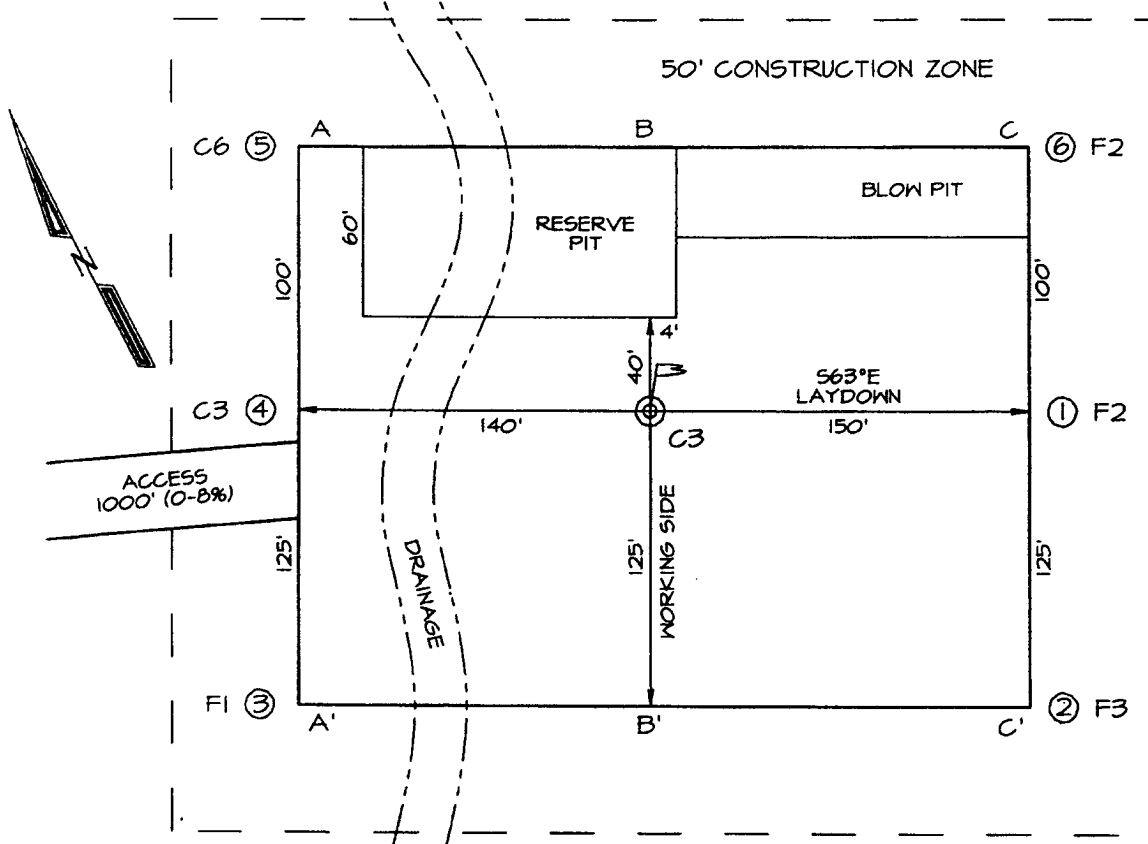
<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
*Dedicated Acres 320.0 Acres - (E/2)					*Joint or Infill	*Consolidation Code	*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

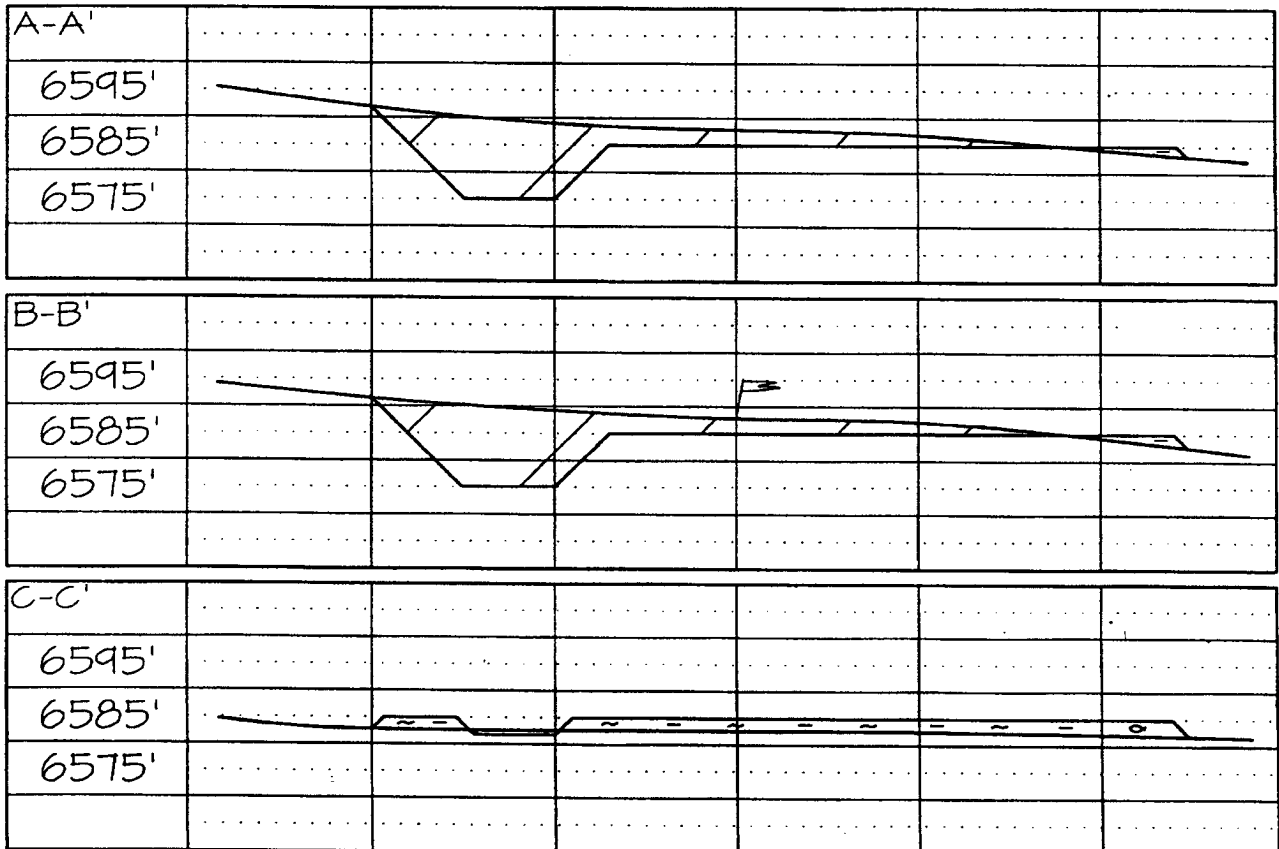
 5283.96' 300' 1165' SF-078498 27 5280.00' 5280.00'	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Vicki Westby</i> Signature Vicki R. Westby Printed Name Sr. Title Analyst Title <i>October 11, 2002</i> Date</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Survey Date: AUGUST 21, 2002</p> <p>Signature and Seal of Professional Surveyor</p>  <p><i>JASON C. EDWARDS</i> Certificate Number 15269</p>

**CONOCO, INC. SAN JUAN 28-7 UNIT #190G**  
**300' FNL, 1165' FEL, SECTION 27, T28N, R7W, NMPM**  
**RIO ARriba COUNTY, NEW MEXICO GROUND ELEVATION: 6588'**



LATITUDE: 36°38'19.35"  
 LONGITUDE: 107°33'18.89"  
 DATUM: NAD1927

PLAT NOTE:  
 \*SURFACE OWNER\*  
 Bureau of Land  
 Management



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.**5. Lease Serial No.  
NMSF078496

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
NNNM78413C8. Well Name and No.  
SAN JUAN 28-7 UNIT 190G9. API Well No.  
30-039-27255-00-X110. Field and Pool, or Exploratory  
BASIN DAKOTA11. County or Parish, and State  
RIO ARRIBA COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other2. Name of Operator  
CONOCOPHILLIPS COMPANYContact: VICKI WESTBY  
E-Mail: Vicki.R.Westby@conocophillips.com3a. Address  
PO BOX 2197 WL3 6054  
HOUSTON, TX 772523b. Phone No. (include area code)  
Ph: 915.368.1352

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 27 T28N R7W NENE 300FNL 1165FEL

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

ConocoPhillips requests to change the drilling plan for this well as shown in the attached documents.



14. I hereby certify that the foregoing is true and correct.

Electronic Submission #34782 verified by the BLM Well Information System  
For CONOCOPHILLIPS COMPANY, sent to the Farmington  
Committed to AFMSS for processing by ADRIENNE BRUMLEY on 08/23/2004 (04AXB3226SE)

Name (Printed/Typed) VICKI WESTBY

Title AGENT

Signature (Electronic Submission)

Date 08/18/2004

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By

Title

AFM

Date

12/17/04

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

KFD

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.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

# PROJECT PROPOSAL - New Drill / Sidetrack

**SAN JUAN 28-7 190G**

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:		Phone: (281) 293 - 6517

## Primary Objective (Zones):

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

<b>Location: Surface</b>					<b>Straight Hole</b>	
Latitude: 36.64	Longitude: -107.56	X:	Y:	Section: 27	Abstract: 7W	
Footage X: 1165 FEL	Footage Y: 300 FNL	Elevation: 6588 (FT)	Survey: 28N			
Tolerance:						
Location Type: Year Round		Start Date (Est.):	Completion Date:	Date In Operation:		

Formation Data: Assume KB = 6601 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	213	6388	<input type="checkbox"/>			12 1/4" Hole. 9 5/8", 32.3 ppf, H-40, STC casing. Circulate cement to surface.
OJAM	2421	4180	<input type="checkbox"/>			Possible water flows
KRLD	2571	4030	<input type="checkbox"/>			
FRLD	3011	3590	<input type="checkbox"/>			Possible gas
PCCF	3261	3340	<input type="checkbox"/>			
LEWS	3461	3140	<input type="checkbox"/>			
Intermediate Casing	3561	3040	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4186	2415	<input type="checkbox"/>			
CLFH	4876	1725	<input type="checkbox"/>	1300		Gas; possibly wet
MENF	5021	1580	<input type="checkbox"/>			Gas
PTLK	5451	1150	<input type="checkbox"/>			Gas
MNCS	5701	900	<input type="checkbox"/>			
GLLP	6726	-125	<input type="checkbox"/>			
GRHN	7411	-810	<input type="checkbox"/>			Possible gas
TWLS	7501	-900	<input type="checkbox"/>			Gas
CBBO	7626	-1025	<input type="checkbox"/>			Gas
Total Depth	7761	-1160	<input type="checkbox"/>	3000		6-1/4" hole. 4 1/2", 11.6 ppf, N-80, LTC 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:

Reference Type	Well Name	Comments
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## Logging Program:

Intermediate Logs:	<input type="checkbox"/> Log only if show	<input type="checkbox"/> GR/ILD	<input type="checkbox"/> Triple Combo
TD Logs:	<input type="checkbox"/> Triple Combo	<input type="checkbox"/> Dipmeter	<input type="checkbox"/> RFT <input type="checkbox"/> Sonic <input type="checkbox"/> VSP <input checked="" type="checkbox"/> TDT
Additional Information:			

Comments: General/Work Description - Incomplete info to start AFE.\*\*

**San Juan 28-7 #190G**

**SURFACE CASING :**

Drill Bit Diameter	12.25"	
Casing Outside Diameter	9.625"	Casing Inside Diam. 9.001"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	230'	
Cement Yield	1.16	cuft/sk
Excess Cement	125	%
Cement Required	148	sx

SHOE 230 ', 9.625 ", 32.3 ppf, H-40 STC

**INTERMEDIATE CASING :**

Drill Bit Diameter	8.75"	
Casing Outside Diameter	7"	Casing Inside Diam. 6.456"
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3561'	
Lead Cement Yield	2.72	cuft/sk
Lead Cement Excess	150	%
Tail Cement Length	712.2'	
Tail Cement Yield	1.31	cuft/sk
Tail Cement Excess	150	%
Lead Cement Required	377	sx
Tail Cement Required	212	sx

SHOE 3561 ', 7 ", 20 ppf, J-55 STC

**PRODUCTION CASING :**

Drill Bit Diameter	6.25"	
Casing Outside Diameter	4.5"	Casing Inside Diam. 4.000"
Casing Weight	11.6	ppf
Casing Grade	N-80	
Top of Cement	3361'	200' inside intermediate casing
Shoe Depth	7761'	
Cement Yield	1.44	cuft/sk
Cement Excess	50	%
Cement Required	465	sx

SHOE 7761 ', 4.5 ", 11.6 ppf, N-80 STC

San Juan 28-7 #190G			
	Surf. Csg	Int. Csg	Prod. Csg
OD	9.625	7	4.5
ID	9.001	6.456	4.000
Depth	230	3561	7761
Hole Diam	12.25	8.75	6.25
% Excess Lead		150	
% Excess Tail	125	150	50
Lead Yield		2.72	
Tail Yield	1.16	1.31	1.44
Ft of Tail Slurry	230	712.2	4400
Top of Tail Slurry	0	2848.8	3361
Top of Lead Slurry	N/A	0	N/A
Mud Wt (ppg)	8.9	9.0	air drill
Mud Type	WBM	WBM	air drill

Surface Casing						
	Ft	Cap	XS Factor	bbls	cuft	sx
Open Hole Annulus	230	0.055804	2.25	27.2	153.0	131.9
Shoe Track Volume	42	0.078735	1	3.3	18.6	16.0
Total				30.6	171.5	147.9

Intermediate Casing						
	Ft	Cap	XS Factor	bbls	cuft	sx
Lead Open Hole Annulus	2618.8	0.026775	2.5	175.3	984.2	361.8
Lead Cased Hole Annulus	230	0.031104	1	7.2	40.2	14.8
Lead Total				182.5	1024.4	376.6
Tail Open Hole Annulus	712.2	0.026775	2.5	47.7	267.7	204.3
Tail Shoe Track Volume	42	0.04049	1	1.7	9.5	7.3
Tail Total				49.4	277.2	211.6

Production Casing						
	Ft	Cap	XS Factor	bbls	cuft	sx
Open Hole Annulus	4200	0.018275	1.5	115.1	646.4	448.9
Cased Hole Annulus	200	0.020818	1	4.2	23.4	16.2
Total				119.3	669.8	465.1

San Juan 28-7 #190G		
9-5/8 Surface Casing		
Cement Recipe	Class G Standard Cement	
	+ 2% S001 Calcium Chloride	
	+0.25 lb/sx D029 Cellophane Flakes	
Cement Volume	148	sx
Cement Yield	1.16	cuft/sx
Cement Volume	171.5	cuft
Cement Density	15.8	ppg
Water Required	4.983	gal/sx
Compressive Strength		
Sample cured at 60 deg F for 8 hrs		
12 hrs	1174	psi
36 hrs	2763	psi

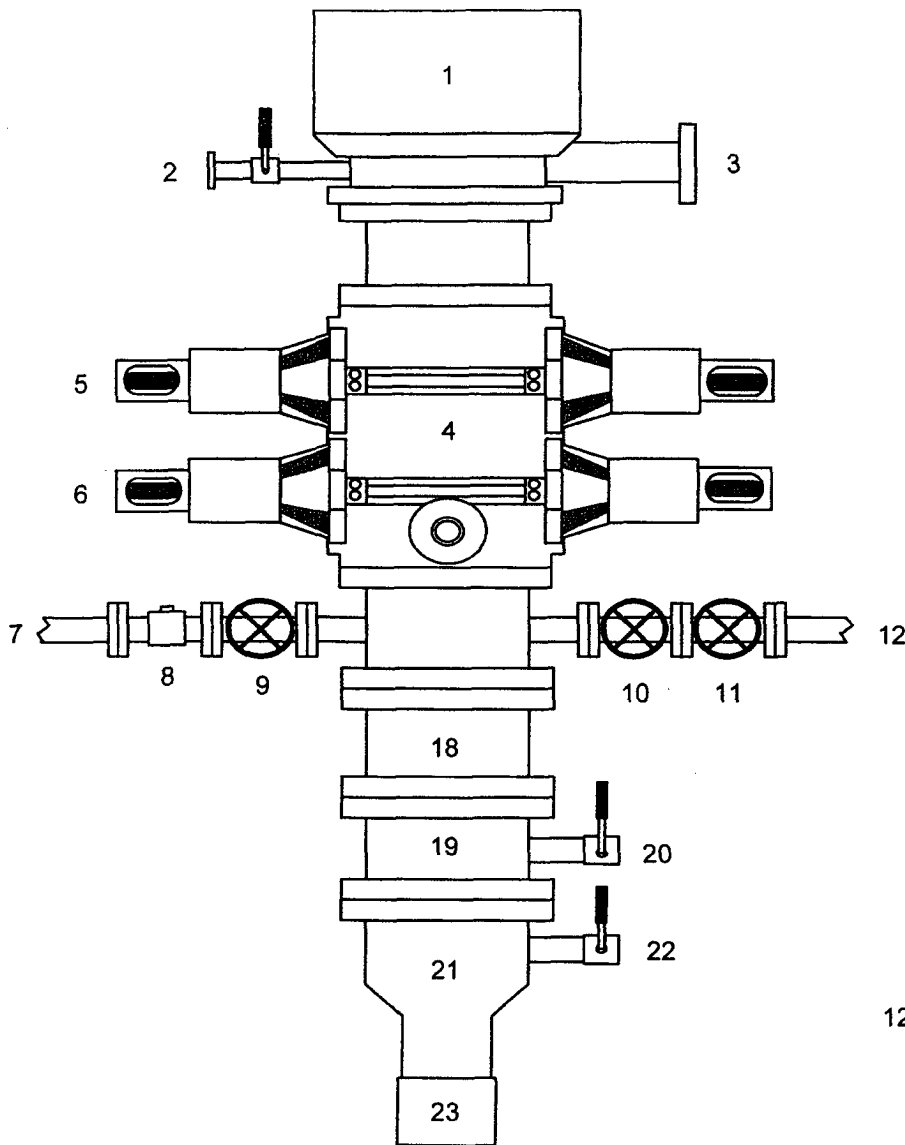
San Juan 28-7 #190G

7" Intermediate Casing		
Lead Slurry		
Cement Recipe	Class G Standard Cement	
	+0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D079 Extender	
	+ 0.20% D046 Antifoam	
	+ 10 lb/sx Pheno Seal	
Cement Required	377	sx
Cement Yield	2.72	cuft/sx
Slurry Volume	1024.4	cuft
	182.5	bbls
Cement Density	11.7	ppg
Water Required	15.74	gal/sx
Compressive Strength		
Sample cured at 140 deg F for 24 hrs		
2 hr 37 min	50	psi
39 hr 40 min	500	psi

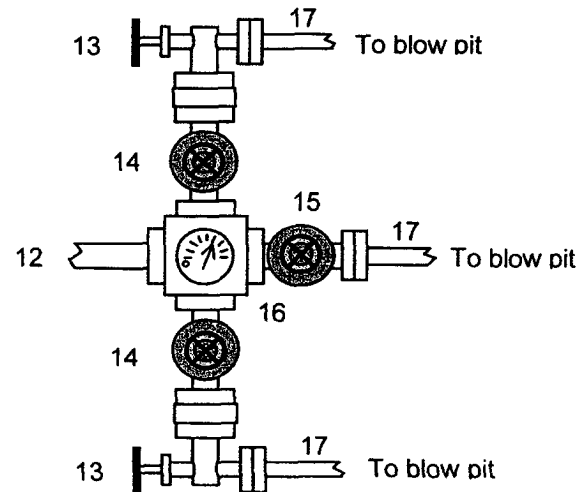
7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ:Standard Cement	
	+0.25 lb/sx D029 Cellophane Flakes	
	+ 2% D020 Bentonite	
	+ 1.5 lb/sx D024 Gilsonite Extender	
	+ 2% S001 Calcium Chloride	
	+ 0.10% D046 Antifoam	
	+ 6 lb/sx Pheno Seal	
Cement Required	212	sx
Cement Yield	1.31	cuft/sx
Slurry Volume	277.2	cuft
	49.4	bbls
Cement Density	13.5	ppg
Water Required	5.317	gal/sx
Compressive Strength		
Sample cured at 140 deg F for 24 hrs		
24 hr	908	psi
48 hr	1950	psi

San Juan 28-7 #190G		
4-1/2" Production Casing		
Cement Recipe	50 / 50 POZ: Class G Standard Cement	
	+0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D020 Bentonite	
	+ 1.0 lb/sx D024 Gilsonite Extender	
	+ 0.25% D167 Fluid Loss	
	+ 0.15% D065 Dispersant	
	+ 0.1% D800 Retarder	
	+ 0.1% D046 Antifoamer	
	+ 3.5 lb/sx PhenoSeal	
Cement Quantity	465	sx
Cement Yield	1.44	cuft/sx
Cement Volume	669.8	cuft
	119.3	
Cement Density	13	ppg
Water Required	6.43	gal/sx
Compressive Strength		
Sample cured at 200 deg F for 24 hrs		
6 hr 35 min	500	psi
24 hr	2373	psi

# BLOWOUT PREVENTER HOOKUP



1. Rotating Head
2. Fill-up Line & valve
3. Flowline
4. Blowout Preventer (3000 psi)
5. Pipe Rams
6. Blind Rams
7. Kill Line
8. Kill Line Check Valve
9. Kill Line Valve
10. Inner Choke Line Valve (3")
11. Outer Choke Line Valve (3")
12. Choke Line (3")
13. Variable Choke
14. Choke Line Valve (2")
15. Panic Line Valve (3")
16. Choke Manifold Pressure Gauge
17. Choke Line (2")
18. Spacer Spool
19. Casing Spool "B" Section
20. Casing Spool "B" Section 2" Valve
21. Casing Head "A" Section
22. Casing Head "A" Section 2" Valve
23. 9 5/8" Casing Collar



Drilling contractors used in the San Juan Basin 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. The above diagram of the BOP system 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.

In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

# Cathodic Protection System Description

<b>Anode Bed Type</b>	Deep Well	
<b>Hole Size</b>	8"	
<b>Hole Depth</b>	200' - 500'	As required to place anodes below moisture and in low resistance strata.
<b>Surface Casing</b>	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.
<b>Vent Pipe</b>	1" Diam. PVC	Vent pipe will extend from bottom of hole, through top of casing cap, and sealed with a 1" perforated PVC cap.
<b>Type Of Anodes</b>	Cast Iron Or Graphite	
<b>Number Of Anodes</b>	8 - 20	Sufficient quantity to achieve a total anode bed resistance of $< 1$ ohm and a design life $\geq$ 20 years.
<b>Anode Bed Backfill</b>	Lorasco SW Calcined Petroleum Coke Braeze	Installed from bottom of hole to 10' above top anode.
<b>Anode Junction Box</b>	8 - 20 Circuit Fiberglass Or Metal	Sealed to prevent insect & rodent intrusion.
<b>Current Splitter Box</b>	2 - 5 Circuit Metal	Sealed to prevent insect & rodent intrusion.
<b>DC / AC Cable</b>	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 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).
<b>Power Source</b>	1) Rectifier 2) Solar Power Unit 3) Thermoelectric Generator	Choice of power source depending on availability of AC & other economic factors.
<b>External Painting</b>	Color to be selected according to BLM specifications.	Paint applied to any surface equipment associated with the CP system which can reasonably be painted.