Com 11912 CONS. DIV.		2005 SEP 23	PM	1 12 OMB Expires	APPROVI No. 1004-01: March 31,	37
DEPARTMENT OF THE II BUREAU OF LAND MAN.		REC	EIVED	5. Lease Serial No.	л-03404	
APPLICATION FOR PERMIT TO D		- UTO FARM	INGTO	6. If Indian, Allote	e or Tribe	Name
Ia. Type of work: DRILL REENTE	ER	<del> </del>		7. If Unit or CA Ag NMNM · 784 NMNM 784	1218-	DIK,
Ib. Type of Well: Oil Well Gas Well Other	Sin	ngle Zone Multip	ole Zone	8. Lease Name and SAN JUAN		IIT #49G
2. Name of Operator ConocoPhillips Company				9. API Well No.	39-	296
3a. Address 4001 Penbrook, Odessa, TX 79762		(include area code) 68-1230		10. Field and Pool, o BLANCO ME	r Explorato	ry E/BASIN
Location of Well (Report location clearly and in accordance with any St     At surface NWSE 1735 FSL - 1975 FI     At proposed prod. zone		nis, *)		I 1. Sec., T. R. M. or SECTION 5, T30N		-
-14. Distance in miles and direction from nearest town or post office*				12. County or Parish		13. State
	<u> </u>			RIO ARRII		NM
15, Distance from proposed* location to nearest propery or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of ac	res in lease	17. Spacing	ing Unit dedicated to this well  MV - E 1/2 - 319.67 ACRES  DK - E 1/2 - 319.67 ACRES		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.				IA Bond No. on file		<del></del>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6435' GL	22 Approxim	ate date work will star	ţ•	23. Estimated duration	on a	
	24. Attac	hments				
The following, completed in accordance with the requirements of Onshore	Oil and Gas C	order No. 1, must be att	ached to this	s form:		****************
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System L SUPO must be filed with the appropriate Forest Service office).</li> </ol>	ands, the	Item 20 above). 5. Operator certifica	ntion	unless covered by an		`
	1	BLM~				
25/S)gnature Name (Printed/Typed) Peggy J			y James	<del>, , , , , , , , , , , , , , , , , , , </del>	Date 9/2	1/2005
Sr. Ašsociate				······································		· · · · · · · · · · · · · · · · · · ·
Approved by (Signature)	Name (	Printed/Typed)			Date //	/9/8
Title AF4	Office	FX	-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\		7	
Application approval does not warfant or certify that the applicant holds conduct operations thereon. Conditions of approval, if any, are attached.	lega orequita	ble title to those rights	in the subje	ct lease which would e	ntitle the a	pplicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements or representations as to	rime for any p	erson knowingly and w	rillfully to m	nake to any department	or agency	of the United

This well will be downhole commingled pursuant to the terms and conditions outlined in Order R-11363.

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".

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 Form C-102 Revised February 21, 1994 Instructions on back

OIL CONSERVATION DIVISION

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies 23 PM 1 42

PO Box 2088 2005 SEP 23 PM 1 Santa Fe, NM 87504-2088

RECEIVED AMENDED REPORT

070 FARMINGTON NM

### WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number	Pool Code	³Pool Name			
30-039-29668	72319 / 71599	BLANCO MESAVERDE / BASIN DA	AKOTA		
'Property Code 31328	S	*Well Number 49G			
70GRID No. 217817	*Operator Name CONOCOPHILLIPS COMPANY				
10.00					

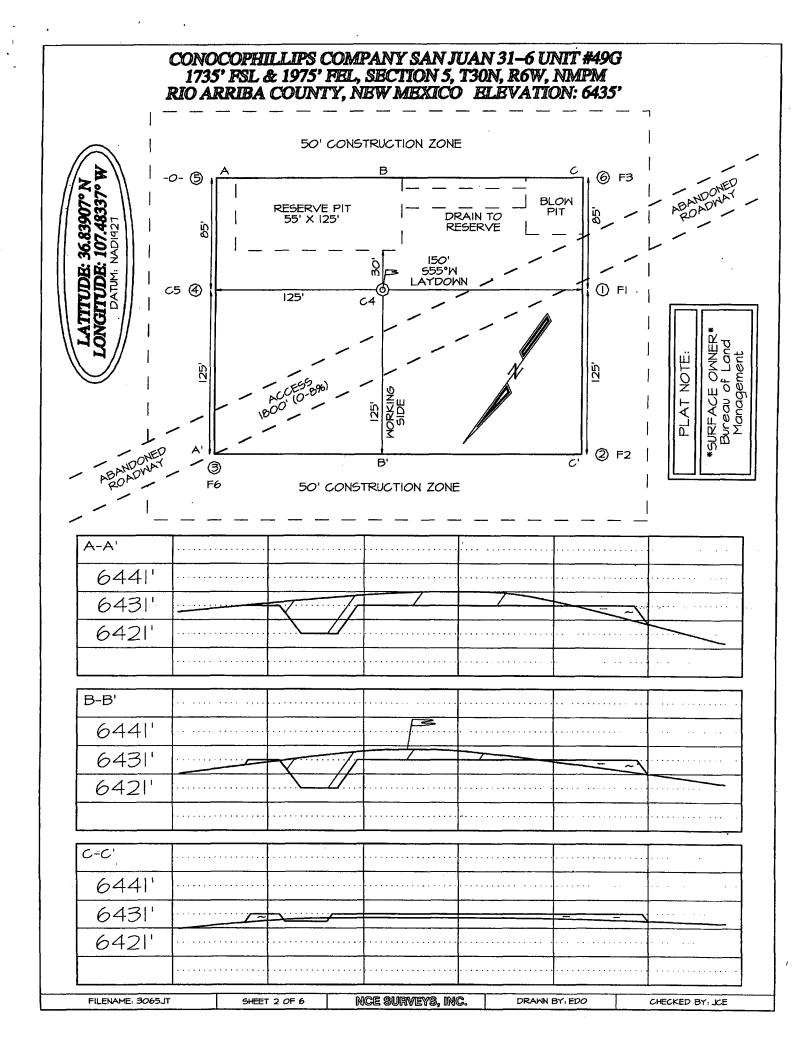
<sup>10</sup> Surface Location UL or lot no. Section Township Range Lot Idn Feet from the North/South line East/West line Feet from the RIO J 5 30N **6W** 1735 SOUTH 1975 **EAST** ARRIBA

<sup>11</sup>Bottom Hole Location If From Surface Different UL or lot no. Section Township Range Lat Ian Feet from the North/South line Feet from the East/West line County 12 Dedicated Acres <sup>13</sup> Joint or Infill <sup>14</sup> Consolidation Code <sup>15</sup> Order No. 319.67 Acres - E/2 (MV) 319.67 Acres - E/2 (DK)

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
15 OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16		OH A NON-STANDA	AUD OMI HAD DE	LIN ALTHOVED I	י יכ	LIE DIAIDION
1310.10	LOT 8	5280. LOT 7	00 <sup>·</sup> LOT 6	LOT 5	1316.04	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Vicke Ulubay (py) Signature Vicki R. Westby
1320.00.			LEA NM-0 639.	45E 3404 16 acres	1320.00'	Printed Name Staff Agent Title  Date  SURVEYOR CERTIFICATION
		5	LAT: 36 *50 LONG: 107 *29	.0020 W		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: APRIL 5, 2005
2640.00°			DATUM: NA	027 1 <b>975</b> '	2640.00°	PESTON C. EDWARDS  MEXICO  SESTON  MEXICO  MEX
		     5272.	08.			JASON C. EDWARDS Certificate Number 15269

Submit 3 Copies To Appropriate District Office	State of New Me	exico		Fonn C- 1 03
District I	Energy, Minerals and Natu	ıral Resources	ELL API NO.	May 27, 2004
1625 N. French Dr., Hobbs, NM 88240 District 11	OH COMODDIA TION	1 2	30-039	29668
1301 W. Grand Ave., Artesia, NM 882 1 0 District III	OIL CONSERVATION	$\frac{1}{5}$	Indicate Type of	
I 000 Rio Brazos Rd., Aztec, NM 8741 0	1220 South St. Fran		STATE	FEE
District IV	Santa Fe, NM 8'	1303 6.	State Oil & Gas	Lease No.
1220 S. St. Francis Dr., Santa I e, NM 87505				
	ICES AND REPORTS ON WELLS SALS TO DRILL OR TO DEEPEN OR PL		Lease Name or	Unit Agreement Name
DIFFERENT RESERVOIR. USE "APPLIC	CATION FOR PERMIT" (FORM C-101) FO	OR SUCH	SAN III	IAN 31-6 UNIT
PROPOSALS.)	Gas Well Other	8.	Well Number	49G
1. Type of Well: Oil Well	out won Source	9	OGRID Numbe	or .
Cono			217817	
3. Address of Operator	10	O. Pool name or	Wildcat	
4001 I	Penbrook, Odessa, TX 79762		BLANCO MESA	VERDE / BASIN DAKOTA
4. Well Location				
Unit LetterJ	1735 feet from the SOUT			
Section5		<del>V </del>	MPM RIO	ARRIBA County
	I 1. Elevation (Show whether DR, 643			
Pit or Below -grade Tank Application 🛛 🤇	losure	1//01/		
Pit type DRILL Depth to Groundw	ater 140° Distance from nearest fresh w	ater well-1-MILE	Distance from near	rest surface water 100'
Liner Thickness: mil	Below-Grade Tank: Volume	bb1s; Constru	ction Material	
12 Check A	appropriate Box to Indicate Na	ature of Notice Rer	ort or Other I	Data
		· •		
NOTICE OF IN		l	QUENT REP	
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	<b>—</b>	ALTERING CASING
TEMPORARILY ABANDON DULL OR ALTER CASING	CHANGE PLANS  MULTIPLE COMPL	COMMENCE DRILLIN CASING/CEMENT JOIN		P AND A
. 622 6117 (2.12.11 6.16.11)		ortontorozmerti voi		
OTHER:		OTHER:		
	eted operations. (Clearly state all pork). SEE RULE I 1 03. For Multiple			
or recompletion.	TKJ. SEE NOEE 1 1 03. 1 01 William	c completions. Attach	welloofe diagram	1 of proposed completion
<b>.</b>				
The nit will be constructed a	and closed in accordance with Rule s	50 and as non CODC Iun	a 2005 Gamamal I	Dit Dlan on file
	attached diagram that details the loc			
	he drill pit will be closed after the w		mos vo mo propo.	
	<del> </del>			**************************************
I hereby certify that the information al grade tank has been/will be constructed or o	ove is true and complete to the best closed according to NMOCD guidelines	of rny knowledge and be	lief. I further cert (attached) alternati	ify that anv pit or below- ve OCD-approved plan
SIGNATURE Peggy James	TITLE Sr. A	Associate		DATE 9/21/2005
Type or print name	E-mail add	lress:	Tele	phone No.
For State Use Only	A			NOV 1 4 2005
ADDD OVER DV		OL & GAS BISPECTOR	, <b>951</b> . (3)	
APPROVED BY: Conditions of Approval (if any):	THILE_			DATE





# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

**SAN JUAN 31-6 49G** 

Lease:					AFE #:				AFE \$:
Field Name: hPHILL	IPS 31-6		Rig:				State: NM	County: RIO ARRIBA	API #:
Geoscientist: Glaser	r, Terry J		Phone	: (832)486	-2332	Prod.	. Engineer: Mo	ody, Craig E.	Phone: 486-2334
Res. Engineer: Tomi	berlin, Timo	othy A	Phone	: (832) 486	5-2328	Proj.	Field Lead: Fra	nsen, Eric E.	Phone:
Primary Objective	(Zones):						1000	Constitution of the second sec	
Zone Z	one Name								
R20002 M	1ESAVERDE	E(R20002)							
R20076 D	AKOTA(R2	0076)							
	,								
				•					
Location: Surface									
Latitude: 36.84	Longitu	ude: -107.48		X: 0.00		Y: 0	nn	Section: 5	Range: 6W
Footage X: 1975 FEL		e Y: 1735 FS	$\rightarrow$	Elevation:	 6435	(FT)	Township: 30N	<u> </u>	Range. Ow
Tolerance:	_ 100tag	C 7. 1755 TC	, <u> </u>	Lictation.	0133	(1.1)	TOWNSHIP. SOIL		
Location Type: Sumn	mer Only		Start Γ	Date (Est.):		Col	mpletion Date:	Date In (	Operation:
	·	6440					inpletion bate.	Date III (	
	ssume KB =		Jnits =			<del>,</del>	· <b></b>		
Formation Call & Casing Points		Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)		BHT		Remarks	
Surface Casing		215	6233			-	12-1/4 hole. 9 to surface.	9 5/8" 32.3 ppf, H-40, ST	C casing. Circulate cement
NCMT		1348	5100						
OJAM		2368	4080				Possible water	flows.	
KRLD		2548	3900						
FRLD	٠.	2998	3450				Possible gas.	* 4	
PCCF		3298	3150						
LEWS		3498	2950						
Intermediate Casing		3598	2850				8 3/4" Hole. 7 surface.	", 20 ppf, J-55, STC Casi	ing. Circulate cement to
CHRA		4498	1950						
CLFH		5208	1240				Gas; possibly v	vet	
MENF		5258	1190				Gas.		
PTLK		5623	825				Gas.		
GLLP		6978	-530		-		Gas. Possibly	wet.	
GRHN		7643	-1195				Gas possible, h	nighly fractured	
CBBO		7823	-1375				Gas	ά.	
Total Depth		7993	-1545				a minimum of	-1/2", 11.6 ppf, N-80, LT 100' inside the previous of le TDT with GR to surfac	C casing. Circulate cement casing string. No open hole e.
Reference Wells:		100		1000				and the second s	110
Reference Type   We	ell Name			Comment	ts				



## PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

**SAN JUAN 31-6 49G** 

Logging Prog Intermediate L		v if show ☐ GR/ILD		nbo	366 27 64	Military Communication
TD Logs:	☐ Triple Co	ombo 🔲 Dipmeter	☐ RFT ☐ Sc	onic VSP TDT		
Additional Information:						
Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks	

Comments: Zones - Drilling Mud Program:

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist/nitrogen drilling media with foamer, polymer, & corrosion inhibitor as needed

Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints
Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th
pints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

### San Juan 31-6 # 49G **Halliburton Cementing Program**

### **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	1.21 cuft/sk	(
Cement Density	15.6 lb/gal	
Excess Cement	125 %	
Cement Required	142 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	3598	ŀ	
Lead Cement Yield	2.88	cuft/sk	. *
Lead Cement Density	11.5	lb/gal	
Lead Cement Excess	150	%	
Lead Cement Required	360	sx	
Tail Cement Length	719.6	'	
Tail Cement Yield	1.33	cuft/sk	
Tail Cement Density	13.5	lb/gal	
Tail Cement Excess	150	%	
Tail Cement Required	-211	sx	

SHOE

3598 ', 7 ", 20 ppf, J-55 STC

tta ing i

### **PRODUCTION CASING:**

Drill Bit Diameter Casing Outside Diameter Casing Weight Casing Grade Top of Cement Shoe Depth Cement Yield Cement Density	6.25 " Casing Inside Diam. 4.000 " 11.6 ppf N-80 3398 ' 200' inside intermediate casing 7993 ' 1.45 cuft/sk 13.1 lb/gal
Cement Density	13.1 lb/gal
Cement Excess	50 %
Cement Required	483 sx

## SAN JUAN 31-6 #49G

## HALLIBURTON OPTION

TO CELEGIA TO TO TO TO THE TOTAL THE TOTAL TO THE TOTAL TOTAL TO THE T					
9-5/8 Surface Casing					
	Standard Cement				
Cement Recipe	+ 3% Calcium Chlori	de			
,	+ 0.25 lb/sx Flocele				
Cement Volume 142 sx					
Cement Yield	1.21	cuft/sx			
	171.5	cuft			
Siurry Volume	30.6	bbls			
Cement Density	15.6	ppg			
Water Required	5.29	gal/sx			

7" Intermediate Casing						
Lead Slurry						
	Standard Cement					
Cement Recipe	+ 3% Econolite (exte	ender)				
·	+ 10 lb/sx Pheno Se	al				
Cement Required	360	sx				
Cement Yield	2.88	cuft/sx				
Olympy Values a	1035.9	cuft				
Slurry Volume	184.5	bbls				
Cement Density	11.5					
Water Required	16.85	gal/sx				

7" Intermediate Casing						
	Tail Slurry					
	50 / 50 POZ:Standar	d Cement				
Cement Slurry	+ 2% Bentonite					
	+ 6 lb/sx Pheno Sea					
Cement Required	211	SX				
Cement Yield	1.33	cuft/sx				
Slurry Volume	280.1	cuft				
	49.9	bbls				
Cement Density	13.5	ppg				
Water Required						

4-1/2" Production Casing				
Cement Recipe	50 / 50 POZ:Standard Cement			
	+ 3% Bentonite			
	+ 3.5 lb/sx PhenoSeal			
	+ 0.2% CFR-3 Friction Reducer			
	+ 0.1% HR-5 Retarder			
	+ 0.8% Halad-9 Fluid Loss Additive			
Cement Quantity	483 sx			
Cement Yield	1.45	cuft/sx		
Cement Volume	700.1	cuft		
	124.7			
Cement Density	13.1	ppg		
Water Required	6.55	gal/sx		

### SCHLUMBERGER OPTION

	9-5/8 Surface Casing			
	Class G Cement			
Cement Recipe	+ 3% S001 Calcium Chloride			
	+ 0.25 lb/sx D029 Cellophane Flakes			
Cement Volume	147 sx			
Cement Yield	1.17 cuft/sx			
Cement Volume	171.5 cuft			
Cement Density	15.8 ppg			
Water Required	4.973 gal/sx			

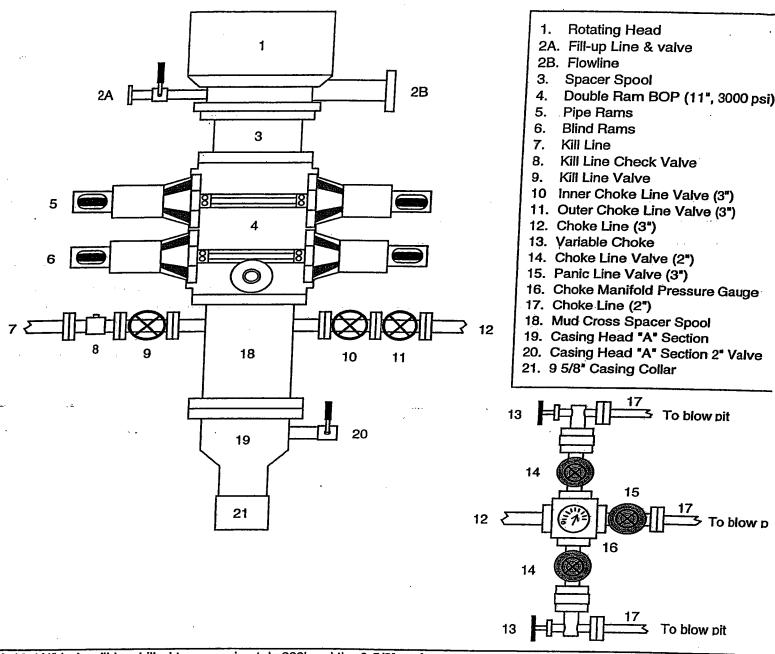
	7" Intermediate Casin	9		
	Lead Slurry			
Cement Recipe	Class G Cement			
	+ 0.25 lb/sx D029 Cellophane Flakes			
	+ 3% D079 Extender			
	+ 0.20% D046 Antifoam			
	+ 10 lb/sx Pheno Seal			
Cement Required	381	sx		
Cement Yield	2.72	cuft/sx		
Slurry Volume	1035.9	cuft		
	184.5	bbls		
Cement Density	11.7	ppg		
Water Required	15.74	gal/sx		

7" Intermediate Casing				
Tail Slurry				
	50 / 50 POZ: Class G Cement			
	+ 0.25 lb/sx D029 Cellophane Flakes			
	+ 2% D020 Bentonite			
Cement Slurry	+ 1.5 lb/sx D024 Gilsonite Extender			
	+ 2% S001 Calcium Chloride			
	+ 0.10% D046 Antifoam			
	+ 6 lb/sx Pheno Seal			
Cement Required	214	SX		
Cement Yield	1.31	cuft/sx		
Slurry Volume	280.1	cuft		
	49.9	bbls		
Cement Density	13.5	ppg		
Water Required	5.317 gal/sx			

4-1/2" Production Casing				
	50 / 50 POZ:Class G Cement			
	+ 0.25 lb/sx D029 Cellophane Flakes			
Cement Recipe	+ 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	486	sx		
Cement Yield	1.44	cuft/sx		
Cement Volume	700.1	cuft		
Cement volume	124.7			
Cement Density	13	ppg		
Water Required	6.47	gal/sx		

## BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing



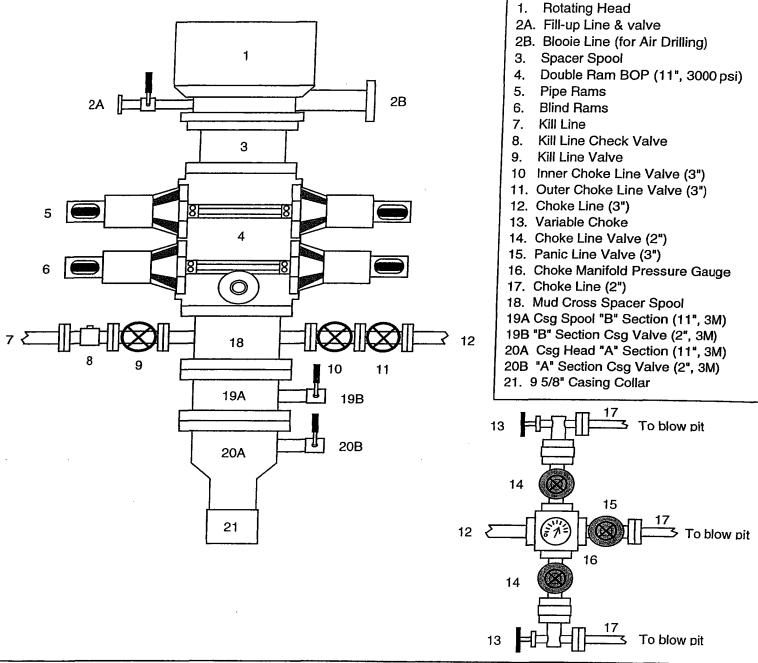
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 1000 psi (high pressure test) for 10 minutes. Then the test plug will be removed, and the 9-5/8" casing will be pressure tested against closed blind rams to 200 psi to 300 psi for 10 minutes and to 1000 psi for 30 minutes (this value is one 44% of the minimum internal yield pressure of the 9-5/8" casing). (Note: per regulatory requirements we will wait on cement at least 8 hrs after placement before testing the 9-5/8" surface casing). Then an 8-3/4" hole will be drilled to intermediate casing point and 7" intermediate casing will be run and cemented.

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

1 Unner Kelly cock Valve with handle

### **BLOWOUT PREVENTER ARRANGEMENT & PROGRAM**

For Drilling to TD and Setting 4.5 inch Casing



After the 7" intermediate casing has been run and cemented, the Casing Spool ("B" Section) will be installed on the wellhead ("A" Section) and the BOP will be installed on the Casing Spool. A test plug will be set in the wellhead and the pipe rams, blind rams, and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 3000 psi (high pressure test) for 10 minutes. Then the test plug will be removed and the 7" casing will be pressure tested against closed blind rams to 200 psi to 300 psi for 10 minutes and to 1800 psi for 30 minutes - this test pressure is 48% of the minimum internal yield strength of 3740 psi for the 7", 20#, J-55, STC casing. Then we will air drill the 6-1/4" hole to TD and run and cement the 4-1/2" casing.

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

Property:	SAN JUAN 31-6 UNIT			_	Well #	:	49G		
Surface Loca	ation:		•						
Unit: J	_Section	on: 5 To	wnship:	30N	_Range:	6W			
County: RIO ARRIBA St					: New M	exico			
Footage	1735	from the	SOUTH	line	1975	from the	EAST	line	

#### **CATHODIC PROTECTION**

ConocoPhillips (COP) proposes to drill a cathodic protection deep well groundbed for the subject well. COP will drill a hole vertically at the surface large enough to accommodate 20 feet of 8 inch diameter PVC pipe for surface casing to assist in further drilling and loading. Casing may be cemented in place for stability if needed. COP will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on the existing well pad and a Farmington based company will be doing the drilling for ConocoPhillips.