# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

BUREAU OF LAND	5. Lease Serial No. SF-078277		
APPLICATION FOR PERMIT	TO DRILL OR REENTER	6. If Indian, Allottee or Trib	e Name
(/(			
la. Type of Work: 🛛 DRILL 🔲 REENTER		7. If Unit or CA Agreement.	Name and No.
1b. Type of Well: ☐ Oil Well    ☐ Oas Well    ☐ O		8. Lease Name and Well No SAN JUAN 29-5 UNIT	
CONOCÓPHILLIPS COMPANY	VICKI WESTBY E-Mail: VICKI.R.WESTBY@CONOCOPHILLIPS.COM	9. API Well No.	
3a. Address 4001 PENBROOK ODESSA, TX 79762	3b. Phone No. (include area code) Ph: 915-368-1352	10. Field and Pool, or Explo MESAVERDE \ DAK	ratory OTA
4. Location of Well (Report location clearly and in accordance  At surface NWSW 2460FSL 1050FW  At proposed prod. zone NWSW 2460FSL 1050FW	L 28 29 30 377	11. Sec., T., R., M., or Blk. Sec 18 T29N R5W M	•
14. Distance in miles and direction from nearest town or post	office* 2005 5	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 Day On 114.73	17. Spacing Unit dedicated of 3.2	o this well
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8041 MD	20. BLM/BIA Bond No. on	file
21. Elevations (Show whether DF, KB, RT, GL, etc.	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:	
<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 Supplied to Supplied the Supplied of the Supplied to Supplied the Supplied the Supplied to Supplied the Supplied the Supplied to Supplied the Supplied to Supplied the Supplied to Supplied the Supplied to Supplied the Supplied the Supplied to Supplied the Supplied to Supplied the Supplied the Supplied to Supplied the Supplied to Supplied the Supplied to Supplied the Supplied to Supplied the Supplied th</li></ol>	4. Bond to cover the operation Item 20 above). 5. Operator certification	ons unless covered by an existing	· ·
25. Signature (Electronic Submission)	Name (Printed/Typed) VICKI WESTBY Ph: 915-368-1352		Date 11/03/2004
Title AGENT			
Approved by (Signature)	Name (Printed/Typed)		Date 1-27-5
Title AFM	Office		
Application approval does not warrant or certify the applicant h operations thereon.  Conditions of approval, if any, are attached.	olds legal or equitable title to those rights in the subject le	ase which would entitle the app	licant to conduct
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, States any false, fictitious or fraudulent statements or representa		make to any department or ag	ency of the United
Additional Operator Remarks (see next page)  Electronic Submis	sion #50669 verified by the BLM Well Inform	nation System	

Electronic Submission #50669 verified by the BLM Well Information System For CONOCOPHILLIPS COMPANY, 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

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

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

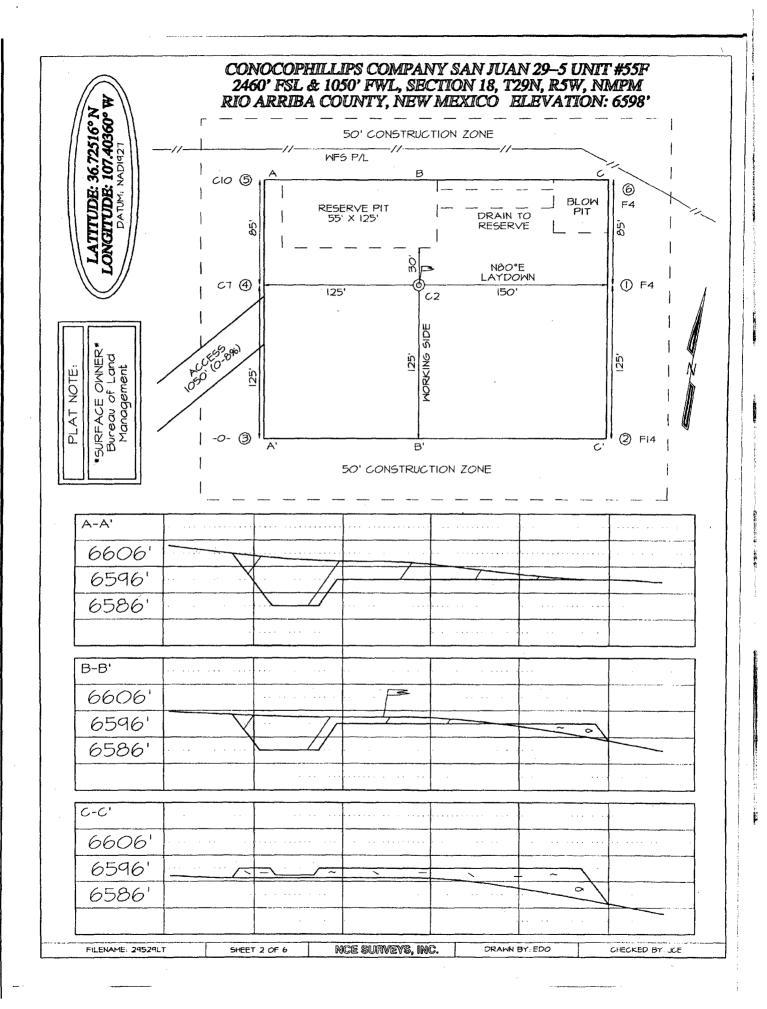
AMENDED REPORT

Centificate Number

O Box 2088, Santa Fe.	NM 87504-2088					
	WELL LOCAT	ION AND A	CREAGE DED	ICATION PLA	ΑT	
30-039-29	<sup>2</sup> Pool Code 72319 \ 71599	3	BLANCO MES	*Pool Name AVERDE \ BA	ASIN DAKOTA	4
'Property Code 31325		Property SAN JUAN 2	Name 29-5 UNIT		° We	ell Number 55F
'OGRID No. 217817	CC	Operator NOCOPHILL	Name IPS COMPANY		• 6	Devation 6598
		<sup>10</sup> Surface	Location			
UL or lot no. Section	Township Range Lot Idn 29N 5W	Feet from the 2460	North/South line SOUTH	Feet from the 1050	East/West line WEST	County RIO ARRIBA
	<sup>11</sup> Bottom Hole L	ocation I		From Surfa	се	
UL or lot no. Section	Township Range Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	) Acres - W/2 (MV) ) Acres - W/2 (DK)	Soint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Onder No.	, , , , , , , , , , , , , , , , , , ,	
	ILL BE ASSIGNED TO TH OR A NON-STANDARD	IS COMPLETI UNIT HAS BE	ON UNTIL ALL EEN APPROVED	INTERESTS HA BY THE DIVIS	ION ION BEEN CON	ISOL IDATED
SF-0	5282.54*  ASE 78277  AT: 36 '43.5098 N NG: 107 '24.2158 W DATUM: NAD27	JAN 2010 JAN 2010 CONS. D OST. 3	25 6 7 8 d	Signature Vicki Signature Vicki Printed N Sr. An Title ///3/C Date  18 SURVE I hereby ce shown on th notes of ac my supervis and correct Survey Di Signature a	YOR CERTINATION OF THE WEIGHT	FICATION 1 location of from field by me or under same is true belief ER 13, 200 1001 Surveyor

5280.00

Office Submit 3 Copies To Appropriate District	State of	New M	exico				nC-103
District I	Energy, Minerals	and Nati	ıral Resources		····	Ma	ay 27, 2004
1625 N. French Dr., Hobbs, NM 88240 District 11				WELLA	PINO.		
1301 W. Grand Ave., Artesia, NM 882 1 0	OIL CONSER'	VATION	NDIVISION	5 Indicate	Type of Le	2000	
<u>District III</u>	1220 Sout	h St. Fra	ncis Dr.		ATE	FEE	7
1 000 Rio Brazos Rd., Aztec, NM 8741 0 District IV	Santa F	e, NM 8	7505		il & Gas Lea		₫
1220 S. St. Francis Dr., Santa I e, NM 87505		•		o. Same o			
	TCES AND REPORTS OF	NWELLS		7. Lease N	Jame or Unit	Agreement	Name
(DONOTUSE THIS FORM FOR PROPO	SALSTODRILLOR TO DEE	PENORPLI	JGBACKTOA	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
DIFFERENT RESERVOIR, USE 'APPLIC PROPOSALS)	ATION FOR PERMIT (FOR	MC-101)FC	RSUCH		SAN JUAN	29-5 UNIT	
1. Type of Well: Oil Well	Gas Well X Other			8. Well Nu	ımber	55F	
2. Name of Operator				9. OGRID	Number		
	ConocoPhillips	Company				21781	.7
3. Address of Operator				10. Pool n	ame or Wild	icat	
	4001 Penbrook, Odes	ssa, TX 7	9762	BLANCO	MESAVERI	DE / BASIN I	DAKOTA
4. Well Location							
Unit Letter L	2460 feet from the	SOUT	H line and	1050 f	feet from the		line
Section 18	Township 2	9N Ra	inge 5W	NMPM	RIO ARR	IBA Cou	ınty
	I 1. Elevation (Show	whether Di 659					
Pit or Below -grade Tank Application 🛛 🔾	Closure	039	0 GL		<u>l</u>		
Pit type DRILL Depth to Groundw		wast frack w	ater well   MILE Dista	<b>(</b>		····280'	
	Below-Grade Tank: Vol					ter 200	
Liner Thickness: mil				struction Mate			
12. Check A	Appropriate Box to Inc	dicate Na	ature of Notice, F	Report or C	Other Data		
NOTICE OF IN	TENTION TO:		SHIPS	SEOLIENT	T REPOR	TOF	
PERFORM REMEDIAL WORK	PLUG AND ABANDON		REMEDIAL WORK			ERING CASIN	√G 🏻
TEMPORARILY ABANDON	CHANGE PLANS		COMMENCE DRIL				~ H
PULL OR ALTER CASING	MULTIPLE COMPL		CASING/CEMENT	JOB			
OT IED		,ı	OT IED				_
OTHER: 13. Describe proposed or comp	leted operations (Clearly	ctate all p	OTHER:	riva nartinar	at dates inch	uding acting	tod doto
of starting any proposed wo	rk). SEE RULE I 1 03. Fo	or Multiple	e Completions: Attac	ch wellbore	diagram of r	oronosed cor	nnletion
of starting any proposed work). SEE RULE I 1 03. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.							
·							
ConocoPhillips' Generic Pit	Plan is on file at the NMO	CD in A	ztec NM See the at	tached diag	ram that deta	ails the locati	on of
the pit in reference to the proposed w							
The solids left after the water has bee							
					·		•
				* "			
			·	•			
I hereby certify that the information	ahova is true and somple	oto to the l	and of many languaged	oo ond balia	fica o		
grade tank has been/will be constructed or o	above is true and corripte alosed according to NMOCD gr	uidelines 🔲	, a general permit 🔲 or	an (attached)	altemative OC	ry that anv pit or D-approved pl	an 🔲
SIGNATURE Vicki Westby	т	TTLE Staff	Agent		DATE	E <u>11/03/04</u>	
Type or print name	,	E-mail add	ress:		Telephone	e No.	
For State Use Only	11 ,				. п		
A DED CO TO COL	11/11	voru!	7 GAL & GAS INSPE	char, dist.	Lange Contract Contra	AN 31	2005
APPROVED BY: Conditions of Approval (if any):	THE	TTLE	*** The Englander of the England of		DAYE	,	- UUJ





## PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

**SAN JUAN 29-5 55F** 

Lease:						AFE #:						AFE	≣ \$:
Field Name: hPHIL	LIPS	29-5		Rig:				State:	NM	County: RIO	ARRIBA	API	#:
Geoscientist: Glas	er, Te	erry J		Phone	: (832)486-	2332	Prod.	Engineer:	Mod	ody, Craig E.	F	hone:	486-2334
Res. Engineer: Joh				Phone	: (832)-486	-2347				nsen, Eric E.	F	hone:	
Primary Objectiv	e (Zc	nes):		45									
Zone	Zone	Name										ATT	
ļ	BASII	N DAKO	TA (PRORA	ATED GA	S)								
			SAVERDE (										
	-				<del></del>								
A	no sel tokono e o co												
Lecation: Suidace			n e					i ii				S	traight Hole
Latitude: 36.73		Longitu	de: -107.4	Ю	X:		Y:			Section: 18		R	ange: 5W
Footage X: 1050 F	WL	Footage	Y: 2460 I	FSL	Elevation: 6	598	(FT)	Township:	29N				
Tolerance:					Acceptance of the second second second								
Location Type: Yea	r Rou	nd		Start (	Date (Est.):		Con	pletion Da	ate:		Date In O	peration	on:
Formation Data:	Assun	ne KB =	6611	Units =	FT								
Formation Call & Casing Points			Depth (TVD in Ft	SS (Ft)	Depletion (Yes/No)		внт				Remarks		
SURFACE CSG			200	6411			······································	12-1/4 ho		5/8" 32.3 ppf	, H-40, ST	C casin	g. Circulate cem
NCMT			1311	5300									
OJAM			2711	3900				Possible v	water	flows.			
KRLD			2861	3750									
FRLD			3231	3380				Possible o	gas.				
PCCF			3511	3100									
LEWS			3711	2900									
Intermediate Casing			3811	2800				8 3/4" Ho surface.	le. 7'	, 20 ppf, J-55,	, STC Casir	ng. Cir	culate cement to
CHRA			4526	2085									
CLFH			5326	1285		575		Gas; poss	ibly w	et			
MENF			5436	1175		•		Gas.					
PTLK			5711	900				Gas.					
MNCS			6011	600									
GLLP			6996	-385				Gas. Pos	sibly v	vet.			
GRHN			7691	-1080		750		Gas possi	ble, hi	ghly fractured			
CBBO			7871	-1260				Gas					
Total Depth			8041	-1430				a minimur	n of 1	1/2", 11.6 ppf 00' inside the TDT with GR	previous ca	asing s	g. Circulate ceme string. No open ho
Reference Wells:								4. 1					100
Reference Type V	Vell N	ame			Comments	S						-contest Vill	
Logging Program Intermediate Logs:	ANALTH PROPERTY	og only i	f show □	GR/ILC	)   Triole	Combo			4.5				
TD Logs:		riple Cor		ipmeter		Sonic [	VSP	▼ TDT		A			
Additional Informati		- F	<u> </u>				<u> </u>						

Comments: Zones - 80-acre replacement for the #26 MV (MV J&A w/tubing fish - will recomplete #26 to coal). DK in the 55F will be an 80 acre infill. Had to move slightly to the SE to avoid arch.

Printed on: 11/3/2004 8:20:54 AM

#### San Juan 29-5 # 55F

### **SURFACE CASING:**

**Drill Bit Diameter** Casing Outside Diameter Casing Weight Casing Grade Shoe Depth Cement Yield **Excess Cement Cement Required** 

ppf H-40 230 1.21 125 %

SHOE

230 ', 9.625 ",

32.3 ppf,

STC

#### **INTERMEDIATE CASING:**

Drill Bit Diameter Casing Outside Diameter Casing Weight Casing Grade Shoe Depth Lead Cement Yield Lead Cement Excess **Tail Cement Length** Tail Cement Yield **Tail Cement Excess** Lead Cement Required **Tail Cement Required** 

J-55 3811 2.88 cuft/sk 150 % 762.2 1.33 cuft/sk 150 % 381 sx

SHOE

3811 ';

20 ppf,

STC

#### **PRODUCTION CASING:**

**Drill Bit Diameter** Casing Outside Diameter Casing Weight Casing Grade Top of Cement Shoe Depth Cement Yield Cement Excess **Cement Required** 

11:6 ppf N-80 3611

8041

Casing Inside Diam. 4.000"

Casing Inside Diam. 9.001 "

Casing Inside Diam. 6.456 "

200' inside intermediate casing

1.45 cuft/sk 50 % 465 sx

## SAN JUAN 29-5 #55F

OPTION 1

	9-5/8 Surface Casing			
	Class C Standard Cement			
Cement Recipe	+ 3% Calcium Chloride			
	+0.25 lb/sx Flocele			
Cement Volume	149 sx			
Cement Yield	1.21 cuft/sx			
	479 8 cuft			
Slurry Volume	32.0 bbls			
Cement Density	15.6 ppg			
Water Required	5.29 gal/sx			

	7" Intermediate Casir	19				
	Lead Slurry					
	Standard Cement					
Cement Recipe	+ 3% Econolite (ex	tender)				
	+ 10 lb/sx Pheno Seal					
Cement Required	861					
Cement Yield		cuft/sx				
	1098/2	cuft				
Slurry Volume	195.6	bbls				
Cement Density	11.5					
Water Required	16.91	gal/sx				

	7" Intermediate Casin	g				
	Tail Slurry					
	50 / 50 POZ:Standa	ard Cement				
Cement Slurry	+ 2% Bentonite					
		+ 6 lb/sx Pheno Seal				
Cement Required	228	SX				
Cement Yield	1.33	cuft/sx				
	296.1	cuft				
Slurry Volume	152.7	bbls				
Cement Density	13.5	ppg				
Water Required	5.52	gal/sx				

	Wis and			
4-	1/2" Production Casi			
Cement Recipe	50 / 50 POZ:Standa	ard Cement		
	+ 3% Bentonite			
	+ 3.5 lb/sx PhenoS	eal		
	+ 0.2% CFR-3 Frict	ion Reducer		
	+ 0.1% HR-5 Retarder			
	+ 0.8% Halad-9 Flu	id Loss Additive		
Cement Quantity	465	SX		
Cement Yield	1.45	cuft/sx		
	674.7	cuft		
Cement Volume	120.2			
Cement Density	13.1	ppg		
Water Required	6.47	gal/sx		

## OPTION 2

	9-5/8 Surface Casing
	Class G Standard Cement
Cement Recipe	+ 2% S001 Calcium Chloride
	+0.25 lb/sx D029 Cellophane Flakes
Cement Volume	448 <mark>\$X</mark>
Cement Yield	1.16 cuft/sx
Cement Volume	1711.5 cuft
Cement Density	15.8 ppg
Water Required	4.983 gal/sx

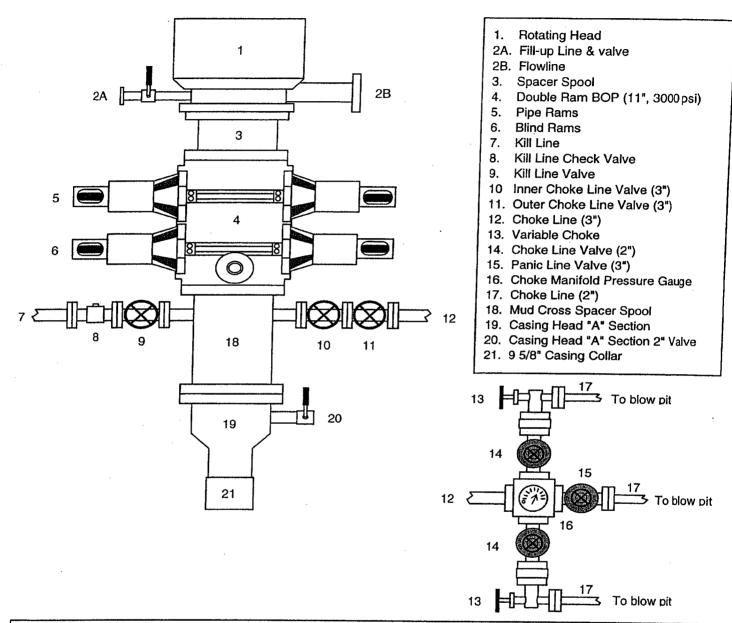
7	" Intermediate Casing				
	Lead Slurry				
	Class G Standard Cement				
	+0.25 lb/sx D029 Cellophane Flakes				
Cement Recipe	+ 3% D079 Extender				
	+ 0.20% D046 Antifoam				
	+ 10 lb/sx Pheno Seal				
Cement Required	404 sx				
Cement Yield	2.72 cuft/sx				
	1099.5 cuft				
Slurry Volume	195 8 bbls				
Cement Density	11.7 ppg				
Water Required	15.74 gal/sx				

7	"Intermediate Casing		
	Tail Slurry		
	50 / 50 POZ:Standard 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	226 sx		
Cement Yield	1.31 cuft/sx		
	296.0 cuft		
Slurry Volume	52 / bbls		
Cement Density	13.5 ppg		
Water Required	5.317 gal/sx		

	0	- De A			
4-	1/2" Production Cas	n <b>g</b>			
	50 / 50 POZ:Class	G Standard Cemen			
	+0.25 lb/sx D029 C				
	+ 3% D020 Bentoni	te			
	+ 1.0 lb/sx D024 Gi	Isonite Extender			
Cement Recipe	+ 0.25% D167 Fluid Loss				
	+ 0.15% D065 Dispersant				
	+ 0.1% D800 Retarder				
	+ 0.1% D046 Antifoamer				
	+ 3.5 lb/sx PhenoSeal				
Cement Quantity	468	sx			
Cement Yield	1.44	cuft/sx			
Coment Volume	674.4	cuft			
Cement Volume	120.1				
Cement Density	13	ppg			
Water Required	6.43	gal/sx			

## **BLOWOUT PREVENTER ARRANGEMENT & PROGRAM**

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



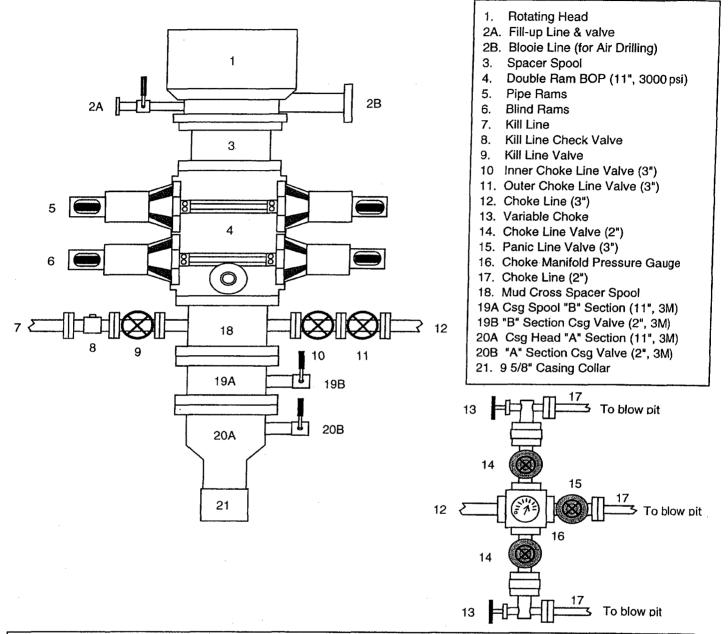
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe 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. Upper Kelly cock Valve with handle
- 2. Stab-in TIW valve for all drillstrings in use

## **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 29-5 UNIT				Well #	•	55F		
Surface Loc	ation:							
Unit: L	_Section	on: 18 To	wnship:_	29N	_Range:	5W		
County: RIO ARRIBA				State: New Mexico				
Footage:	2460	from the	SOUTH	line,	1050	from the	WEST	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.