Form 3160-3 (August 1999)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# RECEIVED

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

SEP 2 1 2004

5. Lease Serial No. NM-03471

APPLICATION FOR PERMIT	ГО DRILL OR R <b>Euniques</b> Land Managemei Farmington Field Office	6. If Indian, Allottee or Tribe Name
1a. Type of Work: ☑ DRILL ☐ REENTER	Water a residence of the control of	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well    Gas Well ☐ Oth		8. Lease Name and Well No. SAN JUAN 589 29-6 #580
	VICKI WESTBY E-Mail: Vicki.R.Westby@conocophillips.com	30-039-29231
3a. Address 4001 PENBROOK, SUITE 346 ODESSA, TX 79762	3b. Phone No. (include area code) Ph: 915.368.1352	10. Field and Pool, or Exploratory BLANCO MESAVERDE
4. Location of Well (Report location clearly and in accorded	unce with any State requirements 10 1920	11. Sec., T., R., M., or Blk. and Survey or Area
At surface SENW 1800FNL 2300FWL At proposed prod. zone	Nov	Sec 28 T29N R6W Mer NMP
14. Distance in miles and direction from nearest town or post	office*	12. County or Parish RIO ARRIBA 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  320 W/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 5778 MD	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 6365 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:
<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 Sys SUPO shall be filed with the appropriate Forest Service Of</li> </ol>	Item 20 above).  5. Operator certification	ons unless covered by an existing bond on file (se
25. Signature (Electronic Submission)	Name (Printed/Typed) VICKI WESTBY	Date 09/17/2004
Title AGENT		
Approved by (Signature)  Title	Name (Printed/Typed) Office	Date // //
Application approval does not warrant or certify the applicant hoperations thereon.  Conditions of approval, if any, are attached.	olds legal or equitable title to those rights in the subject le	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, States any false, fictitious or fraudulent statements or representate.	inake it a crime for any person knowingly and willfully to tions as to any matter within its jurisdiction.	o make to any department or agency of the United
Additional Operator Remarks (see next page)		
Electronic Submiss	sion #36310 verified by the BLM Well Inforn	nation System

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

\ A

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

State of New Mexico Energy, Minerals & Natural Resources Department

Oistrict II PO Drawer DD, Artesia, NM 88211-0719

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

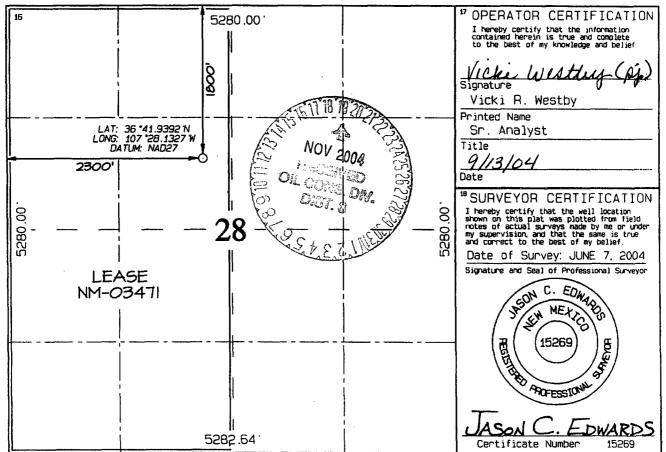
District III 1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

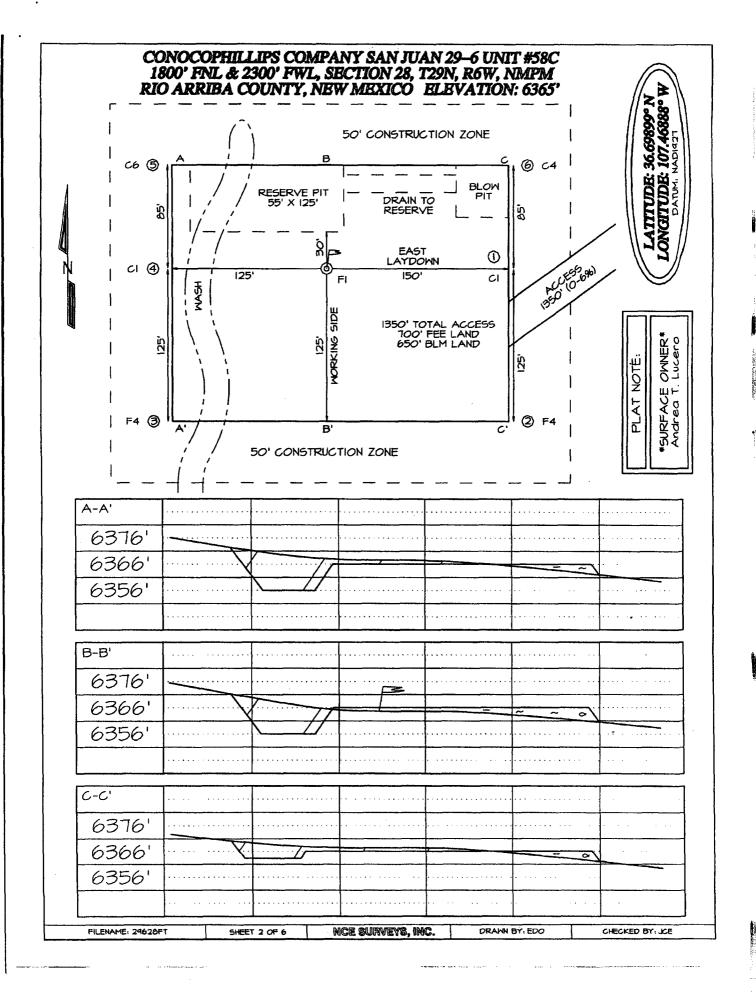
District IV PO Box 2088, Santa Fe, NM 87504-2088

AMENDED REPORT SEP 2 1 2004

			WELL	LOCATI	ON AND A	CREAGE DE	mbyton Field	Office Office	K ´	•
30-03	I Number	931		Code 319		BLA	Pool Name NCO MESAVE	RDE		
Property 31320					Property SAN JUAN 2					11 Number 58C
'OGRID N 21781				CO	*Operator NOCOPHILL I	Name IPS COMPANY			_	levation 6365
					<sup>10</sup> Surface	Location.				
u or lot no.	Section 28	29N	Range GW	Lot Ion	Feet from the	North/South line NORTH	Feet from the 2300	East/No WE		County RIO ARRIBA
			3ottom		ocation I	. 0211010110	From Surf			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	st line	County
<sup>12</sup> Dedicated Acres		0.0 Acr	es – W,	/2	<sup>19</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>16</sup> Onder No.			
NO ALLOW	ABLE W	ILL BE OR A	ASSIGNED NON-ST	D TO THI	IS COMPLETION UNIT HAS BE	ON UNTIL ALL EEN APPROVED	INTERESTS H BY THE DIVI	IAVE BE SION	EN CON	ISOL IDATED
16			5	5280.00			I hereby contains	certify to the design of the d	that the p	FICATION  nformation d complete e and belief
			<u>00</u>			 	VICK Signatur		estle	y (pj.)



Submit 3 Copies To Appropriate District Office	State of	f New Mexico	)				Fonn (	C-103
District I	Energy, Minerals	s and Natural R	esources		·		May 2	7, 2004
1625 N. French Dr., flobbs, NM 88240				WELL API	NO.			
District 11 1301 W. Grand Ave., Artesia, NM 882 1 0	OIL CONSER			5. Indicate	Type of L	ease		
District III I 000 Rio Brazos Rd., Aztec, NM 8741 0		th St. Francis 1	Or.	STA	, , , , , , , , , , , , , , , , , , , ,	FE	Е 🗍	Ì
District IV	Santa F	e, NM 87505		6. State Oil	& Gas L	ease No	).	
1220 S. St. Francis Dr., Santa Fe, NM 87505								
	TICES AND REPORTS O	ON WELLS		7. Lease Na	me or Ui	nit Agre	ement N	ame
(DO NOT USE THIS FORM FOR PROPO						_		
DIFFERENT RESERVOIR. USE "APPLI PROPOSALS.)	CATION FOR PERMIT" (FOR	CM C-101) FOR 500	. п 		AN JUA	N 29-6 I	UNIT	
1. Type of Well: Oil Well	Gas Well 🔀 Other			8. Well Nu	-		58C	
2. Name of Operator	n: '''' a			9. OGRID		2012		
3. Address of Operator	oPhillips Company			I 0. Pool na		7817		
	enbrook, Odessa, TX 79	762					EDDE	
4. Well Location				DI	ANCO N	MESAV	EKDE	
Unit Letter F	1800 feet from the	NORTH	line and	2300 fe	et from th	ne V	VEST	line
Section 28		29N Range	6W		County		ARRIBA	-
	I 1. Elevation (Show							
		6365	GL					
Pit r Bti n% aj nlv i ink Applikilion	77) v2 (///		>.5					[
Pit type DRILL Depth to Groundy	water Distance from no	earest fresh water w	ell <del> 20-100'</del> Dista	nce from neare	st surface	water_3	00'	-
Pit Liner Thickness: mil	Below-Grade Tank: Vo	olume	bbls; Cons	truction Mate	rial			
12. Check A	Appropriate Box to In	ndicate Nature	of Notice, R	Report or C	ther Da	ita		
NOTICE OF IN	NTENTION TO:	1	CLIDS	SEQUENT	. DEDO	DT A	<b>c</b> .	
PERFORM REMEDIAL WORK		v 🗀 🖁 REI	SUDS MEDIAL WORK				r: 3 Casin	e 🗀
TEMPORARILY ABANDON	CHANGE PLANS		MMENCE DRIL			NDA	3 0710111	Ĭ
PULL OR ALTER CASING	MULTIPLE COMPL		SING/CEMENT					
								<u> </u>
OTHER:  13. Describe proposed or comp	pleted operations (Clearly		IER:	cive pertiner	t dates i	naludina	actimat	ed date
of starting any proposed w								
or recompletion.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					p p		F
Companibling Commis Di	is Dian is an Classes she N	MOCD in Anton	NIM Con the o	مائلة الأماليين	45.44	J -4 - 51 - 41	h . 1	<b>c</b>
ConocoPhillips Generic Pi the pit in reference to the p	a rian is on thes at the in-	rill nit will he lir	, NM. See the a led. The drill ni	ittached diag it will be clo	ram mat ( sed after :	details the well	has been	n OU OI
completed. The solids left	after the water has been of	disposed of will b	e sampled and	NMOCD ap	proval w	ill be ob	tained p	rior to
closure of this pit.		•	•	•	•		•	
I hereby certify that the information grade tank has been/will be constructed or	above is true and comple	ete to the best of	my knowledge	and belief. I	further cer	rtify that	any pit or	below-
Eliace falls and been will be constituence of	closed according to MitOCD	garacimes [k a ge	uerai permit [1] o	r an (attacucu)	AIICEIIRIIYI	е ОСБ-ар	iproved pi	*4 L.J
SIGNATURE Vick	i Westby	TITLE	Sr. Anal	lyst	D	ATE	9/17/04	··-
Towns or weight now		<b>7</b> 7 11 11			<b></b>			
Type or print name For State Use Only		E-mail address:			I elepi	none No		
FOI STATE USE ONLY	41.	State Contract and an arrangement of the Contract and an arrangement of the Contract and arran				NO	110	2001
APPROVED BY:	#//N1 1	TITEPUTY OIL	. & GAS THEFT	Cida, dist.	Ø D	ATE	- S	2004
Conditions of Approval (if any):	1010	- 192 feeter 11 to 100 3000				m.mag1 - No. o		





# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

**SAN JUAN 29-6 58C** 

Lease:	· · · · · · · · · · · · · · · · · · ·		······			AFE #: WA		4139		AFE \$:
Field Name: hPHIL	LIPS	29-6		Rig: 3	20-2419		,	State:	NM   County: RIO ARRI	IBA API #:
Geoscientist: Glass	er, Te	erry J		Phone	: (832)486-2	2332	Prod.	Engineer:	Moody, Craig E.	Phone: 486-2334
Res. Engineer: Joh	nson,	Tom B	•	Phone	: (832)-486-	2347	Proj.	Field Lead:	Fransen, Eric E.	Phone:
dentiment/lentedir	1 1/24	mes)								
Zone	Zone	Name								
RON	BLAN	ICO ME	SAVERDE (PI	RORAT	ED GAS)					
		•								
R 1006/6001 1 518/8/68								5-3		
Latitude: 36.70		Longitu	ude: -107.47		X:		Y:	**************************************	Section: 28	Range: 6W
Footage X: 2300 F	WL	Footag	e Y: 1800 FN	IL	Elevation:		(FT)	Township:	29N	
Tolerance:				<u> </u>						
Location Type: Yea	r Rou	ınd		Start [	ate (Est.):		Con	npletion Da	te: Date	e In Operation:
Formation Data:	Assur	ne KB =	: 6378 L	Jnits =	FT					
Formation Call &			Depth	SS	Depletion		PLIT		Dame	
Casing Points			(TVD in Ft)	(Ft)	(Yes/No)	(PSIG)	BHT	<u> </u>	Rema	
SURFACE CSG			213	6165				Severe Lo. H-40, STC	st Circulation is possible. : casing.  Circulate ceme	. 12 1/4" Hole. 9 5/8" 32.3 ppf, nt to surface.
NCMT			1118	5260						
OJAM			2368	4010				Possible w	rater flows.	
KRLD			2568	3810						
FRLD			2913	3465				Possible g	as.	
PCCF			3263	3115						
LEWS			3463	2915				0.2148.11-1	- 71 70 6 7 77 677 6	
Intermediate Casing			3563	2815				8 3/4" Hoi surface.	e. 7", 20 ppr, J-55, S1C	Casing. Circulate cement to
CHRA			4228	2150				Gas; possi	bly wet	
CLFH			5023	1355		1300		Gas; possi	bly wet	
MENF			5113	1265				Gas.		
PTLK			5428	950				Gas.		
MNCS			5678	700					4	
Total Depth			5778	600						5, LTC casing. Circulate cement lious casing string. No open hole
		terna d'aria						logs. Case	d hole TDT with GR to si	urface.
Reference Wells:	100 000 000 000 000 000 000 000 000 000				la .					Elizabeth State State of Section 1
Reference Type V	Vell N	vame			Comments	<del></del> _				
Logging Program	Į.									A STATE OF STREET
Intermediate Logs:	-co-cardo early-	og only	if show 🗍	GR/ILD	Triple	Combo	### T. I.			
TD Logs:	.) <del></del>	riple Co		meter		] Sonic [	<b>┐</b> VSP	▼ TDT		
Additional Informati						····				
Comments: General	I/Wor	k Descri	iption -				<del></del>	.,		

Drilling Mud Program: Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

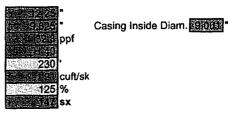
Below Intermediate: air/mist/nitrogen drilling media with foamer, polymer, & corrosion inhibitor as needed

Printed on: 9/17/2004 7:45:58 AM

### San Juan 29-6 # 58C

#### **SURFACE CASING:**

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



SHOE

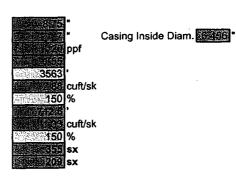
230 ', 9.625 ",

32.3 ppf,

H-40 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** 



SHOE

3563 ',

20 ppf,

J-55 STC

#### **PRODUCTION CASING:**

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



Casing Inside Diam. 4.000"

200' inside intermediate casing

cuft/sk

251 sx

e remains de la sanci	ujani 2.9 (5*#5/	ic.	
	4 Surf. Osg	int Ose	ProdaCsg
(elbina 2012) de	9.625	7	4.5
(D) and the state of the state	9:001	6.456	4.000
Deputies seems allowed	230	3563	5778
litele Diamie de 2004 a se	12.25	8.75	6.25
% Excess Leadis 非国际		150	<b>计划线路</b> 视器
% Excessital 12 12 12 12 12 12 12 12 12 12 12 12 12	125	150	50
incard Milardians and Picture			
3:3118/1010 Page 100			
EGGINFAINSINFT/IST THE ASS	230	712.6	2415
iropyoldicil Slany — Stabil	0	2850.4	3363
តិក្រៀងស៊ីកែខែងដែលមីស៊ីនេីក្រុង នៃ	N/A	0	N/A
MagisWir(epg) by the street	9,8	9.0	air dril
Mbjaslaysersersers was alles	WBM	WBM	air dril

•

	Surface C	asing	
	Capa Care		cuft sx
Open Hole Annulus	230 0:055804		
Shoe Track Volume	40 0.078735		17.7
			7.607.5

		Intermediat	e Casing			(Allies Gaenilli
	<b>FINE</b>	Cap	XS Factor	bbls	cuft	sx
Lead Open Hole Annulus	2620.4	0.026786	2.5	175.5	985.2	342.1
Lead Cased Hole Annulus	220	0.031116		6.8	38.4	13.3
uraiti ili ili talvuutus kaalistoisen k				152.5	11 40230	(15)514
Tail Open Hole Annulus	712.6	0.026786	2.5	47.7	267.9	201.4
Tail Shoe Track Volume	42	0.040505	1945	1.7	9.6	7.2
Gaile Lotal Charles and Carles Francisco				40/4 (C)/4	7777	/40/8/69

	Production		
	Ft Cap	XS Factor bbls	cuft sx
Open Hole Annulus	2215 0.018282	1.5 60.7	341.0 235.2
Cased Hole Annulus	200 0.020826	1 4.2	23.4 16.1
loki.		(6425) (6425) (6425)	500444 56461,2616

	SanJuan 29-6 # 58C
	5 9-5/8 Surface Casing Service 4/2 4/2 4/2
	Class C Standard Cement
Cement Recipe	+ 3% Calcium Chloride
vedest in e	±0:25 lb/sx Flocele
Cement-Volumen	SX STATE OF THE ST
Cement Yield	1.21 cutt/sx
	ental resident
Slurry Volume	65E
Cement Density	5. 15.6 ppg
Water Required	- 5.29 gal/sx
Compressive Stre	ngith
Sample cured at 6	0 deg F for 8 hrs
4hrs 38 mins	50 psi
9hrs	250 psi

# San Juan 29-6#58C

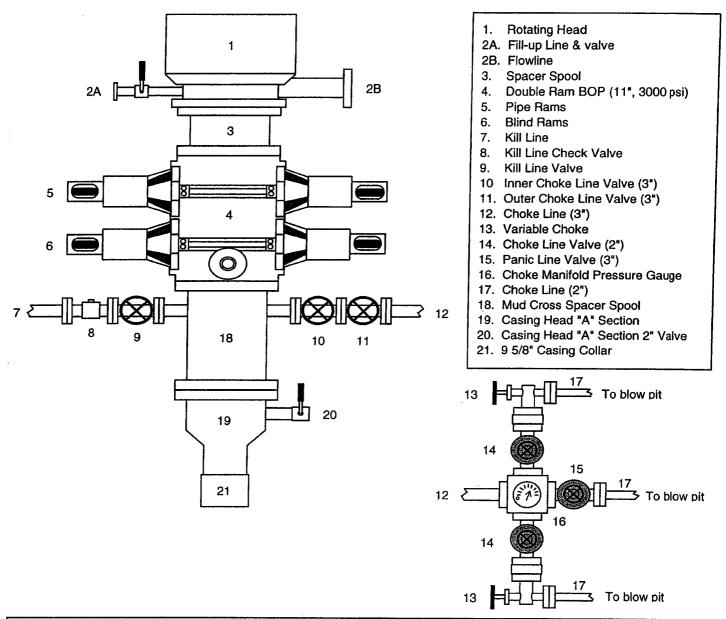
	7" Intermediate Casing
	Lead Slurry
	Standard Cement
Cement Recipe	+ 3% Econolite (extender)
	+ 10 lb/sx Pheno Seal
Cement Required	SX SX
Cement Yield	2.88 cuft/sx
Slurry Volume	CUft
	bbls
Cement Density	11.5 ppg
Water Required	16.91 gal/sx
Compressive Strength	
Sample cured at 130 de	eg F for 24 hrs
1 hr 47 min	50 psi
12 hr	350 psi
24 hr	450 psi

	7" Intermediate Casing
	Tail Slurry
	50 / 50 POZ:Standard Cement
Cement Slurry	+ 2% Bentonite
	+ 6 lb/sx Pheno Seal
Cement Required	209 sx
Cement Yield	1.33 cuft/sx
Slurry Volume	cuft.
	bbls bbls
Cement Density	13.5 ppg
Water Required	5.52 gal/sx
Compressive Strength	
Sample cured at 130 d	eg F for 24 hrs
2 hr 05 min	50 psi
4 hr 06 min	500 psi
12 hr	1250 psi
24 hr	1819 psi

e de la compania	Santiuan 29-6# 580
	42 v2/ Production Gasing
	50 / 50 POZ:Standard Cement
	+3% Bentonite
Cement Recipe	+3.5 lb/sx PhenoSeal
Cerrient Recipe	+ 0.2% CFR-3 Friction Reducer
	+ 0.1% HR-5 Retarder
	÷ 0.8% Halad-9 Fluid Loss Additive
Cement Quantity	SX
Cement Yield	1.45 cuft/sx
Cement Volume	cuff
Cement Density	13.1 ppg
Water Required	6.47 gal/sx
Compressive Stren	gth
Sample cured at 20	0 deg F for 23 hrs
9 hr 50 min	50 psi
13 hr 45 min	500 psi
16 hr	1500 psi
23 hr	2525 ps

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

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



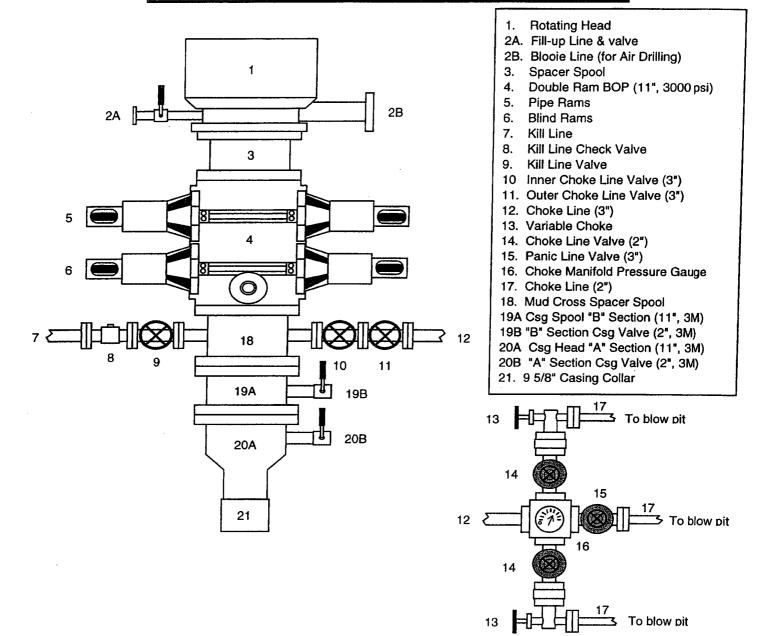
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe 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 Juar	29-6	Well #:	<u> 58C</u>	·
Surface Location:					
Unit: F Section: 28 Township: 26N Range: 6W					
County: RIO arriba State: New Mexico					
Footage: 18	かか from the	North	line 230X	from the WOSt	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.