Fonn 3160 -3 (February 2005)

2006 MAR 13 PM 12 59

UNITED STATES RECEIVED
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT HIGTOR NA

FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

5. Lease Serial No.

NM-011349-B

APPLICATION FOR PERMIT TO I	6. If Indian, Allotee or Tr	ibe Name				
Ia. Type of work: DRILL REENT	ER			7. If Unit or CA Agreement, Name and No. N/M/N/M-0784/5B-DK_N/M/M-6784/5AM		
lb. Type of Well: Oil Well Gas Well Other	Si	ngle Zone Multi	ple Zone	8. Lease Name and Well N SAN JUAN 29-5 I	ło.	
2. Name of Operator ConocoPhillips Company	41 DI . V			30 001	29832	
4001 Penbrook, Odessa, TX 79762	432-3	(include area code) 68-1230		10. Field and Pool, or Exploi BLANCO MESAVE DAKOT	RDÉ / BASIN A	
At surface NWSE 1930 FSL - 1895 At proposed prod. zone At proposed prod. zone	-	nts, *)		I 1. Sec., T. R. M. or Blk. and SECTION 27, T29N, R5V	•	
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	13. State	
				RIO ARRIBA	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			g Unit dedicated to this well		
18. Distance from proposed location*	19. Proposed	0 ACRES		MV & DK - 320.0 ACR BIA Bond No. on file	ES - E/2	
to nearest well, drilling, completed, applied for, on this lease, ft.	13. Proposec	833 <i>5</i> '		50085	15575307/2	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6877' GL	22 Approxim	ate date work will star	t*	23. Estimated duration	300g	
	24. Attac	hments		· non		
The following, completed in accordance with the requirements of Onshor 1. Well plat certified by a registered surveyor.	e Oil and Gas (s form:	g bond on file (see	
 A Drilling Plan. A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service office). 	Lands, the	5. Operator certific		rmation and/or plans as may b	pe required by the	
25. Signature		Printed/Typed) y James		Date	3/10/2006	
Title Senior Associate	<u>, caa</u>	y dames			1	
Approved by (Signature) Manles Cap	Name	(Printed/Typed)		Date	6/6/86	
Title ATM	Office	FFO)			
Application approval does not warrant or certify that the applicant hold conduct operations thereon. Conditions of approval, if any, are attached.	s legal orequita	able title to those rights	s in the subj	ect lease which would entitle t	he applicant to	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a	crime for any	gerson knowingly and v	willfully to	make to any department or age	ncy of the United	

States any false, fictitious or fraudulent statements or representations as to any matter within its juris iction.

*(Instructions on page 2)

ConocoPhillips Company proposes to drill a vertical wellbore to the Blanco Mesaverde / Basin Dakota formations. This well will be drilled and equipped in accordance with the attachments submitted herewith. This application is for APD / ROW.

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

The notice of staking for this well was submitted as a Blanco Mesaverde single well - the San Juan 29-5 Unit # 14A. This well has since changed to a Mesaverde/Dakota and the well number has changed to the #14M.

HWILL

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

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

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

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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

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

API Number

*Pool Code

PO Box 2088 Santa Fe, NM 87504-208888 13 PM 12.59 AMENDED REPORT

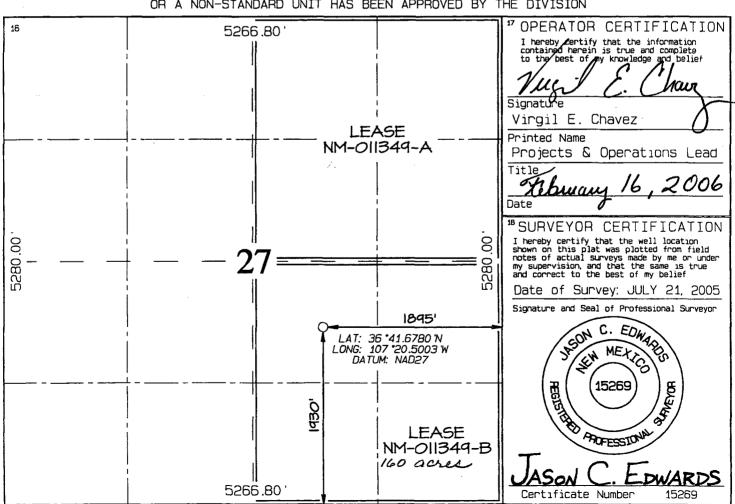
RECEIVED

070 FARMINGTON UM

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-03	39-2	9832	852 72319 / 71599 BLANCO MESAVERDE / BASIN DAKOTA							
*Property	Code		*Property Name							
3132	5				SAN JUAN 2	9-5 UNIT		1		14M
'OGRID N	No.				*Operator	Name			•E:	levation
21781	.7			CO	NOCOPHILLI	PS COMPANY			(6877 '
¹⁰ Surface Location										
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	st line	County
J	27	29N	29N 5W 1930 SOUTH 1895 EAS					ST	RIO ARRIBA	
		11 8	ottom	Hole L	ocation I	f Different	From Surf	ace		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	st line	County
¹² Dedicated Acres	32	0.0 Acre	es - E/	/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.			
			· · · · · ·	· · · · · · ·	1	l	l			

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



Submit 3 Copies To Appropriate District Office	State of New Mexic	•		Fonn C- 1 03
<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals and Natural	Resources	ELL API NO. ₂	May 27, 2004
District 11 1301 W. Grand Ave., Artesia, NM 882 1 0	OIL CONSERVATION D	IVISION		\mathcal{L}
District III	1220 South St. Francis	· · · · · · · · · · · · · · · · · · ·	Indicate Type of STATE	of Lease FEE
I 000 Rio Brazos Rd., Aztec, NM 8741 0 District IV	Santa Fe, NM 8750	5	State Oil & Ga	
1220 S. St. Francis Dr., Santa I e, NM 87505				
SUNDRY NOT	ICES AND REPORTS ON WELLS		Lease Name or	Unit Agreement Name
	SALS TO DRILL OR TO DEEPEN OR PLUG F CATION FOR PERMIT" (FORM C-101) FOR S		ς αν π	JAN 29-5 UNIT
PROPOSALS.) 1. Type of Well: Oil Well	Gas Well Other	8.	Well Number	14M
2. Name of Operator		9. (OGRID Numb	er
Cono	coPhillips Company			217817
3. Address of Operator	Penbrook, Odessa, TX 79762		. Pool name or	
4. Well Location	entrook, odessa, 17. 79702	<u>E</u>	BLANCO MESA	VERDE / BASIN DAKOTA
Unit Letter J	1930 feet from the SOUTH	line and 189	5 feet from	n the EAST line
Section 27	Township 29N Range	_		ARRIBA County
	I 1. Elevation (Show whether DR, RK	B, RT, GR, etc.)		
Pit or Below -grade Tank Application	Closure 6877'	GL		
Pit type DRILL Depth to Groundw		> 1000 well 3,800 ¹	Distance from nea	rest surface water 150'
Liner Thickness: 12 mil	Below-Grade Tank: Volume 4400		tion Material S	
12. Check A	Appropriate Box to Indicate Natur			
NOTICE OF IN PERFORM REMEDIAL WORK ☐		SUBSEC EMEDIAL WORK	QUENT REF	
TEMPORARILY ABANDON		OMMENCE DRILLING		ALTERING CASING P AND A
PULL OR ALTER CASING	= 1	ASING/CEMENT JOE	=	
OTHER:		ΓHER:		
	leted operations. (Clearly state all perting		pertinent dates	s, including estimated date
of starting any proposed we	ork). SEE RULE Ì 1 03. For Multiple C			
or recompletion.				
	and closed in accordance with Rule 50 a			
	attached diagram that details the location that details the well lead to t		nce to the propo	osed weililead.
P	F	F		
				•
I hereby certify that the information a	bove is true and complete to the best of r	ny knowledge and hel	ief I further ce	rtify that any nit or helow-
grade tank has been/will be constructed or	closed according to NMOCD guidelines \Box , a	general permit \square or an	(attached) alterna	tive OCD-approved plan
SIGNATURE Peggy James	TITLESenior	Associate		DATE
r eggy dames				-
Type or print name	E-mail address peggy.s	.james@conocophillips.o	com: Tele	ephone No.: (432)368-1230
For State Use Only		an anamatrical	את אשוח פור	MIN O 7 200G
APPROVED BY:	TITLE UZPUTY	on a Gas inspecto	A1911 1.	DATE
Conditions of Approval (if any):	11 /			

CONOCOPHILLIPS COMPANY SAN JUAN 29-5 UNIT #14M 1930' FSL & 1895' FEL, SECTION 27, T29N, R5W, NMPM RIO ARRIBA COUNTY, NEW MEXICO ELEVATION: 6877' LATITUDE: 36.69463° N LONGITUDE: 107.34167° W DATUM: NADIG27 50' CONSTRUCTION ZONE F5 (5) 6 F4 BLOW RESERVE PIT PIT DRAIN TO RESERVE 55' X 125' 85, 95 30 M°TIN 4 LAYDOWN 1950' (0-8%) ① F2 FΙ 125' 150 Candelarias F2 SIDE MORKING 25 125 PLAT NOTE: *FEE SURFACE Familia de los (C7 3 2 00 B' 50' CONSTRUCTION ZONE 2 A-A' 6889' 6879' 6869' B-B' 6889' 6879' 68691 C-C 6889' 6879' 68691 FILENAME: 29527JT NCE SURVEYS, INC. SHEET 2 OF 6 DRAWN BY EDO CHECKED BY: JCE



PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 29-5 14M

					_							
Lease:					AFE #: WA	N.CNV.6	161			AFE	≣ \$:	
Field Name: 29-5			Rig:				State:	NM	County: RIO ARRIBA	AP]	[#:	
Geoscientist: Glas	er, Terry	J	Phone	e: (832)486	-2332	Prod. E	ngineer:	Mod	ody, Craig E.	Phone:	486-2334	
Res. Engineer: He	nsley, Da	n E	Phone	: 832-486-2	2385	Proj. F	eld Lead:	Fra	nsen, Eric E.	Phone:		
Primary Objectiv	re (Zone	s):										
Zone	Zone Na	ame										
R20002	MESAVE	RDE(R20002)										
R20076	DAKOTA	(R20076)										
Location: Surface Latitude: 36.69463 Footage X: 1895 F Tolerance: Location Type:	30 Lo	Datum Co ngitude: -107.34 otage Y: 1930 F	11670 SL	AD:27 X: Elevation: Date (Est.):	6877	· · · · · · · · · · · · · · · · · · ·	ownship:			* 128 4 200	Straight Hole Range: 5W ion:	
Formation Data:	Assume	KB = 6895	Units =	FT								
Formation Call & Casing Points		Depth (TVD in Ft)	SS (Ft)	Depletio (Yes/No		внт			Remark	s	1	
Surface Casing		216	6679) 🗆		_	13-1/2 h		9 5/8" 32.3 ppf, H-40, 9	STC casi	ng. Circulate ce	ment
NCMT		1735	5160				to surrac	··				1
CJAM		3045	3850	_			Possible	water	flows.			
KRLD		3275	3620									
PCCF		3840	3055	5 🗆								
LEWS		4040	2855	5 🗆								
Intermediate Casing	9	4140	2755	5 🗆			7", 23 pp	of, J-5	000' of 7", 20 ppf, 3-55 5, LTC on bottom (speent to surface.			0' of
CHRA		4835	2060							•		
CLFH		5695	1200				Gas; pos	sibly v	wet			
MENF		<i>5</i> 735	1160				Gas.					
PTLK		6030	865				Gas.					
CLLP		7275	-380				Gas. Pos	ssibly	wet.			
CRHN		7985	-109	0 🗆			Gas poss	ible, l	highly fractured			
CBBO		8145	-125	0 🔲			Gas					
TOTAL DEPTH DK	(7)	8335	-144	0 🗆			a minimu	ım of	4-1/2", 11.6 ppf, N-80, 100' inside the previou ble TDT with GR to surf	is casing		
Reference Wells	Control of the Contro			Ta								
Reference Type	wali Nar	ne		Commer	าระ							1

Printed on: 3/10/2006 9:54:22 AM

TOPSET FRUITLAND COAL Wells: (topset casing above coal to prepare for cavitation/DO/UR)

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, 3'd, & 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 ioints

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

CASE & FRAC FRUITLAND COAL Wells: (casing set below coal to prepare for frac completion)

Drilling Mud Program:

Surface: spud mud

Production: fresh water mud with bentonite and polymer 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 Production: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, 8, the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, 8, the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, 8th

10" joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

MESA VERDE Wells:

Drilling Mud Program:

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist 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, &

U" joints

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

DAKOTA Wells:

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, 8th, 8, 8th, 8

10th joints

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 29-5 # 14M **Halliburton Cementing Program**

SURFACE CASING:

Drill Bit Diameter	42.5	
	13.5	
Casing Outside Diameter	9.625 "	Casing Inside Diam. 9.001
Casing Weight	32.3 ppf	
Casing Grade	H-40	
Shoe Depth	235 '	
Cement Yield	1.21 cuft/sk	
Cement Density	15.6 lb/gal	
Excess Cement	125 %	
Cement Required	214 sx	

SHOE

235 ', 9.625 ", 32.3 ppf, H-40 STC

INTERMEDIATE CASING:

Note: 4000' of 7", 20 ppf, J-55, STC or 140' of 7", 23 ppf, J-55, LTC on I **Drill Bit Diameter** 8.75 Casing Outside Diameter Casing Inside Diam. 6.125 7 Casing Weight 23 ppf Casing Grade J-55 Shoe Depth 4140 Lead Cement Yield 2.88 cuft/sk **Lead Cement Density** 11.5 lb/gal **Lead Cement Excess** 150 % **Lead Cement Required** 416 sx Tail Cement Length 828 Tail Cement Yield 1.33 cuft/sk Tail Cement Density 13.5 lb/gal 150 % **Tail Cement Excess Tail Cement Required** 241 sx

SHOE

4140',

23 ppf, J-55 LTC

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 3940 200' inside intermediate casing Shoe Depth 8335 Cement Yield 1.45 cuft/sk Cement Density 13.1 lb/gal Cement Excess 50 % **Cement Required** 458 sx

SAN JUAN 29-5 #14M

.HALLIBURTON OPTION

9-5/8 Surface Casing				
Standard Cement				
+ 3% Calciur	n Chloride			
+ 0.25 lb/sx l	locele			
214 sx				
1.21	cuft/sx			
259.5	cuft			
46.2	bbls			
15.6 ppg				
5.29	gal/sx			
	Standard Ce + 3% Calciur + 0.25 lb/sx I 214 1.21 259.5 46.2 15.6			

7" Intermediate Casing				
	Lead Slurry			
	Standard Ce	ment		
Cement Recipe	+ 3% Econoli	te (extender)		
	+ 10 lb/sx Pheno Seal			
Cement Required	416	sx		
Cement Yield	2.88	cuft/sx		
Slurn/ Volumo	1197.9	cuft		
Slurry Volume	213.4	bbls		
Cement Density	11.5	ppg		
Water Required	16.85	gal/sx		

7" Intermediate Casing				
	Tail Slurry			
	50 / 50 POZ:St	andard Cement		
Cement Slurry	+ 2% Benton	ite		
	+ 6 lb/sx Pheno Seal			
Cement Required	241	sx		
Cement Yield	1.33	cuft/sx		
Slurna Volumo	319.9	cuft		
Slurry Volume	57.0	bbls		
Cement Density	13.5 ppg			
Water Required	5.52	gal/sx		

4-1/2" Production Casing					
	50 / 50 POZ:Standard Cement				
	+ 3% Benton	ite			
Cement Recipe	+ 3.5 lb/sx Pl	henoSeal			
	+ 0.2% CFR-3 F	riction Reducer			
	+ 0.1% HR-5 Retarder				
	+ 0.8% Halad-9 Fluid Loss Additive				
Cement Quantity	458	sx			
Cement Yield	1.45	cuft/sx			
Cement Volume	664.7	cuft			
Cement volume	118.4				
Cement Density	13.1 ppg				
Water Required	6.55	gal/sx			

SCHLUMBERGER OPTION 1

9-5/8 Surface Casing				
Class G Cen	nent			
+ 3% S001 Calcium Chloride				
+ 0.25 lb/sx D029 Cellophane Flal				
222	sx			
1.17	cuft/sx			
259.5	cuft			
15.8	ppg			
4.973	gal/sx			
	Class G Cen + 3% S001 Ca + 0.25 lb/sx D029 222 1.17 259.5 15.8			

7" Intermediate Casing					
	Lead Slurry				
	Class G Cerr	nent			
	+ 0.25 lb/sx D029 (Cellophane Flakes			
Cement Recipe	+ 3% D079 E	xtender			
	+ 0.20% D046 Antifoam				
	+ 10 lb/sx Pheno Seal				
Cement Required	440	SX			
Cement Yield	2.72	cuft/sx			
Slurry Volume	1197.9	cuft			
Sidily volume	213.4	bbls			
Cement Density	11.7	ppg			
Water Required	15.74	gal/sx			

7" Intermediate Casing					
	Tail Slurry				
	50 / 50 POZ: C	lass G Cement			
	+ 0.25 lb/sx D029	Cellophane Flakes			
	+ 2% D020 E	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	244	SX			
Cement Yield	1.31	cuft/sx			
Slurry Volume	319.0	cuft			
Sidily volume	57.0	bbls			
Cement Density	13.5	ppg			
Water Required	5.317	gal/sx			

4-1/2" Production Casing				
Cement Recipe	50 / 50 POZ:Class G 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	462	sx		
Cement Yield	1.44	cuft/sx		
Coment Volume	664.7	cuft		
Cement Volume	118.4			
Cement Density	13	ppg		
Water Required	6.47	gal/sx		

SCHLUMBERGER OPTION 2

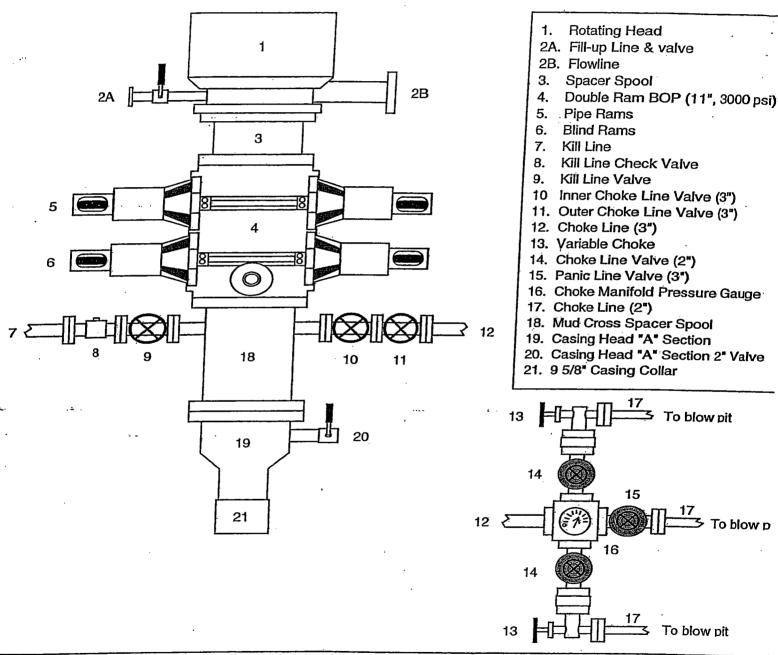
9-5/8 Surface Casing					
	Type III Cement				
Cement Recipe	+ 2% S001 Calcium Chloride				
	+ 0.25 lb/sx D029	Cellophane Flakes			
	+ 0.20% D046 Antifoam				
Cement Volume	195	SX			
Cement Yield	1.33	cuft/sx			
Cement Volume	259.5	cuft			
Cement Density	14.8	ppg			
Water Required	6.095	gal/sx			

7" Intermediate Casing				
Lead Slurry				
Cement Recipe	75% Type XI / 25% Class G Cement			
	+ 0.25 lb/sx D029 Cellophane Flakes			
	+ 3% D079 Extender			
	+ 0.20% D046 Antifoam			
Cement Required	570	sx		
Cement Yield	2.1	cuft/sx		
Slurry Volume	1197.9	cuft		
	213.4	bbls		
Cement Density	11.7	ppg		
Water Required	11.724	gal/sx		

7" Intermediate Casing				
Tail Slurry				
Cement Slurry	50 / 50 POZ: Class G 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	244	SX		
Cement Yield	1.31	cuft/sx		
Slurry Volume	319.9	cuft		
	57.0	bbls		
Cement Density	13.5	ppg		
Water Required	5.317 gal/sx			

4-1/2" Production Casing				
Cement Recipe	50 / 50 POZ:Class G Cement			
	+ 0.25 lb/sx D029 Cellophane Flakes			
	+ 3% D020 Bentonite			
	+ 1.0 lb/sx D024 Gilsonite Extender			
	+ 0.25% D16	7 Fluid Loss		
	+ 0.15% D065 Dispersant			
	+ 0.1% D800 Retarder			
	+ 0.1% D046 Antifoamer			
	+ 3.5 lb/sx PhenoSeal			
Cement Quantity	462	SX		
Cement Yield	1.44	cuft/sx		
Cement Volume	664.7	cuft		
	118.4			
Cement Density	13	ppg		
Water Required	6.47	gal/sx		

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing

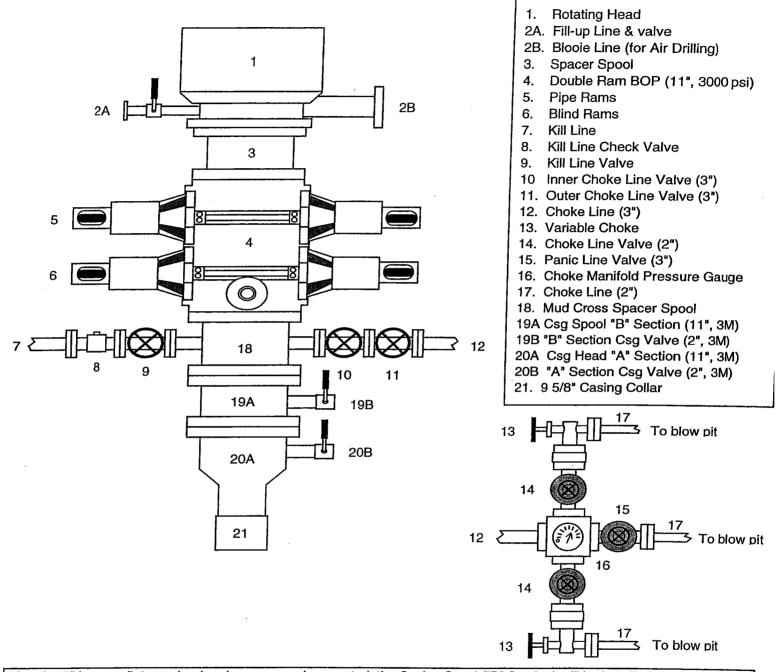


A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. / test plug will be set in the wellhead and the pipe 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:

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

Revision Date: September 1, 2004

Property:	: SAN JUAN 29-5 UNIT			_	Well #	:	14M		
Surface Loca	ation:								
Unit: J	_Section	on: <u>27</u> To	wnship:	29N	_Range:	5W			
County: RI	O ARRI	IBA		State	New M	exico			
Footage:	1930	from the	SOUTH	line.	1895	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.