(· X .					14-1	384
Fom 3165-3 (M ±ch 2012)	TES	OCD Hobbs		FORM AF OMB No. 1 Expires Octo	PPROVED 1004-0137 ber 31, 2014	
DEPARTMENT OF T BUREAU OF LAND	HE INTERIOR MANAGEMENT			5. Lease Serial No. NMLC 031670	(A)	
APPLICATION FOR PERMIT	TO DRILL OR	REENTER		6. If Indian, Allotee or N/A	Tribe Name	
la. Type of work: X DRILL RF	ENTER			7 If Unit or CA Agreem Southeast Monu	ent, Name and No. ument Unit	\
Ib. Type of Well: Oil Well Gas Well X Other J	njection X Sing	gle Zone 🔲 Multi	ple Zone	8. Lease Name and Wel SEMU	1 No. 250	(31670)
2. Name of Operator ConocoPhillips Company 2178	17	HOBBSU	•	9. API Well No. 30-025- 420	921	
3a. Address 600 N. Dairy Ashford Rd, Office P10-4054	3b. Phone No. (281)20	(include area code) 5 6-5281UG 05	2014	10. Field and Pool, or Exp. Skaggs; Grayburg	loratory K-z	80>
4. Location of Well (Report location clearly and in accordance w At surface 1371' FNL & 1786' FWL; UL F, Se	vith any State requirements c. 19, T20S, R38	BE DEC	EIVED	11. Sec., T. R. M. or Blk.a Sec. 19, T20S, R3	and Survey of Area	_ /
At proposed prod. zone 1300' FNL & 1233' FWL;	UL I, Sec. 19, T	20S, R38E				
 Distance in miles and direction from nearest town or post office Approximately 10 miles southwest of Hobbs, 	* NM.			12. County or Parish Lea County	13. State NM	
 15. Distance from proposed* 1233' location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any) 	16. No. of acr 641.68	es in lease	17. Spacin 40 acre	g Unit dedicated to this well es		
 Distance from proposed location* ~575' to nearest well, drilling, completed, applied for, on this lease, ft. 	19. Proposed I 4189' TV	Depth VD/4286' MD	20. BLM/I ES008	BIA Bond No. on file 5		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3541' GL	22 Approxima 06/14/2	ite date work will sta 014	rt*	23 Estimated duration7 days	AN	
	24. Attach	ments			<u></u>	
The following, completed in accordance with the requirements of C	Inshore Oil and Gas O	rder No.1, must be a	ttached to thi	s form:		
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Sy SUPO must be filed with the appropriate Forest Service Office 	stem Lands, the).	 Bond to cover the Item 20 above). Operator certification Such other site BLM. 	he operation cation specific info	ns unless covered by an exis rmation and/or plans as may	sting bond on file (s y be required by the	ee
25. Signature Susan B. Maunder	Name (F Susan	Printed/Typed) B. Maunder		Dat	i/16/14	
Senior Regulatory Specialist						
Approved by (Signature) Steve Caffey	Name (F	Printed/Typed)		Â	UG - 4 201	4
FIELD MANAGER	Office	CARLSBA	D FIELD (OFFICE		
Application approval does not warrant or certify that the applicant conduct operations thereon. Conditions of approval, if any, are attached.	holds legal or equitab	ole title to those right	ts in the subj	ectlease which would entitle VAL FOR TWO	e the applicant to YEARS	
	t a crime for any pers as as to any matter with	on knowingly and w in its jurisdiction.	villfully to m	ake to any department or ag	ency of the United	
(Continued on page 2)		/ \		*(Instruct	tions on page 2)
Lea County Controlled Water Basin	<	$\mathcal{D}/$	K= DSU	ogli¥	UG 072	2014

SEE ATTACHED FOR CONDITIONS OF APPROVAL

•

Approval Subject to General Requirements & Special Stipulations Attached

Operator Certification

HOBBS OCD

AUG 0 5 2014

CONOCOPHILLIPS COMPANY

RECEIVED

CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application with bond coverage provided by Nationwide Bond ES0085. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Date:

Jourder Susan B. Maunder

Senior Regulatory Specialist

Drilling Plan ConocoPhillips Company <u>SEMU; Grayburg</u>

HOBBS OCD

SEMU #250

AUG 0 5 2014

Lea County, New Mexico

RECEIVED

1. Estimated tops of geological markers and estimated depths to water, oil, or gas formations:.

The datum for these depths is RKB (which is 13' above Ground Level).

Formations	Top Depth FT TVD	Top Depths FT MD	Contents
Quaternary	Surface	Surface	Fresh Water
Rustler	1376	1376	Anhydrite
Salado (top of salt)	1462	1462	Salt
Tansill (base of salt)	2575	2576	Gas, Oil and Water
Yates	2675	2677	Gas, Oil and Water
Seven Rivers	2908	2913	Gas, Oil and Water
Queen	3480	3509	Gas, Oil and Water
Penrose	3616	3655	Gas, Oil and Water
Grayburg	3764	3817	Gas, Oil and Water
San Andres	3989	4065	Gas, Oil and Water
Deepest estimated perforation	3989	4065	Deepest estimated perf. is above Top of San Andres
Total Depth (maximum)	4189	4286	200' below deepest estimated perforation

All of the water bearing formations identified above will be protected by setting of the <u>8-5/8</u> surface casing <u>25' – 70' into the Rustler formation</u> and circulating of cement from casing shoe to surface in accordance with the provisions of Onshore Oil and Gas Order No. 2 and New Mexico Oil Conservation Division Title 19.

The targeted oil and gas bearing formations identified above will be protected by setting of the <u>5-1/2</u>" production casing <u>10' off bottom of TD</u> and circulating of cement from casing shoe to surface in accordance with the provisions of Onshore Oil and Gas Order No. 2 and New Mexico Oil Conservation Division Title 19.

2. Proposed casing program:

e	200	095	Kt											
	pee	\sim	8 N			1						Safety Factors		
	Hole		Interval								Calcu	lated per Co	nocoPhillips	
Type	Size	N	ID RKB (ft)	OD	Wt	Gr	Conn	MIY	Col	Jt Str		Corporate C	Criteria	
	(in)	From	То	(inches)	(lb/ft)	U,	- Conn	(psi)	(psi)	(kibs)	Burst DF	Collapse DF	Jt Str DF (Tension) Dry/Buoyant	
Cond	20	· 0	40' - 85' (30' - 75' BGL)	16	0.5" wall	В	Line Pipe	N/A	N/A	N/A	NA	NA	NA	
Alt. Cond	20	0	40' - 85' (30' - 75' BGL)	13-3/8	48#	H-40	PE	1730	740	N/A	NA	NA	NA	
Surf	12-1/4	0	4401' - 1446'	8-5/8	24#	J-55	STC	2950	1370	244	1.38	2.13	3.04	
Prod	7-7/8	0	4231' - 4276'	5-1/2	17#	L-80	LTC	7740	6290	338	3.48	4.90	2.69	

The casing will be suitable for H₂S Service. All casing will be new.

The surface and production casing will be set approximately 10' off bottom and we will drill the hole with a 45' range uncertainty for casing set depth to fit the casing string so that the cementing head is positioned at the floor for the cement job.

The production casing will be set 155' to 200' below the deepest estimated perforation to provide rathole for the pumping completion and for the logs to get deep enough to log the interval of interest.

Casing Safety Factors - BLM Criteria:

Туре	Depth	Wt	MIY	Col	Jt Str	Drill Fluid	Burst	Collapse	Tensile-Dry	Tens-Bouy
Surface Casing	1446	24	2950	1370	244000	8.5	4.62	2.14	7.0	8.1
Production Casing	4276	17	7740	6290	338000	10	3.48	2.83	4.65	5.49

Casing Safety Factors – Additional ConocoPhillips Criteria:

ConocoPhillips casing design policy establishes Corporate Minimum Design Factors (see table below) and requires that service life load cases be considered and provided for in the casing design.

	ConocoPhillips Corporate Criteria for Minimum Design Factors											
	Burst	Collapse	Axial									
Casing Design Factors	1.15	1.05	1.4									

	100	1116		65 35000	1 -	244000	43296	10	·	8 -	3	<u>x</u>						
Production Casing (5-1/2" 1/# L-80	DLTC)	4276		17 7740	62	0 244000	39700	0 10	3.4	8 4.9	0 2.0	59						
/				-														
Burst - ConocoPhillips Reg	uired Load Cases																	
The maximum internal (burst) load or	the Surface Casing occurs when U	ne surfacejcas	sing is b	ested to 150	D psi (as	per BLM Ons	hore Order	2 - IL Require	ements).									
The maximum internal (burst) load or (110000) in the occupute that would	n the Production Casing occurs during It Connerschillers Composite Criteds fo	g the fracture or tiloimum Fe	stimuļat cloru	ion where th	ie maxim	um allowable	working pre	33070										
(india) is no bresser and more	Surface Casing Test Pressure =	1500	josi		Pres	ficted Pore Pr	essuré al T	d (pŕtů) =	8.5	Sippig								
Surface	Reled Working Pressure (BOPE) =		ps)		Predic	ted Frac Grad	lient at Shoe	(CSFG) =	19.2	3 ppg								
Surface' Casina Burst	Field SW = Sefety Fering # API Burst Reting / Mr	aximum Predici	[ppg led Sur	ACR Pressur	e (UPSP	OR' Baylou	m Afriviable	Surface Pr	issure (114 501								
Production Casing MA	WP for the Fracture Stimulation = API	Burst Rating /	Corpor	ale Minimum	Burst De	sign Factor		,	ionere (
Case #1. 1	MPSP (MWhyd next section) =	1446	x	0.052	x	10	-	752										
Case #2, MPSP (Field SV	V @ Bullhead _{CSFG} + 200 psi) =	1446	x	0.052	x	19.23	• •	752	+	200	=	894						
Case #3. MPSP (Kick Vol @ next section TD) =	4276	×	0.052	×	8.55	-	283	-	639	=	9 79						
Case #3 & #d limited	ase #4. MPSP (PP10 - GG) = to MPSP (CSEG + 0.2 npo) =	4275	x	0.052	× * (8.55	-	427.6	= \=	1474 1461								
'MAE	SP (MWhyd + Test Pressure) =	1446	x	0.052	x	8.5	+	1500	=	2139								
Burst Safety Fe	ctor (Max. MPSP or MASP) =	2950	1	2139	=	1.38												
-todriction Casing priter peters	Factor: Case #1. MPSP (MWhód TD) ==	4276	x	0.052	×	10	-	2223.52			•							
С	ase #4. MPSP (PPTD - GG) =	4276	x	0.052	x	B.55		427.6	÷	1474							•	
Burst MAMP for the Erecture St	Safety Factor (Max. MPSP) =	7740	1	2224	1 -	3.48												
WAVE TO the Flacture Su	initiation (Corporate Criteria) -			[1.15	- 1	0/30						•						
	•																	
Collapse – ConocoPhillips R	lequired Load Cases	na ha aunf	112				lànt				an an t- Pr							
The maximum collapse load on the Pr	orlace classing occurs when cements oduction Casing occurs when cemen	ng to surrace, nting to surfac	1/3 eve 28, or 1/	3 evacuation	to the d	cepest depth	of exposure	epest depth e; and	or expos	sure (ion ex	racuation).							
therefore, the external pressure pro-	Re for the evacuation cases should t	be equal to the	pore p	reasure of th	ne horiza	ns on the out	side of the c	asing which	ŵe osa	umed to be	PPTD,							
Surface Casing Collaps Production Casing Collaps	se Safely Factor = API Collapse Rails	ig/FullEvacu	alion 'Ol Dradk	R' Cement Di	aptacem:	nt during Cer 'OP' Camer	nenting to S	urface	مشغلهم	in Curfaine								
i i budelati e using eau	Cement Displacement Fluid (FW) =	8.34	ppg	,	Top of	Cement =	Cement to S	Surfaca	includig	W 3011808								
	Surface Cement Lead =	13.6	ppg	Př	od Ceme	nt Lead =	11.	5 ppg						•				
	Surface Cement Tail = Top of Surface Tail Cement =		ppg #	i Tan of i	Prod Can Prod Tall	Cementa	300	4 ppg										
	Top of our meeting the commit -	L000	1	100 017		Conditi -		<u>o</u>]#										
Surface Casing Collapse Sefety	Factor:								•								÷	
· · ·	Cementing Diff Lift Pressure =	1446 (/	X 1096	0.052	X 0.052	8.55 X	13'6	643)+(350	v	0 052		. 1/	18	۱.	627	1่ =	
	Collapse Safety Factor =	1370	1	643	=	2.13		, · (550	Ŷ	0.032	^	1-	r.u	,.	021	1	4
Production Casing Collapse Saf	ety Factor:															_/_ /		
1	Cementing Diff Lift Pressure =	ll H	42/6	i X	0.052	x	8.55)-(42/6	/ vi	3 0.052	X	• 0.0	52 M	×.	- 8,34	↓) <u>)</u> = ∟1.=	17 16
		cono.	14.14			~	11.0		3000		0.0.12	~				1004		
	Collapse Salety Factor =	6290	1	1263	=	4.90											•	
	Collapse Salety Factor =	6290	1	1283	=	4.90		•		-								
Tensial Strength - ConocoP	Collapse Salety Factor =	6290	/	1283	=	4.90												
<u>Tensial Strength – ConocoP</u> Thê maximum axial (tension) iond occ	Collapse Salety Factor = hillips Required Load Cases was it casing were to get stuck and p	6290 pulled on to try	/ / to`get i	1283 t ünstuck	2	4.90		• :										
<u>Tensial Strength – ConocoPi</u> Thè maximum axial (tension) bod occ Haximum Alsovabi	Collapse Satety Factor = hillips Required Load Cases was if casing were to get stuck and p is Axisi Load for Pipe Yield = API Pipe A Axisi Load for Pipe Yield = API Pipe	0290 puted on to try s Yield Strengt	/ to get i In Rating	1283 Lünstvick. J / Cörporate	≓ Minimun	4.90 Axial Design	Factor	· :										
<u>Tensial Strength – ConocoP</u> Thé maximum axial (tension) bod occ Utaximum Aboyabi Liaximum Aboyabi Utaximum Aboyabi	Collapse Salety Factor = <u>hillips Required Load Cases</u> ure if cashg were to get stuck and p Is Axial Load for Pipe Yeld = API Joint Str Is Hoat Load (Limited to 75% of Rg b Hoat Load (Limited to 75% of Rg b	0290 pulled on lo try sYleid Strēņģi ength Rating / ú Anix ("oad) = Ka	/ to get i In Rating Corpora aximum	1283 I unstuck I Corporate Is Minimum A Ricewable A	≓ Minimum Axial Des xial Load	4.90 Axlal Design Ign Factor	Factor										•	
<u>Tensial Strength – ConocoP</u> Thè maximum axial (tension) bod occ Haximum Abovabi Liaximum Abovabi Haximum Abovabi Liaximum Abôvabi	Collapse Salety Factor = hillips Required Load Cases was if cashg were to get stuck and p 6 Axisi Load for Joni - API Johi 6 Axisi Load for Joni - API Johi 16 Hock Load (Linited to 75% of Rg to 16 Overpul Margin - Maximum Alowa	ozyu pulized en lo try y Yield Strengt nigth Raling / i Ask Load) = Ma able Hook Load	/ togeti hRaling Corpora aximum 1-Bouy	1283 Linstuck J Corporate Is Mintrium A Allowable A ant Wi of the	Hinimum Axial Des Xial Load	4.90 Axisi Design Ign Factor	Factor											
<u>Tensial Strength – ConocoP</u> Thé maximum axial (lension) biod occ Liaximum Abovabi Liaximum Abovabi Liaximum Abovabi Liaximum Abovabi Liaximum Abovabi Tensial Sately Fac	Collapse Salety Factor = <u>billips Required Load Cases</u> ure if cashg were to get stuck and p le Axisi Load for John - AP John Str is Hook Load (Linked to 75% of Rig to to Overput Margin = Maximum Alowe Jor - AP Pipe Yield 'OR AP John Sin Live Lead Colon Dan y 278	6290 pužed on lo try s Yield Strönği rigih Rating / i Aax Load) = M. sible Hook Load erigih 'OR' Rig L 225000	/ toget i th Rains Corpora aximum 1-Bouy Max Lo Ins	1283 1 instuck 1 Corporate 1s Mintrium / Allowable A ant Wt of the ad Rating / (Hinhum Axial Dés Xial Load String Bouyahi	4.90 Axtal Design Ign Factor I Wit of String	Factor + Winihium C)verpull Roqu	ked)								•	
<u>Tensial Strength – ConocoP</u> Thè maximum axial (tension) bod ace Uaximum Alovab Liaximum Alovab Uaximum Aloviab Uaximum Aloviab Uaximum Aloviab Tensial Sately Fac Rig	Collapse Safety Factor = <u>billips Required Load Cases</u> ure if cashg were to get stuck and p le Axisi Load for Pipe Yield = API Pipe te Axisi Load for John = API John Stri is Hook Load (Limited to 75% of Rig L is Overpul Margin = Maximum Above for = API Pipe Yield 'OR API John Stri Max Load (300,000 ba) x 75% = Mahmum Overpul Required =	pulized on lo try a Yield Ströngt angth Rating / daix Load) = Wi sible Hook Load ength 'OR' Rig 225000 50000	/ to`get i h Rating Corpora aximum 1-'Bouy Max Lo Ibs ibs	1283 I unstuck / Corporate le Minimum A Allowable A ant Wi of the ad Railing / (Hintmun Axia) Dêş Xiai Loac Ə String Böuyahl	4.90 Axtal Design Ign Factor I	Factor + Winkhum C	Overpul Requ	ired)									
<u>Tensial Strength – ConocoP</u> Thè maximum axial (tension) bod ace Uaximum Alovab Liaximum Alovab Uaximum Aloviab Uaximum Aloviab Liaximum Aloviab Tensial Safety Fac Rig	Collapse Satety Factor = hillips. Required Load Cases are if casing were to get atuck and y to Axial Load for Pipe Yield = API Pipe to Axial Load for Join = API Joint Str is Hook Load (Linized to 75% of Rig) to 6 Verpul Margin = Maximum Abuve dar = API Pipe Yield OR' API Joint Str Max Load (200,000 bs) x 75% = Minium Overpul Required =	pulzed on Lo bry a Yield Ströngt angth Rating / Anax Load) = KA sible Höck Load ength 'OR' Rig 225000 50000	/ togeti corpora aximum i-Bouy Max Lo Ios Ios	1283 I instuck J Corporate Is Matrian Allowable A ant Wi of the ad Rating / (Hintmurr Axial Dés Xial Load String Bouyahl	4.90 Axtal Design Ign Factor I Wi of Sirbig	Factor + Winthium C	Overpul Requ	ired)			·				•	•	
<u>Tensial Strength – ConccoP</u> Thé maximum Alay (Jension) bad ecc Laximum Alayye Linximum Alayye Linximum Alayyeb Laximum Alayyeb Laximum Alayyeb Tensial Safety Fac Rig Strface Casing Tensial Strength	Collapse Safety Factor = hillips. Required Load Cases are if casing were to get aluck and y to Axist Load for Pipe Yield = API Pipe to Axist Load (or Pipe Yield = API Pipe to Axist Load (Indiate to 75% of Right to Coreput Regime A Devining Above dar = API Pipe Yield 'OR' API Joint Str Max Load (200,000 bs) x 75% = Minimo Overput Required = ' Safety Factor: Air Wt =	pulled on Lo bry a Yield Strengt singth Rating / Aax Load) = MJ sible Hook Load ength 'OR' Rig 225000 50000 34704	/ toʻgʻeti hh Rating Corpora aximum 1-Bouy Max Lo Ibs Ibs	1283 I instuck J Corporata I Mihrium A Alioweble A ani Wi o'i th ad Raling / (Linhun Axia) Dés Xia) Los String Bévyañt	4.90 Axial Design Ign Factor I Wit of String	Factor + Walnum C)verpull Roqu	ired)		· · · ·						-	
<u>Tenisial Strength – ConcooP</u> Thé maximum Alay (Jension) bad ecc Jaximum Alayye Liaximum Alayy	Collapse Safety Factor = hillips, Required Load Cases are if cashs were to gel aluck and y to Axisi Load for Pipe Yield = API Pipe to Axisi Load for Jon = API John Str to Honk Load (Linkes to TSX of Rg b to Vorguil Hargin = Maximan Abuve tor = API Pipe Yield 'OR' API John Str Max Load (300,000 he) x 75% = Minimum Overpuil Required = Safety Factor: Air Wt = Bouyant Wt =	5290 puZzd en lo by s Yield Ströngt sigth Rating / Asx Load) = 14 hibe Hook Load ength 'OR' Rig 225000 50000 50000 34704 34704	/ toget i in Rating Corpora aximum i-Bouy Max Lo Ibs ibs	1283 I unstuick) / Corporate Is Mihrium / Albowebbe A and Wi of the ad Rating / (0,870	Hinimun Axial Dés String Bouyant	4.90 Axtal Design Ign Factor Wit of String 30200	Factor + Winthium C)verpull Roqu	kred)			·					-	
<u>Tenisial Strength – ConcooP</u> Thé maximum axial (tension) iond ecc Laximum Aboveb Liaximum Abo	Collapse Safety Factor = hillips, Required Load Cases was ficashig were to gel aluck and j a Axial Load for Pipe Yield = API Pipe te Axial Load for Joint = API Joint Str te Hock Load (Linkest to TS's of Rig b to Verguil Margin = Maximum Above tor = API Pipe Yield 'OR' API Joint Str Max Load (200,000 bs) x 75% = Mahmum Overpul Required = 'Safety Factor: Air Wt = Bouyant Wt = bible Axial Load (Pipe Yield) =	5230 pulzad en lo bry s Yield Striengi nigh Rathog / Ask Lend) = M Hotok Lead ength '07 Ng 225000 50000] 34704 34704 381000 0 c (1000	/ togeti h Rating Corpora aximum 1-Bouy Max Lo Ibs Ibs Ibs	1283 I instuick.) / Corporate Is Mihrium / Albowebbe A and Wi of the ad Rating / (0.870 1.40	= Lihtmun Axia) Dės xiai Load String Bouyani	4.90 Axtal Design Ign Factor Wh of String 30200 272143	Factor + Winkim C)verpu'i Roqu	ired)									
<u>Tenisial Strength – ConcooP</u> Thé maximum axial (tension) iond ecc Laximum Abovab Liaximum Abovab Max. Allowab Max. Allowab Liaximum Abovab Liaximum Abovab	Collapse Safety Factor = hillips, Required Load Cases us Acial Load for Pipe Yield = API Pipe le Acial Load for Pipe Yield = API Pipe le Acial Load (Indes to To's of Rgb e le Vorgui Hargin = Maxima Abuwe dar = API Pipe Yield 'OR' API John Str Max Load (200,000 bs) x 75% = Mammo Overpul Required = 'Safety Factor: Air Wt = Bouyant Wt = bible Axial Load (Pipe Yield) = Nowable Axial Load (Joint) =	6230 pulzad en lo hy Y Yeld Strengt jngth Rating / i tak (Leot) = M Hot Loca ength 'OR' Rig 225000 500001 34704 34704 34704 381000 244000 174286	/ togeti hRaing Corpora aximum 1-Bouy Max Lo Ds bs bs x / /	1283 Linstuck. / Corporate la Mahmur A Anu Wi of the ad Rating / (0.870 1.40 1.40	Linhnun Axia) Lond String Bouyañt = =	4.90 Axtal Design Ign Factor Wi of String 30200 272143 174286	Factor + Winthistm C)verpull Requ	ired)							•		
<u>Tenisial Strength – ConcooP</u> Thé maximum xkal (tension) biad ecc taximum Aboveb Liaximum Abov	Collapse Safety Factor = hillips, Required Load Cases was if cashs were to gel aluck and y to axisi Load for Pipe Yeld = API Pipe te Axisi Load for Pipe Yeld = API Pipe te Axisi Load (Factor) the Overpul Hargin = Maximan Above for = API Pipe Yeld 'OR' API John Str Max Load (200,000 bs) x 75% = Mammo Overpul Required = Safety Factor: Air Wt = Bouyant Wt = bible Axial Load (Pipe Yield) = Nowable Axial Load (Joint) = id to 75% of Rig Max Load) = Allowable Overpul Margin =	6230 pulzad en lo hry 5 Yield Striengt ingth Rating / i fask Leedt) = M bibe Hook Load bibe Hook Load 2250000 5000001 34704 3774 377	/ / to get i (h Rating Corpora aximum J-'Bau Max Lo Dos bos bos bos bos - y - - y - - - - - - - - - - - - -	1283 Linstuck. / Corporate la Mahmur al Mitof the ad Rating / (0.870 1.40 1.40 34764	Lihuhmum Axia) Dég xiai Loac s String Bouyant Bouyant	4.90 Axisi Design Ign Factor Wi of String 30200 272143 174285 0.870	Factor + Wintrixim C) =)verpull Requ	red)		· ·							
<u>Tenisial Strength – ConcooP</u> Thé maximum axial (tension) iond ecc taximum Aboveb Liaximum Abo	Collapse Safety Factor = hillips, Required Load Cases curs if casing were to get aluck and y to axist Load for Pipe Yeld - API Spin to axist Load for John - API John Strie is hook Load (Linded to 15% of Rg) 5 to overput Margin - Maximum Abave for - API Spin Yeld 'OR' API John Stri Max Load (300,000 Be) X 75% - Mahmum Overput Required - Safety Factor: Air Wt = Bouyant Wt = bible Axial Load (Pipe Yield) = Allowable Axial Load (Joint) = id to 75% of Rig Max Load) = Tensial Safety Factor = Tensial Safety Factor =	6230 pulžad en lo hry 5 Yield Striengt ingth Rating / i dat Lead) = M ibbe Hook Load ibbe Hook L	/ / to get i th Rating Corpora aximum Max Lo Dos Nos Nos Nos - (/ (/ (1283 1 instuick.) / Córporala la Lifhlminn Á Allowable A ant Wi of the ad Rating / (0.870 1.40 1.40 34764 30200	Liintmur Axiat Dés Xiat Loac String Bouyahl Bouyahl = = = x +	4.90 Axtbl Design Ign Factor Wit of String 30200 272143 174286 0.870 50000	Factor + Winthistim C) =) =)verpu1 Roqu 144085 3,04	ired)									
<u>Tenisial Strength – ConcooP</u> Thé maximum xkal (tension) biad ecc taximum Aboveb Liaximum Aboveb Max. Allowable Hook Load (Limité Max roduction Casing Tensial Strën	Collapse Safety Factor = hillips, Required Load Cases was if casing were to get aluck and y to axist Load for Pipe Yeld - API Pipe to axist Load for Pipe Yeld - API Pipe to axist Load for Joint - API Joint Stri- te Normul Hargin - Maximum Abowe for - API Pipe Yeld 'OR' API Joint Stri- Marinum Overpul Required - Safety Factor: Air Wt = Bouyant Wt = Sto 75% of Rig Max Load) = Tensial Safety Factor: gth Safety Factor: Safety Factor: Allowable Overpul Margin = Tensial Safety Factor: Safety Factor: Air Wt =	6230 pulzad en lo hry 5 Yield Striengt ingth Rating / i fask Leedt) = Mi hible Hook Load 2250001 500001 34704 3470	/ togeti hRaling Corpora aximum i-'Bouy Max Lo Dos bos bos kas / / / / / /	1283 1 instuick.) / Córporala te Lifhimium / Alloweble A anl Wi of the ad Rating / (0.870 1.40 1.40 34704 30200	= Liinhmum Axial Dés String Bouyant = = x +	4.90 Axtbl Design Ign Factor Wit of String 30200 272143 174286 0,870 50000	Factor + Wahinum C) =) =)verpu1 Roqu 144085 3,04	ired)									
<u>Tenisial Strength – ConcooP</u> Thé maximum axial (tension) isod ecc Haximum Aboyab Liaximum Aboyab Liaximum Aboyab Maximum Aboyab Liaximum Aboy	Collapse Safety Factor = billing, Required Load Cases sure if casing were to get aluck and y to axisi Load or Pipe Yeld - API Spet te Axisi Load or Pipe Yeld - API Spet to Verpul Margin = Maximum Abuve tor = API Spet Yeld 'OR' API John Sin Max Load (300,000 bs) x 75% = Mahmum Overpul Required = Safety Factor: Air Wt = Biouyant Wt = Tensial Safety Factor = Allowable Overpull Margin = Tensial Safety Factor = gth Safety Factor: Air Wt = Biouyant Wt =	6230 pulžad en lo hry 5 Yield Ströngt high Raling / i tak (Lead) = 48 hible Höck Lona (225000) 50000) 34704 34704 381000 244000 174286 174285 244000 72592 72592	/ togeti th Raing Corpora aximum Max Lo Do Ibs bs k x / / / (/ (1283 1 instučk.) / Córporala le Lihamum Á Alowable A ant Wi of the ad Rating / (0.870 1.40 34704 30200 0.847	Linhmun Axial Des Ash Loar a String Bouyant = = x + +	4.90 Axtbl Design for Factor Wit of String 30200 272143 174286 0.870 50000 61594	Factor + Wintitixim C) =) =)verpull Roqu 144085 3,04	(red)									
<u>Tenisial Strength – ConcooP</u> Thé maximum axial (tension) isod ecc Maximum Aboyab Linximum Abo	Collapse Safety Factor = billing, Required Load Cases sure if casing were to get aluck and y to axisi Load or Pipe Yeld - API Spet te Axisi Load or Pipe Yeld - API Spet te Overpul Margin = Maximum Abuve tar = API Spet Yeld 'OR' API John Sir Max Load (300,000 bs) x 75% = Mamium Overpul Required = Safety Factor: Air Wt = Biouyant Wt = Showable Axial Load (Joint) = id to 75% of Rig Max Load) = Tensial Safety Factor = gth Safety Factor: Air Wt = Biouyant	6230 pulžad en lo hry 5 Yield Ströngt higt Rating / 1 tak (Lead) = 16 higt Rot Raig 225000 50000] 34704 34704 381000 244000 174286 244000 174286 244000 72592 72692 397000 339000	/ r to gel 1 th Rating Corpora aximum 1-'Bouy Max Lo Dos Ibos Ibos Ibos - (/ (/ x / ,	1283 1 instučk. 1 Córporala 1 i Sihrimur Allowable A ant Wi of the ad Rating / (0.870 1.40 34764 30200 0.847 1.40 1.40	Hintmun Axial Des Xist Loar > String Bouyant = = X + =	4.90 Axtbl Design for Factor Wit of String 30200 272143 174286 0.870 50000 61594 283571 24429	Factor + Wintikim C } = } =)verpull Roqu 144085 3,04	ired)			•						
<u>Tenisial Strength – ConcoP</u> Thé maximum axial (tension) iodaci (taximum Abovab) Liaximum Abovab) Liaximum Abovab) Liaximum Abôvab) Liaximum Abôvab) Max, Allowable Hook Load (Limitê Max, Allowable Hook Load (Limitê Max, Allowable Hook Load (Limitê Max, Allowable Hook Load (Limitê	Collapse Safety Factor = billing, Required Load Cases are if cashs were to get latek and y takin Load or Pipe Yelet - API Spet te Axisi Load or Pipe Yelet - API Spet te Overpul Margin = Maximum Above tor - API Spet Yelet 'OR' API Joint Sir is a control of the Axis of the Spet tor - API Spet Yelet 'OR' API Joint Sir Max Load (300,000 bs) x 75% = Italninum Overpul Required = Safety Factor: Air Wt = Bouyant Wt = Safety Factor: Allowable Axial Load (Joint) = it to 75% of Rig Max Load) = Allowable Axial Safety Factor = gth Safety Factor: Air Wt = Bouyant	6230 pulzad en lo hry 5 Yield Ströngt higt Rating / 1 tak (Lead) = 4t hibt Höck Lead ength 'OR Rig 225000] 50000] 34704 34704 381000 244000 174286 244000 772592 72692 397000 325000 225000	/ togeti hRating Corpora aximum Max Lo bs bs bs / / / / / (/ (/ x / / /	1283 1 instučk. 1 Corporala 1 i Silnimur Albovrable A ant Wi of the ad Rating / (0.870 1.40 34704 30200 0.847 1.40 1.40	= Linhmum Axial Disa String Bouyant = = x + +	4.90 Axtal Design for Factor Wit of String 272143 174285 0.870 50000 61594 283571 241429	Factor + Minimum C) =) =)verpull Roqu 144085 3.04	ired)			•						
<u>Tenisial Strength – ConcoP</u> Thé maximum axial (tension) load aci (taximum Abovab) Liaximum Abovab) Liaximum Abovab) Liaximum Abôvab) Liaximum Abôvab) Max. Allowab)e Hook Load (Limitê Max. Max. Allowab)e Hook Load (Limitê Max. Max. Allowab)e Hook Load (Limitê Max.	Collapse Safety Factor = billips, Required Load Cases are if cashs were to get lauck and y takin Load or Pipe Ytel - API Spet te Axisi Load or Pipe Ytel - API Spet te Overpul Margin = Maximum Above to - API Spet Ytel 'OR' API Joint Sir is a control of the Arian Albert to - API Spet Ytel 'OR' API Joint Sir Max Load (300,000 bs) x 75% = Mammo Overpul Required = Safety Factor: Air Wt = Bouyant Wt = Consol and Albert Safety Factor = gth Safety Factor: Air Wt = Bouyant Wt = Consol and Pipe Yteld - Allowable Axial Load (Joint) = di to 75% of Rig Max Load Air Wt = Bouyant Wt = Bouy	6290 putzed en is by s Yield Strengt night Rathy / itax Lead) = M be Hook Lead) = M be Hook Lead 225000 50000 34704 34704 34704 34704 34704 174286 174286 244000 174286 244000 174286 244000 38000 225000	/ / to get i h Rating Corpora 1-Bauy Max Lo Dos bos bos - (/ (/ / / / / / / / / / / / / / / / /	1283 1 instučk. 1 Corporala 1 i Silnimuč Albovrable A ant Wi of the ad Rating / (0.870 1.40 34704 30200 0.847 1.40 1.40 72692	= Linhmum Axial Das Statis Loar Bouyant = = x + = x + x	4.90 Axtal Design Ign Factor 30200 272143 174286 0.870 50000 61594 283571 241429 0.847	Factor • Winthium C) ==) ==)verpull Roqu 144085 3.04 163406	ired)			•	•				•	
<u>Tenisial Strength – Concoñ</u> Thé maximum axial (tension) load eci Maximum Aboyab Linxtmum Aboy	Collapse Safety Factor = hilling, Required Load Cases are if cashs were to get attack and y to a science of the Pipe Yeld - API Spet te Axisi Load of the Pipe Yeld - API Spet to a - API Spet Yeld 'OR' API John Sir to a - API Spet Yeld 'OR' API John Sir tar - API Spet Yeld 'OR' API John Sir Max Load (300,000 bs) x 75% - Hammo Overpul Required - Safety Factor: Air Wt = Bouyant Wt = Showable Axial Load (Joint) = Allowable Axial Load (Joint) = Allowable Axial Load (Joint) = Calibra Safety Factor: Air Wt = Bouyant Wt = Bouyant Wt = Bouyant Wt = Bouyant Wt = Bouyant Wt = Allowable Axial Load (Joint) = (A 10 75% of Rig Max Load) = Allowable Axial Load (Joint) = Allowable Axial Load (Joint) = Allowable Axial Load (Joint) = Allowable Overpull Margin = Tensial Safety Factor = Safety Factor = Allowable Overpull Margin = Tensial Safety Factor =	6290 pulzd en ie by s Yield Strengt night Rathy / iax Lead) = M be Hoot Lead 20000 50000 34704 34704 34704 34704 34704 34704 174286 174286 244000 174286 244000 174286 244000 272692 72692 72692 397000 338000 225000 300000	/ togeti hhaling corpora aximum 1-Bouy MaxLo bos bos bos bos - (/ / / / / / / / / / / / / / / / / / /	1283 1 instučk. 1 Corporala 1 i Silnimur Albovrable A ant Wi of the ad Rating / (0.870 1.40 1.40 34704 30200 0.847 1.40 1.40 1.40 1.40 1.40 1.40 1.40 1.40	Hinhmum Axial Des String Bouyant = = x + = x +	4.90 Axtal Design for Factor 30200 272143 174286 0.870 50000 61594 283571 241429 0.847 50000	Factor + Minimum C) =) =) =)verpull Roqu 144085 3.04 163406 2.69	ired)			•				•	•	
<u>Tensial Strength - ConcooP</u> The maximum axial (Jension) bod eci Laximum Aboveb Uaximum Aboveb Uaximum Aboveb Uaximum Aboveb Uaximum Aboveb Tensial Strength Max. Allowable Hook Load (Limite Max. Allowable Hook Load (Limite	Collapse Salety Factor = hillips. Required Load Casess are if casing were to get stuck and y to Axisi Load for Pipe Yield = API Pipe te Axisi Load for Pipe Yield = API Pipe te Axisi Load for John = API John Str is Hoak Load (John John = API John Str is Hoak Load (John Pipe Yield OR' API John Str is Maxi Load (John Pipe Yield OR' API John Str is Salety Factor:	6290 pulzed en le bry S'held Strengt migh Rathg / Atax Lend) = M be Hook Load 20000 50000 34704 34704 34704 34704 34704 34704 34704 174286 174286 174286 244000 174286 174286 244000 380000 380000 300000	/ toget hhRaing corpora aximum 1-Bouy MaxLo bos bos bos bos bos - (/ / / / / / / / / / / / / / / / / / /	1283 1 instučk. 1 Corporala 1 is Ushrimurá Albovrable A ant Wi of the ad Rating / (0.870 1.40 34704 30200 0.847 1.40 1.40 1.40 72692 61594	Hinhmum Axial Dès Stal Loat S String Bouyahi = = x + + x +	4.90 Axtal Design Ion Factor Wit of String 272143 174286 0.870 50000 61594 283571 241429 0.847 50000	Factor + Winthum C) =) =) =	0verpu1 Roqu 144085 3.04 163406 2.69	ired)			•				•		
Tensial Strength - Concoo The maximum axial (tension) bod eci taximum Atoryab tinximum Atoryab tinximum Atoryab taximum	Collapse Salety Factor = hillips. Required Load Casesis are if cashg were to get aluck and y to Axial Load for Pipe Yield = API Pipe te Axial Load for Pipe Yield = API Pipe te Axial Load for Pipe Yield The API Pipe Yield T	6290 putzd en le by S'held Strengt migh Rathg / Atax Lend) = M be Hook Load 225000 500000 34704 34704 34704 34704 34704 34704 34704 174286 174286 174286 174286 244000 72692 72692 726920 338000 225000 300000	/ r to gel i i th Rating Corpora aximum 1-Bouy Iba bas bas x / / / (x / / (/ / (/ / / / (1283 1 instučk. 1 Corporala 1 i Slihrima Albovable A ant Wi of the ad Rating / (0.870 1.40 34704 30200 0.847 1.40 1.40 1.40 72692 61594	Hinhmum Axial Dès Stal Loat S String Bauyahi = 	4.90 Axtal Design Ion Factor Wit of String 272143 174286 0.870 50000 61594 283571 241429 0.847 50000	Factor + Winthium C) =) =) =	Vverpull Roqu 144085 3.04 163406 2.69	kred)			•				•	•	
Tensial Strength - Concoc The maximum Alay (Lension) bod eci Haximum Alay (Lension) bod eci Haximum Alay (Lension) Haximum Alay (Lension) Haximum Alay (Lension) Haximum Alay (Lension) Tensial Safety Fac Rig Strength Max. Allowable Hook Load (Limite Max. Allowable Hook Load (Limite)	Collapse Salety Factor = hillips. Required Load Casesis are if cashg were to get aluck and y to Axisi Load for Pipe Yield = API Apite te Axisi Load for Pipe Yield = API Apite te Axisi Load for Pipe Yield = API Apite te Axisi Load (Casesis te Overpul Margin = Maximim Abwe ter = API Pipe Yield OR API Joint Str te to Case of the Argented - it Salety Factor:	6290 pulzad on lo hy Y Yeld Ströngt migh Rathg / Atax Lond) - M be Hook Lond) - M be Hook Lond 250000 500000 34704 34700 30000 30000 30000 3000000	/ toget1i th Rating Corpora aximum ti-Bouy bas bas x / / ((/ (/ (/ / (/ / / (/ / / (/	1283 1 instučk. 1 Corporala 1 is Ushrimu Albovabla A ant Wi of the ad Rating / (0.870 1.40 1.40 34704 30200 0.847 1.40 1.40 1.40 1.40 1.40 0.867 0.870 0.847	Hinhmum Axial Dès Stichg Bauyant = xxb:Loat Stichg Bauyant = x + + x +	4.90 Axtal Design Ign Factor Wit of Skring 272143 174286 0.870 50000 61594 283571 241429 0.847 50000	Factor + Uinthium C) =) =) =	0verpull Requ 144085 3.04 163406 2.69	ired)			•					•	
Tensial Strength - Concoo The maximum Alay (Lension) load eci Laximum Alay (Lension) load eci Laximum Alay (Lension) Laximum Alay (Lension) Laximum Alay (Lension) Laximum Alay (Lension) Laximum Alay (Lension) Max. Allowable Hook Load (Limite Max. Allowable Hook Load (Limite) Max. Allowable) Max. Allowable Hook Load (Limite) Max. Allowable) Max. Allowable Hook Load (Limit	Collapse Salety Factor = hillips. Required Load Casesis us A chist.Load for Pipe Yield = API Apipe le Axisl.Load for Pipe Yield = API Apipe le Axisl.Load for Pipe Yield = API Apipe le Axisl.Load (Anite to 75% of Rig le Overpul Required - le Allowable Axial Load (Deiny X 75% - literime Overpul Required - literime Axial Load (Deiny I	6290 pulza on lo hy Yield Ströngt right Rathg // tax Load) = M tax Load) = M 25000 174286 174286 174286 174286 174286 174286 174286 244000 72692 72692 397000 300000 225000 200	/ v to gel i i corpora aximum Max Lo bos bos x / / / (/ (/ (/ (/ / / / / / / / /	1283 1 instuick.) / Corporate to Lithmum A Aboveble A and Wi of the ad Rating / (0.870 1.40 1.40 1.40 34704 30200 0.847 1.40 1.40 34704 30200 0.847 1.40 1.40 34704 30200 0.847 1.40 1.40 34704 30200 0.847 1.40	Elinbrum Axial Des Xabi Loat s String Bauyant = = x + + = x + +	4.90 Axtbl Design Ign Factor 30200 272143 174286 0.870 50000 61594 283571 241429 0.847 50000	Factor + Wintmum C) =) =) =)verpu'i Roqu 144085 3.04 163406 2.69	ired)	-		•					•	
Tensial Strength - ConcooP Thé maximum axial (tension) load eci taximum Abovabi Liaximum Abovabi Liaximum Abovabi Liaximum Abovabi Liaximum Abovabi Liaximum Abovabi Liaximum Abovabi Tensial Safety Fac Rig surface Casing Tensial Strength Max. Allowable Hook Load (Limite Max. Allowable Hook Load (Limite) Max. Allowable) Max. Allo	Collapse Salety Factor = hillips, Required Load Casesis us Acisi Load for Pipe Yield = API Api e Axisi Load for Pipe Yield = API Api e Axisi Load for Jon = API John Str e Axisi Load (Dimes to TSX of Rig b e Axisi Load (Dimes to TSX of Rig b e Axisi Load (Colored Casesis) act = API Pipe Yield 'OR' API John Str liter Load (200,000 he) x 75% = Minimum Overput Required = ' Safety Factor:	6230 pulzd on lo by Yield Ströngi right Rathg // tak Load) = M tak Load) = M 107 Rig 250000 34704 347000 244000 72692 72692 397000 300000 225000 300000 225000 300000 225000 300000 225000 300000 225000 300000 244000 300000 245000 300000 300000 300000 300000 300000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 300000 300000 300000 30000 30000 30000 30000 30000 30000 300000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 3000000 30000000 3000000 3000000 30000000 30000000 3000	/ v to gel i i corpora zavinum Max Lo bos bos bos x / / / (/ (/ (/ (/ (/) / () - ((/) / () / / / / / / / / / / / / /	1283 I instuick.) / Corporate Is Untriam? / Above bis A and Wi of the ad Rating / (0.870 1.40 1.40 34704 30200 0.847 1.40 34704 30200 0.847 1.40 1.40 34704 30200 0.847 1.40 1	Hinhmum kxiaiDes xisiLoar s String Bouyanti = x + + x + x +	4.90 Axtbl Design pr Factor 30200 272143 174285 0.870 50000 61594 283571 241429 0.847 50000	Factor + Minbîsúm C) =) =) =)verpu'i Roqu 144085 3.04 163406 2.69	ired)			•	•				•	
Tensial Strength - ConcooP Thé maximum axial (tension) bod eci taximum Abovab Liaximum Abovab Liaximum Abovab Liaximum Abovab Liaximum Abovab Liaximum Abovab Liaximum Abovab Tensial Safety Fac Rig Surface Coising Tensial Strength Max. Allowable Hook Load (Limite Max. Allowable Hook Load (Limite) Max. Allowable) Max. Allowable Hook Load (Limite) Max. Allowable Hook Load (Limite) Max. Allowable) Max. Allowab	Collapse Salety Factor = hillips, Required Load Casesis are Arist Load for Pipe Yield - API Pipe le Axist Load for Pipe Yield - API Pipe le Axist Load for Pipe Yield - API Pipe le Axist Load (Dinkes to TS's of Rg) be linkax Load (200,000 be) x 75% - Linkamo Overpul Required - linkax Load (200,000 be) x 75% - Linkamo Overpul Required - Safety Factor: Air Wt = Bouyant Wt = bible Axial Load (Pipe Yield) = Allowable Axial Load (Joint) = Allowable Axial Load (Joint) = Calibuable Axial Load (Joint) = Allowable Axial Load (Joint) = Calibuable Axial Load (Joint) = Calibuable Axial Load (Joint) = Bouyant Wt = Bouyant Wt = Bouyant Wt = Bouyant Wt = Bouyant Wt = Calibuable Axial Load (Joint) = Allowable Axial Load (Arist) = Allowable Axial Arist Arist Arist = Allowable Axial Arist Arist Arist = Allowable Axial Arist Arist = Allowable Axial Arist Arist = Allowable Axial Arist Arist = Allowable Axial Arist Arist Arist = Allowable Axial Arist Arist Arist = Allowable Axial Arist Arist = Allowable Axial Arist Arist = Allowable Axial Arist Arist = Allowable Axial Arist = Allowable Axial Arist = Allowable Axial Arist = Allowable Aris	6230 pulza an lo hy Yeld Strengt ingth Rating / Inst Levd) = M Hok Loca ength OR/Rig 225000 50000 34704 34704 34704 34704 34704 34704 34704 74285 244000 72692 72692 72692 326000 225000 300000 25000 20000 25000 30000 25000 300000 25000 30000 25000 30000 25000 30000 25000 30000 25000 30000 25000 30000 25000 30000 2000 2	/ toget i h Raing Corpora zwimum i-Bouy Max Lo bo bo bo bo bo kas / / / / / / / / / / / / / / / / / / /	1283 a instuick.) / Corporate to Lifetimum / Aboveble A and Wi of the ad Rating / (0.870 1.40 1.40 1.40 34764 30200 0.847 1.40 1.40 1.40 1.40 1.40 1.40 1.40 0.870 0.876 0.877 1.40 1.40 0.877 0.9777 0.9777 0.9777 0.9777 0.9777 0.9777 0.9777 0.9777 0.9777 0.9777 0.9777 0.9777 0.9777 0.9777 0.97777 0.9777 0.9777 0.97777 0.97777 0.977777 0.	= Klintmum txtalDes xtslLoad string Bouyant = = x + + = x + tcted Loa	4.90 Axtbl Design for Factor Wh of String 30200 272143 174286 0.870 50000 61594 281571 241429 0.847 50000 d	Factor + Mahinum C) =) =) =)verpu'i Requ 144085 3.04 163406 2.69	ired)	-		•	· · · · · · · · · · · · · · · · · · ·				•	
Tensial Strength - ConcooP The maximum axial (tension) load aci teximum Abovab Linximum Abovab Linximum Abovab Linximum Abovab Linximum Abovab Linximum Abovab Linximum Abovab Linximum Abovab Max. Allowab Max. Allowab Max. Allowable Hook Load (Linnite Max. Allowable Hook Load (Linnite) Max. Allowable Hook Load (Collapse Safety Factor = hillips, Required Load Casesis was it cashs were to gel aluck and j to axisi Load for Pipe Yield - API Pipe to axisi Load for Pipe Yield - API Pipe to Axisi Load (Initiation - API John Str to Vergui Hargin - Haximin Abuve tar = API Pipe Yield 'OR' API John Str Max Load (200,000 bs) x 75% = Hinimum Overpui Required - Safety Factor: Air Wt = Bouyant Wt = CoroPhillips Required Load (2011) = Tensial Safety Factor = get Safety Factor Allowable Overpui Margin = Tensial Safety Factor = get Safety Factor = Bouyant Wt = Bouyant Wt = CoroPhillips Required Load (2011) = Tensial Safety Factor = Tensial Safety Factor = Safety Factor = Bouyant Wt = Nilowable Overpui Margin = Tensial Safety Factor = Safety Fact	6230 pulzd en lo hy Y Yeld Strengt ingth Rating / i tat (Leot) = M 1000 1225000 500001 1000 1225000 174286 244000 174286 244000 174286 244000 174286 244000 225000 225000 3380000 225000 300000 225000 300000 100	/ / to get i i h Rathy Carpora zximum i-Bouy ba ba x / / - ((/ (x / / - ((/ (idon thi ba don thi ba ka ka ka ka ka ka ka ka ka k	1283 I instuick.) / Corporates to Lifetrium / Aboveble A and Wi of the ad Rating / (0.870 1.40 1.40 34764 30200 0.847 1.40 1.40 72692 61594 e canductor he load is the load. istrimm Predit	Hintmum kxial Dis xxial Load S String Bouyant = = x + + x + + x kted Loa	4.90 Axtbi Design Inn Factor White / Stating 20200 272143 174286 0.870 50000 61594 283571 241429 0.847 50000 0.847 50000	Factor + Wahinum C) =) =) =	144085 3.04 163406 2.69	ired)	-		•					•	
Tensial Strength - ConcooP Thé maximum axial (tension) bod eci taximum Aboveb Liaximum Aboveb Max. Allowa Max. Allowa Max. Allowable Hook Load (Limite Max. Allowable Hook Load (Limite) Max. Allowable Hook	Collapse Safety Factor = billips, Required Load Casesis was if cashs were to gel aluck and j to Axisi Load for Pipe Yeld - API Pipe to Axisi Load for Pipe Yeld - API Pipe to Axisi Load (Divises to TS's of Rg) b to Vergui Hargen - Maximin Abuve to - API Pipe Yield 'OR' API John Str Max Load (200,000 bs) x 75% - Minimum Overpui Required - Safety Factor: Air Wt = Bouyant Wt = Bouyant Wt = Safety Factor: Air Wt = Bouyant Wt = Allowable Axial Load (Divint) = Allowable Axial Load (Joint) = Allowable Axial Load (Joint) = d to 75% of Rig Max Load) = Allowable Axial Load (Joint) = d to 75% of Rig Max Load) = Allowable Axial Load (Joint) = d to 75% of Rig Max Load) = Allowable Dverpuil Margin = Tensial Safety Factor = Bouyant Wt = ble Axial Load (Joint) = d to 75% of Rig Max Load) = Allowable Overpuil Margin = Tensial Safety Factor = Safety Facto	6230 pulzd on lo hy Yfeld Strengt ingth Rating / i Ratic Levid > 1k be Hook Load ength 'OR' Rig 225000] 500001 34704 34704 34704 34704 34704 34704 74286 244000 72692 72692 72692 72692 72692 397000 3380000 225000 225000 300000 200000 200000 200000 200000 200000 200000 200000 200	/ togelli h Rathy Carpors axtrnum 1-Bouy Max Lo bs bs x / / (/ (x / / (x / / (carpora axtrnum - - - - - - - - - - - - -	1283 1 instuick.) / Corporate te Lifetrium / Alloweble A ant Wi of the ad Rating / (0.870 1.40 1.40 34704 30200 0.847 1.40 1.40 72692 61594 is canductor he bod is the bad. is kinim Prédi	Hintmum Axial Des Xial Load S String Bouyant = = x + + x + t cled Loa	4.90 Axtbi Design Im Factor Wito / String 30200 272143 174286 0.870 50000 61594 283571 241429 0.847 50000 d	Factor • Wintimum C) =) =) =) = 30200)verpull Roqu 144085 3.04 163406 2.69	ired)			•					•	
Tensial Strength - ConcoP The maximum extel (tension) load eci teximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Max. Allowa Max. Allowable Hook Load (Limite Max. Allowable Hook Load (Limite) Max. Allowable Hobk Load (Limite) Max. A	Collapse Salety Factor = hillips, Required Load Casesis and in cashs were to get aluck and y to axist Load for Pipe Yeld - API Pipe to Axist Load for Pipe Yeld - API Pipe to Axist Load (Divised to TS's of Rig be to verpul Margin - Maximin Above to a - API Pipe Yeld 'OR' API John Str Max Load (200,000 be) x 75% - Minimum Overpul Required - Safety Factor: Air Wt = Bouyant Wt = ble Axial Load (Pipe Yield) = Allowable Axial Load (Joint) = di to 75% of Rig Max Load) (Joint) = di to 75% of Rig Max Load) = Allowable Overpul Margin = Tensial Safety Factor = gth Safety Factor = Biouyant Wt = ble Axial Load (Divint) = di to 75% of Rig Max Load) = Allowable Overpul Margin = Tensial Safety Factor = gth Safety Factor = CocoPhillips Required Load (Joint) = d to 75% of Rig Max Load) = Allowable Overpul Margin = Tensial Safety Factor = Safety Factor = Safety Factor = Safety Factor = Safety Factor = Safety Factor = Surder Arifang Wt (Bouyant) = Prod Casing Wt (Bouyant) = Prod Prod Prod Prod Prod Prod Prod Prod	6230 pul2ad en lo hry Yfeld Striengl ingth Rating / 1 fast (Leed) = 14 fast (Leed) = 15 fas	/ / to get 1 h Rating Carpors aximum 1-Bouy Max Lo Do bs x / / / / (x / / / (x / / / / / / / / / / / / /	1283 A instrick. (Corporate to Minimum A Abovebie A ant W of the ad Rating / (0.870 1.40 1.40 34764 30200 0.847 1.40 72692 61594 to canductor the bad is the bad. is the bad. is the bad. is the bad.	Hinimum Axial Des Xial Loar String Bouyant = = = x + + = x + t cted Loa 0.870 0,847	4.90 Axtbl Design pr Factor Wi of String 30200 272143 174286 0.870 50000 61594 283571 241429 0.847 50000 d d	Factor + Wahimim C) =) =) =) = 30200 61594)verpull Roqu 144085 3,04 163406 2,69	ired)	-		•			· ·		•	
Tensial Strength - ConcoP The maximum extel (tension) load eci teximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Linximum Aboveb Max. Allowa Max. Allowable Hook Load (Limite Max. Allowable Hook Load (Limite) Max. Allowable Hobk Load (Limite) Max. A	Collapse Safety Factor = hillips, Required Load Casesis was if cashs were to get aluck and y to axist Load for Pipe Yeld - API Spet to Axist Load for Pipe Yeld - API Spet to Axist Load (Divises to TS's of Rg) to Verpul Hargin - Maximin Above to - API Pipe Yeld 'OR' API John Str Max Load (200,000 bs) x 75% - Minimum Overpul Required - Safety Factor: Air Wt = Bouyant Wt = bile Axial Load (Pipe Yield) = Allowable Axial Load (Joint) = id to 75% of Rig Max Load) = Allowable Axial Load (Joint) = di to 75% of Rig Max Load) = Allowable Overpul Margin = Tensial Safety Factor: Air Wt = Bouyant Wt = bile Axial Load (Chint) = id to 75% of Rig Max Load) = Allowable Overpul Margin = Tensial Safety Factor: Air Wt = Bouyant Wt = bile Axial Load (Joint) = id to 75% of Rig Max Load) = Allowable Overpul Margin = Tensial Safety Factor: at the Axial Load (Chint) = id to 75% of Rig Max Load) = Allowable Axial Load (Aint) = id to 75% of Rig Max Load) = Allowable Axial Load (Aint) = id to 75% of Rig Max Load) = Allowable Axial Load (Aint) = id to 75% of Rig Max Load) = Allowable Axial Load (Aint) = id to 75% of Rig Max Load) = Allowable Axial Load (Aint) = id to 75% of Rig Max Load) = Allowable Axial Bater Hawama and the surface of the the surface of the the surface of the surface of the the surface of the the surface of the the surface of the surface of the surface of the the surface of the surface of the surface of the surface of the the surfa	6290 putzed en le bys s Yield Strengt might Rathy / iax Lead) = M tax L	/ / to get 1 h Rating Carpora aximum 1-Bouy Max Lo Do ba x / / / / (x / / / (x / / / / / / / / / / / / /	1283 1283	Hintmum kxial Des xkal Loat String Bouyant = = x + + = x + t cted Loa	4.90 Axtbl Design pr Fector 30200 272143 174286 0.870 50000 61594 283571 241429 0.847 50000 d 1 =) =) = 27794 655 - 1	Factor + Minimim C) =) =) =) = 30200 61534	Vyerpull Roqu 144085 3,04 163406 2,69	(red)	2 441		6816					•	
Tensial Strength - ConocoP The maximum Alay (Lension) bod eci Laximum Alayya Laximum Alayya Laximum Alayya Laximum Alayya Laximum Alayya Laximum Alayya Laximum Alayya Tensial Strength Max. Allowa Max. Allowable Hook Load (Limite Max. Allowable Hook Load (Limite) Max. Allowable Hook	Collapse Salety Factor = billips. Required Load Casesis are if casing were to get stuck and y to Axisi Load for Pipe Ytel = API Pipe te Axisi Load for Pipe Ytel = API Pipe te Axisi Load for John = API John Str is Hoak Load (John Shi Tik) to Comput Margin = Maximim Above dar = API Pipe Yteld 'OR' API John Str is Hoak Load (200,000 be) x 75% = Minimum Overput Required - Minimum Overput Required - Minimum Overput Required - Salety Factor: Air Wt = Bouyant Wt = id to 75% of Rig Max Load) = Allowable Axial Load (John) = id to 75% of Rig Max Load) = Allowable Axial Load (John) = id to 75% of Rig Max Load) = Allowable Axial Load (John) = id to 75% of Rig Max Load) = Allowable Axial Load (John) = id to 75% of Rig Max Load) = Allowable Axial Load (John) = id to 75% of Rig Max Load) = Consolid Load (Sing Max Load) = Consolid Load (John) = if ansial Salety Factor = Bouyant Wt = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John) = if ansial Salety Factor = Bible Axial Load (John)	6290 putzed en le bry s Yield Strengt might Rathy / taix Lead) = M taix Lead) =	/ / to get i i h Rating Corpora aximum Max Lo bs x / / ((x / / (x / / / (x / / / / / / / / / / / / /	1283 1283	Hinhmum kxial Des xxisi Loat S String Bouyani = = x + + x + t cted Loa 0.870 0.847 = x +	4.90 Axtbl Design pr Fector 30200 272143 174286 0.870 50000 61594 283571 241429 0.847 50000 d) =) = 27794 6.55 61594	Factor + Minimim C) =) =) = 30200 61594 × +	Vverpull Roqu 144085 3,04 163406 2,69 0.7854 27794	kred) *	2.441 6616] *2 =	6816 12240/			·		•	
Tensial Strength - ConocoP The maximum axial (lension) bod eci Haximum Abovab Linxtmum Abovab Linxtmum Abovab Linxtmum Abovab Linxtmum Abovab Safety Fac Rig Surface Casing Tensial Strength Max. Allowable Hook Load (Limité Max roduction Casing Tensial Strën Max. Allowable Hook Load (Limité Max. Max. Allowable Hook Load (Limité Max. <u>Compressión Strength - Com</u> The maximum Axial compression) ba vuth a support of a pitte of Buding rif bui nei Inded. Any other axial loade a Compression Safety Factor = APIAxia enductor & Surface Compression	Collapse Salety Factor = billips. Required Load Casesis are if cashig were to get aluck and y to Axial Load for Pipe Ytel = API Pipe te Axial Load for Pipe Ytel = API Pipe te Axial Load for Pipe Ytel = API Pipe te Axial Load (DR API John Str te to Verpul Margin = Maximim Abwe dar = API Pipe Yteld 'OR' API John Str te Utinimum Overpul Required - i Salety Factor:	6290 putzd en lo hy Yeld Strengt migh Rathg // taix Lend) = M taix	/ v to get i i h Rating Corpora aximum Max Lo bs x / / ((v v v v v v v v v v v v v	1283 12 12 12 12 12 12 12 12 12 12 12 12 12 1	Hinhmum Vala Des String Bouyant = + + + + + + + + +	4.90 Axtbl Design par Factor 30200 272143 174286 0.870 50000 61594 283571 241429 0.847 50000 d) =) = 27794 6.55 61594 3.35	Factor + Mintinim C) =) =) = 30200 61594 x +	0.7854 27794	kred) *	<u>2.441</u> 6816] *2 =	6816 129404						

¥

3. Proposed cementing program:

16" or 13-3/8" Conductor:

Cement to surface with rathole mix, ready mix or Class C Neat cement. (Note: The gravel used in the cement is not to exceed 3/8" diameter) TOC at surface.

8-5/8" Surface Casing Cementing Program:

The intention for the cementing program for the Surface Casing is to:

- Place the Tail Slurry from the casing shoe to 350' above the casing shoe,
- Bring the Lead Slurry to surface.

Spacer: 20 bbls Fresh Water

		Slurry	Inter Ft	rvals MD	Weight ppg	Sx	Vol Cuft	Additives	Yield ft ³ /sx
	Lead	Class C	Surface	1051' – 1096'	13.6	450	765	+ 2% Extender + 2% CaCl ₂ + 0.125 lb/sx Lost Circulation Control Agent + 0.2% Defoamer Excess =200% based on	1.70
-					··	· · ·			
	Tail	Class C	1051' – 1096'	1401' – 1446'	14.8	300	402	Excess = 100% based on gauge hole volume	1.34

Displacement: Fresh Water.

Note: In accordance with the Pecos District Conditions of Approval, we will Wait on Cement (WOC) for a Apperiod of not less than 18 hrs after placement or until at least 500 psi compressive strength has been reached in both the Lead Slurry and Tail Slurry cements on the Surface Casing, whichever is greater.

5-1/2" Production Casing Cementing Program – Single Stage Cementing Option:

The intention for the cementing program for the Production Casing - Single Stage Cementing Option is to:

- Place the Tail Slurry from the casing shoe to above the top of the Grayburg,
- Bring the Lead Slurry to surface.

Spacer: 20 bbls Fresh Water

	Slurry	Inte Ft	rvals MD	Weight ppg	Sx	Vol Cuft	Additives	Yield ft ³ /sx
Lead	C Gas Tight Slurry	Surface	3000'	11.5	400	1292	Class C 94 lb/sx 6% Extender 10% Gas Migration Control 2% Sodium Metasilicate (dry) 1% Cement Bonding Agent 3% Aluminum Silicate 0.125 lb/sx Cello Flake 3 lb/sx LCM-1	3.23
Tail	Poz/C Gas Tight Slurry	3000'	4231' – 4276'	14.0	320	438	(35:65) Poz:C 33 lb/sx 1% Sodium Metasilicate (dry) 1.5% Fluid Loss Control,	1.37

Displacement: Fresh Water with approximately 250 ppm gluteraldehyde biocide.

5-1/2" Production Casing Cementing Program – Two-Stage Cementing Option (Shallow Flow):

ConocoPhillips Company respectfully requests the options to our cementing program. The intention for the cementing program for the Production Casing – Two-Stage Cementing Option is to:

- Provide a contingency plan for using a Stage Tool and Annulus Casing Packer(s) to isolate shallow saltwater or
- gas flow if either of these events occurs while drilling the well.
- Place the Stage 1 Cement from the casing shoe to surface.
- Proceed with Stage 2 Cement only if cement returns are contaminated or flow was observed after pumping 1st stage.

Spacer: 20 bbls Fresh Water

Stage	1 - Slurry		Intervals Ft MD	Weight ppg	Sx	Vol Cuft	Additives	Yield ft ³ /sx
Lead	C Gas Tight Slurry	Surface	3000'	11.5	400	1292	Class C 94 lb/sx 6% Extender 10% Gas Migration Control 2% Sodium Metasilicate (dry) 1% Cement Bonding Agent 3% Aluminum Silicate 0.125 lb/sx Cello Flake 3 lb/sx LCM-1	3.23
Tail	Poz/C Gas Tight Slurry	3000'	4231' 4276'	14.0	320	438	(35:65) Poz:C 33 lb/sx 1% Sodium Metasilicate (dry) 1.5% Fluid Loss Control,	1.37

1st stage displacement: FW followed by Weighted Spacer

Spacer: Remaining Weighted Spacer in cementing lines from the 1st stage displacement

Sta	age 2 - Slurry	Intervals Ft M	D	Weight ppg	Sx	Vol Cuft	Additives	Yield ft ³ /sx
Tail	Class C	Surface	Stage Tool ~1450'	14.8	300	402	1% CaCl2 Excess = 100% based on gauge hole volume	1.34

2nd stage displacement: Fresh Water

<u>5-1/2" Production Casing Cementing Program – Two-Stage Cementing Option (Lower Zone Losses or Waterflow):</u>

ConocoPhillips Company respectfully requests the options to our cementing program. The intention for the cementing program for the Production Casing – Two-Stage Cementing Option is to:

- Provide a contingency plan for using a Stage Tool and Annulus Casing Packer(s) to isolate losses or waterflow if either of these events occurs while drilling the well.
- Place the Stage 1 Cement from the casing shoe to the stage tool,
- Bring Stage 2 Cement from the stage tool to surface.

Spacer: 20 bbls Fresh Water

Secon

Sta	ge 1 – Slurry	Inter Ft N	vals ID	Weight ppg	Sx	Vol Cuft	Additives	Yield ft ³ /sx
Lead	Poz/C Gas Tight Slurry	Stage Tool ~2900'	4231' – 4276'	14.0	320	438	(35:65) Poz:C 33 lb/sx 1% Sodium Metasilicate (dry) 1.5% Fluid Loss Control,	1.37

1st stage displacement: FW followed by Brine

(Date: 1/14/2014)

Page 5 of 11

Spacer: 20 bbls Fresh Water

Stag	ge 2 - Slurry	Inter Ft N	vals MD	Weight ppg	Sx	Vol Cuft	Additives	Yield ft ³ /sx
Lead	C Gas Tight Slurry	Surface	Stage Tool ~2900'	11.5	400	1292	Class C 94 Ib/sx 6% Extender 10% Gas Migration Control 2% Sodium Metasilicate (dry) 1% Cement Bonding Agent 3% Aluminum Silicate 0.125 Ib/sx Cello Flake 3 Ib/sx LCM-1	3.23

Displacement: Fresh Water

Proposal for Option to Adjust Production Casing Cement Volumes:

The production casing cement volumes for the proposed single stage and two-stage option presented above are estimates based on gauge hole. We will adjust these volumes based on the caliper log data for each well and our trends for amount of cement returns to surface. Also, if no caliper log is available for any particular well, we would propose an option to possibly increase the production casing cement volume to account for any uncertainty in regard to the hole volume.

4. Pressure Control Equipment:

A <u>11" 3M</u> system will be installed, used, maintained, and tested accordingly as described in Onshore Oil and Gas Order No. 2.

Our BOP equipment will be:

- o Rotating Head
- o Annular BOP, 11" 3M
- o Blind Ram, 11" 3M
- o Pipe Ram, 11" 3M

After nippling up, and every 30 days thereafter or whenever any seal subject to test pressure is broken followed by related repairs, blowout preventors will be pressure tested. BOP will be inspected and operated at least daily to insure good working order. All pressure and operating tests will be done by an independent service company and recorded on the daily drilling reports. BOP will be tested using a test plug to isolate BOP stack from casing. BOP test will include a low pressure test from 250 to 300 psi for a minimum of 10 minutes or until requirements of test are met, whichever is longer. Ram type preventers and associated equipment will be tested to 50 percent of rated working pressure of 3000 psi isolated by test plug. Annular type preventers will be held for at least 10 minutes or until provisions of test are met, whichever is longer. Valve on casing head below test plug will be open during testing of BOP stack. BOP will comply with all provisions of Onshore Oil and Gas Order No. 2 as specified. **See Attached BOPE Schematic.** A variance is respectfully requested to allow for the use of flexible hose. The variance request is included as a separate enclosure with attachments.

Secon

5. Proposed Mud System:

DEPTH	TYPE	Density ppg	FV sec/qt	API Fluid Loss cc/30 min	рН	Vol bbl
0 – Surface Casing Point	Fresh Water or Fresh Water Native Mud in Steel Pits	8.5 – 9.0	28 – 40	N.C.	N.C.	150 – 300
Surface Casing Point to TD	Brine (Saturated NaCl ₂) in Steel Pits	10	29	N.C.	10 – 11	300 – 1000
Conversion to Mud at TD	Brine Based Mud (NaCl ₂) in Steel Pits	10 _	33 – 40	5 – 10	10 11	0 - 1000

The mud systems that are proposed for use are as follows:

Gas detection equipment and pit level flow monitoring equipment will be on location. A flow paddle will be installed in the flow line to monitor relative amount of mud flowing in the non-pressurized return line. Mud probes will be installed in the individual tanks to monitor pit volumes of the drilling fluid with a pit volume totalizer. Gas detecting equipment and H2S monitor alarm will be installed in the mud return system and will be monitored. A mud gas separator will be installed and operable before drilling out from the Surface Casing. The gases shall be piped into the flare system. Drilling mud containing H2S shall be degassed in accordance with API RP-49, item 5.14.

In the event that the well is flowing from a waterflow, then we would discharge excess drilling fluids from the steel mud pits through a fas-line into steel frac tanks at an offset location for containment. Depending on the rate of waterflow, excess fluids will be hauled to an approved disposal facility, or if in suitable condition, may be reused on the next well.

No reserve pit will be built.

Proposal for Option to Not Mud Up at TD:

FW, Brine, and Mud volume presented above are estimates based on gauge 12-1/4" or 7-7/8" holes. We will adjust these volume based on hole conditions. We do not plan to keep any weighting material at the wellsite. Also, we propose an option to not mud up leaving only brine in the hole if we have good hole stability.

6. Logging, Coring, and Testing Program:

- a. No drill stem tests will be done
- b. Remote gas monitoring planned for the production hole section (optional).
- c. No whole cores are planned
- d. The open hole electrical logging program is planned to be as follows:
 - Total Depth to 1700' MD: Spectral Gamma Ray, PE, Resistivity (laterologs), Bulk Density, and Sonic
 - Total Depth to surface Casing Shoe: Caliper
 - Total Depth to surface, Total Gamma Ray and Neutron
 - Total Depth to 2350' MD ; Mud Log (optional)
 - Total Depth to 2350' MD ; Dielectric Scanner (optional)
 - Formation pressure data (XPT) on electric line if needed (optional)
 - Rotary Sidewall Cores on electric line if needed (optional)
 - FMI (Formation MicroImager) if needed (optional)
 - UBI (Ultrasonic Borehole Imager) if needed (optional)
- e. Cement Bond Log (optional).

7. Abnormal Pressures and Temperatures:

- No abnormal pressures are expected to be encountered.
- Loss of circulation is a possibility in the horizons below the Top of Grayburg. We expect that normal Loss of Circulation Material will be successful in healing any such loss of circulation events.
 - The bottom hole pressure is expected to be 7.8 ppg gradient.
 - The expected Bottom Hole Temperature is 100 degrees F.



The estimated H₂S concentrations and ROE calculations for the gas in the zones to be penetrated are presented in the table below for the various producing horizons in this area:

FORMATION / ZONE	H2S (PPM)	Gas Rate (MCFD)	ROE 100 PPM	ROE 500 PPM
Seven Rivers	6	50 - 100 MCFD	0	0
Grayburg / San Andres	18360	20 - 50 MCFD	95	43

ConocoPhillips will comply with the provisions of Oil and Gas Order # 6, Hydrogen Sulfide Operations. Also, ConocoPhillips will provide an H2S Contingency Plan (please see copy attached) and will keep this plan updated and posted at the wellsite during the drilling operation.

8. Anticipated starting date and duration of operations:

Well pad and road constructions will begin as soon as all agency approvals are obtained. Anticipated date to drill these wells begin in 2014 after receiving approval of the APD.

Attachments:

- Attachment # 1 Two-stage Cementing Schematic
- Attachment # 2...... BOP and Choke Manifold Schematic 3M System
- Attachment # 3 Diagram of Choke Manifold Equipment

Contact Information:

Proposed 14 January 2014 by: Steven Herrin Drilling Engineer, ConocoPhillips Company Phone (281) 206-5115 Cell (432) 209-7558 SEMU #250

(Date: 1/14/2014)





(Date: 1/14/2014)

Page 10 of 11

Attachment # 3



- 5 Gate Valve, 2-1/16" 5M
- 6 Gate Valve, 2-1/16" 5M
- 7 Gate Valve, 3-1/8° 3M
- 8 Gate Valve, 2-1/16" 5M
- 9 Gate Valve, 2-1/16" 5M
- 10 Gate Valve, 2-1/16" 5M
- 11 Gate Valve, 3-1/8" 3M
- 12 Gate Valve, 2-1/16" 5M
- 13 Pressure Gauge
- 14 2" hammer union tie-in point for BOP Tester

We will test each valve to 3000 psi from the upstream side.

Submitted by: Steven Herrin Drilling Engineer, Mid-Continent Business Unit, ConocoPhillips Company Date: 3-January-2014

ConocoPhillips MCBU

Buckeye SEMU SEMU 250

SEMU 250

Plan: Plan Design

Standard Planning Report - Geographic

09 December, 2013

Planning Report - Geographic

Database: Company: Project:	EDN Con Bucł	1 Central Plan coPhillips MC ceye	ning :BU		Local Co TVD Ref MD Refe	o-ordinate Ref ference: erence:	erence:	Well SEMU 25 RKB @ 3554.0 RKB @ 3554.0	50 0usft (PD 822) 0usft (PD 822)	
Site:	SEM	IU			North Re	eference:		Grid		
Well:	SEM	IU 250			Survey (Calculation Me	thod:	Minimum Curv	ature	
Wellbore:	SEM	IU 250								
Design:	Plan	Design								
Project	Bucke	eye, Lea Coun	ty, NM							
Map System: Geo Datum:	US Sta NAD 19	te Plane 1927 927 (NADCON	(Exact soli CONUS)	ution)	System D	atum:	M	lean Sea Level		
Map Zone:	New M	exico East 300)1				. U	sing geodetic s	cale factor	
Site	SEML	J, New Mexico	, East							
Site Position:				Northing:	57	4,584.87 usft	Latitude:			32° 34' 29.280 N
From:	Ĺa	t/Long	E	Easting:	83	9,762.30 usft	Longitude:			103° 13' 49.440 W
Position Uncer	tainty:	:	3.5 usft 🖇	Slot Radius:		8 "	Grid Conver	gence:	•	0.59 °
Well	SEMU	250, Deviated	t Well					······································		· · · · · · · · · · · · · · · · · · ·
Well Position	+N/-S	<u></u>	0.0 usft	Northing:		570,041.6	2 usft Lat	titude:		32° 33' 43.031 N
	+E/-W		0.0 usft	Easting:		852,200.3	3 usft Lo	naitude:		103° 11' 24.680 W
Position Uncer	tainty		0.0 usft	Wellhead Elev	vation:	·	Gro	ound Level:		3,541.0 usft
Wellbore	SEM	J 250								·
Magnetics	M	odel Name	S	ample Date	Declin	ation	Dip A	Angle	Field	Strength
		BGGM201	3	12/6/2013		7.23	(. 60,49		48.603
				•						
Design	Plan D	esign		· .						
Version:	1		1	Phase:	PROTOTYPE	Tie	e On Depth:		0.0	
Vertical Section	n:		Depth From	m (TVD)	+N/-S	+E	E/-W	Dii	rection	
			(usf	t)	(usft)	(u	isft)		(°)	
			0.0		0.0	().0	2	76.71	
Plan Sections										
Measured			Vertical			Dogleg	Build	Turn		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Rate	Rate	Rate	TFO	
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	Target
0.0	0.00	0.00		0.0 0.0) 0.0	0.00	0.00	0,00	0.00	
2 148 0	0.00	0.00	2,14	8.0 0.0	0.0	0.00	0.00	0.00	0.00	
2,140.0						1 50	4 50	0.00	276 71	SEMILOSO (Torget)
3,816.6	25.03	276.71	3,76	4.0 41.9	-300.2	1.50	1.50	0.00	270.71	SEIVIO 250 (Target)

.

.

Planning Report - Geographic

******	n de la companya de l		
Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SEMU 250
Company:	ConocoPhillips MCBU	TVD Reference:	RKB @ 3554.0usft (PD 822)
Project:	Buckeye	MD Reference:	RKB @ 3554.0usft (PD 822)
Site:	SEMU	North Reference:	Grid
Well:	SEMU 250	Survey Calculation Method:	Minimum Curvature
Wellbore:	SEMU 250		
Design:	Plan Design		

Planned Survey

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Map Northing	Map Easting		•
(usn)	(*)	(*)	(usit)	(usft)	(usit)	(usπ)	(usπ)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
85.0	0.00	0.00	85.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
Conduct	or			·					••••••••••••••••••••••••••••••••••••••
100.0	0.00	0.00	100.0	0.0	0.0	570,041.62	852,200.33	· 32° 33' 43.031 N	103° 11' 24.680 W
200.0	0.00	0.00	200.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
300.0	0.00	0.00	300.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
400.0	0.00	0.00	400.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
500.0	0.00	0.00	500.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
700.0	0.00	0.00	600.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
700.0	0.00	0.00	700.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
000.0	0.00	0.00	800.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11,24.680 W
900.0	0.00	0.00	900.0	. 0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
1,200.0	0.00	.0.00	1,200.0	0.0	0.0	570,041.62	852,200.33	32° 33° 43,031 N	103* 11' 24.680 W
1,300.0	. 0.00	0.00	1,300.0	0.0	0.0	570,041.62	852,200.33	32° 33° 43.031 N	103° 11' 24.680 W
1,376.0	0.00	0.00	1,376.0	. 0.0	0.0	570,041.62	852,200,33	32° 33' 43.031 N	103° 11' 24.680 W
Rustler									
1,400.0	0.00	0.00	1,400.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
1,446.0	0.00	0.00	1,446.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
Surface			· · · · ·			·			
1,462.0	0.00	0.00	1,462.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
Salado									
1,500.0	0.00	0.00	1,500.0	0.0	0.0	. 570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
1,700.0	0.00	0.00	1,700.0	· 0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
2,148.0	0.00	0.00	2,148.0	0.0	0.0	570,041.62	852,200.33	32° 33' 43.031 N	103° 11' 24.680 W
2,200.0	0.78	276.71	2,200.0	0.0	-0.4	570,041.66	852,199.97	32° 33' 43.031 N	103° 11' 24.685 W
2,300.0	2.28	276.71	2,300.0	0.4	-3.0	570,041.98	852,197.32	32° 33' 43.035 N	103° 11' 24.715 W
2,400.0	3.78	276.71	2,399.8	1.0	-8.3	570,042.60	852,192.07	32° 33' 43.041 N	103° 11' 24.777 W
2,500.0	5.28	276.71	2,499.5	1.9	-16.1	570,043.52	852,184.23	32° 33' 43.051 N	103° 11' 24.868 W
2,575.9	6.42	276.71	2,575.0	2.8	-23.8	570,044.42	852,176.54	32° 33' 43.061 N	103° 11' 24.958 W
Tansill									
2,600.0	6.78	276.71	2,598.9	3.1	-26.5	570,044.75	852,173.79	32° 33' 43.065 N	103° 11' 24.990 W
2,676.7	7.93	276.71	2,675.0	4.3	-36.3	570,045.90	852,164.04	32° 33' 43.077 N	103° 11' 25.104 W
Yates				.					
2,700.0	8.28	276.71	2,698.1	4.7	-39.5	570,046.28	852,160.78	32° 33' 43.081 N	103° 11' 25.142 W
2,800.0	9.78	276.71	2,796.8	6.5	-55.1	570,048.12	852,145.19	32° 33' 43.101 N	103° 11' 25.324 W
2,900.0	11.28	276.71	2,895.2	8.6	-73.3	570,050.25	852,127.03	32° 33' 43.124 N	103° 11' 25.536 W
2,913.1	11.48	276.71	2,908.0	8.9 .	-75.9	570,050.55	852,124.47	32° 33' 43.127 N	103° 11' 25.566 W
Seven Riv	ers								
3,000.0	12.78	276.71	2,993.0	11.1	-94.0	570,052.69	852,106.33	32° 33' 43.150 N	103° 11' 25.777 W
3,100.0	14.28	276.71	3,090.2	13.8	-117.2	570,055.42	852,083.10	32° 33' 43.180 N	103° 11' 26.048 W
3,200.0	15.78	276.71	3,186.7	16.8	-143.0	570,058.46	852,057.34	32° 33' 43.213 N	103° 11' 26.349 W
3,300.0	17.28	276.71	3,282.6	20.2	-171.2	570,061.78	852,029.08	32° 33' 43.248 N	103° 11' 26.678 W
3,400.0	18.78	276.71	3,377.7	23.8	-202.0	570,065.40	851,998.34	32° 33' 43.288 N	103° 11' 27.037 W
3,500.0	20.28	276.71	3,471.9	27.7	-235.2	570,069.31	851,965.14	32° 33' 43.330 N	103° 11' 27.425 W
3,508.6	20.41	276.71	3,480.0	28.0	-238.1	570,069.66	851,962.17	32° 33' 43.333 N	.103° 11' 27.459 W
Queen				·, ·					·····
3,600.0	21.78	276.71	3,565.3	31.9	-270.8	570,073.51	851,929.50	32° 33' 43.375 N	103° 11' 27.840 W

COMPASS 5000.1 Build 61

Planning Report - Geographic

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SEMU 250	
Company:	ConocoPhillips MCBU	TVD Reference:	RKB @ 3554.0usft (PD 822)	
Project:	Buckeye	MD Reference:	RKB @ 3554.0usft (PD 822)	
Site:	SEMU	North Reference:	Grid	
Well:	SEMU 250	Survey Calculation Method:	Minimum Curvature	
Wellbore:	SEMU 250			
Design:	Plan Design			

Planned Survey

.

Aeasured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,654.8	22.60	276.71	3,616.0	34.3	-291.4	570,075.93	851,908.95	32° 33' 43.401 N	103° 11' 28.080 W
Penrose	· 、	· ·							
3,700.0	23.28	276.71	3,657.6	36.4	-308.9	570,077.99	851,891.44	32° 33' 43.423 N	103° 11' 28.284 W
3,800.0	24.78	276.71	3,749.0	41.1	-349.3	570,082.75	851,851.00	32° 33' 43.475 N	103° 11' 28.756 W
3,816.6	25.03	276.71	3,764.0	41.9	-356.2	570,083.57	851,844.07	32° 33' 43.484 N	103° 11' 28.837 W
Grayburg							-		· · · ·
3,900.0	25.03	276.71	3,839.6	46.1	-391.3	570,087.69	851,809.01	32° 33' 43.528 N	103° 11' 29.246 W
4,000.0	25.03	276.71	3,930.2	51.0	-433.3	570,092.64	851,766.99	32° 33' 43,582 N	103° 11' 29.737 W
4,064.9	25.03	276.71	3,989.0	54.2	-460.6	570,095.85	851,739.73	32° 33' 43.616 N	103° 11' 30.055 W
San Andr	es					· •	··· ·		• • • • • •
4,100.0	25.03	276.71	4,020.8	56.0	-475.3	570,097.59	851,724.97	32° 33' 43.635 N	103° 11' 30.227 W
4,179.0	25.03	276.71	4,092.4	59.9	-508.5	570,101.50	851,691.77	32° 33' 43.677 N	103° 11' 30.614 W
Productio	on				•	· ···			
4,200.0	25.03	276.71	4,111.4	60.9	-517.4	570,102.53	851,682.95	32° 33' 43.688 N	103° 11' 30.717 W
4,285.6	25.03	276.71	4,189.0	65.1	-553.3	570,106.77	851,646.98	32° 33' 43.734 N	103° 11' 31.137 W

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft) ⁻	Northing (usft)	Easting (usft)	Latitude	Longitude
SEMU 250 (Target)	0.00	0.01	3,764.0	53.7	-456.0	570,095.31	851,744.30	32° 33' 43.610 N	103° 11' 30.001 W
- plan misses targe	et center by 91.0	Dusft at 3859	.1usft MD (3	802.5 TVD, 44	4.0 N, -374.1 E	E) ·			

Casing Points

Measured Depth (usft)	Vertical Depth (usft)		Name	i	Casing Diameter (")	Hole Diameter (")	
 85.0	85.0	Conductor		;	16	20	
1,446.0	1,446.0	Surface			8-5/8	12-1/4	
4,179.0	4,092.4	Production			5-1/2	7-7/8	

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,376.0	1,376.0	Rustler		0.00		
1,462.0	1,462.0	Salado		0.00		
2,575.9	2,575.0	Tansill .		0.00		
2,676.7	2,675.0	Yates		0.00		
2,913.1	2,908.0	Seven Rivers		0.00		
3,508.6	3,480.0	Queen		0.00		
3,654.8	3,616.0	Penrose		0.00		
3,816.6	3,764.0	Grayburg		0.00		
4,064.9	3,989.0	San Andres		0.00		

Planning Report - Geographic

CARLON CARLON CARLON CARLON

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SEMU 250
Company:	ConocoPhillips MCBU	TVD Reference:	RKB @ 3554.0usft (PD 822)
Project:	Buckeye	MD Reference:	RKB @ 3554.0usft (PD 822)
Site:	SEMU	North Reference:	, Grid
Well:	SEMU 250	Survey Calculation Method:	Minimum Curvature
Wellbore:	SEMU 250		
Design:	Plan Design		



Proposed Directional Well Plan

.



Request for Variance

ConocoPhillips Company

Lease Number: NM LC 031670A Well: SEMU #250 Location: Sec. 19, T20S, R38E Date: 1/14/2014

Request:



ConocoPhillips Company respectfully requests a variance to install a flexible choke line instead of a straight choke line prescribed in the Onshore Order No. 2, III.A.2.b Minimum standards and enforcement provisions for choke manifold equipment. This request is made under the provision of Onshore Order No. 2, IV Variances from Minimum Standard. The rig to be used to drill this well is equipped with a flexible choke line if the requested variance is approved and determined that the proposed alternative meets the objectives of the applicable minimum standards.

Justifications:

The applicability of the flexible choke line will reduce the number of target tees required to make up from the choke valve to the choke manifold. This configuration will facilitate ease of rig up and BOPE Testing.

Attachments:

- Attachment # 1 Specification from Manufacturer.
- Attachment # 2 Mill & Test Certification from Manufacturer

Contact Information:

Program prepared by: Steven Herrin Drilling Engineer, ConocoPhillips Company Phone: (281) 206-5115 Cell: (432) 209-7558 Date: 2 January 2014

Attachment # 1



Reliance Eliminator Choke & Kill

This hose can be used as a choke hose which connects the BOP stack to the bleed-off manifold or a kill hose which connects the mud stand pipe to the BOP kill valve.

The Reliance Eliminator Choke & Kill hose contains a specially bonded compounded cover that replaces rubber covered Asbestos, Fibreglass and other fire retardant materials which are prone to damage. This high cut and gouge resistant cover overcomes costly repairs and downtime associated with older designs.

The Reliance Eliminator Choke & Kill hose has been verified by an independent engineer to meet and exceed EUB Directive 36 (700°C for 5 minutes).

Non	n, ID	Not	n ÖD	We	ight	Min Be	nd Radius	Max	WP
in.	mm.	in.	mm	Ib/ft	kg/m	in.	mm.	psi	Мра
3	76.2	5.11	129.79	14.5	21.46	48	1219.2	5000	34.47
3-1/2	88.9	5.79	147.06	20.14	29.80	54	1371.6	5000	34.47

Fittings RC4X5055 R35 - 3-1/8 5000# API Type 6B RC3X5055 R31 - 3-1/8 3000# API Type 6B RC4X5575

Hammer Unions	Other
All Union Configurations	LP Threaded Connectio
· ·	Graylock
	Custom Ends
	•

Flanges

Attachment # 2



Closed Loop System Design, Operating and Maintenance, and Closure Plan

ConocoPhillips Company Well: SEMU #250 Location: Sec. 19, T20S, R38E Date: 1/14/2014

ConocoPhillips proposes the following plan for design, operating and maintenance, and closure of our proposed closed loop system for the above named well:

1. We propose to use a closed loop system with steel pits, haul-off bins, and frac tanks for containing all cuttings, solids, mud, water, brine, and liquids. We will not dig a pit, nor will we use a drying pad, nor will we build an earth pit above ground level, nor will we dispose of or bury any waste on location.

All drilling waste and all drilling fluids (fresh water, brine, mud, cuttings, drill solids, cement returns, and any other liquid or solid that may be involved) will be contained on location in the rig's steel pits or in hauloff bins or in frac tanks as needed. The intent is as follows:

- We propose to use the rigs' steel pits for containing and maintaining the drilling fluids.
- We propose to remove cuttings and drilled solids from the mud by using solids control equipment and to contain such cuttings and drilled solids on location in haul-off bins.
- We propose that any excess water that may need to be stored on location will be stored in tanks.

The closed loop system components will be inspected daily by each tour and any needed repairs will be made immediately. Any leak in the system will be repaired immediately, and any spilled liquids and/or solids will be cleaned immediately, and the area where any such spill occurred will be remediately.

2. Cuttings and solids will be removed from location in haul-off bins by an authorized contractor and disposed of at an authorized facility. For this well, we propose the following disposal facility:

R-360 Inc.

4507 West Carlsbad Hwy, Hobbs, NM 88240,

P.O. Box 388; Hobbs, New Mexico 88241

Toll Free Phone: 877.505.4274, Local Phone Number: 432.638.4076

The physical address for the plant where the disposal facility is located is Highway 62/180 at mile marker 66 (33 miles East of Hobbs, NM and 32 miles West of Carlsbad, NM).

The Permit Number for R-360 is NM-01-0006.

A photograph showing the type of haul-off bins that will be used is attached.

- 3. Mud will be transported by vacuum truck and disposed of at R-360 Inc. at the facility described above.
- 4. Fresh Water and Brine will be hauled off by vacuum truck and disposed of at an authorized salt water disposal well. We propose the following for disposal of fresh water and brine as needed:
 - Nabors Well Services Company, 3221 NW County Rd; Hobbs, NM 88240, PO 5208 Hobbs, NM, 88241, Permit SWD 092. (Well Location: Section 3, T19S R37E)
 - Basic Energy Services, P.O. Box 1869; Eunice, NM 88231 Phone Number: 575.394.2545, Facility located at Hwy 18, Mile Marker 19; Eunice, NM.

Steven Herrin Drilling Engineer, ConocoPhillips Company Phone: (281) 206-5115 Cell: (432) 209-7558 Date: 2 January 2014

SPECIFICATIONS

Heavy Duty Split Metal Rolling Lid

FLOOR = 3/16" PL one piece CROSS MEMBER; 3 x 4.1 channel 16" on center

WALLS: 3/16¹ PL solid welded with tubing top, insi de liner hooks

DOOR: 3/16" PL with tubing trame FRONT: 3/16" PL slant formed PICK U P: Standard cable with 2" x 6" x 1/4" rails, guisset at each crossmember WHEELS: 10 DIA x 9 long with rease fittings DOOR LATCH: 3 Independent ratchet binders with chains, vertical second latch GASKE TS: Extruded rubber seal with metal retainer s

retainer s WELDS: All welds continuous except substructur e crossmembers

Structur e crossmembers FINISH: 'Coated inside and out with direct to metal, rust inhibiting acrylic enamel color coat HYDROTESTING: Full capacity static test DIMENSIONS: 22-11 long (21'8' inside), 99' wide (88' inside), see drawing for height OPTIONS: Steel grit blast and special paint, Amplircill, Heil and Dino pickup ROOF: 3/16'' PL roof panels with tubing and

ROOF: 3/16" PL roof panels with tubing and channel support frame LIDS: (2) 68" x 90" metal rolling lids spring

LIDS: (2) 68 X90 metal rolling lids spring loaded, self raising

ROLLERS: 4" V-groove rollers with delrin bearings and grease fittings OPENING: (2) 60" x 82" openings

with 8" divider centered on

container LATCH (2) independent ratchet binders with chains per lid

GASKETS: Extruded rubber seal with metal retainers



CONT.	A	В
20 YD	41	53
25 YD	53	65
30 YD	65	77



31

Ľ

Localion Bohamalia and Rig Layout for Cloced Loop Dynamic

FIETER HOT TO SCALES

Rovieweg By: Jäcken Herrin Ontrig Erigineer, GenesePhilipä Genpany Dalei upaissa Jänuary 2314

NOTE: There are two muster areas (animary & soandary) desending on the prevailing what direction. The muster area that is hirdeest upwhateratavina will be the designated area for phetrog and assessing the situation. In the stualian that a full evaluation is deprine necessary, all personnel will eas the localism on the main access road. Otherwise, if the main access road is blocked off, they will exit on the secondary road or walk off road in the upwindurationing direction.

