<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240

District II

811 S. First St., Artesia, NM 88210

District III

State of New Mexico Energy, Minerals & Natural Resources

Form C-104 Revised August 1, 2011

Oil Conservation Division

Submit one copy to	appropriate	District	Office
--------------------	-------------	----------	--------

Documents pending BLM approvals will

subsequently be reviewed and scanned

1000 Rio Brazos District IV 1220 S. St. Fran		anta Fe, l	NM 8750)5	122	20 South St. Santa ES N	Francis Dr. M 87505	•					MENDED REPO) R]		
	I,	REC	QUES'	T FO	R AN	OWABLE	AND AUT	HO	RIZATIO	OT I	TRA	NSF	PORT			
¹ Operator n COG Opera			SS			OWABLE OCT 19 RECE	2010		² OGRID Nu	mber	2291	37				
2208 W Mai	n Street					-cE	IVED		³ Reason for	-			ive Date			
Artesia, NM ⁴ API Numb		5	Pool Na	ame		REU				NW 6 F	Pool Co	de				
30 - 025-4					raw; Wo							17980				
⁷ Property C 319		8	Propert	ty Nam	ne	Square Bill Fe	daral Cam			9 1	⁹ Well Number 21Y					
	rface Lo	ocation	1			Square Dill Fe	uerai Com			l		211				
Ul or lot no	Section	Towns	ship R		Lot Idn	Feet from the		ine		1	/West li	ine	County			
P 11 70	31	258	_ L _	35E		240	South		924		East		Lea			
UL or lot no	ttom Ho			ange	Lot Idn	Feet from the	North/South	line	Feet from the	East	/West li	ine	County			
I	30	25		35E	Lot Iun	2426	South	inic	316		ast		Lea			
¹² Lse Code F		cing Meth Code	od 14	Gas Co		¹⁵ C-129 Perm	nit Number	¹⁶ C	-129 Effective	Date	17	C-129	Expiration Date			
		F		8/21	/18											
III. Oil a		s Tran	sporte	rs		19 Transpor	ter Name				Т		²⁰ O/G/W			
OGRID			_			and Ad			 -							
					Al	pha Crude Con	mector Pipelin	e					0			
	a			1		•	•				5					
24650					Т	arga Midstrear 1000 Louisia		•					G	111,00		
				•		Houston, T					}					
		***										Sea 26 Care		\$4.		
				·												
													,			
	•												1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
IV. Well	l Compl	letion l	Data													
²¹ Spud Da	te	²² Re	ady Dat	te/	1	²³ TD	²⁴ PBTD		²⁵ Perfora			26	⁶ DHC, MC			
2/20/18	ole Size	8/	/21/18	Casina	& Tubin	20,035'	19920 29 Dep	4 L Co	12850-19	830	30 €	Saaka	Cement			
			(ig Size			<u>. </u>				·			
14	3/4				10 3/4		115)) 				10	000	_		
9	7/8				7 5/8		11,8	890'				19	950			
6	3/4				5 5 1/2		20025- 1142		5			16	75			
 .					2 7/8		115	87								
V. Well	Test Da	nta				!										
31 Date New		² Gas D	elivery	Date	1	Test Date	³⁴ Test L	_	h ³⁵ Tl	g. Pre	ssure		³⁶ Csg. Pressure	_		
8/21/18		08	3/21/18		8	3/21/18	24 H			4500			3881			
³⁷ Choke Si 16/64	ize		⁸ Oil 275		39	Water 1049	⁴⁰ Ga 340						41 Test Method			
⁴² I hereby cer									OIL CONSER	VATIO	N DIVI	SION				
been complied complete to the						e is true and										
Signature:	1		1				Approved by:	15	4.4.	\mathcal{Q}	. , , .					
Printed name:	hnand	ia s	grev	y			Γitle:	~	run (gra	yp	•				
Amanda Avery	<u>/</u>						\mathcal{Q}	Za	H MA	4						
Title: Regulatory Te	ch II					A	Approval Date:	(10-24-	18						
									- 404							

Phone:

575-748-6962

E-mail Address: aavery@concho.com

10/16/18

Date:

יי עייינ the United

Form 3160-5 (June 2015) DE	UNITED STATES EPARTMENT OF THE INT UREAU OF LAND MANAGE NOTICES AND REPORT is form for proposals to dr. II. Use form 3160-3 (APD)	TERIOR EMENT	BBS	O _{CO}	OMB N Expires: Jo 5. Lease Serial No.	APPROVED O. 1004-0137 anuary 31, 2018
SUNDRY Do not use thi	NOTICES AND REPORT is form for proposals to dr.	「S ON WELASSIII or to re-enter	an - 1	\$ 5010	NMNM119280	
abandoned we	NOTICES AND REPORT is form for proposals to dr II. Use form 3160-3 (APD)	for such propos	salac / S	LIVED	6. If Indian, Allottee of	or Tribe Name
SUBMIT IN	TRIPLICATE - Other instru	ctions on page	REC	ENED	7. If Unit or CA/Agre	ement, Name and/or No.
Type of Well Gas Well	ner				8. Well Name and No.	EDERAL COM 21Y
2. Name of Operator COG OPERATING LLC		MANDA AVERY			9. API Well No. 30-025-44397	,
3a. Address 2208 W MAIN STREET ARTESIA, NM 88210		b. Phone No. (inclue h: 575-748-694			10. Field and Pool or DOGIE DRAW;	
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description)				11. County or Parish,	State
Sec 31 T25S R35E SESE 240 32.080286 N Lat, 103.401028					LEA COUNTY,	NM
12. CHECK THE AI	PPROPRIATE BOX(ES) TO	O INDICATE NA	ATURE O	F NOTICE,	REPORT, OR OTI	HER DATA
TYPE OF SUBMISSION			TYPE OF	ACTION		
□ Notice of Intent	☐ Acidize	□ Deepen		☐ Producti	on (Start/Resume)	☐ Water Shut-Off
_	☐ Alter Casing	☐ Hydraulic	Fracturing	☐ Reclama	ation	☐ Well Integrity
Subsequent Report	□ Casing Repair	■ New Const	ruction	□ Recomp	lete	Other
☐ Final Abandonment Notice	☐ Change Plans	Plug and A	bandon	□ Tempora	arily Abandon	
	☐ Convert to Injection	☐ Plug Back		☐ Water D	pisposal	
13. Describe Proposed or Completed Op If the proposal is to deepen direction. Attach the Bond under which the wo following completion of the involved testing has been completed. Final Al determined that the site is ready for f	ally or recomplete horizontally, given rk will be performed or provide the loperations. If the operation result bandonment Notices must be filed or the part of the provided in the provid	ve subsurface location e Bond No. on file with its in a multiple comp	ns and measu th BLM/BIA letion or reco	red and true ve Required sub empletion in a n	rtical depths of all perting sequent reports must be new interval, a Form 316	nent markers and zones. filed within 30 days 60-4 must be filed once
05/15/18 - 7/17/18 Test annul Perf 19,885-19,895' (60). Inje	us to 1500# Set CBP @ 19,9 ction test. Perf 12,850-19,8	920' and test csg 95'.	to 11,005	#. Good tes	t.	
06/15/18 to 07/15/18 Perf 12, sand & 11,789,694 gal fluid. 07/25/18 to 07/26/18 Drilled of	•	. •	2%; frac w	/12,309,953	¥	
08/06/18 Set 2 7/8" 6.5# L-80	tbg @ 11,587 ' @ packer @	2) 11,572. Install	ed gas lift :	system.		
08/21/18 Began flowing back 08/22/18 Date of first product				AND AND AND A SECOND SE		
14. I hereby certify that the foregoing is	Electronic Submission #439	9892 verified by th PERATING LLC, s	e BLM Wel	l Information lobbs	System	
Name (Printed/Typed) AMANDA	AVERY	Title	AUTHO	RIZED REP	RESENTATIVE	
Signature (Electronic	·	Date	10/16/2			
	THIS SPACE FOR	FEDERAL OF	SIAIE		 ·	
Approved By		Title			its pending BLM	approvals will
Conditions of approval, if any, are attache	d. Approval of this notice does no			Documen	its penume barre	and scanned
certify that the applicant holds legal or eq which would entitle the applicant to condu	uitable title to those rights in the su		:e	subseque	its pending BLM i ently be reviewed	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and v States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-4				UNIT	TED S	STATES		. م۲	AND LOC	, 0					PROVED	
(August 2007)			DEPAR BUREAU	TMEN J OF L	T OF	THE INT	ERIOF EMEN	SHO,	~ 192'	710	~ ~				1004-0137 y 31, 2010	
	WELL (COMPL	ETION C	R RE	CON	/PLETI	ON RE	PORT	AND LOG	W			ease Serial			
la. Type of	Well 🛛	Oil Well	Gas \	Well	D D	ry 🔲 (Other		REC	<u> </u>		6. If	Indian, Al	lottee o	r Tribe Name	;
b. Type of	f Completion	⊠ N Othe	lew Well er	□ Wo	rk Ove	er 🔲 D	eepen	☐ Plu	g Back 🔲	Diff. R	esvr.	7. U	nit or CA	Agreem	ent Name and	l No.
2. Name of	Operator			14-11-		Contact: A	MANDA	A AVERY	,				ease Name			
3. Address	2208 W M	IAIN STR	REET	-Mail: a	lavery	@concho	3a.	Phone N	o. (include area	code)	'		PI Well No		EDERAL CO	
4. Location	of Well (Re		-	d in acc	ordan	ce with Fed		uirements				10.	Field and P	ool, or	30-025-44 Exploratory	
At surfa	ce SESE	240FSL	924FEL 32.	080286	3 N La	it, 103.401	028 W	Lon	,		:				VOLFCAMP Block and S	
At top p	rod interval r	eported b	elow SES	E 240F	SL 92	24FEL 32.	080286	N Lat, 1	03.401028 W	Lon		O	r Area Se	c 31 T	25S R35E N	/ler NMP
At total		SE 240FS	SL 924FEL				101028					L	County or 1 EA		13. State NM	;
14. Date Sp 02/20/2	018		03	ate T.D. /25/201	18			□ D &	2/2018	dy to P			32	73 GL		
18. Total D	epth:	MD TVD	20035 12630		19. I	Plug Back	Γ.D.:	MD TVD	19920 12630		20. Dep	th Bri	idge Plug S		MD 1993 TVD 1263	
	lectric & Oth					py of each)			22.		vell cored OST run? tional Sur	i? vey?	☑ No ☑ No ☐ No	☐ Ye	s (Submit ana s (Submit ana s (Submit ana	lysis)
23. Casing an		<u></u>	<u> </u>	set in w	T	Bottom	Stage	Cementer	No. of Sk	s. &	Slurry	Vol.		Т*	A	Dullod
Hole Size	Size/G		Wt. (#/ft.)	(MI		(MD)	+	Depth	Type of Ce		(BB	L)	Cement		Amount 1	Pulled
14.750 9.875	1	750 N80 625 L80	45.5 29.7		0	1159 1189	$\overline{}$	5329		1000 1950				0		
6.750	†	00 P110	23.0		0	1189				1675		0				
6.750	5.00	00 P110	18.0	1	1895	2002					 			0		
24. Tubing	Pagard												•			
	Depth Set (M	ID) P	acker Depth	(MD)	Siz	e Dep	th Set (N	MD) I	Packer Depth (MD)	Size	De	epth Set (M	ID)	Packer Dept	h (MD)
2.875 25. Producii		1587		11572	∟ ,⁄	26	. Perfora	ation Rec	ord			<u> </u>	i.			
	ormation		Тор		Bot			erforated			Size		No. Holes	Ţ	Perf. Statu	s
A)	WOLFC	AMP	1	2850		19836			12850 TO 198	336			1560			
B) C)																
-D)	racture, Treat	ment Cor	ment Saugeze	Etc												<u> </u>
	Depth Interva		nem squeeze	, Etc.				A	mount and Typ	e of M	laterial			.,		
	1285	0 TO 198	836 SEE AT	TACHE	D			_								
	ion - Interval		Tract	lo:	I.	`aa	Wat	lono	max.itu	G		Dec J	tion M-4L 1			
Date First Produced 08/22/2018	Test Date 08/22/2018	Hours Tested 24	Test Production	Oil BBL 275.	N	Gas 4CF 340.0	Water BBL 1049	Corr.	ravity API	Gas Gravity	,	Product	tion Method	GAS I	_IFT	
Choke Size	Tbg. Press.	Csg.	24 Hr. Rate	Oil BBL	-	ias ACF	Water BBL	Gas:C		Well St	tatus					
16/64	SI	1950.0	_	275		340	1049			Р	ow					
	tion - Interva		Tast	los:	T.	laa .	Wat	lozo	-0.14tu			Dec 2	tion Mark : 1			
Date First Produced	Test Date	Hours Tested	Production	Oil BBL	N	Gas ACF	Water BBL	Corr.		Gas Gravity			tion Method			
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL		ias ACF	Water BBL	Gas:0 Ratio		Well St	tatus			- non	ding BLM e reviewe	approval
(See Instructi ELECTRON	ions and space NIC SUBMI ** (es for add SSION #4 DPERA	ditional data 139884 VER TOR-SU	on reve IFIED BMIT	rse sid BY TI FED	HE BLM V ** OPE	VELL I	NFORM R-SUB	ATION SYST MITTED **	EM OPE	ERATO	Do!	_{cument} bsequer	itly b	e reviewe	ed and so

		1.0										
	uction - Interv		T	Oil	Ic	Water	Oil Comite		C	Dan dan stine Mathed		
Date First Produced	Date	Hours Tested	Test Production	BBL	Gas MCF	BBL	Oil Gravity Corr. API		Gas Gravity	Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio		Well Status			
28c. Prod	uction - Interv	al D	_ _		•							
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API		Gas Gravity	Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio		Well Status	1		
29. Dispo	sition of Gas(Sold, used j	for fuel, vent	ed, etc.)	<u> </u>							
30. Sumn	ary of Porous	Zones (Inc	lude Aquife	rs):					31. For	mation (Log) Mar	kers	
tests,	all important including dept ecoveries.	zones of po th interval t	orosity and c ested, cushid	ontents there on used, tim	eof: Cored i e tool open,	ntervals and flowing and	all drill-sten shut-in pres	sures				
	Formation		Тор	Bottom		Descriptio	ns, Contents	, etc.		Name		Top Meas. Depth
RSLR TOS BOS LMAR BLCN CYCN BYCN FBSP	3 12033	(include pl	1065 1483 5042 5354 5401 6537 7878 10391	edure): 11127 12033 12507					RS TO BO LM BLG CY BY FB:	S S AR CN CN CN		1065 1483 5042 5354 5401 6537 7878 10391
33. Circle	enclosed atta	chments:				 	·					
	ectrical/Mecha ndry Notice fo					Geologic Core Ana			3. DST Rep 7 Other:	port	4. Direction	al Survey
34. I here	by certify that	the forego		ronic Subm	ission #439	-	by the BL	M Well In	formation Sy	records (see attac stem.	ched instruction	ns):
Name	(please print)	AMANDA	AVERY				Tit	le <u>AUTH</u>	ORIZED REP	RESENTATIVE	<u>.</u>	· · · · · · · · · · · · · · · · · · ·
Signa	ture	(Electron	ic Submissi	on)	-		Da	te <u>10/16/</u>	2018			
Title 18 U	J.S.C. Section	1001 and 7	Fitle 43 U.S.	C. Section 1	212, make	it a crime for	any person	knowingly ter within	y and willfully its jurisdiction	to make to any de	partment or a	gency

Square Bill Federal Com #21Y

	Square bill react	ai Colli #211	
<u>Perfs</u>	7 1/2% Acid (Gal)	<u>Sand (#)</u>	Fluid (Gal)
1	2688	354299	292992
2	1512	362489	292068
3	1512	361498	291270
4	1512	360656	291270
5	3066	362118	322728
6	1554	363049	304164
7	1512	362723	298074
8	1428	362605	298158
9	1512	361551	299754
10	1512	362593	317730
11	1512	359914	325164
12	1512	362749	298788
13	1512	352590	298998
14	1512	361361	290136
15	1512	362583	298284
16	1428	361413	339444
17	1512	358283	294756
18	1428	362317	307902
19	1512	364728	322056
20	1638	362790	304038
21	1680	360985	309624
22	1512	361609	291900
23	1512	364256	305718
24	1554	361118	292110
25	1512	360690	296520
26	1596	365180	333228
27	1512	362628	291690
28	1470	362581	295008
29	1512	362457	288960
30	2100	364121	292362
31	1428	360921	288750
32	1512	361994	288414
33	1512	361644	294084
34	1512	362051	287826
35	1554	359686	291606
36	1512	361923	285264
37	1512	360576	285600
38	1554	366549	302904
39	1470	359799	289212
Totals	58,212	11,938,968	11,698,554

HOBBS OCD OCT 1 9 2018 RECEIVED

Distance																
Part	1		Distance						Distance			Distance		ka La		
	1 .			Shots			Shots	26(11)201		Shots	12000		Shots	The same		Shots
	İ	10.000			CONTRACTOR OF THE PARTY OF		4 4	40.405			A LEGISLAND CAR.			40.400		
	Erom								_							
19.753																
19.774									19							· · · · · · · · · · · · · · · · · · ·
10.716	1 .								40							
Toggo Price G	:	AND DESCRIPTION OF THE PARTY OF	$\overline{}$	The second second									The same of the same of			
Page		The state of the s	17			23	the state of the s			-		25		The second second		Charles to the Charles to the Charles
Part																
Distance Shots S		+														
		Frac Plug	19,845	Total Shots	Frac Plug	19,684	Total Shots	Frac Plug	19,511	Total Shots	Frac Plug	19,328	l otal Shots	Frac Plug	19,112	otal Shots
	Γ		Distance			Dietanee	· · · · · ·		Dietanee			Dictance		الاستعمال المالات	Dietance	
Perfs State Perfs Stat				Shots			Shots	Sile will		Shots	3 2 3 6		Shots	100		Shots
15,961 22 5 19,777 10 5 5,8607 10 5 15,977 26 5 15,971 10 5	·	247		55.2												
	ı	18,961		5	18,777		5	18,601		5	18,421		5 .	18,241		5
Dollar 15,858 17 17 5 18,770 28 5 18,526 22 5 18,526 27 5 18,526 27 5 18,526 28 5 18,526 27 5 18,526 28	1	18,932	27	5	18,751	28	5	18,571	26	5	18,391	26	5	18,211	18	.5
Top		18,905	19	5	18,723	17	5 .	18,545	19	5	18,365	19	5	18,193	27	5
15,001 29 5 10,002 20 5 10,002 2		18,886	17	5	18,706	28	5	18,526	25	5	18,346	. 26	5	18,166	25	5
18,814 18 5	lob .	18,869	28	. 5	18,678	17	.5	18,501	20	5	18,320	19	5	18,141	20	5
18,799		18,841	27.	5	18,661	26	5	18,481	23	5	18,301	: 26	5-	18,121	27	- 5
First Plug 18,970 Fold Shorts Frace Plug 18,970 Fold Shorts Frace Plug 18,970 Frace Plug 1		18,814	18	5	18,635	15	. 5	18,458	18	5	18,275	15	5.	18,094	. 14	5
Frac Plug		18,796		.5	18.620		5 .	18,440		5	18,260		5	18,080		5
Distance Brown Shots Shots Between Shots S	:	lug to Plu	84	40	Plug to Plu	80	40	lug to Plu	84	40	Plug to Plug	84	40	Plug to Plu	84	40
Between Shots Shot		Frac Plug	18,970	Total Shots	Frac Plug	18,786	Total Shots		18,610	Total Shots		18,430	Total Shots		18,250	Total Shots
	· <u></u>															
					e in the in			10.					1			
18,051 29 5 17,881 19 6 17,881 28 5 17,282 19 5 17,233 27 8		3.10010301		Shots	Signalia		Shots	English (6)		Shots	Strong		Shots	CASH COM		Shots
From	I '	THE RESIDENCE AND ADDRESS.		<u> </u>	47.7		ļ	安全市 化基础		<u> </u>			<u> </u>	-		
From 16,000 20 5 17,826 21 5 17,846 21 5 17,445 20 5 17,225 20 5		A CONTRACTOR OF THE PERSON NAMED IN		-	The state of the s			and the second second		and the second second second			district and the second state of the			Control of the Contro
Bottom to 17,986 25 5 17,955 24 5 17,852 9 5 17,445 25 5 17,225 24 5 17,956	From					$\overline{}$		-								
Tright 21 21 22 3 3 4 5 17,006 28 5 5 17,006 20 5 17,007 21 5 5 17,006 22 5 17,007 22 5 5 17,007 23 5 5 17,007 24 5 17,006 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 5 17,007 25 17,007 25 17,007 25 17,007 25 25 10,007 25 25 25 25 25 25 25 2											1000					
17,940																
17,915 15 5 17,736 17 5 17,596 16 5 17,537 17 5 17,197 17 5 17,500 5 17,730 5 17,730 5 17,530 17,530	1												 			
Trigot T	ı	the second second														
Frace Plug 18,976 Fotal Short Frace Plug 17,890 Frace Plug 17,990 Frace Plug 17,990 Frace Plug 18,990 Frace						1/										
Prace Plug 16,879 Total Shots Frace Plug 17,890 Total Shots Frace Plug 17,706 Total Shots Tota	. I					0.5										had and decoding a second
Distance Shots Distance	: L		A									,				
Between Shots Perfs Pe	tu. 11	Frac Plug	. 16,870	otal Shots	Frac Plug	17,890	otal Snot	Frac Plug	17,706	otal Shots	Frac Plug	17,530	l otal Shot	Frac Plug	17,346	otal Snots
Between Shots Perfs Pe		唐中四种种艺术	Distance			Distance		Compet deliment	· .							
Parfs Section Parfs Parfs Section Parfs Parfs Section Parfs Parfs Parfs Parfs Parfs Parfs Section Parfs		20,000 11,000 12										Dictores				
17,151 29 5 16,868 26 5 16,769 25 5 16,809 25 5 5 16,428 26 5 5 17,109 17,109 17,109 21 8 16,825 21 5 16,744 23 5 16,868 22 5 16,332 23 5 17,009 17,005 20 5 16,879 20 5 16,876 22 5 16,819 22 5 16,335 21 5 17,009 24 5 16,839 26 5 16,876 22 5 16,819 22 5 16,335 21 5 17,009 24 5 16,833 19 5 16,844 20 5 16,474 20 5 16,215 21 5 16,833 19 5 16,844 20 5 16,474 20 5 16,274 20 10,27	1. 11			Shots	100		Shots	V.		Shots			Shots	1 3 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Shots
From Bottom to 17,1066	1- 1:		Between	Shots	\$10 July 16	Between	Shots		Between	Shots	3.00010	Between	Shots	1 3 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Between	Shots
Bottom to 17,085 26 6 16,894 25 5 16,721 23 5 16,541 22 5 16,399 23 5 17,099 20 5 16,879 20 5 16,898 22 5 16,976 22 5 16,395 23 5 17,015 21 5 16,839 23 5 16,844 20 5 16,497 23 5 16,315 21 5 16,994 5 16,834 15 16,834 20 5 16,474 20 5 16,244 20 20 20 20 20 20 20			Between Perfs		16,968	Between Perfs		14.5	Between Perfs			Between Perfs		Saitii 2	Between Perfs	
Top		17,151	Between Perfs 29	- 5	-	Between Perfs 26	. 5	16,789	Between Perfs 25	5	16,609	Between Perfs 25	-5	16,428	Between Perfs 26	5
17,039		17,151 17,130 17,106	Between Perfs 29 24	. 5 5	16,949	Between Perfs 26 24	5 5	16,789 16,767	Between Perfs 25 23	5 5	16,609 16,586	Between Perfs 25 23	·5	16,428 16,405	Between Perfs 26 23	5 5
17,015	Bottom to	17,151 17,130 17,106	Between Perfs 29 24 21	5 5 5	16,949 16,925	Between Perfs 26 24 21	5 5 5	16,789 16,767 16,744	Between Perfs 25 23 23	5 5 5	16,609 16,586 16,563	Between Perfs 25 23 22	5 5	16,428 16,405 16,382	Between Perfs 26 23 23	5 5 5
16,994	Bottom to	17,151 17,130 17,106 17,085	29 24 21 26	5 5 5	16,949 16,925 16,904	Between Perfs 26 24 21 25	5 5 5	16,789 16,767 16,744 16,721	Between Perfs 25 23 23 23	5 5 5	16,609 16,586 16,563 16,541	Between Perfs 25 23 22 22	5 5 5	16,428 16,405 16,382 16,359	Between Perfs 26 23 23 23	5 5 5 5
Proceedings Proceedings Proceedings Proceedings Procedings	Bottom to	17,151 17,130 17,106 17,085 17,059	29 24 21 26 20	5 5 5 5	16,949 16,925 16,904 16,879	26 24 21 25 20	5 5 5 5	16,789 16,767 16,744 16,721 16,698	Between Perfs 25 23 23 23 22	5 5 5 5	16,609 16,586 16,563 16,541 16,519	Between Perfs 25 23 22 22 22 22	.5 .5 .5 .5 .5	16,428 16,405 16,382 16,359 16,336	Between Perfs 26 23 23 23 21	5 5 5 5 5
Prac Plug	Bottom to	17,151 17,130 17,106 17,085 17,059 17,039	Perfs 29 24 21 26 20 24	5 5 5 5 5	16,949 16,925 16,904 16,879 16,859	26 24 21 25 20 26	5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676	Perfs 25 23 23 23 22 22	5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,497	Between Perfs 25 23 22 22 22 23	5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315	Between Perfs 26 23 23 23 21 21	5 5 5 5 5 5
Distance Shots Distance	Bottom to	17,151 17,130 17,106 17,085 17,059 17,039 17,015	Perfs 29 24 21 26 20 24	5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833	26 24 21 25 20 26	5 5 5 5 5 5 5	16,789 16,767 18,744 16,721 16,698 16,676 16,654	Perfs 25 23 23 23 22 22	5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,497 16,474	Between Perfs 25 23 22 22 22 23	5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315 16,294	Between Perfs 26 23 23 23 21 21	5 5 5 5 5 5
Between Shots Between Shots Perfs Form 16,249 25 5 16,044 18 5 15,881 32 5 15,881 32 5 15,685 35 5 15,517 36 5 5 16,227 22 5 16,044 18 5 15,863 17 5 15,685 16 5 15,502 17 5 5 16,046 23 5 16,026 23 5 15,846 23 5 15,685 22 5 15,485 22 5 15,485 22 5 15,485 22 5 16,184 23 5 15,085 22 5 15,685 22 5 15,485 22 5 15,485 22 5 16,184 23 5 15,981 23 5 15,801 23 5 15,685 22 5 15,485 22 5 16,184 22 5 16,195 23 5 15,778 22 5 15,592 23 5 15,440 22 5 16,040 22 5 15,040 22 5 14,040 24 24 24 24 24 24 24	Bottom to	17,151 17,130 17,106 17,085 17,059 17,039 17,015 16,994	29 24 21 26 20 24 21	5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814	26 24 21 25 20 26 19	5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634	Between Perfs 25 23 23 23 22 22 20	5 5 5 5 5 5 5 5	16,609 16,586 16,653 16,541 16,519 16,497 16,474 16,454	Between Perfs 25 23 22 22 22 23 20	5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315 16,294 16,274	Between Perfs 26 23 23 23 21 21 20	5 5 5 5 5 5 5 5
Between Shots Between Shots Perfs Form 16,249 25 5 16,044 18 5 15,881 32 5 15,881 32 5 15,685 35 5 15,517 36 5 5 16,227 22 5 16,044 18 5 15,863 17 5 15,685 16 5 15,502 17 5 5 16,046 23 5 16,026 23 5 15,846 23 5 15,685 22 5 15,485 22 5 15,485 22 5 15,485 22 5 16,184 23 5 15,085 22 5 15,685 22 5 15,485 22 5 15,485 22 5 16,184 23 5 15,981 23 5 15,801 23 5 15,685 22 5 15,485 22 5 16,184 22 5 16,195 23 5 15,778 22 5 15,592 23 5 15,440 22 5 16,040 22 5 15,040 22 5 14,040 24 24 24 24 24 24 24	Bottom to	17,151 17,130 17,106 17,085 17,059 17,039 17,015 16,994 Plug to Plu	29 24 21 26 20 24 21	5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 .16,814 Plug to Plu	Between Perfs 26 24 21 25 20 26 19 79	5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 2lug to Plu	Between Perfs 25 23 23 23 22 22 20 83	5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,497 16,474 16,454 Plug to Plu	Between Perfs 25 23 22 22 22 23 20 83	5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315 16,294 16,274 Plug to Plug	8etween Perfs 26 23 23 23 21 21 20 84	5 5 5 5 5 5 5 5
Perfs Perf	Bottom to	17,151 17,130 17,106 17,085 17,059 17,039 17,015 16,994 Plug to Plu	Between Perfs 29 24 21 26 20 24 21 11 17,166	5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 .16,814 Plug to Plu	26 24 21 25 20 26 19 79 16,983	5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 2lug to Plu	Between Perfs 25 23 23 23 22 22 20 83 16,804	5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,497 16,474 16,454 Plug to Plu	Between Perfs 25 23 22 22 22 22 23 20 83 16,624	5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315 16,294 16,274 Plug to Plug	Between Perfs 26 23 23 23 21 21 20 84 16,443	5 5 5 5 5 5 5 5
From	Bottom to	17,151 17,130 17,106 17,085 17,059 17,039 17,015 16,994 Plug to Plug	Between Perfs 29 24 21 26 20 24 21 1 17.166	5 5 5 5 5 5 5 5 7 5	16,949 16,925 16,904 16,879 16,859 16,833 .16,814 Plug to Plu	Between Perfs 26 24 21 25 20 26 19 79 16,983	5 5 5 5 5 5 5 5 7 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 2lug to Plu	Between Perfs 25 25 23 23 22 22 20 83 16,804 Distance	5 5 5 5 5 5 5 5 5 7 7	16,609 16,586 16,563 16,541 16,519 16,497 16,474 16,454. Plug to Plug	Between Perfs 25 23 22 22 22 20 20 83 16,624	5 5 5 5 5 5 5 5 5 7 5	16,428 16,405 16,382 16,359 16,336 16,315 16,294 16,274 Plug to Plug	Between Perfs 26 23 23 23 21 21 20 84 16,443	5 5 5 5 5 5 5 5 5 5 7 7
From Bottom to 16,227 22 5 16,044 18 5 15,863 17 5 15,681 16 5 15,502 17 5 16,025 21 5 16,026 23 5 15,046 23 5 15,065 22 5 15,485 22 5 15,485 23 5 16,026 23 5 15,023 22 5 15,065 22 5 15,445 23 5 16,033 22 5 15,085 22 5 15,043 23 5 16,181 22 5 15,981 23 5 15,001 23 5 15,502 22 5 15,440 22 5 16,181 22 5 15,981 23 5 15,0778 22 5 15,598 23 5 15,440 22 5 16,033 23 5 15,958 23 5 15,578 23 5 15,578 23 5 15,578 23 5 15,578 23 5 15,578 23 5 15,578 23 5 15,578 23 5 15,578 5 15,578 5 15,376 5 5 16,093 5 15,913 5 15,773 3 5 15,575 3 5 15,376 5 5 16,093 5 15,913 5 15,773 3 5 15,575 3 5 15,376 5 5 16,093 5 15,913 5 15,773 3 5 15,575 3 5 15,376 5 5 14,000 10,000 16,000	Bottom to	17,151 17,130 17,106 17,085 17,059 17,039 17,015 16,994 Plug to Plug	Between Perfs 29 24 21 26 20 24 21 81 17,156 Distance Between	5 5 5 5 5 5 5 5 7 5	16,949 16,925 16,904 16,879 16,859 16,833 .16,814 Plug to Plu	Between Perfs 26 24 21 25 20 26 19 79 16,983	5 5 5 5 5 5 5 5 7 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 2lug to Plu	Between Perfs 25 23 23 23 22 22 20 83 10,804 Distance Between	5 5 5 5 5 5 5 5 5 7 7	16,609 16,586 16,563 16,541 16,519 16,497 16,474 16,454. Plug to Plug	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between	5 5 5 5 5 5 5 5 5 7 5	16,428 16,405 16,382 16,359 16,336 16,315 16,294 16,274 Plug to Plug	Between Perfs 26 23 23 21 21 20 B4443	5 5 5 5 5 5 5 5 5 5 7 7
Top	Bottom to	17,151 17,130 17,130 17,106 17,085 17,039 17,015 16,994 Plug to Plug Frac Plug	Between Perfs 29 24 21 26 20 24 21 81 17,156 Distance Between Perfs	5 5 5 5 5 5 5 5 5 7 40 Total Shots	16,949 16,925 16,904 16,879 16,859 16,833 .16,814 Plug to Plug Frac Plug	Between Perfs 26 24 21 25 20 26 19 79 16,983	5 5 5 5 5 5 5 5 5 40 Total Shots	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug	Between Perfs 25 23 23 23 22 22 20 83 16,804 Distance Between Perfs	5 5 5 5 5 5 5 5 5 40 Total Shots	16,609 16,586 16,563 16,563 16,541 16,497 16,474 16,454 Plug to Plug Frac Plug	Between Perfs 25 23 22 22 22 20 83 16,624 Distance Between Perfs	5 5 5 5 5 5 5 5 5 40 Total Shots	16,428 16,405 16,332 16,359 16,336 16,315 16,294 16,274 Plug to Plug	Between Perfs 26 23 23 23 21 21 20 Between Distance Between Perfs Description Perfs Description Perfs Description Perfs Description Descript	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Bottom to 16,184 23 5 16,003 22 5 15,623 22 5 15,643 23 5 15,463 23 5 16,184 22 8 16,189 23 5 15,981 23 5 15,778 22 5 15,582 23 5 15,440 22 8 16,139 23 5 15,986 23 5 15,986 23 5 15,418 26 5 16,093 5 15,913 5 15,778 22 5 15,575 22 5 15,392 16 5 16,093 5 15,913 5 15,773 3 5 15,553 5 15,376 5 5 15,096 16,093 5 15,913 5 15,773 3 5 15,553 5 15,376 5 5 15,096 16,093	Bottom to	17,151 17,105 17,106 17,085 17,059 17,015 16,994 Plug to Plug Frac Plug	Between Perfs 29 24 21 26 20 24 21 81 17,186 Distance Between Perfs 25	5 5 5 5 5 5 5 5 40 Total Shots	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug	Between Perfs 26 24 21 25 20 26 19 79 16,983 Distance Between Perfs 32	5 5 5 5 5 5 5 5 5 40 Total Shots	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug Frac Plug	Between Perfs 25 23 23 23 22 22 20 Distance Between Perfs 32	5 5 5 5 5 5 5 5 40 Total Shots	16,699 16,586 16,563 16,541 16,519 16,474 16,474 16,454 Plug to Plu Frac Plug	Between Perfs 25 23 22 22 22 20 83 20 Bstance Between Perfs 35	5 5 5 5 6 5 5 40 Total Shots	16,428 16,406 16,359 16,359 16,336 16,315 16,294 16,274 10,294 16,274 10,294 15,517	Between Perfs 26 23 23 23 21 21 20 84 16,443 Distance Between Perfs 36	5 5 5 5 5 5 5 5 5 5 5 5 7 7 40 Total Shots
16,161 22 5 15,981 23 5 15,861 23 5 15,801 23 5 15,520 22 5 15,440 22 5 16,139 23 5 15,936 22 5 15,778 22 5 15,598 23 5 15,418 26 5 16,116 23 5 15,936 23 5 15,753 25 15,575 22 5 15,376 5 16,093 5 15,913 5 15,733 5 15,553 5 15,376 5 10	Bottom to Top	17,151 17,100 17,100 17,005 17,039 17,039 17,015 16,994 Plug to Plu Frac Plug	Between Perfs 29 24 21 26 20 24 21 Tr.186 Distance Between Perfs 25 22	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug	Between Perfs 26 24 21 25 20 26 19 79 16,983 Distance Between Perfs 32 18	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug Frac Plug	Between Perfs 25 23 23 22 22 20 Distance Between Perfs 32 17	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,474 16,474 16,454. Plug to Plug Frac Plug	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16	5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug	Between Perfs 26 23 23 21 21 20 84 16,443 Distance Between Perfs 36 17	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
16,139 23 5 15,958 22 5 15,778 22 5 15,598 23 5 15,418 26 5 16,116 23 5 15,936 23 5 15,756 23 5 15,575 22 5 15,392 16 5 16,093 5 15,913 5 15,733 5 15,553 5 15,376 5 10y to Plu 80 40 Plug to Plu 67 40 Plug to Plu 67 40 Plug to Plu 64 40 Plug to Plu 63 40 Frac Plug 16,264 Total Shots Frac Plug 16,070 Total Shots Frac Plug 15,890 Total Shots Frac Plug 15,707 Total Shots Frac Plug 15,525 Total Shots Frac Plug 16,264 Total Shots Frac Plug 16,070 Total Shots Frac Plug 15,890 Total Shots Frac Plug 15,707 Total Shots Frac Plug 15,525 Total Shots Frac Plug 16,264 Total Shots Frac Plug 16,070 Total Shots Frac Plug 15,890 Total Shots Frac Plug 15,707 Total Shots Frac Plug 15,525 Total Shots Frac Plug 15,351 25 5 15,171 25 5 14,990 27 5 14,810 26 5 14,829 28 5 15,352 23 5 15,147 22 5 14,990 27 5 14,810 26 5 14,829 28 5 15,353 25 5 15,147 22 5 14,990 27 5 14,787 23 5 14,807 23 5 15,353 23 5 15,125 23 5 14,990 27 5 14,787 23 5 14,807 23 5 15,353 23 5 15,125 23 5 14,990 23 5 14,764 22 5 14,562 23 5 15,238 23 5 15,057 22 5 14,990 23 5 14,762 23 5 14,552 23 5 15,238 23 5 15,057 22 5 14,877 22 5 14,697 23 5 14,517 23 5 15,215 19 5 15,035 18 5 14,855 19 5 14,674 17 5 14,494 17 5 15,196 5 15,017 5 14,836 5 14,657 5 14,477 5 5 19	From Bottom to	17,151 17,190 17,085 17,059 17,039 17,015 16,994 Plug to Plug Frac Plug 16,249 16,227 16,205	Between Perfs 29 24 21 26 20 24 21 17,186 Distance Between Perfs 22 21 21 21 22 21 21 22 21	5 5 5 5 5 5 5 5 5 7 7 40 Total Shots	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug	Between Perfs 26 24 21 25 20 26 19 19 16,983 Distance Between Perfs 32 18 23	5 5 5 5 5 5 5 5 5 5 7 7 40 Total Shots	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug Frac Plug 15,881 15,863 15,846	Between Perfs 25 23 23 23 22 22 20 20 B3 16,804 Distance Between Perfs 32 17 23	5 5 5 5 5 5 5 5 5 7 5 7 5 5 5 5 5 5 5 5	16,609 16,589 16,563 16,563 16,541 16,519 16,474 16,454. Plug to Plu Frac Plug 15,698 15,681 15,685	Between Perfs 25 23 22 22 22 22 20 83 20 Between Perfs 35 16,624	5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug	Between Perfs 26 23 23 23 21 21 20 B4 443 3 Between Perfs 36 17 22	5 5 5 5 5 5 5 5 5 5 5 7 5 5 5 5 5 5 5 5
16,116 23 5 15,936 23 5 15,756 23 5 15,575 22 5 15,392 16 5 16,093 5 15,913 5 15,733 5 15,553 5 15,376 5 10g to Plu 80 40 Plug to Plu 67 40 Plug to Plu 67 40 Plug to Plu 64 40 Plug to Plu 63 40 Frac Plug 16,264 Total Shots Frac Plug 16,070 Total Shots Frac Plug 15,890 Total Shots Frac Plug 15,707 Total Shots Frac Plug 15,525 Total Shots Frac Plug 16,264 Total Shots Frac Plug 16,070 Total Shots Frac Plug 15,890 Total Shots Frac Plug 15,707 Total Shots Frac Plug 15,525 Total Shots Frac Plug 16,264 Total Shots Frac Plug 16,070 Total Shots Frac Plug 15,890 Total Shots Frac Plug 15,707 Total Shots Frac Plug 15,525 15,351 25 5 15,171 25 5 14,990 27 5 14,810 26 5 14,629 28 5 15,328 23 5 15,147 22 5 14,967 22 5 14,787 23 5 14,607 23 5 From 15,305 22 5 15,125 23 5 14,945 23 5 14,784 22 5 14,584 22 5 Top 15,260 22 5 15,060 23 5 14,900 23 5 14,784 22 5 14,629 23 5 14,652 23 5 15,238 23 5 15,057 22 5 14,877 22 5 14,697 23 5 14,617 23 5 15,215 19 5 15,035 18 5 14,855 19 5 14,674 17 5 14,494 17 5 15,196 5 15,017 5 14,836 5 14,657 5 14,647 17 5 14,494 17 5 Plug to Plug 15,366 Total Shots Frac Plug 15,186 Total Shots Frac Plug 15,007 Total Shots Frac Plug 14,826 Total Shots Frac Plug 14,647 Total Shots Tota	From Bottom to	17,151 17,191 17,106 17,085 17,059 17,039 17,015 16,994 Plug to Plug Frac Plug 16,249 16,227 16,205 16,184	Between Perfs 29 24 21 26 20 24 21 17,186 Distance Between Perfs 25 22 21 23	5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plu Frac Plug 16,061 16,044 16,026 16,003	Between Perfs 26 24 21 25 20 26 19 79 16,983 21 82 22	5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plu Frac Plug 15,881 15,863 15,846 15,823	Between Perfs 25 23 23 23 22 22 20 83 16,804 Distance Between Perfs 32 17 23 22 22 23 22 24 25 25 25 25 25 25	5 5 5 5 5 5 5 5 5 40 Fotal Shots Shots 5 5 5	16,609 16,586 16,563 16,564 16,519 16,497 16,474 16,454 Plug to Plu Frac Plug 15,688 15,681 15,685 15,643	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16 22 23	5 5 5 5 6 5 5 40 Total Shots	16,428 16,405 16,382 16,359 16,336 16,315 16,219 16,274 Plug to Plug Frac Plug 15,517 15,502 15,463	Between Perfs 26 23 23 23 21 21 20 B4 16,443 36 17 22 23 23 24 25 25 25 25 25 25 25	5 5 5 5 5 5 5 5 5 5 40 Total Shots
16,093 5 15,913 5 15,733 5 15,553 5 15,376 5 15,376 5 15,076 15 16,070 16,070 10 10 10 10 10 10 10	From Bottom to	17,151 17,105 17,005 17,059 17,059 17,015 16,994 16,997 16,205 16,205 16,184 16,161	Between Perfs 29 24 21 26 20 24 21 81 17,166 Distance Between Perfs 25 22 21 23 22	5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plu Frac Plug 16,061 16,044 16,026 16,003 15,981	Between Perfs 26 24 21 25 20 26 19 79 16,983 Distance Between Perfs 32 18 23 22 23	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plu Frac Plug 15,881 15,863 15,846 15,823 15,845	Between Perfs 25 23 23 23 22 22 20 83 16,804 Distance Between Perfs 32 17 23 22 23	5 5 5 5 5 5 5 5 40 Fotal Shots Shots 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,497 16,474 16,454 Plug to Plug Frac Plug 15,688 15,681 15,685 15,683 15,683 15,683	Between Perfs 25 23 22 22 22 22 20 83 16,624 Distance Between Perfs 35 16 22 23 22 23 22 23 22 23 22 23 22 23 22	5 5 5 5 5 5 40 Total Shots Shots 5 5 5 6	16,428 16,405 16,332 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug 15,517 15,502 15,485 15,440	8etween Perfs 26 23 23 21 21 20 20 84 16,443 7 22 23 22 22	5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Plug to Plug 80 40 Plug to Plu 67 40 Plug to Plu 67 40 Plug to Plu 64 40 Plug to Plu 63 40 Plug to Plu 64 40 Plug to Plu 63 40 Plug to Plu 64 40 Plug to Plu 65 Plug to Plu	From Bottom to	17,151 17,106 17,106 17,005 17,005 17,039 17,015 16,099 Plu Frac Plug 16,227 16,227 16,184 16,181 16,139	Between Perfs 29 24 21 26 20 24 21 T.155 Distance Between Perfs 25 22 21 23 22 23	5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plu Frac Plug 16,061 16,024 16,023 15,981 15,958	Between Perfs 26 24 21 25 20 26 19 79 16,983 Distance Between Perfs 32 18 23 22 23 22	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,846 15,840 15,878	Between Perfs 25 23 23 23 22 22 20 B83 16,804 Distance Between Perfs 32 17 23 22 23 22 23 22	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,497 16,474 16,454 16,454 15,688 15,681 15,683 15,683 15,643 15,620 15,598	Between Perfs 25 23 22 22 22 20 Bs 3 16,624 Distance Between Perfs 35 16 22 23 22 23 22 23	5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,359 16,359 16,336 16,315 16,274 11ug to Pluy Frac Plug 15,517 15,502 15,465 15,440 15,418	Between Perfs 26 23 23 21 21 20 84 46,443 16,443 36 17 22 23 22 26	5 5 5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5
Frac Plug 16,264 Total Shots Frac Plug 16,070 Total Shots Frac Plug 15,890 Total Shots Frac Plug 15,707 Total Shots Frac Plug 14,826 Total Shots Frac Plug 14,826 Total Shots Frac Plug 14,827 Total Shots Frac Plug 14,826 Total Shots Frac Plug 14,847 Total Shots Frac Plug 15,366 Total Shots Frac Plug 15,007 Total Shots Frac Plug 14,826 Total Shots Frac Plug 14,847 Total Shots Frac Plug 14	From Bottom to	17,151 17,109 17,106 17,059 17,059 17,015 16,994 Plug to Plug 16,227 16,225 16,184 16,161 16,139 16,116	Between Perfs 29 24 21 26 20 24 21 T.155 Distance Between Perfs 25 22 21 23 22 23	5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug 16,061 16,044 16,026 16,003 15,981 15,988	Between Perfs 26 24 21 25 20 26 19 79 16,983 Distance Between Perfs 32 18 23 22 23 22	5 5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug Frac Plug 15,881 15,863 15,846 15,823 15,878 15,778	Between Perfs 25 23 23 23 22 22 20 B83 16,804 Distance Between Perfs 32 17 23 22 23 22 23 22	5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,699 16,589 16,565 16,651 16,641 16,497 16,474 16,454-Plug to Plug Frac Plug 15,698 15,681 15,685 15,685 15,682 15,598 15,575	Between Perfs 25 23 22 22 22 20 Bs 3 16,624 Distance Between Perfs 35 16 22 23 22 23 22 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,359 16,336 16,315 16,294 16,279 116,279 116,279 116,279 15,517 15,502 15,485 15,485 15,440 15,418 15,392	Between Perfs 26 23 23 21 21 20 84 46,443 16,443 36 17 22 23 22 26	5 5 5 5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Distance Shots Distance Shots	From Bottom to	17,151 17,100 17,100 17,005 17,039 17,015 16,994 Plug to Plu Frac Plug 16,227 16,205 16,184 16,139 16,116 16,093	Between Perfs 29 24 21 26 20 24 21 81 11,186 Distance Between Perfs 25 22 21 23 22 23 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,859 16,833 16,814 Plug to Plu Frac Plug 16,061 16,026 16,003 15,981 15,936 15,936 15,913	Between Perfs 26 24 21 25 20 26 19 79 16,983 20 28 22 23 22 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,729 16,676 16,654 16,634 Plug to Plug Frac Plug 15,881 15,863 15,863 15,878 15,778 15,778	Between Perfs 25 23 23 23 22 22 20 B3 16,804 Distance Between Perfs 32 22 23 22 23 22 23 22 23 22 23 23 22 23 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,699 16,589 16,583 16,541 16,519 16,474 16,474 16,454 Plug to Plug Frac Plug 15,698 15,681 15,698 15,643 15,598 15,575 15,553	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16 22 23 22 23 22 23 22 23 22 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug 15,517 15,502 15,463 15,440 15,440 15,440 15,432 15,376	Between Perfs 26 23 23 23 21 21 20 20 21 20 20 21 20 20 21 21 20 20 20 22 20 26 16	5 5 5 5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Between Perfs Pe	From Bottom to	17,151 17,190 17,105 17,059 17,039 17,015 16,994 Plug to Plug Frac Plug 16,227 16,205 16,184 16,161 16,193 Plug to Plug	Between Perfs 29 24 21 26 20 24 21 T.1566 20 25 21 23 22 23 23 28 80	5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 40 Total Shots	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plu Frac Plug 16,061 16,044 16,026 16,003 15,981 15,958 15,938 Plug to Plu	Between Perfs 26 24 21 25 20 26 19 79 16,983 20 28 23 22 23 22 23 67	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,654 16,654 16,634 Plug to Plu Frac Plug 15,881 15,863 15,846 15,823 15,801 15,778 15,773	Between Perfs 25 23 23 23 22 22 20 83 16,804 Distance Between Perfs 32 22 23 22 23 22 23 22 23 25 67	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,588 16,563 16,541 16,519 16,497 16,474 16,454 Plug to Plug Frac Plug 15,688 15,681 15,685 15,683 15,620 15,598 15,575 15,553 Plug to Plu	Between Perfs 25 23 22 22 22 23 20 B3 16,624 Distance Between Perfs 35 16 22 23 22 23 22 23 24 25 26 26	5 5 5 5 6 5 5 40 Total Shots 5 5 5 5 5 5 5 40 Total Shots	16,428 16,405 16,382 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug 15,517 15,502 15,463 15,440 15,418 15,392 15,376 Plug to Plug	Between Perfs 26 23 23 23 21 21 20 20 20 20 20 20 20 20 20 20 20 20 20	5 5 5 5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Between Perfs Pe	From Bottom to	17,151 17,190 17,105 17,059 17,039 17,015 16,994 Plug to Plug Frac Plug 16,227 16,205 16,184 16,161 16,193 Plug to Plug	Between Perfs 29 24 21 26 20 24 21 T.1566 20 25 21 23 22 23 23 28 80	5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 40 Total Shots	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug 16,061 16,044 16,026 16,003 15,981 15,936 15,913 Plug to Plug Frac Plug	Between Perfs 26 24 21 25 20 26 19 79 16,983 20 28 23 22 23 22 23 67	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,654 16,654 16,634 Plug to Plu Frac Plug 15,881 15,863 15,846 15,823 15,801 15,778 15,773	Between Perfs 25 23 23 23 22 22 20 83 16,804 Distance Between Perfs 32 22 23 22 23 22 23 22 23 25 67	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,588 16,563 16,541 16,519 16,497 16,474 16,454 Plug to Plug Frac Plug 15,688 15,681 15,685 15,683 15,620 15,598 15,575 15,553 Plug to Plu	Between Perfs 25 23 22 22 22 23 20 B3 16,624 Distance Between Perfs 35 16 22 23 22 23 22 23 24 25 26 26	5 5 5 5 6 5 5 40 Total Shots 5 5 5 5 5 5 5 40 Total Shots	16,428 16,405 16,332 16,359 16,336 16,315 16,294 116,274 11ug to Pluy Frac Plug 15,517 15,557 15,463 15,440 15,418 15,392 15,376 Plug to Pluy Frac Plug	Between Perfs 26 23 23 23 21 21 20 20 20 20 20 20 20 20 20 20 20 20 20	5 5 5 5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
From 15,351 25 5 15,171 25 5 14,990 27 5 14,810 26 5 14,629 28 5 15,1328 23 5 15,147 22 5 14,967 22 5 14,767 23 5 14,607 23 5 15,328 23 5 15,147 22 5 14,945 23 5 14,764 22 5 14,764 22 5 14,562 23 5 15,260 22 5 15,162 22 5 14,945 23 5 14,764 22 5 14,562 23 5 15,260 22 5 15,160 22 5 14,900 23 5 14,762 22 5 14,562 23 5 15,238 23 5 15,067 22 5 14,877 22 5 14,697 23 5 14,517 23 5 15,215 19 5 15,035 18 5 14,875 22 5 14,667 23 5 14,697 23 5 15,196 5 15,017 5 14,836 5 14,836 5 14,657 5 14,677 5 14,477	From Bottom to	17,151 17,105 17,005 17,059 17,059 17,059 17,015 16,994 16,292 16,227 16,205 16,184 16,116 16,139 16,116 16,139 16,116 16,093 16,116 16,093 16,116 16,093 16,116 16,093	Between Perfs 29 24 21 26 20 24 21 81 17,166 Distance Between Perfs 25 22 21 23 23 23 80 16,264	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 40 Total Shots	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug 16,061 16,044 16,026 16,003 15,981 15,936 15,913 Plug to Plug Frac Plug	Between Perfs 26 24 21 25 20 26 19 79 16,983 21 82 22 23 22 23 67 16,070	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,756 15,778 15,778 15,778	Between Perfs 25 23 23 23 22 22 20 B3 16,804 Distance Between Perfs 32 22 23 22 23 25 67 15,890 Distance	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,699 16,586 16,563 16,641 16,691 16,497 16,474 16,454 Plug to Plug Frac Plug 15,698 15,681 15,085 15,683 15,553 15,553 15,555 15,558 15,575 15,558 15,575 15,575 15,575 16,575 16,575 16,575 17,575	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16 22 23 22 23 20 44 15,707	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,332 16,359 16,336 16,315 16,294 116,274 11ug to Pluy Frac Plug 15,517 15,557 15,463 15,440 15,418 15,392 15,376 Plug to Pluy Frac Plug	8etween Perfs 26 23 23 23 21 21 20 20 84 16,443 7 22 26 16 63 15,526	5 5 5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 5 5 40 Total Shots
From Bottom to Top Top Top Top Top Top Top Top Top To	From Bottom to	17,151 17,105 17,106 17,005 17,005 17,005 17,015 16,909 17,015 16,909 16,227 16,205 16,184 16,184 16,139 16,116 16,033 Plug to Plug Frac Plug	Between Perfs 29 24 21 26 20 24 21 81 17.186 Distance Between Perfs 25 22 21 23 22 23 25 80 16.284 Distance Between Perfs 25 25 25 25 25 25 25 25 25 25 25 25 25	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 40 Total Shots	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug 16,061 16,044 16,026 16,003 15,981 15,936 15,913 Plug to Plug Frac Plug	Between Perfs 26 24 21 25 20 26 26 19 79 16,983 22 23 22 23 22 23 22 23 25 67 16,070 Distance Between Perfs 25 25 25 25 25 25 25 25 25 25 25 25 25	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,756 15,778 15,778 15,778	Between Perfs 25 23 23 23 22 22 20 20 B3 16,804 20 20 20 20 20 20 20 20 20 20 20 20 20	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,699 16,586 16,563 16,641 16,691 16,497 16,474 16,454 Plug to Plug Frac Plug 15,698 15,681 15,085 15,683 15,553 15,553 15,555 15,558 15,575 15,558 15,575 15,575 15,575 16,575 16,575 16,575 17,575	Between Perfs 25 23 22 22 22 20 20 83 16,624 Distance Between Perfs 35 22 23 22 23 22 23 22 23 22 23 22 25 25 25 25 25 25 25 25 25 25 25 25	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,332 16,359 16,336 16,315 16,214 116,274 Plug to Plug Frac Plug 15,517 15,502 15,463 15,440 15,418 15,376 Plug to Plug Frac Plug	Between Perfs 26 23 23 23 21 21 20 20 84 16,443 3 22 22 26 16 63 15,526 Distance Between Perfs 36 CS 22 26 CS 25 C	5 5 5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 5 5 5 5 5 40 Total Shots
From Bottom to 15,305	From Bottom to	17,151 17,100 17,005 17,059 17,059 17,015 16,994 Plug to Plug Frac Plug 16,249 16,205 16,184 16,161 16,139 16,116 16,009 16,109	Between Perfs 29 24 21 26 20 24 21 81 17,166 Distance Between Perfs 25 22 23 23 23 80 16,264 Distance Perfs	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 40 Total Shots	16,949 16,925 16,904 16,859 16,833 16,814 Plug to Plug Frac Plug 16,061 16,044 16,026 16,003 15,981 15,958 15,913 Plug to Plug	Between Perfs 26 24 21 25 20 26 19 79 16,983 20 23 22 23 22 23 22 23 27 16,070 Distance Between Perfs Distance Between Perfs Per	5 5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,654 16,654 16,634 Plug to Plu Frac Plug 15,881 15,863 15,846 15,783 15,778 15,778 15,778 15,773	Between Perfs 25 23 23 22 22 20	5 5 5 5 40 Fotal Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,641 16,519 16,497 16,474 16,454 Plug to Plug Frac Plug 15,688 15,681 15,685 15,683 15,685 15,685 15,575 15,575 15,575 10,575	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16 22 23 22 23 20 Distance Between Perfs 35 16 64 15,707	5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,332 16,359 16,336 16,315 16,274 Plug to Plug Frac Plug 15,517 15,502 15,463 15,440 15,418 15,392 15,376 Plug to Plug Frac Plug	Between Perfs 26 23 23 21 21 20 20 21 20 20 21 20 21 20 21 20 21 20 20 20	5 5 5 5 5 5 5 40 Total Shots 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Bottom to 15,283 23 5 15,102 22 5 14,922 22 5 14,742 22 5 14,562 23 5 1 14,562 23 5 1 15,286 22 6 15,080 23 5 14,900 23 5 14,720 23 5 14,539 22 5 15,238 23 5 15,057 22 6 14,877 22 5 14,697 23 5 14,517 23 5 15,215 19 5 15,035 18 5 14,855 19 5 14,674 17 5 14,494 17 5 15,196 5 5 15,017 5 14,836 5 5 14,855 19 5 14,674 17 5 14,494 17 5 15,196 15 15,196 15 15,017 15 14,836 15 14,856 15 14,674 17 15 14,477 15 14,494 17 15 14,910 19 19 19 19 19 19 19 19 19 19 19 19 19	From Bottom to	17,151 17,105 17,005 17,005 17,005 17,005 17,005 17,005 16,909 16,905 16,905 16,205 16,116 16,139 16,116 16,139 16,116 16,003 16,116 16,003 16,116 16,003 16,116 16,003 16,116 16,003 16,116 16,003 16,116 16,003 16	Between Perfs 29 24 21 26 20 24 21 81 17,166 Distance Between Perfs 25 22 21 23 23 23 80 16,264 Distance Between Perfs 25 25 25 25 25 25 25 25 25 25 25 25 25	5 5 5 5 5 5 5 40 Fotal Shots 5 5 5 5 5 5 5 5 5 40 Fotal Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plu Frac Plug 16,003 15,981 16,003 15,981 15,958 15,933 Plug to Plug Frac Plug	Between Perfs 26 24 21 25 20 26 19 79 16,983 21 22 23 22 23 22 23 25 67 16,070 Distance Between Perfs 25 25	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 40 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,756 15,778 15,778 15,778 15,778 15,778 15,778 15,778 15,778 15,778 15,778	Between Perfs 25 23 23 22 22 20 83 16,804 Distance Between Perfs 22 23 23	5 5 5 5 5 5 5 5 40 Fotal Shots 5 5 5 5 5 5 5 5 40 Fotal Shots 5 5 5 5 5 5 5 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	16,609 16,586 16,563 16,641 16,519 16,497 16,474 16,454 Plug to Plug Frac Plug 15,698 15,681 15,005 15,685 15,553 15,553 15,555 15,555 15,555 15,558 15,575 15,558 15,575	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16 22 23 22 23 20 Distance Between Perfs 26	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,332 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug 15,517 15,502 15,465 15,440 15,440 15,418 15,392 15,376 Plug to Plug Frac Plug	Setween Perfs 26 23 23 21 21 20 20	5 5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 40 Total Shots
Top 15,280 23 5 15,080 23 5 14,800 23 5 14,720 23 5 14,539 22 5 5 15,288 23 5 15,057 22 5 14,877 22 5 14,697 23 5 14,517 23 5 15,215 19 5 15,035 18 5 14,855 19 5 14,674 17 5 14,494 17 5 15,196 5 15,017 5 14,836 5 14,657 5 14,477 5 14,477 5 14,477 5 14,477 15 14,477	From Bottom to Top	17,151 17,105 17,106 17,005 17,005 17,039 17,015 16,949 18,227 16,225 16,225 16,116 16,139 16,140 16	Between Perfs 29 24 21 26 20 24 21	5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug 16,061 16,044 16,026 16,003 15,981 15,936 15,913 Plug to Plug Frac Plug 15,171 15,171	Between Perfs 26 24 21 25 20 26 19 19 16,883 21 8 23 22 23 27 16,070 Distance Between Perfs 25 22 25 22 25 25 22 25 25 22	5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,733 Plug to Plug 15,778 15,778 15,778 11,756 11,733 Plug to Plug 14,990 14,990	Between Perfs 25 23 23 23 22 22 20 Bs 3 25 25 25 25 25 25 25 25 25 25 25 25 25	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,497 16,474 16,454 16,454 15,688 15,681 15,683 15,683 15,683 15,575 15,553 Plug to Plu Frac Plug	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16 22 23 22 23 20 64 15,707 Distance Between Perfs 25 26 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,332 16,359 16,336 16,315 16,294 116,274 11ug to Pluy Frac Plug 15,517 15,557 15,463 15,440 15,418 15,392 15,376 Plug to Pluy Frac Plug	Between Perfs 23 23 23 21 21 20 20 21 20 20 21 20 20	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
15,238 23 5 15,057 22 5 14,877 22 5 14,674 23 5 14,517 23 5 15,215 19 5 15,035 18 5 14,855 19 5 14,674 17 5 14,494 17 5 15,198 5 15,017 5 14,836 5 14,855 5 15,017 5 14,674 17 5 14,477 5 14,477 5 14,477 5 14,477 5 14,477 5 14,477 15 14,4	From Bottom to Top	17,151 17,105 17,106 17,005 17,005 17,005 17,015 16,094 Plug to Plug 16,227 16,205 16,116 16,093 Plug to Plug Frac Plug 15,351 15,328 16,305	Between Perfs 29 24 21 26 20 24 21 31 31 31 31 31 31 31 31 31 31 31 31 31	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,859 16,833 16,814 Plug to Plug Frac Plug 16,061 16,044 16,026 16,003 15,981 15,986 15,936 15,913 Plug to Plug Frac Plug 15,171 15,171 15,147 15,147	Between Perfs 26 24 21 25 20 26 26 27 20 26 26 27 20 26 26 27 20 26 27 20 26 27 20 26 27 20 27 2	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,623 15,878 15,733 Plug to Plug Frac Plug 14,990 14,997 14,945	Between Perfs 25 23 23 23 22 22 20 B3 16,804 Distance Between Perfs 22 23 25 25 25 25 25 25 25 25 25 25 25 25 25	5 5 5 5 5 5 5 5 40 Fotal Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,699 16,589 16,565 16,651 16,519 16,497 16,474 16,454 16,454 15,698 15,681 15,685 15,685 15,583 15,575 15,553 Plug to Plug Frac Plug	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16 22 23 22 24 25 26 26 27 28 28 28 28 28 28 28 28	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug 15,517 15,502 15,463 15,440 15,485 15,392 15,376 Plug to Plug Frac Plug 14,629 14,629 14,607 14,584	Between Perfs 26 23 23 21 21 20	5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
15,215 19 5 15,035 18 5 14,855 19 5 14,674 17 5 14,494 17 5 15,196 5 15,017 5 14,836 5 14,657 5 14,657 5 14,477 5 14,477 5 14,676 19 19 19 19 19 19 19 19 19 19 19 19 19	From Bottom to Top From Bottom to Top	17,151 17,106 17,059 17,059 17,059 17,039 17,015 16,994 Plug to Plug Frac Plug 16,225 46,184 16,181 16,198 16,033 Plug to Plug Frac Plug	Between Perfs 29 24 21 26 20 24 21	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,859 16,833 16,814 Plug to Plug Frac Plug 16,003 15,961 15,956 15,936 15,913 Plug to Plug Frac Plug 15,171 15,147 15,125 15,102	Between Perfs 26 24 21 25 20 26 26 27 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug Frac Plug 15,881 15,863 15,848 15,823 15,878 15,778 15,778 15,778 15,778 14,945 14,992	Between Perfs 25 23 23 22 22 20	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,474 16,454 Plug to Plu Frac Plug 15,688 15,620 15,683 15,620 15,598 15,575 15,553 Plug to Plu Frac Plug 14,810 14,787	Between Perfs 25 23 22 22 22 23 20 B33 16,624 Distance Between Perfs 35 16 22 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,316 16,214 16,274 Plug to Plug Frac Plug 15,517 15,502 15,463 15,440 15,418 15,392 15,376 Plug to Plug Frac Plug 14,629 14,607 14,584 14,562	Between Perfs 26 23 23 23 21 21 20 20 20 20 20 20	5 5 5 5 5 5 5 5 40 Total Shots Shots 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
15,196 5 15,017 5 14,836 5 14,657 5 14,477 5 Plug to Plug 83 40 Plug to Plu 84 40 Plug to Plu 85 40 Plug to Plu 84 40 Plug to Plu 85 40 Plug to Plu 84 40 Plug to Plu 85 40 Plug to Plu 84 40 Plug to Plu 85 40 Frac Plug 15,366 Total Shots Frac Plug 15,186 Total Shots Frac Plug 15,007 Total Shots Frac Plug 14,826 Total Shots Frac Plug 14,647 Total Shots	From Bottom to Top From Bottom to Top	17,151 17,109 17,005 17,059 17,059 17,015 16,994 Plug to Plug Frac Plug 16,225 16,184 16,161 16,193 16,116 16,093 Plug to Plug Frac Plug 15,235 16,184 16,161 16,093 Plug to Plug Frac Plug 15,255 16,184 16,161 16,093 Plug to Plug 15,351 15,328 15,326	Between Perfs 29 24 21 26 20 24 21 17.186 21 21 25 22 23 23 25 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,859 16,833 16,814 Plug to Plug Frac Plug 16,061 16,044 16,026 16,003 15,981 15,958 15,936 15,913 Plug to Plug Frac Plug 15,171 15,171 15,147 15,125 15,102 15,080	Between Perfs 26 24 21 25 20 26 19 79 16,983 22 23	5 5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,769 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug Frac Plug 15,881 15,863 15,846 15,623 15,801 15,733 Plug to Plug Frac Plug 14,990 14,990 14,945 14,945	Between Perfs 23 23 23 22 22 20	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 6 5 5 40 Total Shots 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 5 5 5 5 6 6 5 5 5 5 5 6 6 5 5 5 5 5 6 6 5 5 5 5 6 6 5 5 5 5 6 6 5 5 5 5 6 6 5 5 5 5 6 6 5 5 5 5 6 6 6 5 5 5 5 6	16,609 16,586 16,563 16,641 16,519 16,497 16,474 16,454 Plug to Plug Frac Plug 15,688 15,681 15,685 15,682 15,575 15,588 15,575 15,588 15,575 10,588 16,788 16,788 17,787 14,787 14,787 14,787 14,782 14,782	Between Perfs 25 23 22 22 22 23 20 B3 16,624 Distance Between Perfs 35 16 22 23	5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,332 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug 15,517 15,502 15,463 15,440 15,418 15,392 15,376 Plug to Plug Frac Plug 14,629 14,629 14,629 14,634	Between Perfs 26 23 23 21 21 20 20 20 20 20 20	5 5 5 5 40 Total Shots Shots 5 5 5 5 6 5 5 5 6 6 5 5 5 6 6 6 6 6 6
Plug to Plue 83 40 Plug to Plue 84 40 Plug to Plue 85 40 Plug to Plue 84 40 Plug to Plue 85 40 Plug to Plue 84 40 Plug to Plue 85 40 Plue 85	From Bottom to Top From Bottom to Top	17,151 17,105 17,005 17,059 17,059 17,015 16,994 16,297 16,205 16,164 16,205 16,184 16,161 16,139 16,116 16,139 16,116 16,339 16,116 16,339 16,116 16,339 115,351 15,351 15,328 15,328 15,260 15,238	Between Perfs 29 24 21 26 20 24 21 81 17,156 Distance Between Perfs 25 22 23 23 23 Estween Perfs 25 22 23 23 23 23 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug 16,003 15,981 16,003 15,981 15,958 15,913 Plug to Plug Frac Plug 15,171 15,171 15,171 15,171 15,125 15,080 15,080 15,087	Between Perfs 26 24 21 25 20 26 19 79 16,983 21 82 22 23 22 23 22 25 22 23 22	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,843 15,863 15,873 15,783 15,786 15,778 15,756 15,739 14,990 14,997 14,990 14,977	Between Perfs 23 23 23 22 20 20 20 20	5 5 5 5 5 5 40 Fotal Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,641 16,519 16,497 16,474 16,454 Plug to Plug Frac Plug 15,698 15,681 15,698 15,683 15,693 15,575 15,575 15,575 10,575 14,764 14,784 14,784 14,784 14,784 14,784 14,784	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16 22 23	5 5 5 40 Total Shots 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,332 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug 15,517 15,502 15,463 15,440 15,418 15,392 15,376 Plug to Plug Frac Plug 14,629 14,629 14,607 14,584 14,562 14,533 14,517	Setween Perfs 26 23 23 21 21 20 20 21 21 20 21 21	5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Frac Plug 15,366 Total Shote Frac Plug 15,186 Total Shote Frac Plug 15,007 Total Shote Frac Plug 14,826 Total Shote Frac Plug 14,647 Total Shote	From Bottom to Top From Bottom to Top	17,151 17,109 17,105 17,005 17,039 17,015 16,939 17,015 16,939 17,015 16,227 16,227 16,227 16,227 16,238 16,116 16,139 16,116 16,139 16,116 16,039 18,116 16,039 18,116 16,305 15,328 15,305 15,238 15,238 15,238 15,215	Between Perfs 29 24 21 26 20 24 21 81 17,156 Distance Between Perfs 25 22 23 23 23 Estween Perfs 25 22 23 23 23 23 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23 22 23	5 5 5 5 5 5 5 40 Fotal Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug Frac Plug 16,061 16,044 16,026 16,003 15,981 15,98 15,936 15,913 Plug to Plug Frac Plug 15,171 15,147 15,125 15,060 15,067 15,067 15,067 15,067	Between Perfs 26 24 21 25 20 26 19 79 16,983 21 82 22 23 22 23 22 25 22 23 22	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,733 Plug to Plug 15,778 15,778 15,778 14,945 14,990 14,945 14,992 14,997 14,945	Between Perfs 23 23 23 22 20 20 20 20	5 5 5 5 5 5 5 40 Fotal Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,641 16,659 16,497 16,474 16,474 16,454 10,400 15,698 15,688 15,681 15,685 15,685 15,553 15,553 15,553 15,555 15,555 15,555 15,555 14,674 14,764 14,764 14,764 14,764 14,764 14,764 14,764 14,764 14,764	Between Perfs 25 23 22 22 22 23 20 83 16,624 Distance Between Perfs 35 16 22 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,332 16,359 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug 15,517 15,502 15,485 15,440 15,440 15,418 15,392 14,607 14,562 14,607 14,562 14,607 14,562 14,539 14,517 14,494	Setween Perfs 26 23 23 21 21 20 20 21 21 20 21 21	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	From Bottom to Top From Bottom to Top	17,151 17,105 17,106 17,005 17,005 17,005 17,005 17,015 16,909 17,015 16,909 17,015 16,105 16,227 16,227 16,227 16,227 16,228 16,161 16,139 16,116 16,139 16,116 16,039 194 194 195 195 195 195 195 195 195 195 195 195	Between Perfs 29 24 21 26 20 24 21 17,186 Distance Between Perfs 25 22 21 23 22 23 23 22 23 22 23 29 29 19	5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,879 16,859 16,833 16,814 Plug to Plug 16,061 16,044 16,026 16,003 15,981 15,988 15,936 15,913 Plug to Plug Frac Plug 15,171 15,147 15,125 15,102 15,080 15,085 15,035 1	Between Perfs 26 24 21 25 20 26 26 27 28 28 22 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,823 15,846 15,733 Plug to Plug 14,945 14,990 14,967 14,945 14,922 14,900 14,877 14,855 14,836	Between Perfs 25 23 23 23 22 20 20 Bstance Between Perfs 32 22 23 32 22 23 32 22 23 32 22 23 32 22 2	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,519 16,497 16,474 16,454 16,454 15,688 15,681 15,683 15,683 15,683 15,690 15,575 15,575 15,575 19,505 10,100 14,810 14,787 14,764 14,764 14,762 14,697 14,674 14,657	Between Perfs 25 23 22 22 22 23 3 20 B3 3 15,624 Distance Between Perfs 35 16 22 23 22 22 23 22 23 22 23 22 23 22 24 15,707 Distance Between Perfs 26 23 22 22 23 22 22 23 22 23 22 23 22 23 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,336 16,336 16,315 16,294 16,274 Plug to Plug Frac Plug 15,517 15,502 15,463 15,463 15,40 15,418 15,392 15,376 Plug to Plug Frac Plug 14,629 14,637 14,584 14,539 14,539 14,539 14,539 14,539 14,539	Between Perfs 26 23 23 21 21 20 20 21 20 20 20	5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	From Bottom to Top From Bottom to Top	17,151 17,105 17,005 17,005 17,005 17,005 17,005 17,015 16,099 Plug to	Between Perfs 29 24 21 26 20 24 21	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,859 16,833 16,814 Plug to Plu Frac Plug 16,061 16,026 16,003 15,981 15,986 15,936 15,936 15,913 Plug to Plu Frac Plug 15,171 15,147 15,125 15,060	Between Perfs 26 24 21 25 20 26 26 27 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,823 15,846 15,733 Plug to Plug Frac Plug 14,990 14,967 14,945 14,875 14,836 Plug to Plu	Between Perfs 25 23 23 22 20 20	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,579 16,474 16,454 Plug to Plu Frac Plug 15,681 15,681 15,685 15,620 15,583 15,575 15,533 Plug to Plu Frac Plug 14,810 14,784 14,784 14,784 14,784 14,787 14,677 14,677 Plug to Plu	Between Perfs 25 23 22 22 22 23 23 22 22 23 23 22 22 23 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315 16,215 16,224 16,274 Plug to Plug Frac Plug 15,517 15,502 15,465 15,465 15,440 15,185 15,376 Plug to Plug Frac Plug 14,607 14,584 14,607 14,584 14,572 14,593 14,517 14,594 14,517 14,494 14,477 Plug to Plug	Between Perfs 26 23 23 24 21 20 20 20 20 20 20 20	5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	From Bottom to Top From Bottom to Top	17,151 17,105 17,005 17,005 17,005 17,005 17,005 17,015 16,099 Plug to	Between Perfs 29 24 21 26 20 24 21	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,949 16,925 16,904 16,859 16,833 16,814 Plug to Plu Frac Plug 16,061 16,026 16,003 15,981 15,986 15,936 15,936 15,913 Plug to Plu Frac Plug 15,171 15,147 15,125 15,060	Between Perfs 26 24 21 25 20 26 26 27 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,789 16,767 16,744 16,721 16,698 16,676 16,654 16,634 Plug to Plug 15,881 15,863 15,846 15,823 15,846 15,733 Plug to Plug Frac Plug 14,990 14,967 14,945 14,875 14,836 Plug to Plu	Between Perfs 25 23 23 22 20 20	5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,609 16,586 16,563 16,541 16,579 16,474 16,454 Plug to Plu Frac Plug 15,681 15,681 15,685 15,620 15,583 15,575 15,533 Plug to Plu Frac Plug 14,810 14,784 14,784 14,784 14,784 14,787 14,677 14,677 Plug to Plu	Between Perfs 25 23 22 22 22 23 23 22 22 23 23 22 22 23 23	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16,428 16,405 16,382 16,359 16,336 16,315 16,215 16,224 16,274 Plug to Plug Frac Plug 15,517 15,502 15,465 15,465 15,440 15,185 15,376 Plug to Plug Frac Plug 14,607 14,584 14,607 14,584 14,572 14,593 14,517 14,594 14,517 14,494 14,477 Plug to Plug	Between Perfs 26 23 23 24 21 20 20 20 20 20 20 20	5 5 5 5 5 5 5 5 5 40 Total Shots 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5

		Distance Between Perfs	Shots	of the same	Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots	and the same of	Distance Between Perfs	Shots
ļ. ·	14,449	28	5	14,261	31	5	14,089	27	5	13,901	30	5	13,722	29	5
	14,427	23	5	14,243	19	5	14,066	22	. 5	13,883	19	- 5	13,703	20	5
From	14,404	22	- 5	14,224	23	5	14,044	23	5	13,864	23	5	13,683	22	5
Bottom to	14,382	23	5	14,201	22	5	14,021	22	5	13,841	22	5	13,661	23	5
Тор	14,359	22	. 5	14,179	23	5	13,999	23	5	13,819	23	5	13,638	22	5
1. 1.	14,337.	23	5	14,156	22	5	13,976	22	5	13,796	22	5	13,616	: 23	5
1	14,314	22	5	14,134	18	5	13,954	23	.5	13,774	23	. 5	13,593	22	5
į.	14,292		. 5	14,116	:	. 5	13,931	· .:	. 5	13,751		. 5	13,571		5
1	Plug to Plug	85	40	Plug to Plu	. 69	40	Plug to Plu	85	40	Plug to Plu	69	: : 40	Plug to Plu	70	40
<u> </u>	Frac Plug	14,467	Total Shots	Frac Plug	14,270	Total Shots	Frac Plug	14,106	Total Shot	Frac Plug	13,910	Total Shots	Frac Plug	13,731	Total Shot

		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots	Stage 40	Distance Between Perfs	Shots
1 1	13,542	29	5	13,361	30	- 5	13,181	29	5	13,001	29	5		12850	
	13,523	20	5	13,343	20	5	13,162	19	5	12,982	19	5	:. ;		
From	13,503	22	5	13,323	22	5.	13,143	23	5	12,963	23	5	· · · · · ;		
Bottom to	13,481	. 23.	. 5	13,301	. 23 .	. 5	13,120	22	5	12,940	22 .	5			
Тор	13,458	22	5	13,278	23	. 5	13,098	23	5	12,918	23	5		*	
	13,436	23	5	13,255	. 22.	5	13,075	22	5	12,895	22	5			
1	13,413	22	5 ·	13,233	23	5	13,053	23	5	12,873	23	5			
	13,391		5	13,210		5	13,030		5	12,850		5			
	Plug to Plu	70	40	lug to Plu	69	40	Plug to Plu	70	40 ·	lug to Plu	70	40	lug to Plu	0	0
	Frac Plug	13,551	Total Shots	Frac Plug	13,370	Total Shots	Frac Plug	13,190	Total Shots	Frac Plug	13,010	Total Shots	Frac Plug		Total Shots
					1									٠.	

	Stage 41	Distance Between Perfs	Shots		Distance Between Perfs	Shots	Stage 43	Distance Between Perfs	Shots	Stage 44	Distance Between Perfs	Shots	Stage 45	Distance Between Perfs	Shots
		0	5 .		0	5		0	5		0	5		∵ 0	5
			5		:	5			. 5			5.			5
rom			: 5			. 5			. 5			. 5			5,
ottom to			5			5		1 .	5 .			5		. :	5
op qe			5 :			5 .	2 2 2 2 2		5			5			5
1. 1			5			5			5			5			5
			5			- 5			5			-5			. 5
		,	- 5	1		5			5			: :5			5
: !	Plug to Plug	0 :	: :40	Plug to Plus	:. o	40	Plug to Plug	. 0	40	Plug to Plu	. 0	40	Plug to Plug	0	40