	B	C
1	**Source Description**	
2		
3	Phase II ID No.	2021
4	EPA ID No.	TXD000461533
5	Facility Name	Union Carbide Coporation
6	Facility Location	
7	City	Texas City
8	State	Texas
9	Unit ID Name/No.	Boiler 53
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid-fired
14	Combustor Characteristics	Watertube boiler. Combustion Engineering Type V-60. Designed to co-fire gaseous fuels with supplemental firing of liquid residues. Equiped with four liquid burners. Produces 300000 lb/hr superheated steam and 250000 lb/hr fuel gas @ 650, 750^{o}F and 50% liquid firing, 441 MM
15	Capacity (MMBtu/hr)	441
16	Soot Blowing	Yes (run 11)
17	APCS Detailed Acronym	None
18	APCS General Class	
19	APCS Characteristics	N/A
20	Hazardous Wastes	Liquid wastes
21	Haz Waste Description	The various organic residue fuels (Propionic Acid Heads, 2-Ethylhexanoic Acid Heads and Ethanol)
22	Supplemental Fuel	Fuel gas
23		
24	Stack Characteristics	
25	Diameter (ft)	8
26	Height (ft)	125
27	Gas Velocity (ft/sec)	41.0
28	Gas Temperature (°F)	323.6
29		
30	Permitting Status	Tier I all metals except Cr+6.
31	HWC Burn Status (Date if Terminated)	

	B	C
1	**Cond Description**	
2		
3	**2021C1**	
4		
5	Report Name/Date	Trial Burn Report for Boiler 53, July 2000
6	Report Prepare	TRC Environmental Corporation
7	Testing Firm	TRC Environmental Corporation
8	Testing Dates	March 23, 2000 and June 15, 2000
9	Cond Dates	Mar-00
10	Condition Descr	Trial burn, max comb Temp, max steam prod rate, max feedrate, soot blow
11	Content	PM, CO, Cl2/HCl, Cr+6, DRE
12		
13	**2021C2**	
14		
15	Report Name/Date	Trial Burn Report for Boiler 53, July 2000
16	Report Prepare	TRC Environmental Corporation
17	Testing Firm	TRC Environmental Corporation
18	Testing Dates	March 20 - 22, 2000
19	Cond Dates	Mar-00
20	Condition Descr	Trial burn, min comb temp
21	Content	CO, DRE
22		
23	**2021C3**	
24		
25	Report Name/Date	Trial Burn Report for Boiler 53, July 2000
26	Report Prepare	TRC Environmental Corporation
27	Testing Firm	TRC Environmental Corporation
28	Testing Dates	March 25 - 26, 2000
29	Cond Dates	Mar-00
30	Condition Descr	Risk burn, max feedrate.
31	Content	CO, PCDD/PCDF

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	**Stack Gas Emissions**														
2															
3		Comments	Units	7% O2											
4															
5												Soot blow			
6	**2021C1**	**Trial Burn**				R4		R5		R6		R11		Cond Avg	
7															
8	PM	E1	gr/dscf	y		0.0346		0.0397		0.0425		0.0633		0.0411	
9	CO (MHRA)	E1	ppmv	y		15.56		12.45		12.69		15.17		13.97	
10	HCl		g/hr			36465		27407		42784		44096		36297	
11	Cl2		g/hr			38		35		68		35		46	
12	Chromium (Hex)		g/hr			3.6		4.1		5		4		4.18	
13	Chromium		g/hr			6.1		5.3		6.2		9		6.65	
14															
15	Sampling Train	PM	E1												
16	Stack Gas Flowrate		dscfm			68747		70318		70550		76945		71640.2	
17	O2		%			4.2		4.2		4.3		4.9		4.4	
18	Moisture		%			20.12		19.75		20.13		21.33		20.3	
19	Temperature		°F			325.9		325.5		326.7		349		331.8	
20															
21	Sampling Train	HCl/Cl2	E2												
22	Stack Gas Flowrate		dscfm			68728		69428		70346		76474		71266.2	
23	O2		%			4.2		4.2		4.3		4.9		4.4	
24	Moisture		%			19.76		19.73		20.3		21.24		20.3	
25	Temperature		°F			323.6		324.2		323.8		339.4		327.7	
26															
27	Sampling Train	Cr+6	E3												
28	Stack Gas Flowrate		dscfm			73546		75201		72021		80222		75247.5	
29	O2		%			4.2		4.2		4.3		4.9		4.4	
30	Moisture		%			19.48		17.94		20.8		17.33		18.9	
31	Temperature		°F			319		319.1		320.3		347.5		326.5	
32															
33	HCl	E2	ppmv	y		173.9		129.4		200.5		197.2		168.9	
34	Cl2	E2	ppmv	y		0.1		0.1		0.2		0.1		0.1	
35	Total Chlorine	E2	ppmv	y		174.1		129.5		200.8		197.4		169.2	
36															
37	Chromium (Hex)	E3	µg/dscm	y		24.0		26.8		34.3		25.5		27.6	
38	Chromium	E3	µg/dscm	y		40.7		34.6		42.5		57.5		43.9	
39	LVM	E3	µg/dscm	y		40.7		34.6		42.5		57.5		43.9	Cr only
40															
41	POHC DRE	Chlorobenzene													
42	Feedrate		g/hr			38551.0		38125.0		38787.0					
43	Emission Rate	E1	g/hr		nd	0.167	nd	0.167	nd	0.166					
44	DRE	E1	%		nd	99.9996	nd	99.9996	nd	99.9996					
45															
46	POHC DRE	Toluene													
47	Feedrate		g/hr			38474.0		38049.0		38710.0					
48	Emission Rate	E1	g/hr		nd	0.216	nd	0.226	nd	0.217					
49	DRE	E1	%		nd	99.9994	nd	99.9994	nd	99.9994					
50															
51	**2021C2**	**DRE**				R1		R2		R3				Cond Avg	
52															
53	CO (MHRA)	E1	ppmv	y		5.04		0.7		47.72				17.82	
54															
55	POHC DRE	Chlorobenzene													
56	Feedrate		g/hr			34021		34119		34016					
57	Emission Rate	E1	g/hr		nd	0.1291	nd	0.125	nd	0.1195					
58	DRE	E1	%		nd	99.9996	nd	99.9996	nd	99.9996					
59															
60	POHC DRE	Toluene													
61	Feedrate		g/hr			33948		34054		33948					
62	Emission Rate	E1	g/hr		nd	0.167	nd	0.1634	nd	0.1547					
63	DRE	E1	%		nd	99.9995	nd	99.9995	nd	99.9995					
64															
65	Sampling Train	DRE	E1												
66	Stack Gas Flowrate		dscfm			54479		52750		50683				52637	
67	O2		%			8.8		8.7		8.3				8.6	
68	Moisture		%			13.08		14.95		16.22				14.75	
69	Temperature		°F			292.2		292.3		280.6				288.4	
70															
71															

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
72	**2021C3**	**Risk burn**				R1		R2		R3				Cond Avg	
73															
74	CO (MHRA)	E1	ppmv	y		6.2		32.96		28.15				22.4	
75															
76	Sampling Train	PCDD/PCDF	E1												
77	Stack Gas Flowrate		dscfm			73505		71825		71861				72397.0	
78	O2		%			4.2		4.9		4.1				4.4	
79	Moisture		%			17.87		17.41		16.98				17.42	
80	Temperature		°F			330.6		330.4		329.9				330.3	
81															
82	Particle Size Distribution														
83	> 10 microns		wt%			100									

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	**Feedrates**																							
2																								
3																								
4	**2021C1**	**Trial Burn**			R4		R5		R6		R11		Cond Avg		R4		R5		R6		R11		Cond Avg	
5																								
6	Feedstream Number				F1		F1		F1		F1		F1		F2		F2		F2		F2		F2	
7	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW	
8	Feed Class 2																							
9	Feedstream Description				Propionic Acid Heads		onic Acid Heads		opionic Acid Heads		ionic Acid Heads		onic Acid Heads		xanoic Acid Heads		xanoic Acid Heads		exanoic Acid Heads		exanoic Acid Heads		hexanoic Acid Heads	
10	Feed Rate		g/hr		1828363		1844769		1827034		2070246		1892603		918942		953106		969549		1028217		967453.5	
11	Thermal Feedrate		MMBtu/hr																					
12	Ash		g/hr	nd	59	nd	70	nd	68		621		204.5	nd	38	nd	44	nd	41		51		43	
13	Chlorine		g/hr		109		118		117	nd	166		127.5		117		42		62		312		133	
14	Chromium		g/hr		0.37		0.46		0.88		0.11		0.455		0.32		0.16		0.16		0.046		0.17	
15	Antimony		g/hr	nd	0.44	nd	0.44	nd	0.44		0.33		0.4125	nd	0.22	nd	0.23	nd	0.23		0.2		0.22	
16	Arsenic		g/hr	nd	0.48	nd	0.5	nd	0.49	nd	0.27		0.435	nd	0.25	nd	0.26	nd	0.26	nd	0.16		0.23	
17	Barium		g/hr	nd	0.20	nd	0.2	nd	0.2	nd	0.08		0.17		1.5		0.19	nd	0.11	nd	0.052		0.46	
18	Beryllium		g/hr		0.04		0.04	nd	0.04	nd	0.02		0.035		0.14	nd	0.02	nd	0.02	nd	0.03		0.1	
19	Cadmium		g/hr		0.40		0.3		0.27	nd	0.02		0.2475		0.31		0.09		0.07	nd	0.03		0.1	
20	Lead		g/hr		1.40		0.77		1	nd	0.2		0.8425		1.5		0.23	nd	0.19	nd	0.11		0.5	
21	Mercury		g/hr		0.04		0.04		0.04	nd	0.02		0.035	nd	0.009	nd	0.02		0.02	nd	0.26		0.08	
22	Silver		g/hr		1.00		0.79		0.79	nd	0.11		0.6725		0.51		0.39		0.38	nd	0.061		0.33	
23	Thallium		g/hr	nd	1.80	nd	1.8	nd	1.8	nd	0.23		1.4075	nd	0.89	nd	0.92	nd	0.94	nd	0.14		0.72	
24																								
25	Stack Gas Flowrate		dscfm		68747.0		70318.0		70550.0		76945.0		71640.2		68747.0		70318.0		70550.0		76945.0		71640.2	
26	Oxygen		%		4.2		4.2		4.3		4.9		4.4		4.2		4.2		4.3		4.9		4.4	
27																								
28	*Feedrate MTEC Calculations*																							
29	Ash		mg/dscm	nd	0.4	nd	0.5	nd	0.5		4.1		1.38	nd	0.3	nd	0.3	nd	0.3		0.3		0.30	100
30	Chlorine		ug/dscm		778.1		823.6		818.8	nd	1104.8		881.32		835.2		293.1		433.9		2076.5		909.70	
31	Chromium		ug/dscm		2.6		3.2		6.2		0.7		3.19		2.3		1.1		1.1		0.3		1.21	
32	Antimony		ug/dscm	nd	3.1	nd	3.1	nd	3.1		2.2		2.87	nd	1.6	nd	1.6	nd	1.6		1.3		1.53	100
33	Arsenic		ug/dscm	nd	3.4	nd	3.5	nd	3.4	nd	1.8		3.04	nd	1.8	nd	1.8	nd	1.8	nd	1.1		1.62	100
34	Barium		ug/dscm	nd	1.4	nd	1.4	nd	1.4	nd	0.5		1.19		10.7		1.3	nd	0.8	nd	0.3		3.29	12
35	Beryllium		ug/dscm		0.3		0.3	nd	0.3	nd	0.1		0.24		1.0	nd	0.1	nd	0.1	nd	0.2		0.37	33
36	Cadmium		ug/dscm		2.9		2.1		1.9	nd	0.1		1.74		2.2		0.6		0.5	nd	0.2		0.88	
37	Lead		ug/dscm		10.0		5.4		7.0	nd	1.3		5.92		10.7		1.6	nd	1.3	nd	0.7		3.59	
38	Mercury		ug/dscm		0.3		0.3		0.3	nd	0.1		0.24	nd	0.1	nd	0.1		0.1	nd	1.7		0.52	18
39	Silver		ug/dscm		7.1		5.5		5.5	nd	0.7		4.73		3.6		2.7		2.7	nd	0.4		2.36	
40	Thallium		ug/dscm	nd	12.8	nd	12.6	nd	12.6	nd	1.5		9.88	nd	6.4	nd	6.6	nd	6.6	nd	0.9		5.07	100
41	SVM		ug/dscm		12.8		7.5		8.9	100	1.5		7.67		12.9		2.2	73	1.8	100	0.9	13	4.48	0
42	LVM		ug/dscm	54	6.4	50	7.0	38	9.9	73	2.7	49	6.47	35	5.1	59	3.1	64	3.1	81	1.6	53	3.20	46
43																								
44	**2021C2**	**DRE burn**			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2	
45																								
46	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3	
47	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Misc. Fuel		Misc. Fuel	
48	Feed Class 2																							
49	Feedstream Description				Propionic Acid Heads		onic Acid Heads		opionic Acid Heads		ionic Acid Heads		2-Ethylhexaonic		2-Ethylhexaonic A		2-Ethylhexaonic A		2-Ethylhexaonic Acid		Ethanol		Ethanol	
50	Feed Rate		g/hr		1841807		1829937		1852095		1841280		937494		934881		913971		928782		923972		913453	
51	Thermal Feedrate		MMBtu/hr																					
52																								
53	**2021C3**	**Risk burn**			R7		R8		R9		Cond Avg		R7		R8		R9		Cond Avg		R7		R8	
54																								
55	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3	
56	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Misc. Fuel		Misc. Fuel	
57	Feed Class 2																				MF		MF	
58	Feedstream Description				Propionic Acid Heads		onic Acid Heads		opionic Acid Heads		ionic Acid Heads		2-Ethylhexaonic		2-Ethylhexaonic A		2-Ethylhexaonic A		2-Ethylhexaonic Acid		Ethanol		Ethanol	
59	Feed Rate		g/hr		1848788		1843263		1851378		1847810		983865		917935		957797		953199		921505		944125	
60	Viscosity		cSt		3.0		2.85		2.96		2.93		3.24		3.31		3.2		3.25		3.1		3.02	

	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA
1																												
2																												
3																												
4	R4		R5		R6		R11		Cond Avg		R4		R5		R6		R11		Cond Avg		R4		R5		R6		R11	
5																												
6											F3		F3		F3		F3		F3		F4		F4		F4		F4	
7											Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Spike		Spike		Spike		Spike	
8	HW		HW		HW		HW		HW		MF		MF		MF		MF		MF		Spike		Spike		Spike		Spike	
9											Ethanol		Ethanol		Ethanol		Ethanol		Ethanol		Spike		Spike		Spike		Spike	
10											915658		932681		944103		684262		869176		153387		151696		154099		153038	
11																												
12										nd	36	nd	34	nd	34		14		29		19209		18996		19209		19895	
13											61		84		83	nd	55		71		45729		45188		45984		45387	
14											0.67		0.26		0.26	nd	0.02		0.3		43		42		43		43	
15										nd	0.22	nd	0.22	nd	0.23	nd	0.082		0.19									
16										nd	0.25	nd	0.25	nd	0.25	nd	0.1		0.21									
17											0.43		2		0.57	nd	0.034		0.75									
18										nd	0.02		0.12		0.06	nd	0.007		0.05									
19											0.22		0.37		0.28	nd	0.007		0.22									
20											1.8		3		1.4	nd	0.075		1.6									
21											0.009		0.009		0.009	nd	0.007		0.009									
22											0.36		0.66		0.59	nd	0.04		0.41									
23										nd	0.91	nd	0.92	nd	0.92	nd	0.089		0.71									
24																												
25											68747.0		70318.0		70550.0		76945.0		71640.2		68747.0		70318.0		70550.0		76945.0	
26											4.2		4.2		4.3		4.9		4.4		4.2		4.2		4.3		4.9	
27																												
28																												
29	0.69	100	0.80	100	0.76		4.47	33	1.68	100	0.3	100	0.2	100	0.2		0.1	89	0.21		137.1		135.6		137.1		142.0	
30	1613.38		1116.69		1252.65	35	3181.35	15	1791.02		435.5		586.3		580.8	100	366.1	19	492.16		326451.8		322589.7		328272.2		324010.3	
31	4.93		4.33		7.28		1.04		4.39		4.8		1.8		1.8	100	0.1		2.14		307.0		299.8		307.0		307.0	
32	4.71	100	4.68	100	4.69		3.53	80	4.40	100	1.6	100	1.5	100	1.6	100	0.5	100	1.32									
33	5.21	100	5.30	100	5.25	100	2.86	100	4.66	100	1.8	100	1.7	100	1.7	100	0.7	100	1.49									
34	12.14	49	2.72	100	2.17	100	0.88	32	4.48		3.1		14.0		4.0	100	0.2	1.1	5.31									
35	1.28		0.42	100	0.42	100	0.33	48	0.61	100	0.1	100	0.8	100	0.4	100	0.0	100	0.36									
36	5.07		2.72		2.38	100	0.33	3.2	2.63		1.6		2.6		2.0	100	0.0	0.8	1.54									
37	20.70		6.98		8.33	100	2.06	5.4	9.52		12.8		20.9		9.8	100	0.5	1.1	11.02									
38	0.35	33	0.42		0.42	100	1.86	68	0.76		0.1		0.1		0.1	100	0.0	20	0.06									
39	10.78		8.24		8.19	100	1.14	4	7.09		2.6		4.6		4.1	100	0.3	2.3	2.89									
40	19.20	100	18.98	100	19.17	100	2.46	100	14.96	100	6.5	100	6.4	100	6.4	100	0.6	100	4.99									
41	25.77	0	9.70	12	10.71	100	2.40	5	12.14		14.4		23.5		11.8	100	0.3	0.5	12.49									
42	11.42	53	10.05	44	12.95	75	4.23	50	9.66	29	6.7	73	3.5	70	3.1	100	0.4	48	3.44		307.0		299.8		307.0		307.0	
43																												
44											R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3	
45																												
46											F3		F3		F4		F4		F4		F4		F5		F5		F5	
47											Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Total		Total		Total	
48															MF		MF		MF		MF		Total		Total		Total	
49											Ethanol		Ethanol		Fuel Gas		Fuel Gas		Fuel Gas		Fuel Gas		Total		Total		Total	
50											925496		920974										3703273		3678271		3691562	
51															107		142		152		134		107		142		152	
52																												
53											R9		Cond Avg		R7		R8		R9		Cond Avg		R7		R8		R9	
54																												
55											F3		F3		F4		F4		F4		F4		F5		F5		F5	
56											Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Total		Total		Total	
57											MF		MF										Total		Total		Total	
58											Ethanol		Ethanol		Fuel Gas		Fuel Gas		Fuel Gas		Fuel Gas		Total		Total		Total	
59											919037		928222										3754158		3705323		3728212	
60											2.98		3.03										3.1		3.02		2.98	

	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV
1																					
2																					
3																					
4	Cond Avg		R4		R5		R6		R11		Cond Avg		R4		R5		R6		R11		Cond Avg
5																					
6	F4		F5		F5		F5		F5		F5	F6			F6		F6		F6		F6
7	Spike		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel	Total			Total		Total		Total		Total
8	Spike		MF		MF		MF		MF		MF	Total			Total		Total		Total		Total
9	Spike		Fuel Gas		Fuel Gas		Fuel Gas		Fuel Gas		Fuel Gas	Total			Total		Total		Total		Total
10	153055																				
11			346		350		348		293		334.25		346		350		348		293		334.25
12	19156																				
13	45572																				
14	43																				
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					
25	71640.2																				
26	4.4																				
27																					
28																					
29	138.0											0.7	138.1	0.8	136.6	0.7	138.1	0	146.6	0.5	139.9
30	325331.0											0	328500.6	0	324292.6	0	330105.7	0.4	327557.7	0.1	327614.1
31	305.2											0	316.7	0	306.0	0	316.1	0	308.1	0	311.7
32												100	6.3	100	6.2	100	6.3	13	4.1	85	5.7
33												100	7.0	100	7.0	100	7.0	100	3.5	100	6.1
34												9.4	15.2	7.9	16.7	35	6.2	100	1.1	15	9.8
35												40	1.4	67	1.3	100	0.8	100	0.4	67	1.0
36												0	6.6	0	5.3	0	4.3	100	0.4	2.3	4.2
37												0	33.6	0	27.9	0	18.1	100	2.6	3.1	20.5
38												16	0.4	29	0.5	0	0.5	100	1.9	64	0.8
39												0	13.3	0	12.8	0	12.3	100	1.4	3.5	10.0
40												100	25.7	100	25.4	100	25.6	100	3.1	100	19.9
41												0	40.2	0	33.2	5.9	22.5	100	2.7	2.6	24.6
42	305.2											2.2	325.1	2.5	313.4	2.4	323.0	1.2	311.6	2	318.3
43																					
44	Cond Avg																				
45																					
46	F5																				
47	Total																				
48	Total																				
49	Total																				
50	3691036																				
51	134																				
52																					
53	Cond Avg																				
54																					
55	F5																				
56	Total																				
57	Total																				
58	Total																				
59	3729231																				
60	3.03																				

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
61	Moisture		%		12.3		10.84		11.57		11.57		0.598		0.526		0.559		0.561		49.37		51.58	
62	Density		g/cc		1.00		0.97		0.99		0.99		0.86		0.86		0.86		0.86		0.87		0.87	
63	Heating Value		Btu/lb		8380.0		8360		8360		8367		16100		16300		17400		16600		8110		8880	
64	Thermal Feedrate		MMBtu/hr																					
65																								
66	Estimated Firing Rate		MMBtu/hr		34.1																			

	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA
61											51.63		50.86															
62											0.87		0.87															
63											9160		8717															
64															267		250		253		257							
65																												
66																												

	A	B	C
1	**Process Information**		
2			
3	**2021C1**		Cond Avg
4			
5	Comb Temp	F	1545
6	Steam Production	M lb/hr	271
7			
8	**2021C2**		
9			
10	Comb Temp	F	1194
11	Steam Production	M lb/hr	143
12			
13	**2021C3**		
14			
15	Comb Temp	F	1547
16	Steam Production	M lb/hr	259

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	**PCDD/PCDF**																	
2	N																	
3	Facility Name and ID:	Union Carbide Corporation																
4	Condition ID:	2021C3																
5	Condition/Test Date:	Risk burn, max feedrate.																
6																		
7			I-TEF			Run 1					Run 2					Run 3		
8			Wght Fact		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ
9					Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND
10	Detected in sample volume (ng)																	
11		2,3,7,8-TCDD	1	nd	0.007	0.0073	0.004	0.0037	nd	0.007	0.0070	0.004	0.0035	nd	0.009	0.009	0.005	0.005
12		1,2,3,7,8-PCDD	0.5	nd	0.007	0.0036	0.004	0.0018	nd	0.009	0.0046	0.005	0.0023	nd	0.017	0.009	0.009	0.004
13		1,2,3,4,7,8-HxCDD	0.1	nd	0.014	0.0014	0.007	0.0007	nd	0.011	0.001	0.006	0.001		0.027	0.003	0.027	0.003
14		1,2,3,6,7,8-HxCDD	0.1	nd	0.014	0.0014	0.007	0.0007	nd	0.019	0.002	0.010	0.001		0.042	0.004	0.042	0.004
15		1,2,3,7,8,9-HxCDD	0.1	nd	0.034	0.0034	0.017	0.0017	nd	0.038	0.004	0.019	0.002		0.079	0.008	0.079	0.008
16		1,2,3,4,6,7,8-HpCDD	0.01		0.111	0.0011	0.111	0.0011		0.132	0.001	0.132	0.001		0.239	0.002	0.239	0.002
17		OCDD	0.001		0.135	0.0001	0.135	0.0001		0.152	0.0002	0.152	0.0002		0.246	0.000	0.246	0.000
18		2,3,7,8-TCDF	0.1		0.100	0.0100	0.100	0.0100		0.105	0.011	0.105	0.011		0.122	0.012	0.122	0.012
19		1,2,3,7,8-PCDF	0.05		0.039	0.0020	0.039	0.0020	nd	0.051	0.003	0.026	0.001		0.093	0.005	0.093	0.005
20		2,3,4,7,8-PCDF	0.5		0.070	0.0350	0.070	0.0350		0.080	0.040	0.080	0.040		0.153	0.077	0.153	0.077
21		1,2,3,4,7,8-HxCDF	0.1		0.285	0.0285	0.285	0.0285		0.313	0.031	0.313	0.031		0.640	0.064	0.640	0.064
22		1,2,3,6,7,8-HxCDF	0.1	nd	0.088	0.0088	0.044	0.0044		0.009	0.001	0.009	0.001		0.183	0.018	0.183	0.018
23		2,3,4,6,7,8-HxCDF	0.1		0.112	0.0112	0.112	0.0112		0.114	0.011	0.114	0.011		0.229	0.023	0.229	0.023
24		1,2,3,7,8,9-HxCDF	0.1	nd	0.009	0.0009	0.004	0.0004	nd	0.009	0.001	0.005	0.000	nd	0.009	0.0009	0.004	0.0004
25		1,2,3,4,6,7,8-HpCDF	0.01		0.359	0.0036	0.359	0.0036		0.400	0.004	0.400	0.004		0.830	0.0083	0.830	0.0083
26		1,2,3,4,7,8,9-HpCDF	0.01	nd	0.023	0.0002	0.011	0.0001	nd	0.021	0.0002	0.011	0.0001		0.043	0.0004	0.043	0.0004
27		OCDF	0.001		0.059	0.0001	0.059	0.0001		0.080	0.0001	0.080	0.0001		0.130	0.0001	0.130	0.0001
28																		
29		Gas sample volume (dscf)				144.89		144.89			143.65		143.65			142.04		142.04
30		O2 (%)				4.20		4.20			4.9		4.9			4.10		4.10
31																		
32		PCDD/PCDF (ng in sample)				0.12		0.11			0.122		0.111			0.2436		0.2342
33		PCDD/PCDF (ng/dscm @ 7% O2)	22.8			0.024		0.021	18.2		0.026		0.024	7.7		0.050		0.048
34																		
35		TEQ Cond Avg	0.031															