

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	610
4	EPA ID No.	LAD980622104
5	Facility Name	Norco Chemical Plant-West Site Shell Oil Company
6	Facility Location	
7	City	Norco
8	State	LA
9	Unit ID Name/No.	Unit 1
10	Other Sister Facilities	
11	Number of Sister Facilities	0
12	Combustor Class	Onsite incinerator
13	Combustor Type	Liquid injection
14	Combustor Characteristics	Designed and built by Bieglow-Liptak Corp. Equipped with a mason premix pilot with a Hauck spark ignitor. This burner is also equipped with a natural gas firing system and six liquid waste injection guns NCIN-2 is an induced draft organic chloride incinerator consisting of a combustion chamber, flue gas cooler, and scrubbing train. Induced draft blower is 16000 acfm at 90oF and 20 inc W.C. vacuum. Discharge pressure is 2 inc. W.C. Powered by a 150 hp electric motor
15	Capacity (MMBtu/hr)	
16	Soot Blowing	
17	APCS Detailed Acronym	WHB/QS/AA/CS
18	APCS General Class	WHB,WQ,LEWS
19	APCS Characteristics	Waste heat boiler, water quench, acid absorber, caustic scrubber. The system was designed by Shell Oil Company and manufactured by various suppliers
20	Hazardous Wastes	Liq Allyl Chloride Heavy Ends (ACHE) which is a waste stream produced on site.
21	Haz Waste Description	
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	2.50
26	Height (ft)	100
27	Gas Velocity (ft/sec)	17.7
28	Gas Temperature (°F)	130
29		
30	Permitting Status	Tier I for all metals
31	HWC Burn Status (Date if Terminated)	

	B	C
1	Condition Description	
2		
3	610C10	
4		
5	Report Name/Date	Source of Emissions Survey of Shell Chemical Company NCIN 1 Stack, February 1998.
6	Report Prepare	Shell Chemical Company
7	Testing Firm	METCO Environmental
8	Testing Dates	February 9, 1998
9	Cond Dates	Feb-98
10	Condition Descr	Trial burn, low temp, no water injection, low waste feed
11	Content	PM, HCl/Cl ₂ , CO, DREs
12		
13	610C11	
14		
15	Report Name/Date	Source of Emissions Survey of Shell Chemical Company NCIN 1 Stack, February 1998.
16	Report Prepare	Shell Chemical Company
17	Testing Firm	METCO Environmental
18	Testing Dates	February 10-11, 1998
19	Cond Dates	Feb-98
20	Condition Descr	Trial burn, upper oper temp, max waste, max water injection
21	Content	PM, HCl/Cl ₂ , CO, DREs
22		
23	610C12	
24		
25	Report Name/Date	Risk Burn, February 1998.
26	Report Prepare	Shell Chemical Company
27	Testing Firm	METCO Environmental
28	Testing Dates	February 2-5, 1998
29	Cond Dates	Feb-98
30	Condition Descr	Risk burn, reasonable upper bound on normal operation
31	Content	PM, HCl/Cl ₂ , CO, PCDD/Fs
32		
33	610C1	
34		
35	Report Name/Date	PM, HCl, and HCl Removal Efficiency Compliance Emissions Sampling of Incinerator NCIN-1, Shell Chemical Co, NORCO, LA, December 1991, SwL Project No. 54-9112-065
36	Report Prepare	Southwestern Laboratories, Environmental Analytical Services Div.
37	Testing Firm	Southwestern Laboratories, Environmental Analytical Services Div.
38	Cond Descr	Air compliance test, NORMAL OPERATIONS
39	Testing Dates	December 11, 1991
40	Cond Dates	Dec-91

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions 1											
2												
3		Comments	Units	7% O2								
4												
5	610C10	Trial Burn				R1		R2		R3		Cond Avg
6												
7	PM	E1	gr/dscf	y		0.0065		0.0059		0.0097		0.0074
8	CO (RA)	E1	ppmv	y	nd	0.2	nd	0.2	nd	0.2		0.20
9	HCl		ppmv	n		190		194.5		223.9		
10	Cl2		ppmv	n		18.3		17.6		14.3		
11												
12	POHC DRE	Chlorobenzene										
13	POHC Feedrate		lb/hr			19.99		20.01		20		
14	Emission Rate	E2	lb/hr		nd	5.62E-05	nd	3.52E-05	nd	7.02E-05		
15	DRE	E2	%		>	99.9997	>	99.9998	>	99.9996		
16												
17	POHC DRE	1,2,3-Tricholoropropane										
18	POHC Feedrate		lb/hr			43.542		43.46		47.835		
19	Emission Rate	E2	lb/hr		nd	3.88E-05	nd	1.14E-05	nd	1.26E-05		
20	DRE	E2	%		>	99.9999	>	99.9999	>	99.9999		
21												
22	Sampling Train	PM, HCl/Cl2	E1									
23	Stack Gas Flowrate		dscfm			16116		16548		15702		16122
24	O2		%			13.4		13.3		13.2		13.3
25	Moisture		%			7.59		7.52		8.07		7.73
26	Temperature		°F			97		98		100		98.00
27												
28	Sampling Train	DRE	E2									
29	Stack Gas Flowrate		dscfm			16116		16548		15702		16122
30	O2		%									
31	Moisture		%									
32	Temperature		°F									
33												
34	HCl	E1	ppmv	y		350.0		353.6		401.9		368.5
35	Cl2	E1	ppmv	y		33.7		32.0		25.7		30.5
36	Total Chlorine	E1	ppmv	y		417.42		417.64		453.21		429.4
37												
38	610C11	Trial Burn				R1		R2		R3		Cond Avg
39												
40	PM	E1	gr/dscf	y		0.006		0.0076		0.0086		0.0074
41	CO (RA)	E1	ppmv	y		0.8		0.9		1.2		0.97
42	HCl		ppmv	n		84.9		96.6		63		
43	Cl2		ppmv	n		1.3		1.6		1.2		
44												
45	POHC	Chlorobenzene										
46	POHC Feedrate		lb/hr			20.01		20		19.99		
47	Emission Rate	E2	lb/hr		nd	2.27E-05	nd	1.17E-05	nd	8.46E-06		
48	DRE	E2	%		nd	99.9999	nd	99.9999	nd	99.9999		
49												
50	POHC	1,2,3-Tricholoropropane										
51	POHC Feedrate		lb/hr			57.284		53.069		53.062		
52	Emission Rate	E2	lb/hr		nd	9.76E-06	nd	9.80E-06	nd	1.26E-05		
53	DRE	E2	%		nd	99.9999	nd	99.9999	nd	99.9999		
54												
55	Sampling Train	PM, HCl/Cl2	E1									
56	Stack Gas Flowrate		dscfm			15503		15115		14000		14873
57	O2		%			8.7		8.7		8.6		8.7
58	Moisture		%			15.55		15.39		15.34		15.43
59	Temperature		°F			126		128		128		127.00
60												
61	Sampling Train	DRE	E2									
62	Stack Gas Flowrate		dscfm			15503		15115		14000		14873
63	O2		%									
64	Moisture		%									
65	Temperature		°F									
66												
67	HCl	E1	ppmv	y		96.6		110.0		71.1		92.57
68	Cl2	E1	ppmv	y		1.5		1.8		1.4		1.55
69	Total Chlorine	E1	ppmv	y		99.59		113.59		73.84		95.68
70												
71												

	B	C	D	E	F	G	H	I	J	K	L	M
72	610C12	Risk Burn				R1		R2		R3		Cond Avg
73												
74	PM	E1	gr/dscf	y		0.0055		0.0024		0.0048		0.0042
75	CO (RA)	E1	ppmv	y		2.1		0.4		1.4		1.30
76	HCl		ppmv	n		33.6		44.8		48.6		
77	Cl2		ppmv	n		3.5		9.2		3		
78												
79	Sampling Train	PM, HCl/Cl2	E1									
80	Stack Gas Flowrate		dscfm			15953		16857		16088		16299
81	O2		%			8.8		9.7		8.7		9.1
82	Moisture		%			13.55		9.51		11.32		11.5
83	Temperature		°F			125		111		117		118.0
84												
85	Sampling Train	PCDD/PCDF	E2									
86	Stack Gas Flowrate		dscfm			14794		17148		16359		16100.0
87	O2		%			9.7		9.5		8.7		9.3
88	Moisture		%			14.13		10.45		12.97		12.52
89	Temperature		°F			123		112		117		117
90												
91	HCl	E1	ppmv	y		38.6		55.5		55.3		49.79
92	Cl2	E1	ppmv	y		4.0		11.4		3.4		6.28
93	Total Chlorine	E1	ppmv	y		46.59		78.30		62.15		62.35

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions 2											
2												
3												
4	610C1					R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.0063		0.0060		0.0070		0.0064
7	HCl	E1	ppmv	y		18.1		16.0		17.2		17.1
8	Cl2	E1	ppmv	y		25.4		25.7		21.2		24.1
9	Total Chlorine	E1	ppmv	y		68.9		67.4		59.7		65.3
10												
11	Sampling Train	PM/Halogens										
12	Stack Gas Flowrate		dscfm			11683.9		11478.3		11476.5		
13	O2		%			11.0		11.0		11.0		
14	Moisture		%			20.8		21.6		21.5		
15	Temperature		°F			153.0		156.0		156.0		

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Feedstream 1																		
2																			
3																			
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5																			
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B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
61	Thermal Feedrate	MM Btu/hr								56.0								
62	Heating Value	Btu/lb		7600	7320	7860	7860.0			7860.0								
63	Density	kg/L		1.1845	1.858	1.858	1.1854			1.1854								
64	Chlorobenzene	lb/hr					20.0			20.0								
65	1,2,3-Trichloropropane	lb/hr					54			54								
66	Ash	g/hr	nd	1883	1881	1880	1881			1881								
67	Chlorine	g/hr	nd	2197336.831	2219890.5	2299351.65	2238859.6			2238859.6								
68	Antimony	g/hr	nd	0.414	0.414	0.414	0.4			0.4								
69	Arsenic	g/hr	nd	1.845	2.031	2.068	2.0			2.0								
70	Barium	g/hr	nd	0.151	0.15	0.075	0.15			0.15								
71	Beryllium	g/hr	nd	0.075	0.075	0.075	0.1			0.1								
72	Cadmium	g/hr	nd	0.038	0.038	0.038	0.038			0.038								
73	Chromium	g/hr	nd	1.017	1.128	1.128	1.091			1.091								
74	Lead	g/hr	nd	7.908	7.899	7.522	7.776			7.776								
75	Mercury	g/hr	nd	0.038	0.038	0.075	0.1			0.1								
76	Nickel	g/hr	nd	1.017	1.467	2.933	2			2								
77	Selenium	g/hr	nd	0.64	0.639	0.639	0.639			0.639								
78	Silver	g/hr	nd	0.64	0.639	0.602	0.627			0.627								
79	Thallium	g/hr	nd	0.339	0.339	0.338	0.339			0.339								
80	Stack Gas Flowrate	dscfm		15503	15115	14000	14873			14873								
82	Oxygen	%		8.7	8.7	8.6	8.7			8.7								
83																		
84	Thermal Feedrate	MMBtu/hr		63.1	60.7	65.2	65.2			65.2								
85	Estimated Firing Rate	MMBtu/hr																
86																		
87	Feedrate MTEC Calculations																	
88	Ash	mg/dscm	100	81.4	83.4	89.3	84.71			84.71								
89	Chlorine	ug/dscm	100	95009302	98448393	109205880	50452598			50452598								
90	Antimony	ug/dscm	100	18	18	18	19			19								
91	Arsenic	ug/dscm	100	80	90	98	89			89								
92	Barium	ug/dscm	100	7	7	7	7			7								
93	Beryllium	ug/dscm	100	3	3	4	3			3								
94	Cadmium	ug/dscm	100	2	2	2	2			2								
95	Chromium	ug/dscm	100	44	50	54	49			49								
96	Lead	ug/dscm	100	342	350	357	350			350								
97	Mercury	ug/dscm	100	2	2	4	2			2								
98	Nickel	ug/dscm	100	44	65	139	83			83								
99	Selenium	ug/dscm	100	28	28	30	29			29								
100	Silver	ug/dscm	100	28	28	29	28			28								
101	Thallium	ug/dscm	100	15	15	16	15			15								
102	SVM	ug/dscm	100	344	352	359	352			352								
103	LVM	ug/dscm	2.55	127	143	155	142			142								
104																		
105	610C12	Risk burn	R1		R2	R3	Cond Avg			R1	R2	R3	Cond Avg					
106	Feedstream Number		F1		F1	F1	F1			F1								
107	Feed Class		Liq HW		Liq HW	Liq HW	Liq HW			Liq HW								
108	Feed Class 2		HW		HW	HW	HW			HW								
109	Feedstream Description		Liq waste		Liq waste	Liq waste	Liq waste			Liq waste								
110	Feed Rate	lb/hr		8254	8230	8324	8269			8269								
111	Heating Value	Btu/lb		8590	7630	7810	8010			8010								
112	Density	kg/L		1.1726	1.175	1.1733	1.1736			1.1736								
113	Ash	g/hr	nd	1872.0	nd	1866.6	nd			1875.5								
114	Antimony	g/hr	nd	0.374	nd	0.411	nd			0.4								
115	Arsenic	g/hr	nd	0.711	nd	1.195	nd			1.063								
116	Barium	g/hr	nd	0.15	nd	0.261	nd			0.187								
117	Beryllium	g/hr	nd	0.075	nd	0.075	nd			0.075								
118	Cadmium	g/hr	nd	0.037	nd	0.037	nd			0.037								
119	Chromium	g/hr	nd	0.374	0.747	0.793	0.638			0.638								
120																		

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
121	Lead		nd	7.488	nd	7.466	nd	7.929		7.628									
122	Mercury	g/hr	nd	0.075	nd	0.075	nd	0.076		0.075									
123	Nickel	g/hr	nd	1.46		3.061		1.699		2.073									
124	Selenium	g/hr		0.861		0.635		1.737		1.078									
125	Silver	g/hr	nd	0.599	nd	0.537	nd	0.642		0.613									
126	Thallium	g/hr	nd	0.337	nd	0.336	nd	0.34		0.338									
127	Copper	g/hr		2.733		6.346		4.153		4.411									
128	Manganese	g/hr		0.786		1.344		1.43		1.201									
129	Zinc	g/hr		7.862		26.879		43.799		26.18									
130																			
131	Stack Gas Flowrate	dscfm		15953		16857		16088		16299									
132	Oxygen	%		8.8		9.7		8.7		9.1									
133																			
134	Thermal Feedrate	MMBtu/hr		70.9		62.8		65.0		66.2									
135	Estimated Firing Rate	MMBtu/hr										70.9			62.8			65.0	
136												61.8			60.5			62.8	
137	<i>Feedrate MTEC Calculations</i>																		
138	Ash	mg/dscm	100	79	100	81	100	79	100	80	100	79.3	100	80.8	100	78.7	100	79.6	
139	Antimony	ug/dscm	100	16	100	18	100	17	100	17	100	15.8	100	17.8	100	17.3	100	17	
140	Arsenic	ug/dscm	100	30	100	52	100	53	100	45	100	30.1	100	51.7	100	53.5	100	45	
141	Barium	ug/dscm	100	6	100	11	100	6	100	8	100	6.4	100	11.3	100	6.3	100	8	
142	Beryllium	ug/dscm	100	3	100	3	100	3	100	3	100	3.2	100	3.2	100	3.2	100	3	
143	Cadmium	ug/dscm	100	2	100	2	100	2	100	2	100	1.6	100	1.6	100	1.6	100	2	
144	Chromium	ug/dscm	100	16	100	32	100	33	100	27	100	15.8	100	32.3	100	33.0	100	27	
145	Lead	ug/dscm	100	317	100	323	100	330	100	324	100	317.2	100	323.2	100	330.4	100	324	
146	Mercury	ug/dscm	100	3	100	3	100	3	100	3	100	3.2	100	3.2	100	3.2	100	3	
147	Nickel	ug/dscm	100	62	100	132	100	71	100	88	100	61.9	100	132.5	100	70.8	100	88	
148	Selenium	ug/dscm	100	36	100	27	100	72	100	45	100	36.5	100	27.5	100	72.4	100	45	
149	Silver	ug/dscm	100	25	100	23	100	27	100	25	100	25.4	100	23.2	100	26.7	100	25	
150	Thallium	ug/dscm	100	14	100	15	100	14	100	14	100	14.3	100	14.5	100	14.2	100	14	
151	Copper	ug/dscm	100	116	100	275	100	173	100	188	100	115.8	100	274.7	100	173.0	100	188	
152	Manganese	ug/dscm	100	33	100	58	100	60	100	50	100	33.3	100	58.2	100	59.6	100	50	
153	Zinc	ug/dscm	100	333	100	1163	100	1825	100	1107	100	333.1	100	1163.4	100	1824.9	100	1107	
154	SVM	ug/dscm	100	319	100	325	100	332	100	325	100	318.8	100	324.8	100	332.0	100	325.2	
155	LVM	ug/dscm	67.8	49	63	87	63	90	64	75	68	49.1	63	87.3	63	89.7	64	75.4	

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Feedstream 2																		
2																			
3																			
4																			
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	B	C	D	E
1	Process Information			
2				
3	610C10 Trial burn			Cond Avg
4				
5	Combustion Chamber Temp (min)	°F		1655
6	Combustion Pressure	in. WC		-1
7	Waste Injection Pressure	psig		4.0
8	Atomizing Steam Header	psig		58.00
9	Scrubber pH	pH		8.48
10	Scrubber Recir Rate	gpm		411
11	Water Injection Rate	gpm		0
12				
13	610C11 Trial burn			Cond Avg
14				
15	Combustion Chamber Temp (min)	°F		1988.0
16	Combustion Pressure	in. WC		-1.00
17	Waste Injection Pressure	psig		4
18	Atomizing Steam Header	psig		58
19	Scrubber pH	pH		8.5
20	Scrubber Recir Rate	gpm		412
21	Water Injection Rate	gpm		10
22				
23	610C12 Risk burn			Cond Avg
24				
25	Combustion Chamber Temp (min)	°F		1987.0
26	Combustion Pressure	in. WC		-1.00
27	Scrubber pH	pH		9.1
28	Scrubber Recir Rate	gpm		413
29	water Injection Rate	gpm		9.94

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
																			PCDD/PCDF
2	N																		
3	Norco Chemical Plant-West Site Shell Oil Company																		
4	Facility Name and ID: 610C12																		
5	Condition/Test Date: Risk burn, reasonable upper bound on normal operation																		
6																			
7	I-TEF																		
8	Wght Fact																		
9	Run 1																		
10	Run 2																		
11	Run 3																		
11	Detected in sample volume (ng)		Total Full ND		TEQ Full ND		Total Full ND		TEQ Full ND		Total Full ND		TEQ Full ND		Total Full ND		TEQ Full ND		
12	2,3,7,8-TCDD	1	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	
13	1,2,3,7,8-PCDD	0.5	0.430	0.215	0.430	0.215	0.430	0.215	0.430	0.215	0.430	0.215	0.430	0.215	0.430	0.215	0.430	0.215	
14	1,2,3,4,7,8-HxCDD	0.1	0.370	0.097	0.485	0.049	0.485	0.049	0.485	0.049	0.485	0.049	0.485	0.049	0.485	0.049	0.485	0.049	
15	1,2,3,6,7,8-HxCDD	0.1	1.000	0.100	0.500	0.050	0.500	0.050	0.500	0.050	0.500	0.050	0.500	0.050	0.500	0.050	0.500	0.050	
16	1,2,3,7,8,9-HxCDD	0.1	1.210	0.121	0.605	0.061	0.605	0.061	0.605	0.061	0.605	0.061	0.605	0.061	0.605	0.061	0.605	0.061	
17	1,2,3,4,6,7,8-HpCDD	0.01	8.010	0.080	4.005	0.040	4.005	0.040	4.005	0.040	4.005	0.040	4.005	0.040	4.005	0.040	4.005	0.040	
18	OCDD	0.001	15.730	0.016	15.730	0.016	15.730	0.016	15.730	0.016	15.730	0.016	15.730	0.016	15.730	0.016	15.730	0.016	
19	2,3,7,8-TCDF	0.1	2.220	0.222	1.110	0.111	1.110	0.111	1.110	0.111	1.110	0.111	1.110	0.111	1.110	0.111	1.110	0.111	
20	1,2,3,7,8-PCDF	0.05	14.040	0.702	14.040	0.702	14.040	0.702	14.040	0.702	14.040	0.702	14.040	0.702	14.040	0.702	14.040	0.702	
21	2,3,4,7,8-PCDF	0.5	11.340	5.670	11.340	5.670	11.340	5.670	11.340	5.670	11.340	5.670	11.340	5.670	11.340	5.670	11.340	5.670	
22	1,2,3,4,7,8-HxCDF	0.1	124.360	12.436	124.360	12.436	124.360	12.436	124.360	12.436	124.360	12.436	124.360	12.436	124.360	12.436	124.360	12.436	
23	1,2,3,6,7,8-HxCDF	0.1	47.010	4.701	47.010	4.701	47.010	4.701	47.010	4.701	47.010	4.701	47.010	4.701	47.010	4.701	47.010	4.701	
24	2,3,4,6,7,8-HxCDF	0.1	36.660	3.666	36.660	3.666	36.660	3.666	36.660	3.666	36.660	3.666	36.660	3.666	36.660	3.666	36.660	3.666	
25	1,2,3,7,8,9-HxCDF	0.1	4.810	0.481	4.810	0.481	4.810	0.481	4.810	0.481	4.810	0.481	4.810	0.481	4.810	0.481	4.810	0.481	
26	1,2,3,4,6,7,8-HpCDF	0.01	40.460	0.405	20.230	0.202	20.230	0.202	194.690	1.947	194.690	1.947	194.690	1.947	194.690	1.947	194.690	1.947	
27	OCDF	0.001	650.620	0.651	650.620	0.651	650.620	0.651	384.930	0.385	384.930	0.385	384.930	0.385	384.930	0.385	384.930	0.385	
28	Total TCDD	0	0.640	0.000	0.640	0.000	0.640	0.000	0.230	0.000	0.230	0.000	0.230	0.000	0.230	0.000	0.230	0.000	
29	Total PCDD	0	1.900	0.000	1.900	0.000	1.900	0.000	0.930	0.000	0.930	0.000	0.930	0.000	0.930	0.000	0.930	0.000	
30	Total HxCDD	0	7.010	0.000	3.505	0.000	3.505	0.000	4.110	0.000	4.110	0.000	2.055	0.000	2.055	0.000	12.460	0.000	
31	Total HpCDD	0	13.410	0.000	6.705	0.000	6.705	0.000	9.630	0.000	9.630	0.000	9.630	0.000	30.990	0.000	30.990	0.000	
32	Total TCDF	0	26.160	0.000	26.160	0.000	26.160	0.000	13.460	0.000	13.460	0.000	13.460	0.000	24.470	0.000	24.470	0.000	
33	Total PCDF	0	110.390	0.000	110.390	0.000	110.390	0.000	59.890	0.000	59.890	0.000	59.890	0.000	135.200	0.000	135.200	0.000	
34	Total HxCDF	0	381.820	0.000	381.820	0.000	381.820	0.000	208.200	0.000	208.200	0.000	208.200	0.000	417.900	0.000	417.900	0.000	
35	Total HpCDF	0	40.850	0.000	20.425	0.000	20.425	0.000	369.400	0.000	369.400	0.000	369.400	0.000	51.400	0.000	51.400	0.000	
36																			
37	Gas sample volume (dscf)		121.18	121.18	121.18	121.18	121.18	121.18	142.86	142.86	142.86	142.86	142.86	142.86	139.13	139.13	139.13	139.13	
38	O2 (%)		9.70	9.70	9.70	9.70	9.70	9.70	9.5	9.5	9.5	9.5	9.5	9.5	8.70	8.70	8.70	8.70	
39																			
40	PCDD/PCDF (ng in sample)		30.53	1217.9	30.53	1217.9	30.53	1217.9	30.53	18.871	18.871	18.871	18.871	18.871	34.43	34.43	34.43	34.43	34.13
41	PCDD/PCDF (ng/dscm @ 7% O2)		11.03	440.00	11.03	440.00	11.03	440.00	11.03	5.68	5.68	5.68	5.68	5.68	9.95	9.95	9.95	9.95	9.87
42																			
43	TEQ Cond Avg		8.78																
44	Total Cond Avg		323.38																