	B	C
1	**Source Description**	
2		
3	Phase II ID No.	3008
4	EPA ID No.	UT3213820894
5	Facility Name	Tooele Army Depot North
6	Facility Location	
7	City	Tooele
8	State	Utah
9	Unit ID Name/No.	APE 1236M1 DF
10	Other Sister Facilities	
11	Number of Sister Facilities	0
12	Combustor Class	Onsite incinerator, DoD munitions popping, government
13	Combustor Type	Rotary hearth
14	Combustor Characteristics	Designed to ignite the ammunition items and effectively incinerate reactive components from the metal shells. Equiped with a Hauck 783 proportioning burner located at the discharge end. The burner has a turndown ratio of 4:1. Operated at 800-1100F and slight negative pressure.
15	Capacity (MMBtu/hr)	3
16	Soot Blowing	
17	APCS Detailed Acronym	C/AB/FF
18	APCS General Class	C, FF
19	APCS Characteristics	Cyclone has a 90-95% removal efficiency for particles 10 microns or larger. Afterburner is built by Southern Technology Inc, designed to raise the temperature of the exhaust gases from the kiln. High temperature cast ceramic filters bahouse which is built by JT Systems Inc.
20		New APCS, old APCS (pre 2000 testing) used low temperature baghouse
21	Hazardous Wastes	Liq, solid
22	Haz Waste Description	Propellant, ammunitions.
23	Supplemental Fuel	Oil
24		
25	Stack Characteristics	
26	Diameter (ft)	1.67
27	Height (ft)	34
28	Gas Velocity (ft/sec)	51.0
29	Gas Temperature (°F)	500
30		
31	Permitting Status	Tier II for Sb, Ba, Cr and tier III for Pb
32	HWC Burn Status (Date if Terminated)	

	B	C
1	**Condition Description**	
2		
3	**3008C1**	
4		
5	Report Name/Date	Trial Burn Report. July 2000
6	Report Prepare	Tooele Army Depot
7	Testing Firm	
8	Testing Dates	July 12- 14, 2000
9	Cond Dates	Jul-00
10	Condition Descr	Trial burn, M9 propellant feed
11	Content	PM, CO, PCDD/F
12		
13	**3008C2**	
14		
15	Report Name/Date	Trial Burn Report. July 2000
16	Report Prepare	Tooele Army Depot
17	Testing Firm	
18	Testing Dates	July 19-21, 2000
19	Cond Dates	Jul-00
20	Condition Descr	Trial burn, M1 propellant/ HCB powder
21	Content	PM, CO, PCDD/F
22		
23	**3008C3**	
24		
25	Report Name/Date	Trial Burn Report. July 2000
26	Report Prepare	Tooele Army Depot
27	Testing Firm	
28	Testing Dates	July 24-26, 2000
29	Cond Dates	Jul-00
30	Condition Descr	Trial burn, 0.5 caliber M17 tracer/ Cr powder. Max oper cond.
31	Content	PM, CO, PCDD/F, HCl/Cl2, metals
32		
33	**3008C4**	
34		
35	Report Name/Date	Risk Burn Report. May 2001
36	Report Prepare	Tooele Army Depot
37	Testing Firm	
38	Testing Dates	May 8-10, 2001
39	Cond Dates	May-01
40	Condition Descr	Risk burn, "normal" operation risk burn
41	Content	PM, metals, PCDD/F
42		
43	**3008C9**	
44		
45	Report Name/Date	TEAD-N Incinerator Trial Burn Report, 6 December 1993, Air Pollution Emission Assessment No. 42-21-M665-93, RCRA Trial Burn for Deactivation Furnace, Tooele, Utah, 9-31 Autust 1993, Prepared by the U.S. Army Environmental Hygiene Agency
46	Report Prepare	
47	Testing Firm	
48	Testing Dates	August 11-12, 1993
49	Cond Dates	Aug-93
50	Condition Descr	TEST SERIES 1
51	Content	
52		
53	**3008B1**	
54		
55	Report Name/Date	TEAD-N Incinerator Trial Burn Report, 6 December 1993, Air Pollution Emission Assessment No. 42-21-M665-93, RCRA Trial Burn for Deactivation Furnace, Tooele, Utah, 9-31 Autust 1993, Prepared by the U.S. Army Environmental Hygiene Agency
56	Report Prepare	
57	Testing Firm	
58	Testing Dates	August 13-16, 1993
59	Cond Dates	Aug-93
60	Condition Descr	TEST SERIES 2
61	Content	
62		
63	**3008B2**	
64		

	B	C
65	Report Name/Date	TEAD-N Incinerator Trial Burn Report, 6 December 1993, Air Pollution Emission Assessment No. 42-21-M665-93, RCRA Trial Burn for Deactivation Furnace, Tooele, Utah, 9-31 Autust 1993, Prepared by the U.S. Army Environmental Hygiene Agency
66	Report Prepare	
67	Testing Firm	
68	Testing Dates	
69	Testing Dates	Aug 17-19, 1993
70	Cond Dates	Aug-93
71	Condition Descr	TEST SERIES 3
72	Content	
73		
74	**3008B3**	
75		
76	Report Name/Date	TEAD-N Incinerator Trial Burn Report, 6 December 1993, Air Pollution Emission Assessment No. 42-21-M665-93, RCRA Trial Burn for Deactivation Furnace, Tooele, Utah, 9-31 Autust 1993, Prepared by the U.S. Army Environmental Hygiene Agency
77	Report Prepare	
78	Testing Firm	
79	Testing Dates	Aug 20-25, 1993
80	Cond Dates	Aug-93
81	Condition Descr	
82	Content	
83		
84	**3008B4**	
85		
86	Report Name/Date	TEAD-N Incinerator Trial Burn Report, 6 December 1993, Air Pollution Emission Assessment No. 42-21-M665-93, RCRA Trial Burn for Deactivation Furnace, Tooele, Utah, 9-31 Autust 1993, Prepared by the U.S. Army Environmental Hygiene Agency
87	Report Prepare	
88	Testing Firm	
89	Testing Dates	Aug 26-27, 1993
90	Cond Dates	Aug-93
91	Condition Descr	TEST SERIES 5
92	Content	

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions**											
2												
3		Comments	Units	7% O2								
4												
5	**3008C1**	Trial Burn				R1		R2		R3		Cond Avg
6												
7	PM	E1	gr/dscf	y		0.003		0.005		0.004		0.0040
8	CO (RA)	E1	ppmv	y		30.75		18.83		24.25		24.61
9	CO (MHRA)	E1	ppmv	y		67.1		35.2		36.5		46.27
10	HC	E1	ppmv	y		2.62		0.68		1.27		1.52
11												
12	POHC DRE	Dinitroglycerin										
13	POHC Feedrate		lb/hr			42.21		42.77		41.34		
14	Emission Rate	E2	lb/hr			4.85E-05		4.66E-06		5.88E-06		
15	DRE	E2	%			99.9999		99.9999		99.9999		
16												
17	Sampling Train	PM	E1									
18	Stack Gas Flowrate		dscfm			2606.7		2878.3		2831.6		2772.2
19	O2		%			14.87		15		15		15.0
20	Moisture		%			4.85		4.52		5.17		4.8
21	Temperature		°F			483		504		502		496.3
22												
23	Sampling Train	DRE	E2									
24	Stack Gas Flowrate		dscfm			2628.5		2877.6		2826.4		2777
25	O2		%									
26	Moisture		%									
27	Temperature		°F									
28												
29	Sampling Train	PCDD/F	E3									
30	Stack Gas Flowrate		dscfm			2615.9		2894.8		2805.6		2772.1
31	O2		%			14.87		15		15		15
32	Moisture		%			4.77		4.2		5.05		5
33	Temperature		°F			477		505		506		496
34												
35	**3008C2**	Trial Burn				R1		R2		R3		Cond Avg
36												
37	PM	E1	gr/dscf	y		0.004		0.013		0.003		0.0067
38	CO (RA)	E1	ppmv	y		11.54		9.36		11.4		10.77
39	CO (MHRA)	E1	ppmv	y		15.1		13		15.1		14.40
40	HC	E1	ppmv	y		4.36		0.91		1.64		2.30
41												
42	POHC	HCB										
43	POHC Feedrate		lb/hr			3		3.05		3.05		
44	Emission Rate	E2	lb/hr			1.28E-06		4.07E-06		6.38E-06		
45	DRE	E2	%			99.9997		99.9989		99.9983		
46												
47	POHC	2,4-DNT										
48	POHC Feedrate		lb/hr			11.11		11.25		11.28		
49	Emission Rate	E2	lb/hr			5.02E-05		5.05E-06		5.14E-06		
50	DRE	E2	%			99.9995		99.9996		99.9996		
51												
52	Sampling Train	PM, HCl/Cl2	E1									
53	Stack Gas Flowrate		dscfm			2523.5		2467.1		2442.3		2477.6
54	O2		%			14.73		14.6		14.8		14.7
55	Moisture		%			5.75		5.52		5.44		5.6
56	Temperature		°F			508		503		488		499.7
57												
58	Sampling Train	DRE	E2									
59	Stack Gas Flowrate		dscfm			2502.3		2489.4		2480.8		2490.8
60	O2		%			14.73		14.6		14.8		14.7
61	Moisture		%			5.8		5.75		5.54		5.7
62	Temperature		°F			513		503		493		503.0
63												
64	Sampling Train	PCDD/F	E3									
65	Stack Gas Flowrate		dscfm			2492.7		2497.8		2451.0		2480.5
66	O2		%			14.73		14.6		14.8		14.7
67	Moisture		%			5.66		5.52		5.36		5.5
68	Temperature		°F			520		508		499		509.0
69												
70	**3008C3**	Trial Burn				R1		R2		R3		Cond Avg
71												

	B	C	D	E	F	G	H	I	J	K	L	M
72	PM	E1	gr/dscf	y		0.005		0.005		0.004		0.005
73	CO (RA)	E1	ppmv	y		29.64		32.91		34.11		32.22
74	CO (MHRA)	E1	ppmv	y		73.8		83.2		71.7		76.23
75	HC	E1	ppmv	y		1.96		2.4		0.41		1.59
76	HCl		lb/hr			0.008		0.014		0.01		
77	Cl2		lb/hr			0.175		0.154		0.161		
78												
79	Aluminum		g/hr			5.28E-02		5.74E-02		5.20E-02		
80	Antimony		g/hr			8.63E-02		1.13E-01		9.98E-02		
81	Arsenic		g/hr			9.40E-03		1.11E-02		8.06E-03		
82	Barium		g/hr			1.44E-01		1.97E-01		1.65E-01		
83	Beryllium		g/hr			4.96E-03		4.56E-03		4.61E-03		
84	Cadmium		g/hr			9.71E-03		7.38E-03		7.06E-03		
85	Chromium		g/hr			7.70E-03		6.31E-03		6.35E-03		
86	Copper		g/hr			3.53E-02		4.77E-02		4.06E-02		
87	Lead		g/hr			4.5		6.76		5.73		
88	Mercury		g/hr			6.48E-03		9.48E-03		1.33E-02		
89	Nickel		g/hr			6.88E-03		6.69E-03		6.35E-03		
90	Selenium		g/hr			9.91E-03		9.14E-03		9.21E-03		
91	Silver		g/hr			1.98E-03		1.83E-03		1.84E-03		
92	Thallium		g/hr			1.45E-03		1.93E-03		1.73E-03		
93	Zinc		g/hr			9.97E-02		1.04E-01		8.45E-02		
94												
95	Sampling Train	PM, HCl/Cl2	E1									
96	Stack Gas Flowrate		dscfm			2513.9		2538.4		2703.1		2585.13
97	O2		%			14.7		14.4		15		14.70
98	Moisture		%			5.48		5.67				5.58
99	Temperature		°F			522		515				518.50
100												
101	Sampling Train	Metals	E2									
102	Stack Gas Flowrate		dscfm			2434.8		2505.5		2634.3		2524.9
103	O2		%			14.7		14.4		15		14.7
104	Moisture		%			5.42		5.7				5.6
105	Temperature		°F			490		487				488.5
106												
107	Sampling Train	PCDD/F	E3									
108	Stack Gas Flowrate		dscfm			2487.5		2498.9		2493.2		2493.2
109	O2		%			14.7		14.4		15		14.7
110	Moisture		%			5.46		5.63				5.5
111	Temperature		°F			502		499				500.5
112												
113	HCl	E1	ppmv	y		1.3		2.1		1.5		1.63
114	Cl2	E1	ppmv	y		14.2		11.8		12.8		12.93
115	Total Chlorine	E1	ppmv	y		29.67		25.72		27.06		27.48
116												
117	Aluminum	E2	ug/dscm	y		28.4		28.6		27.1		28.04
118	Antimony	E2	ug/dscm	y		46.4		56.3		52.1		51.60
119	Arsenic	E2	ug/dscm	y		5.1		5.5		4.2		4.93
120	Barium	E2	ug/dscm	y		77.4		98.2		86.1		87.23
121	Beryllium	E2	ug/dscm	y		2.7		2.3		2.4		2.45
122	Cadmium	E2	ug/dscm	y		5.2		3.7		3.7		4.19
123	Chromium	E2	ug/dscm	y		4.1		3.1		3.3		3.53
124	Copper	E2	ug/dscm	y		19.0		23.8		21.2		21.31
125	Lead	E2	ug/dscm	y		2418.8		3370.6		2989.0		2926.11
126	Mercury	E2	ug/dscm	y		3.5		4.7		6.9		5.05
127	Nickel	E2	ug/dscm	y		3.7		3.3		3.3		3.45
128	Selenium	E2	ug/dscm	y		5.3		4.6		4.8		4.90
129	Silver	E2	ug/dscm	y		1.1		0.9		1.0		0.98
130	Thallium	E2	ug/dscm	y		0.8		1.0		0.9		0.88
131	Zinc		ug/dscm	y		53.6		51.9		44.1		49.84
132												
133	SVM	E2	ug/dscm	y		2424.0		3374.2		2992.7		2930.30
134	LVM	E2	ug/dscm	y		11.9		11.0		9.9		10.91
135												
136	**3008C4**	Risk Burn				R1		R2		R3		Cond Avg
137												
138	PM	E1	gr/dscf	y		0.008		0.006		0.006		0.007
139	CO (RA)	E1	ppmv	y		15.5		10.6		5.1		10.40
140												
141	Aluminum		g/hr			2.97E-02		2.24E-02		2.07E-02		
142	Antimony		g/hr			2.79E-01		1.96E-01		2.27E-01		

	B	C	D	E	F	G	H	I	J	K	L	M
143	Arsenic		g/hr			1.63E+00		1.45E+00		1.41E+00		
144	Barium		g/hr			3.46E-01		2.38E-01		3.54E-01		
145	Beryllium		g/hr			3.14E-03		3.14E-03		3.12E-03		
146	Cadmium		g/hr			1.70E-02		9.50E-03		7.02E-03		
147	Chromium		g/hr			1.39E-03		1.40E-03		2.44E-03		
148	Copper		g/hr			4.17E-02		4.72E-02		4.93E-02		
149	Lead		g/hr			1.60E+01		1.12E+01		1.02E+01		
150	Nickel		g/hr			1.39E-03		1.40E-03		1.93E-03		
151	Selenium		g/hr			4.88E-03		4.89E-03		4.86E-03		
152	Silver		g/hr			1.67E-03		1.29E-03		1.91E-03		
153	Thallium		g/hr			1.25E-03		1.26E-03		1.25E-03		
154	Zinc		g/hr			1.12E-01		1.09E-01		1.21E-01		
155												
156	Sampling Train	PM, HCl/Cl2	E1									
157	Stack Gas Flowrate		dscfm			2768.3		2687.2		2687.8		2714.43
158	O2		%			15.2		14.67		14.8		14.89
159	Moisture		%			4.8		4.7		4.8		4.77
160	Temperature		°F			428		436		443		435.67
161												
162	Sampling Train	Metals	E2									
163	Stack Gas Flowrate		dscfm			2768.3		2687.2		2687.8		2714.4
164	O2		%			15.2		14.7		14.8		14.9
165	Moisture		%									
166	Temperature		°F			445		457		461		454.3
167												
168	Sampling Train	PCDD/F	E3									
169	Stack Gas Flowrate		dscfm			2796.6		2754.1		2704.8		2751.8
170	O2		%			15.2		14.67		14.8		14.9
171	Moisture		%			4.7		4.8		4.27		4.6
172	Temperature		°F			449		456		465		456.7
173												
174	Aluminum	E2	ug/dscm	y		15.3		10.9		10.2		12.13
175	Antimony	E2	ug/dscm	y		143.3		95.5		112.3		117.01
176	Arsenic	E2	ug/dscm	y		837.0		706.2		697.6		746.94
177	Barium	E2	ug/dscm	y		177.7		115.9		175.2		156.24
178	Beryllium	E2	ug/dscm	y		1.6		1.5		1.5		1.56
179	Cadmium	E2	ug/dscm	y		8.7		4.6		3.5		5.61
180	Chromium	E2	ug/dscm	y		0.7		0.7		1.2		0.87
181	Copper	E2	ug/dscm	y		21.4		23.0		24.4		22.93
182	Lead	E2	ug/dscm	y		8216.1		5454.6		5046.7		6239.15
183	Nickel	E2	ug/dscm	y		0.7		0.7		1.0		0.78
184	Selenium	E2	ug/dscm	y		2.5		2.4		2.4		2.43
185	Silver	E2	ug/dscm	y		0.9		0.6		0.9		0.81
186	Thallium	E2	ug/dscm	y		0.6		0.6		0.6		0.62
187	Zinc	E2	ug/dscm	y		57.5		53.1		59.9		56.82
188												
189	SVM	E2	ug/dscm	y		8224.8		5459.2		5050.2		6244.76
190	LVM	E2	ug/dscm	y		839.3		708.4		700.4		749.37

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions 1**											
2												
3												
4	**3008C9**					R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.1668		0.1685		0.1433		0.16
7	CO	E1	ppmv	y		6.4		30.5		18.5		18.43
8	CO(MHRA)	E1	ug/dscm	y		8.8		37.4		36.8		27.69
9												
10												
11	**3008B1**					R1		R2		R3		Cond Avg
12												
13	PM	E1	gr/dscf	y		0.0310		0.0177		0.0210		0.0232
14	CO	E1	ppmv	y		37.9		60.8				49.4
15	CO(MHRA)	E1	ug/dscm	y		66.0		163.0				114.5
16	HCl	E1	ppmv	y		0.6		21.9		41.5		21.3
17	Cl2	E1	ppmv	y		0.6		21.8		41.4		21.3
18	Total Chlorine	E1	ppmv	y		1.8		65.6		124.3		63.9
19	Antimony	E1	ug/dscm	y		867.3		683.0		909.5		819.9
20	Arsenic	E1	ug/dscm	y		9.6		5.6		4.6		6.6
21	Barium	E1	ug/dscm	y		265.6		2217.5		2680.6		1721.2
22	Beryllium	E1	ug/dscm	y		0.3		0.3		0.3		0.3
23	Cadmium	E1	ug/dscm	y		6.8		4.3		7.3		6.1
24	Chromium	E1	ug/dscm	y		45.4		34.5		242.8		107.6
25	Lead	E1	ug/dscm	y		6849.3		6684.1		5095.8		6209.7
26	Mercury	E1	ug/dscm	y		1.1		0.0		0.1		0.4
27	Nickel	E1	ug/dscm	y		37.0		177.0		247.4		153.8
28	Selenium	E1	ug/dscm	y		0.9		1.0		0.8		0.9
29	Silver	E1	ug/dscm	y		1.0		0.5		0.6		0.7
30	Thallium	E1	ug/dscm	y		0.8		0.7		0.3		0.6
31	LVM	E1	ug/dscm	y		55.4		40.4		247.6		114.5
32	SVM	E1	ug/dscm	y		6856.1		6688.4		5103.1		6215.9
33												
34	**3008B2**					R1		R2		R3		Cond Avg
35												
36	PM	E1	gr/dscf	y		0.0153		0.0117		0.0350		0.0207
37	CO	E1	ppmv	y		82.0		40.4		10.4		44.3
38	CO(MHRA)	E1	ug/dscm	y		129.5		62.3		65.1		85.6
39	Antimony	E1	ug/dscm	y		581.2		5.4		2153.6		913.4
40	Arsenic	E1	ug/dscm	y		3.8		0.8		9.8		4.8
41	Barium	E1	ug/dscm	y		278.9		37.5		8619.9		2978.8
42	Beryllium	E1	ug/dscm	y		0.4		0.4		0.4		0.4
43	Cadmium	E1	ug/dscm	y		5.8		5.9		6.0		5.9
44	Chromium	E1	ug/dscm	y		162.1		104.1		443.3		236.5
45	Lead	E1	ug/dscm	y		2905.5		145.3		19262.7		7437.8
46	Mercury	E1	ug/dscm	y		0.1		0.0		0.0		0.0
47	Nickel	E1	ug/dscm	y		161.3		72.9		303.9		179.4
48	Selenium	E1	ug/dscm	y		1.0		0.8		1.1		0.9
49	Silver	E1	ug/dscm	y		0.6		0.4		1.1		0.7
50	Thallium	E1	ug/dscm	y		0.4		0.4		2.0		0.9
51	SVM	E1	ug/dscm	y		2911.2		151.2		19268.7		7443.7
52	LVM	E1	ug/dscm	y		166.3		105.3		453.4		241.7
53												
54												
55	**3008B3**					R1		R2		R3		Cond Avg
56												
57	PM	E1	gr/dscf	y				0.0494		0.0488		0.0491
58	CO	E1	ppmv	y		2.8		8.4		9.3		6.9
59	CO(MHRA)	E1	ug/dscm	y		4.1		44.4		12.0		20.2
60	Antimony	E1	ug/dscm	y				3800.7		4326.3		4063.5
61	Arsenic	E1	ug/dscm	y				11.0		12.9		12.0
62	Barium	E1	ug/dscm	y				5121.4		4634.2		4877.8
63	Beryllium	E1	ug/dscm	y				0.3		0.3		0.3
64	Cadmium	E1	ug/dscm	y				134.0		3.3		68.7
65	Chromium	E1	ug/dscm	y				110.1		110.3		110.2
66	Lead	E1	ug/dscm	y				16723.7		8056.1		12389.9
67	Mercury	E1	ug/dscm	y				0.0		0.4		0.2
68	Nickel	E1	ug/dscm	y				20.0		173.5		96.7
69	Selenium	E1	ug/dscm	y				0.9		0.6		0.8
70	Silver	E1	ug/dscm	y				1.0		1.0		1.0
71	Thallium	E1	ug/dscm	y				0.3		0.6		0.5

	B	C	D	E	F	G	H	I	J	K	L	M
72	SVM	E1	ug/dscm	y				16857.7		8059.5		12458.6
73	LVM	E1	ug/dscm	y				121.5		123.5		122.5
74												
75												
76	**3008B4**					R1		R2		R3		Cond Avg
77												
78	PM	E1	gr/dscf	y		0.0512		0.0221		0.0364		0.0365
79	CO	E1	ppmv	y		20.2		12.1		12.8		15.0
80	CO(MHRA)	E1	ug/dscm	y		147.5		12.4		28.8		62.9
81	Antimony	E1	ug/dscm	y		2575.3		985.1		1108.4		1556.3
82	Arsenic	E1	ug/dscm	y		12.3		7.0		7.6		9.0
83	Barium	E1	ug/dscm	y		4195.9		274.5		5077.1		3182.5
84	Beryllium	E1	ug/dscm	y		0.3		0.4		0.4		0.3
85	Cadmium	E1	ug/dscm	y		8.4		2.8		2.5		4.6
86	Chromium	E1	ug/dscm	y		132.2		46.3		198.4		125.6
87	Lead	E1	ug/dscm	y		8982.1		10675.6		20.9		6559.5
88	Mercury	E1	ug/dscm	y		0.1		0.0		0.0		0.0
89	Nickel	E1	ug/dscm	y		265.5		77.4		239.5		194.1
90	Selenium	E1	ug/dscm	y		0.6		0.7		0.9		0.8
91	Silver	E1	ug/dscm	y		1.4		0.9		0.9		1.1
92	Thallium	E1	ug/dscm	y		0.7		0.6		1.2		0.9
93	SVM	E1	ug/dscm	y		8990.5		10678.5		23.4		6564.1
94	LVM	E1	ug/dscm	y		144.8		53.6		206.4		134.9

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	M	X	Y	Z	AA	AB	A	AD	A	AF	AG
1	**Feedstream 2**																															
2																																
3																																
4	**3008C1**	Trial burn			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg					
5																																
6	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3					
7	Feed Class				Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Total		Total		Total		Total					
8	Feed Class 2																				Total		Total		Total		Total					
9	Feedstream Description				M9 Propellant	M9	Propellant		M9 Propellant	M9	Propellant		PEP		PEP		PEP		PEP		Total		Total		Total		Total					
10	Feed Rate		lb/hr		104.2		105.61		102.08		104.0		104.21		105.61		102.08		104.0								207.9					
11	Thermal Feedrate		MM Btu/hr																													
12	Heating Value		Btu/lb																													
13	Density		kg/L																													
14	Ash		lb/hr																		0.86		0.87		0.86		0.86					
15																																
16	Stack Gas Flowrate		dscfm																		2606.7		2878.3		2831.6		2772.2					
17	Oxygen		%																		14.9		15.0		15.0		15.0					
18																																
19	Thermal Feedrate		MMBtu/hr																													
20	Estimated Firing Rate		MMBtu/hr																													
21																																
22	*Feedrate MTEC Calculations*																															
23	Ash		mg/dscm																		201.5		188.6		189.5		192.2					
24																																
25	**3008C2**	Trial burn			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg					
26																																
27	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3					
28	Feed Class				Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Total		Total		Total		Total					
29	Feed Class 2																				Total		Total		Total		Total					
30	Feedstream Description				M1 Propellant	M1	Propellant		M1 Propellant	M1	Propellant		PEP		PEP		PEP		PEP		Total		Total		Total		Total					
31	Feed Rate		lb/hr		117.8		119.21		119.63		118.9		120.79		122.26		122.68		121.9								240.8					
32	Thermal Feedrate		MM Btu/hr																													
33	Heating Value		Btu/lb																													
34	Density		kg/L																													
35																																
36	Stack Gas Flowrate		dscfm																													
37	Oxygen		%																													
38																																
39	Thermal Feedrate		MMBtu/hr																													
40	Estimated Firing Rate		MMBtu/hr																													
41																																
42	*Feedrate MTEC Calculations*																															
43	Ash		mg/dscm																													
44																																
45	**3008C3**	**Trial burn**			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2	
46																																
47	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3		F4		F4	
48	Feed Class				Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW	
49	Feed Class 2																															
50	Feedstream Description				0.5 Cal M17		0.5 Cal M17		0.5 Cal M17		0.5 Cal M17		Cr Powder		Cr Powder		Cr Powder		Cr Powder		9 Propellant		9 Propellant		9 Propellant		9 Propellant		PEP		PEP	
51	Feed Rate		lb/hr										0.01		0.01		0.01		0.0										227.1		230.8	
52	Feed Rate		items/hr		5277		5363		5317		5319.0																					
53	Heating Value		Btu/lb																													
54	Density		kg/L																													
55	Ash		lb/hr																													
56	Chlorine		lb/hr																													
57	Antimony		lb/hr																													
58	Barium		lb/hr																													
59	Chromium		lb/hr																													
60	Lead		lb/hr																													

	B	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
1	**Feedstream 2**											
2												
3												
4	**3008C1**											
5												
6	Feedstream Number											
7	Feed Class											
8	Feed Class 2											
9	Feedstream Description											
10	Feed Rate											
11	Thermal Feedrate											
12	Heating Value											
13	Density											
14	Ash											
15												
16	Stack Gas Flowrate											
17	Oxygen											
18												
19	Thermal Feedrate											
20	Estimated Firing Rate											
21												
22	*Feedrate MTEC Calculat*											
23	Ash											
24												
25	**3008C2**											
26												
27	Feedstream Number											
28	Feed Class											
29	Feed Class 2											
30	Feedstream Description											
31	Feed Rate											
32	Thermal Feedrate											
33	Heating Value											
34	Density											
35												
36	Stack Gas Flowrate											
37	Oxygen											
38												
39	Thermal Feedrate											
40	Estimated Firing Rate											
41												
42	*Feedrate MTEC Calculat*											
43	Ash											
44												
45	**3008C3**	R3		Cond Avg		R1		R2		R3		Cond Avg
46												
47	Feedstream Number	F4		F4		F5		F5		F5		F5
48	Feed Class	Solid HW		Solid HW		Total		Total		Total		Total
49	Feed Class 2					Total		Total		Total		Total
50	Feedstream Description	PEP		PEP		Total		Total		Total		Total
51	Feed Rate	228.82		228.9								228.9
52	Feed Rate											
53	Heating Value											
54	Density											
55	Ash					43.08		43.78		43.4		43.42
56	Chlorine					3.38		3.44		3.41		3.41
57	Antimony					3.33		3.28		3.26		3.26
58	Barium					5.89		5.99		5.94		5.94
59	Chromium					0.01		0.01		0.01		0.01
60	Lead					153.21		155.7		154.37		154.42

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	M	X	Y	Z	AA	AB	A	AD	A	AF	AG
61																																
62	Stack Gas Flowrate		dscfm																													
63	Oxygen		%																													
64																																
65	Thermal Feedrate		MMBtu/hr																													
66	Estimated Firing Rate		MMBtu/hr																													
67																																
68	*Feedrate MTEC Calculations*																															
69	Ash		mg/dscm																													
70	Chlorine		ug/dscm																													
71	Antimony		ug/dscm																													
72	Barium		ug/dscm																													
73	Chromium		ug/dscm																													
74	Lead		ug/dscm																													
75	SVM		ug/dscm																													
76	LVM		ug/dscm																													
77																																
78	**3008C4**	**Risk burn**			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg					
79																																
80	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3					
81	Feed Class				Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Total		Total		Total		Total					
82	Feed Class 2																				Total		Total		Total		Total					
83	Feedstream Description				0.5 Cal M17		0.5 Cal M17		0.5 Cal M17		0.5 Cal M17		PEP		PEP		PEP		PEP		Total		Total		Total		Total					
84	Feed Rate		lb/hr										146.67		167.495		220.128															
85	Feed Rate		items/hr		3408		3892		5115																							
86	Heating Value		Btu/lb																													
87	Density		kg/L																													
88	Ash		lb/hr																		27.82		31.77		41.76		33.78					
89	Chlorine		lb/hr																		2.185		2.495		3.279		2.653					
90	Antimony		lb/hr																		2.078		2.382		3.13		2.533					
91	Barium		lb/hr																		3.805		4.345		3.279		4.62					
92	Chromium		lb/hr																													
93	Lead		lb/hr																		98.943		112.994		148.501		120.146					
94																																
95	Stack Gas Flowrate		dscfm																		2768.3		2687.2		2687.8		2714.4					
96	Oxygen		%																		15.2		14.7		14.8		14.9					
97																																
98	Thermal Feedrate		MMBtu/hr																													
99	Estimated Firing Rate		MMBtu/hr																													
100																																
101	*Feedrate MTEC Calculations*																															
102	Ash		mg/dscm																		6486		6991		9381		7624					
103	Chlorine		ug/dscm																		509394		549045		736558		598774					
104	Antimony		ug/dscm																		484449		524178		703088		571691					
105	Barium		ug/dscm																		887068		956152		736558		1042720					
106	Lead		ug/dscm																		23066809		24865231		33357617		27116593					
107	SVM		ug/dscm																		23066809		24865231		33357617		27116593					

	B	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
61												
62	Stack Gas Flowrate					2513.9		2538.4		2703.1		2585.1
63	Oxygen					14.7		14.4		15.0		14.7
64												
65	Thermal Feedrate											
66	Estimated Firing Rate											
67												
68	*Feedrate MTEC Calculat*											
69	Ash					10182.0		9781.7		10016.8		9979.6
70	Chlorine					798866.8		768595.4		787032.3		783750.8
71	Antimony					787049.2		732846.8		752412.1		749275.0
72	Barium					1392108.1		1338339.1		1370959.5		1365243.4
73	Chromium					2363.5		2234.3		2308.0		2298.4
74	Lead					36211354.3		34787880.5		35628792.1		35491731.5
75	SVM					36211354.3		34787880.5		35628792.1		35491731.5
76	LVM					2363.5		2234.3		2308.0		2298.4
77												
78	**3008C4**							R2		R3		Cond Avg
79												
80	Feedstream Number							F5		F5		F5
81	Feed Class											
82	Feed Class 2											
83	Feedstream Description											
84	Feed Rate											
85	Feed Rate											
86	Heating Value											
87	Density											
88	Ash											
89	Chlorine											
90	Antimony											
91	Barium											
92	Chromium											
93	Lead											
94												
95	Stack Gas Flowrate											
96	Oxygen											
97												
98	Thermal Feedrate											
99	Estimated Firing Rate											
100												
101	*Feedrate MTEC Calculat*											
102	Ash											
103	Chlorine											
104	Antimony											
105	Barium											
106	Lead											
107	SVM											

	B	C	D	E	F	G
1	**Process Information**					
2						
3	**3008C1 Trial burn**					
4						
5	Retort Speed	rpm		1.75	1.82	1.93
6	Afterburner Temperature	^{o}F		1600.98	1602.6	1601.73
7	Baghouse Diff. Press.	in W.C		9.064	10.078	11.556
8	Bahouse Temperature	^{o}F		666.7	687.69	680.1
9	Kiln Feed End Draft	in. H2O		0.32	0.283	0.282
10	Kiln Feed End Temperature	^{o}F		517.15	463.44	467.42
11	Kiln Burner End Temperature	^{o}F		1301.02	1285.45	1229.97
12				14.362	14.343	14.346
13	**3008C2 Trial burn**					
14						
15	Retort Speed	rpm		2.79	2.78	2.77
16	Afterburner Temperature	^{o}F		1604.9	1606.78	1600.1
17	Baghouse Diff. Press.	in W.C		8.36	8.963	10.027
18	Bahouse Temperature	^{o}F		690.93	671.8	660.32
19	Kiln Feed End Draft	in. H2O		0.297	0.295	0.3
20	Kiln Feed End Temperature	^{o}F		591.2	621.98	630.23
21	Kiln Burner End Temperature	^{o}F		1201.18	1212.92	1276.14
22						
23	**3008C3 Trial burn**					
24						
25	Retort Speed	rpm		1.65	1.61	1.58
26	Afterburner Temperature	^{o}F		1712.8	1687.75	1649.57
27	Baghouse Diff. Press.	in W.C		14.40	14.529	14.29
28	Bahouse Temperature	^{o}F		671.55	666.24	638.51
29	Kiln Feed End Draft	in. H2O		0.368	0.348	0.337
30	Kiln Feed End Temperature	^{o}F		679.4	637.16	606.17
31	Kiln Burner End Temperature	^{o}F		1409.81	1280.97	1261.33
32						
33	**3008C4 Risk burn**					
34						
35	Retort Speed	rpm		1.5	1.5	1.5
36	Afterburner Temperature	^{o}F		1634.0	1632	1634
37	Baghouse Diff. Press.	in W.C		3.54	4.13	4.53
38	Bahouse Temperature	^{o}F		792	806	818
39	Kiln Feed End Draft	in. H2O		-0.28	-0.29	-0.29
40	Kiln Feed End Temperature	^{o}F		507.0	538	597
41	Kiln Burner End Temperature	^{o}F		821	844	799

	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:	Tooele Army Depot North															
4		Condition ID:	3008C1															
5		Condition/Test Date:	Trial burn, M9 propellant feed															
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 (pg)																
11		2,3,7,8-TCDD	1															
12		1,2,3,7,8-PCDD	0.5															
13		1,2,3,4,7,8-HxCDD	0.1															
14		1,2,3,6,7,8-HxCDD	0.1															
15		1,2,3,7,8,9-HxCDD	0.1															
16		1,2,3,4,6,7,8-HpCDD	0.01															
17		OCDD	0.001		210	0.21	210.00	0.21		360	0.36	360	0.36		290	0	290	0
18		2,3,7,8-TCDF	0.1		13	1.30	13.00	1.30		12	1.20	12	1.20		10	1	10	1
19		1,2,3,7,8-PCDF	0.05															
20		2,3,4,7,8-PCDF	0.5															
21		1,2,3,4,7,8-HxCDF	0.1															
22		1,2,3,6,7,8-HxCDF	0.1															
23		2,3,4,6,7,8-HxCDF	0.1															
24		1,2,3,7,8,9-HxCDF	0.1															
25		1,2,3,4,6,7,8-HpCDF	0.01															
26		1,2,3,4,7,8,9-HpCDF	0.01															
27		OCDF	0.001															
28		Total TCDD	0		38	0	38	0		13	0.00	13	0.00		13	0	13	0
29		Total PCDD	0															
30		Total HxCDD	0															
31		Total HpCDD	0															
32		Total TCDF	0		146	0	146	0		187	0.00	187	0.00		44	0	44	0
33		Total PCDF	0															
34		Total HxCDF	0															
35		Total HpCDF	0															
36																		
37		Gas sample volume (dscf)				107.54	107.54	107.54			112.53	112.53	112.53			112.09	112.09	112.09
38		O2 (%)				14.87	14.87	14.87			15.0	15.0	15.0			15.00	15.00	15.00
39																		
40		PCDD/PCDF (ng in sample)				0.00	0.4	0.00			0.00	0.6	0.00			0.00	0.3	0.00
41		PCDD/PCDF (ng/dscm @ 7% O2)		0.0		0.0011	0.30	0.0011	0.0		0.0011	0.41	0.0011	0.0		0.0009	0.26	0.0009
42																		
43		TEQ Cond Avg	0.001															
44		Total Cond Avg	0.320															

	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:	Tooele Army Depot North															
4		Condition ID:	3008C2															
5		Condition/Test Date:	Trial burn, M1 propellant/ HCB powder															
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 (pg)																
11		2,3,7,8-TCDD	1															
12		Total TCDD	0		74	0	74	0		95	0.00	95	0.00		60	0	60	0
13		1,2,3,7,8-PCDD	0.5															
14		Total PCDD	0							61	0.00	61	0.00					
15		1,2,3,4,7,8-HxCDD	0.1															
16		1,2,3,6,7,8-HxCDD	0.1															
17		1,2,3,7,8,9-HxCDD	0.1															
18		Total HxCDD	0		95	0	95	0		200	0.00	200	0.00		180	0	180	0
19		1,2,3,4,6,7,8-HpCDD	0.01		59	0.59	59.00	0.59		150	1.50	150.00	1.50		90	1	90	1
20		Total HpCDD	0		120	0	120	0		300	0.00	300	0.00		190	0	190	0
21		OCDD	0.001		240	0.24	240.00	0.24		1180	1.18	1180	1.18		530	1	530	1
22		2,3,7,8-TCDF	0.1		41	4.10	41.00	4.10		84.4	8.44	84	8.44		84	8	84	8
23		Total TCDF	0		100	0	100	0		2014	0.00	2014	0.00		1736	0	1736	0
24		1,2,3,7,8-PCDF	0.05							86	4.30	86	4.30		70	4	70	4
25		2,3,4,7,8-PCDF	0.5		57	29	57	29		130	65.00	130	65.00		110	55	110	55
26		Total PCDF	0		410	0	410	0		1400	0.00	1400	0.00		1100	0	1100	0
27		1,2,3,4,7,8-HxCDF	0.1							140	14.00	140	14.00		130	13	130	13
28		1,2,3,6,7,8-HxCDF	0.1							120	12.00	120	12.00		110	11	110	11
29		2,3,4,6,7,8-HxCDF	0.1							110	11.00	110	11.00		97	10	97	10
30		1,2,3,7,8,9-HxCDF	0.1															
31		Total HxCDF	0		240	0	240	0		1000	0.00	1000	0.00		890	0	890	0
32		1,2,3,4,6,7,8-HpCDF	0.01		140	1	140	1		530	5.30	530	5.30		640	6	640	6
33		1,2,3,4,7,8,9-HpCDF	0.01							77	0.77	77	0.77		82	1	82	1
34		Total HpCDF	0		140	0	140	0		860	0.00	860	0.00		970	0	970	0
35		OCDF	0.001							310	0.31	310	0.31		330	0	330	0
36																		
37		Gas sample volume (dscf)				104.82	104.82	104.82			113.88	113.88	113.88			111.05	111.05	111.05
38		O2 (%)				14.73	14.73	14.73			14.6	14.6	14.6			14.80	14.80	14.80
39																		
40		PCDD/PCDF (ng in sample)				0.03	1.4	0.03			0.12	7.4	0.12			0.11	6.0	0.11
41		PCDD/PCDF (ng/dscm @ 7% O2)		0.0		0.0262	1.07	0.0262	0.0		0.0840	5.04	0.0840	0.0		0.0787	4.30	0.0787
42																		
43		TEQ Cond Avg	0.1															
44		Total Cond Avg	3.5															

	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:		Tooele Army Depot North															
4	Condition ID:		3008C3															
5	Condition/Test Date:		Trial burn, 0.5 caliber M17 tracer/ Cr powder. Max oper cond.															
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 (pg)																	
11		2,3,7,8-TCDD	1															
12		Total TCDD	0		120.00	0.00	120.00	0.00		10.00	0.00	10.00	0.00		69.00	0.00	69.00	0.00
13		1,2,3,7,8-PCDD	0.5															
14		Total PCDD	0		66.00	0.00	66.00	0.00							41.00	0.00	41.00	0.00
15		1,2,3,4,7,8-HxCDD	0.1															
16		1,2,3,6,7,8-HxCDD	0.1															
17		1,2,3,7,8,9-HxCDD	0.1															
18		Total HxCDD	0		210.00	0.00	210.00	0.00										
19		1,2,3,4,6,7,8-HpCDD	0.01		198.00	1.98	198.00	1.98		69.00	0.69	69.00	0.69		113.00	1.13	113.00	1.13
20		Total HpCDD	0		420.00	0.00	420.00	0.00		130.00	0.00	130.00	0.00		230.00	0.00	230.00	0.00
21		OCDD	0.001		1600.00	1.60	1600.00	1.60		800.00	0.80	800.00	0.80		780.00	0.78	780.00	0.78
22		2,3,7,8-TCDF	0.1		350.00	35.00	350.00	35.00		43.00	4.30	43.00	4.30		54.00	5.40	54.00	5.40
23		Total TCDF	0		1600.00	0.00	1600.00	0.00		1000.00	0.00	1000.00	0.00		2300.00	0.00	2300.00	0.00
24		1,2,3,7,8-PCDF	0.05															
25		2,3,4,7,8-PCDF	0.5		60.00	30.00	60.00	30.00							56.00	28.00	56.00	28.00
26		Total PCDF	0		500.00	0.00	500.00	0.00		160.00	0.00	160.00	0.00		220.00	0.00	220.00	0.00
27		1,2,3,4,7,8-HxCDF	0.1		70.00	7.00	70.00	7.00										
28		1,2,3,6,7,8-HxCDF	0.1															
29		2,3,4,6,7,8-HxCDF	0.1															
30		1,2,3,7,8,9-HxCDF	0.1															
31		Total HxCDF	0		170.00	0.00	170.00	0.00							52.00	0.00	52.00	0.00
32		1,2,3,4,6,7,8-HpCDF	0.01		130.00	1.30	130.00	1.30										
33		1,2,3,4,7,8,9-HpCDF	0.01															
34		Total HpCDF	0		130.00	0.00	130.00	0.00										
35		OCDF	0.001															
36																		
37		Gas sample volume (dscf)				104.15	104.15	104.15			114.76	114.76	114.76			122.21	122.21	122.21
38		O2 (%)				14.70	14.70	14.70			14.4	14.4	14.4			15.00	15.00	15.00
39																		
40		PCDD/PCDF (ng in sample)				0.08	4.8	0.08			0.01	2.1	0.01			0.04	3.7	0.04
41		PCDD/PCDF (ng/dscm @ 7% O2)		0.0		0.0580	3.63	0.0580	0.0		0.0038	1.37	0.0038	0.0		0.0238	2.49	0.0238
42																		
43		TEQ Cond Avg	0.029															
44		Total Cond Avg	2.50															

	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:		Tooele Army Depot North															
4	Condition ID:		3008C4															
5	Condition/Test Date:		Risk burn, "normal" operation risk burn															
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 (pg)																	
11		2,3,7,8-TCDD	1	nd	6.37	6.37	3.19	3.19	nd	5.20	5.20	2.60	2.60	nd	4.20	4.20	2.10	2.10
12		Total TCDD	0		401.90	0.00	401.90	0.00		232.20	0.00	232.20	0.00		242.10	0.00	242.10	0.00
13		1,2,3,7,8-PCDD	0.5	nd	20.30	10.15	10.15	5.08	nd	10.20	5.10	5.10	2.55	nd	10.50	5.25	5.25	2.63
14		Total PCDD	0		344.10	0.00	344.10	0.00		194.05	0.00	194.05	0.00		232.70	0.00	232.70	0.00
15		1,2,3,4,7,8-HxCDD	0.1	nd	19.30	1.93	9.65	0.97	nd	10.80	1.08	5.40	0.54	nd	8.20	0.82	4.10	0.41
16		1,2,3,6,7,8-HxCDD	0.1	nd	50.40	5.04	25.20	2.52	nd	15.20	1.52	7.60	0.76	nd	16.90	1.69	8.45	0.85
17		1,2,3,7,8,9-HxCDD	0.1	nd	50.20	5.02	25.10	2.51	nd	27.00	2.70	13.50	1.35	nd	25.60	2.56	12.80	1.28
18		Total HxCDD	0		505.00	0.00	505.00	0.00		125.50	0.00	125.50	0.00		146.50	0.00	146.50	0.00
19		1,2,3,4,6,7,8-HpCDD	0.01		364.00	3.64	364.00	3.64		193.50	1.94	193.50	1.94		230.00	2.30	230.00	2.30
20		Total HpCDD	0		715.00	0.00	715.00	0.00		177.50	0.00	177.50	0.00		500.00	0.00	500.00	0.00
21		OCDD	0.001		1050.00	1.05	1050.00	1.05		420.00	0.42	420.00	0.42		2390.00	2.39	2390.00	2.39
22		2,3,7,8-TCDF	0.1		95.90	9.59	95.90	9.59		47.75	4.78	47.75	4.78		44.30	4.43	44.30	4.43
23		Total TCDF	0		2151.00	0.00	2151.00	0.00		1339.00	0.00	1339.00	0.00		1153.00	0.00	1153.00	0.00
24		1,2,3,7,8-PCDF	0.05		76.45	3.82	76.45	3.82	nd	40.20	2.01	20.10	1.01	nd	35.80	1.79	17.90	0.90
25		2,3,4,7,8-PCDF	0.5		143.20	71.60	143.20	71.60		66.10	33.05	66.10	33.05	nd	47.40	23.70	23.70	11.85
26		Total PCDF	0		1311.50	0.00	1311.50	0.00		501.50	0.00	501.50	0.00		370.00	0.00	370.00	0.00
27		1,2,3,4,7,8-HxCDF	0.1		93.50	9.35	93.50	9.35	nd	57.00	5.70	28.50	2.85		74.00	7.40	74.00	7.40
28		1,2,3,6,7,8-HxCDF	0.1		113.35	11.34	113.35	11.34	nd	42.80	4.28	21.40	2.14	nd	40.10	4.01	20.05	2.01
29		2,3,4,6,7,8-HxCDF	0.1		134.30	13.43	134.30	13.43	nd	50.70	5.07	25.35	2.54	nd	44.50	4.45	22.25	2.23
30		1,2,3,7,8,9-HxCDF	0.1	nd	14.70	1.47	7.35	0.74	nd	6.50	0.65	3.25	0.33	nd	8.80	0.88	4.40	0.44
31		Total HxCDF	0		737.50	0.00	737.50	0.00		93.50	0.00	93.50	0.00		156.00	0.00	156.00	0.00
32		1,2,3,4,6,7,8-HpCDF	0.01		473.50	4.74	473.50	4.74		102.50	1.03	102.50	1.03		117.05	1.17	117.05	1.17
33		1,2,3,4,7,8,9-HpCDF	0.01		93.50	0.94	93.50	0.94	nd	18.70	0.19	9.35	0.09	nd	59.00	0.59	29.50	0.30
34		Total HpCDF	0		773.50	0.00	773.50	0.00		102.50	0.00	102.50	0.00		146.00	0.00	146.00	0.00
35		OCDF	0.001		489.50	0.49	489.50	0.49	nd	59.00	0.06	29.50	0.03	nd	108.00	0.11	54.00	0.05
36																		
37		Gas sample volume (dscf)				124.27	124.27	124.27			122.20	122.20	122.20			120.77	120.77	120.77
38		O2 (%)				15.20	15.20	15.20			14.7	14.7	14.7			14.80	14.80	14.80
39																		
40		PCDD/PCDF (ng in sample)				0.16	8.5	0.14			0.07	3.2	0.06			0.07	5.4	0.04
41		PCDD/PCDF (ng/dscm @ 7% O2)		18.7		0.1098	5.82	0.0995	44.9		0.0478	2.06	0.0371	73.9		0.0448	3.56	0.0282
42																		
43		TEQ Cond Avg	0.055															
44		Total Cond Avg	3.8															