

	B	C
1	<b>Source Description</b>	
2		
3	Phase II ID No.	327
4	EPA ID No.	UTD982595795
5	Facility Name	Safety Kleen
6	Facility Location	
7	City	Aragonite
8	State	UT
9	Unit ID Name/No.	Rotary kiln
10	Other Sister Facilities	
11	Number of Sister Facilities	0
12	Combustor Class	Commercial incinerator
13	Combustor Type	Rotary kiln
14	Combustor Characteristics	Rotary kiln, afterburner. Six different waste feed streams can be fed in, most of the waste streams are fed to the kiln; only aqueous and liquid blend are fed to the afterburner. Kiln has 14' diameter, 40' long
15	Capacity (MMBtu/hr)	140 MM Btu/hr
16	Soot Blowing	
17	APCS Detailed Acronym	CI/SD/FF/WS/WS/WESP
18	APCS General Class	FF, CI, WESP, LEWS
19	APCS Characteristics	Spray dryer, carbon injection, fabric filter, 2 stage wet scrubber, wet ESP. Proceadaira spray dryer / FF, pulse jet, A/C = 3, 42,000 ft2 fabric area, Teflon coated fiberglass bags, Intolox saddle packing; Anderson 2000 packed tower, Tellerette packing; Beltran wet ESP, 9600 ft2 plate area. Carbon injection added around 1994, however, not currently in use.
20		
21	Hazardous Wastes	Liq, solid
22	Haz Waste Description	
23	Supplemental Fuel	Oil
24		Fuel oil
25		
26	Stack Characteristics	
27	Diameter (ft)	5
28	Height (ft)	150
29	Gas Velocity (ft/sec)	58.7
30	Gas Temperature (°F)	158
31		
32	Permitting Status	
33	HWC Burn Status (Date if Terminated)	

	B	C
1	<b>Condition Description</b>	
2		
3	<b>327C10</b>	
4		
5	Report Name/Date	Trial Burn Test Report, June 2001
6	Report Prepare	METCO Environmental
7	Testing Firm	Safety Kleen
8	Testing Dates	June 13-16, 2001
9	Cond Dates	Jun-01
10	Condition Descr	Trial burn, to set oper limits on all constituents
11	Content	PM, HCl/Cl2, metals, DRE, POHC, PCDD/F
12		
13	<b>327C1</b>	
14		
15	Report Name/Date	Trial Burn Report for the Aptus Rotary Kiln Incinerator in Aragonite, Utah, Alliance Project No. 5-008-999, August 1992
16	Report Prepare	Alliance Technologies
17	Testing Firm	Alliance Technologies
18	Cond Descr	Trial burn, MAX LIQUID AND DIRECT BURN FEED RATES
19	Testing Dates	May 5-10, 1992
20	Cond Dates	May-92
21		
22	<b>327C2</b>	
23		
24	Report Name/Date	Trial Burn Report for the Aptus Rotary Kiln Incinerator in Aragonite, Utah, Alliance Project No. 5-008-999, August 1992
25	Report Prepare	Alliance Technologies
26	Testing Firm	Alliance Technologies
27	Cond Descr	Trial burn, MAX SLUDGE FEED RATE
28	Testing Dates	March 19-21, 1992
29	Cond Dates	Mar-92
30		
31	<b>327C3</b>	
32		
33	Report Name/Date	Trial Burn Report for the Aptus Rotary Kiln Incinerator in Aragonite, Utah, Alliance Project No. 5-008-999, August 1992
34	Report Prepare	Alliance Technologies
35	Testing Firm	Alliance Technologies
36	Cond Descr	Trial burn, MAX KILN HEAT INPUT
37	Testing Dates	March 25-27, 1992
38	Cond Dates	Mar-92
39		
40	<b>327C4</b>	
41		
42	Report Name/Date	Evaluation of Polychlorinated Dibenzo-p-dioxins and Polychlorinated dibenzo-furan Formation in the Hazardous Waste Incinerator Operated by Aptus, Inc. at Aragonite, Utah, NAWC Report EM 94-31, October 1994
43	Report Prepare	North American Weather Consultants
44	Testing Firm	TRC Environmental
45	Cond Descr	Evaluation testing, HIGH, LOW APCD TEMP/NO SULFUR ADDITIVE
46	Testing Dates	August 2, 1994
47	Cond Dates	Aug-94
48		
49	<b>327C5</b>	
50		
51	Report Name/Date	Evaluation of Polychlorinated Dibenzo-p-dioxins and Polychlorinated dibenzo-furan Formation in the Hazardous Waste Incinerator Operated by Aptus, Inc. at Aragonite, Utah, NAWC Report EM 94-31, October 1994
52	Report Prepare	North American Weather Consultants
53	Testing Firm	TRC Environmental
54	Cond Descr	Research test, HIGH, LOW APCD TEMP/SULFUR ADDITIVE
55	Testing Dates	August 3, 1994
56	Cond Dates	Aug-94

	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Stack Gas Emissions 1</b>											
2												
3												
4	<b>327C10</b>	<b>Trial Burn</b>				R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.0046		0.0008		0.0012		0.0022
7	PM (duplicate)		gr/dscf	y		0.0006		0.0008		0.0002		0.000533
8	CO (RA)	E1	ppmv	y		0.57		1.13		2.71		1.47
9	HC	E1	ppmv	y	nd	4.2 nd		3.9 nd		4.9		4.33
10	SO2	E5	ppmv	y		0		4.1		60		21.37
11												
12	NOx		lb/hr			18.58		18.49		17.68		
13	NOx	E1	ppmv	y		89.9		86.8		85.2		
14												
15	HCl	E1	ppmv	y		0.4		0.3		0.3		0.33
16	Cl2	E1	ppmv	y		0.1		0.2		0.3		0.20
17	Total Chlorine	E1	ppmv	y		0.6		0.7		0.9		0.73
18												
19	Silver	E2	ug/dscm	y	nd	1.75 nd		1.69 nd		1.83 100		1.76
20	Aluminum	E2	ug/dscm	y	nd	87.43 nd		78.32 nd		82.33 100		82.69
21	Arsenic	E2	ug/dscm	y	nd	53.37 nd		51.29 nd		55.56 100		53.40
22	Barium	E2	ug/dscm	y	nd	3.73 nd		3.28 nd		3.54 100		3.51
23	Beryllium	E2	ug/dscm	y	nd	0.90 nd		0.87 nd		0.94 100		0.91
24	Calcium	E2	ug/dscm	y	nd	220.26 nd		120.71 nd		103.68 100		148.22
25	Cadmium	E2	ug/dscm	y	nd	0.90 nd		0.87 nd		0.94 100		0.91
26	Cobalt	E2	ug/dscm	y	nd	8.87 nd		8.58 nd		9.26 100		8.90
27	Chromium	E2	ug/dscm	y	nd	1.53 nd		1.26 nd		1.47 100		1.42
28	Copper	E2	ug/dscm	y	nd	3.73 nd		3.11 nd		3.24 100		3.36
29	Iron	E2	ug/dscm	y		25.87		22.01		59.09		35.66
30	Potassium	E2	ug/dscm	y	nd	524.10 nd		515.06 nd		527.24 100		522.13
31	Lithium	E2	ug/dscm	y	nd	8.87 nd		8.58 nd		9.26 100		8.90
32	Magnesium	E2	ug/dscm	y	nd	434.31 nd		417.84 nd		447.74 100		433.29
33	Manganese	E2	ug/dscm	y		5.42 nd		1.91 nd		1.95		3.09
34	Molybdenum	E2	ug/dscm	y	nd	4.18 nd		3.82 nd		4.66 100		4.22
35	Sodium	E2	ug/dscm	y	nd	779.66 nd		733.81 nd		728.94 100		747.47
36	Nickel	E2	ug/dscm	y	nd	7.12 nd		6.83 nd		7.43 100		7.12
37	Lead	E2	ug/dscm	y	nd	8.87 nd		8.58 nd		9.26 100		8.90
38	Antimony	E2	ug/dscm	y	nd	10.67 nd		10.27 nd		11.09 100		10.68
39	Selenium	E2	ug/dscm	y	nd	44.45 nd		42.68 nd		46.30 100		44.47
40	Strontium	E2	ug/dscm	y	nd	0.73 nd		0.66 nd		0.53 100		0.64
41	Thallium	E2	ug/dscm	y	nd	355.80 nd		341.92 nd		370.37 100		356.03
42	Vanadium	E2	ug/dscm	y	nd	3.56 nd		3.44 nd		3.72 100		3.57
43	Zinc	E2	ug/dscm	y		22.308		10.487		11.618		14.80
44	Mercury	E2	ug/dscm	y		132.607		90.013		349.311		190.64
45												
46	SVM	E2	ug/dscm	y	100	9.77 100		9.45 100		10.20 100		9.81
47	LVM	E2	ug/dscm	y	100	55.80 100		53.42 100		57.97 100		55.73
48												
49	Chromium (Hex)		lb/hr			4.94E-05		1.06E-04		1.05E-04		
50												
51												
52	POHC DRE		Chlorobenzene									
53	POHC Feedrate		lb/hr			1907.29		1272.86		1268.62		
54	Emission Rate	E4	lb/hr		nd	7.57E-04 nd		9.76E-04 nd		1.40E-03		
55	DRE	E4	%			99.99996		99.999923		99.99989		
56												
57												
58	POHC DRE		Hexachloroethane									
59	POHC Feedrate		lb/hr			423.5		613.66		598.63		
60	Emission Rate	E4	lb/hr		nd	2.30E-05 nd		2.09E-05 nd		2.44E-05		
61	DRE	E4	%			99.999995		99.999995		99.999996		
62												
63	POHC DRE		PCB									
64	POHC Feedrate		lb/hr			1265.9		1332.08		1269.35		
65	Emission Rate	E4	lb/hr		nd	8.45E-06 nd		7.91E-06 nd		6.34E-06		
66	DRE	E4	%			99.999999		99.999999		99.999999		
67												
68												
69	Sampling Train		PM(A), HCl/Cl2		E1							
70	Stack Gas Flowrate		dscfm			34344		33436		33647		33809
71	O2		%			9.2		8.5		8.9		8.9

	B	C	D	E	F	G	H	I	J	K	L	M
72	Moisture		%			31.93		34.96		34.38		33.8
73	Temperature		°F			155		161		159		158.3
74												
75	Sampling Train	Metals		E2								
76	Stack Gas Flowrate		dscfm			34156		33030		32554		33247
77	O2		%			9.2		8.5		8.9		8.9
78	Moisture		%			31.58		35.05		34.37		33.7
79	Temperature		°F			155		160		160		158.3
80												
81	Sampling Train	Cr+6		E3								
82	Stack Gas Flowrate		dscfm			34441		33035		33463		33646
83	O2		%			9.2		8.5		8.9		8.87
84	Moisture		%			31.96		34.35		34.56		33.62
85	Temperature		°F			153		158		156		155.67
86												
87	Sampling Train	DRE		E4								
88	Stack Gas Flowrate		dscfm			33063		33865		33746		33558
89	O2		%			8.4		8.6		8.8		8.6
90	Moisture		%			33.78		33.46		34.09		33.8
91	Temperature		°F			156		159		158		157.7
92												
93	Sampling Train	SO2		E5								
94	Stack Gas Flowrate		dscfm			34241		33179		33841		33753.67
95	O2		%			8.2		8.4		8.6		8.4
96	Moisture		%			32.21		34.37		33.86		33.48
97	Temperature		°F									
98												
99	Sampling Train	PCDD/F		E6								
100	Stack Gas Flowrate		dscfm			67665		69001		70347		69004
101	O2		%			8.2		8.4		8.6		8.4
102	Moisture		%			33.63		33.89		34.19		33.9
103	Temperature		°F			156		157		159		157.3
104												
105	Chromium (Hex)	E3	ug/dscm	y		0.46		0.96		0.97		

	B	C	D	E	F	G	H	I	J	K	L	M	
1	<b>Stack Gas Emissions</b>												
2													
3	<b>327C1</b>					R1	R2	R3	Cond Avg				
4													
5	PM	E1	gr/dscf	y		0.0009		0.0001		0.0024		0.0011	
6	CO (RA)	E1	ppmv	y		6.5		7.1		11.9		8.5	
7	HC (RA)	E1	ppmv	y		5.1		3.0				4.1	
8	HCl	E1	ppmv	y		11.1		8.5		7.2		8.9	
9	Cl2	E1	ppmv	y		0.3		0.2		0.2		0.2	
10	Total Chlorine	E1	ug/dscm	y		11.7		8.9		7.5		9.4	
11	Antimony	E2	ug/dscm	y	nd	6.8 nd		6.8 nd		7.1		6.9	
12	Arsenic	E2	ug/dscm	y	nd	5.7 nd		5.7		3.5		5.0	
13	Barium	E2	ug/dscm	y		17.4		15.1		0.8		11.1	
14	Beryllium	E2	ug/dscm	y		0.7		0.9		0.4		0.7	
15	Cadmium	E2	ug/dscm	y		0.6		0.7		0.9		0.7	
16	Chromium	E2	ug/dscm	y		28.9		29.8		22.0		26.9	
17	Chromium (Hex)	E3	ug/dscm	y		0.5		0.1		0.2		0.3	
18	Lead	E2	ug/dscm	y		19.9		16.4		37.6		24.6	
19	Mercury	E2	ug/dscm	y		1461.0		599.6		2127.1		1395.9	
20	Silver	E2	ug/dscm	y	nd	2.3		3.5 nd		2.4		2.7	
21	Thallium	E2	ug/dscm	y	nd	11.3 nd		11.3 nd		11.8		11.5	
22	SVM	E2	ug/dscm	y		20.5		17.1		38.5		25.4	
23	LVM	E2	ug/dscm	y		35.3		36.4		25.9		32.5	
24													
25	Hexachloroethane	E4	%			99.99999		99.99989		99.99999			
26	Monochlorobenzene	E4	%			99.99986		99.99944		99.99995			
27	PCBs	E4	%			99.99999		100		100			
28													
29	Sampling Train	Haloge E1											
30	Stack Gas Flowrate		dscfm			34258.0		32783.0		31149.0			
31	O2		%			9.9		9.4		9.6			
32	Moisture		%			22.4		25.4		24.1			
33	Temperature		°F			143.1		145.5		147.8			
34													
35	Sampling Train	Metals E2											
36	Stack Gas Flowrate		dscfm			32573.0		31113.0		33064.0			
37	O2		%			9.9		10.0		10.6			
38	Moisture		%			23.7		27.2		23.1			
39	Temperature		°F			145.9		146.0		143.5			
40													
41	Sampling Train	Cr Hex E3											
42	Stack Gas Flowrate		dscfm			34246.0		33387.0		33379.0			
43	O2		%			9.9		10.0		10.6			
44	Moisture		%			20.0		24.7		20.1			
45	Temperature		°F			144.9		143.7		145.8			
46													
47	Sampling Train	SVOC E4											
48	Stack Gas Flowrate		dscfm			34627.0		32623.0		31721.0			
49	O2		%			10.7		9.7		9.7			
50	Moisture		%			22.4		24.3		23.6			
51	Temperature		°F			141.4		144.4		147.9			
52													
53	<b>327C2</b>					R1	R2	R3	Cond Avg				
54													
55	PM	E1	gr/dscf	y		0.0009		0.0023		0.0009		0.0014	
56	CO (RA)	E1	ppmv	y		2.0		5.5		5.7		4.4	
57	HC (RA)	E1	ppmv	y		5.0		4.5		4.3		4.6	
58	HCl	E1	ppmv	y	nd	0.3 nd		0.2 nd		0.2		0.2	
59	Cl2	E1	ppmv	y		0.1		0.3		0.2		0.2	
60	Total Chlorine	E1	ppmv	y		0.5		0.7		0.6		0.6	
61	Antimony	E2	ug/dscm	y	nd	7.8 nd		7.4 nd		7.7		7.6	
62	Arsenic	E2	ug/dscm	y	nd	6.6		7.9 nd		6.5		7.0	
63	Barium	E2	ug/dscm	y		2.9		2.3		2.8		2.7	
64	Beryllium	E2	ug/dscm	y	nd	0.3		0.1 nd		0.3		0.2	
65	Cadmium	E2	ug/dscm	y		2.1		1.3		0.8		1.4	
66	Chromium	E2	ug/dscm	y		4.3		18.3		2.7		8.4	
67	Lead	E2	ug/dscm	y	nd	6.6		53.8 nd		6.5		22.3	
68	Mercury	E2	ug/dscm	y		599.1		328.8		300.1		409.4	
69	Silver	E2	ug/dscm	y	nd	2.6 nd		2.5 nd		2.6		2.6	
70	Thallium	E2	ug/dscm	y	nd	13.2 nd		12.5 nd		13.0		12.9	
71	SVM	E2	ug/dscm	y		8.7		55.2		7.3		23.7	

	B	C	D	E	F	G	H	I	J	K	L	M
72	LVM	E2	ug/dscm	y		11.1		26.4		9.4		15.7
73												
74	Hexachloroethane	E3	%			99.99996		99.999995		100		
75	Monochlorobenzene	E3	%			99.99997		99.999965		99.99985		
76	PCBs	E3	%			99.99998		99.999984		99.99986		
77												
78	Sampling Train	Haloge	E1									
79	Stack Gas Flowrate		dscfm			34278.0		31509.0		31127.0		
80	O2		%			10.5		8.9		9.0		
81	Moisture		%			22.4		24.4		25.1		
82	Temperature		°F			144.0		146.0		144.0		
83												
84	Sampling Train	Metals	E2									
85	Stack Gas Flowrate		dscfm			33523.0		30830.0		29811.0		
86	O2		%			10.5		8.9		9.0		
87	Moisture		%			22.7		24.0		24.5		
88	Temperature		°F			144.0		144.0		144.0		
89												
90	Sampling Train	SVOC	E3									
91	Stack Gas Flowrate		dscfm			34493.0		32060.0		31887.0		
92	O2		%			9.3		9.7		8.6		
93	Moisture		%			24.1		24.9		23.5		
94	Temperature		°F			150.0		143.0		148.0		
95												
96	<b>327C3</b>					R1		R2		R3		Cond Avg
97												
98	PM	E1	gr/dscf	y		0.0000		0.0012		0.0002		0.0005
99	CO	E1	ppmv	y		12.5		4.1		12.7		9.8
100	HC	E1	ppmv	y		8.5		5.2		7.1		6.9
101	HCl	E1	ppmv	y		0.6 nd		0.2		3.3		1.4
102	Cl2	E1	ppmv	y		0.3		0.1		0.1		0.2
103	Total Chlorine	E1	ppmv	y		1.2		0.5		3.6		1.7
104	Antimony	E2	ug/dscm	y nd		6.9 nd		7.2 nd		5.2		6.4
105	Arsenic	E2	ug/dscm	y nd		5.8 nd		6.1 nd		8.1		6.7
106	Barium	E2	ug/dscm	y		2.9		3.4		5.0		3.8
107	Beryllium	E2	ug/dscm	y nd		0.2 nd		0.2 nd		0.3		0.3
108	Cadmium	E2	ug/dscm	y		44.1		9.5		2.4		18.7
109	Chromium	E2	ug/dscm	y		4.0		9.5		9.2		7.6
110	Lead	E2	ug/dscm	y		11.6		24.3		20.7		18.9
111	Mercury	E2	ug/dscm	y		788.9		157.8		2587.4		1178.0
112	Silver	E2	ug/dscm	y nd		2.3 nd		2.4 nd		3.2		2.6
113	Thallium	E2	ug/dscm	y nd		11.6 nd		12.1 nd		16.3		13.3
114	SVM	E2	ug/dscm	y		55.7		33.8		23.1		37.6
115	LVM	E2	ug/dscm	y		10.1		15.8		17.6		14.5
116												
117	Hexachloroethane	E3	%			99.99998		99.999975		99.99998		
118	Monochlorobenzene	E3	%			99.99996		99.999975		99.99997		
119	PCBs	E3	%			99.99999		99.999997		100		
120												
121	Sampling Train	Haloge	E1									
122	Stack Gas Flowrate		dscfm			31476.0		34124.0		33108.0		
123	O2		%			8.1		9.9		12.2		
124	Moisture		%			27.6		25.7		25.7		
125	Temperature		°F			150.0		146.0		143.0		
126												
127	Sampling Train	Metals	E2									
128	Stack Gas Flowrate		dscfm			31104.0		33367.0		33643.0		
129	O2		%			8.1		9.9		12.2		
130	Moisture		%			27.4		25.7		24.9		
131	Temperature		°F			149.0		144.0		143.0		
132												
133	Sampling Train	SVOC	E3									
134	Stack Gas Flowrate		dscfm			32953.0		33204.0		32334.0		
135	O2		%			9.5		9.4		9.5		
136	Moisture		%			24.7		25.3		29.4		
137	Temperature		°F			147.0		147.0		155.0		

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	
1	<b>Feedstream 1</b>																					
2																						
3																						
4	<b>327C10</b>	<b>Trial burn</b>			Cond Avg		Cond Avg		Cond Avg		Cond Avg		Cond Avg		Cond Avg		Cond Avg		Cond Avg		Cond Avg	
5																						
6	Feedstream Number				F1		F2		F3		F4		F5		F6		F7		F8			
7	Feed Class				Solid HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW			
8	Feed Class 2																				HW	
9	Feedstream Description				Solids		FW Blend Liq A104		Sludge A103		Blend Liq A106A		Blend Liq A106B		AB Aqueous A105		Kiln Aqueous A102		Direct Burn A101			
10	Feed Rate		lb/hr				2207		2170		1867		1611		6530		1351		1710			
11	Thermal Feedrate		MM Btu/hr																			
12	Heating Value		Btu/lb				13300		2600		14500		9000 nd		600				8000			
13	Viscosity		Cps				8.02		394		7.5		19		3.51				4.51			
14	Density		kg/L																			
15	Ash		lb/hr																			
16	Chlorine		mg/kg				142666.7		62850		105425.0		318000		1865.75				368750			
17	Mercury		mg/kg				50.9		0.15 nd		0.03 nd		0.028 nd		0.02				1.2			
18	Antimony		mg/kg		nd		10 nd		10		14		11 nd		10			nd	10			
19	Arsenic		mg/kg				18 nd		10 nd		10 nd		10 nd		10			nd	10			
20	Barium		mg/kg		nd		10		42.5 nd		10 nd		10 nd		10			nd	10			
21	Beryllium		mg/kg		nd		5 nd		5 nd		5 nd		5 nd		5			nd	5			
22	Cadmium		mg/kg		nd		2 nd		2 nd		2 nd		2.0 nd		2			nd	2			
23	Chromium		mg/kg				4127.3		10 nd		10 nd		10.0 nd		10			nd	10			
24	Copper		mg/kg		nd		10 nd		10 nd		10 nd		10.0 nd		10			nd	10			
25	Lead		mg/kg		nd		10 nd		10 nd		10 nd		10.0 nd		10			nd	10			
26	Manganese		mg/kg		nd		10 nd		10 nd		10 nd		10.0 nd		10			nd	10			
27	Nickel		mg/kg		nd		10 nd		10 nd		10 nd		10.0 nd		10			nd	10			
28	Selenium		mg/kg		nd		10 nd		10 nd		10 nd		10.0 nd		10			nd	10			
29	Silver		mg/kg		nd		10 nd		10 nd		10 nd		10.0 nd		10			nd	10			
30	Thallium		mg/kg		nd		10 nd		10 nd		10 nd		10.0 nd		10			nd	10			
31																						
32	SVM		lb/hr																			
33	LVM		lb/hr																			
34																						
35	Stack Gas Flowrate		dscfm				33246.67															
36	Oxygen		%				8.866667															
37																						
38	Thermal Feedrate		MMBtu/hr																			
39	Estimated Firing Rate		MMBtu/hr																			
40																						
41	<i>Feedrate MTEC Calculations</i>																					
42	Ash		mg/dscm																			
43	Chlorine		ug/dscm				2921748		1265561		1826442		4753797		113054				5851216		16731817	
44	Mercury		ug/dscm				1042		3 100		1 100		0 100		1				19 0		1066	
45	Antimony		ug/dscm		100		205 100		201		243		164 100		606			100	159 74		1578	
46	Arsenic		ug/dscm				369 100		201 100		173 100		149 100		606			100	159 78		1657	
47	Barium		ug/dscm		100		205		856 100		173 100		149 100		606			100	159 60		2148	
48	Beryllium		ug/dscm		100		102 100		101 100		87 100		75 100		303			100	79 100		747	
49	Cadmium		ug/dscm		100		41 100		40 100		35 100		30 100		121			100	32 100		299	
50	Chromium		ug/dscm				84526		201 100		173 100		149 100		606			100	159 1		85815	
51	Copper		ug/dscm		100		205 100		201 100		173 100		149 100		606			100	159 100		1494	
52	Lead		ug/dscm		100		205 100		201 100		173 100		149 100		606			100	159 100		1494	
53	Manganese		ug/dscm		100		205 100		201 100		173 100		149 100		606			100	159 100		1494	
54	Nickel		ug/dscm		100		205 100		201 100		173 100		149 100		606			100	159 100		1494	
55	Selenium		ug/dscm		100		205 100		201 100		173 100		149 100		606			100	159 100		1494	
56	Silver		ug/dscm		100		205 100		201 100		173 100		149 100		606			100	159 100		1494	
57	Thallium		ug/dscm		100		205 100		201 100		173 100		149 100		606			100	159 100		1494	
58																						
59	SVM		ug/dscm				100		245.75 100		241.63 100		207.89 100		179.39 100		727.13		100		190.41 100	1792
60	LVM		ug/dscm				###		84996.9 60		503.4 100		433.1 100		373.7 100		1514.9		100		396.7 4	88219

	B	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI
1	<b>Feedstream 1</b>													
2														
3														
4	<b>327C10</b>		Cond Avg		Cond Avg		R1		R2		R3		Cond Avg	
5														
6	Feedstream Number		F9		F10		F11		F11		F11		F11	
7	Feed Class		Oil		Spike		Total		Total		Total		Total	
8	Feed Class 2		MF		Spike		Total		Total		Total		Total	
9	Feedstream Description		Fuel Oil		Spike		Total		Total		Total		Total	
10	Feed Rate				3386.5									
11	Thermal Feedrate													
12	Heating Value		19200											
13	Viscosity		5.76											
14	Density													
15	Ash						9764		10575		9342		9894 lb/hr	
16	Chlorine		1550		858408.1		2984		2839		2897		2907.0 lb/hr	
17	Mercury		0.052		147.9		0.501		0.5		0.501		0.501 lb/hr	
18	Antimony	nd	10											
19	Arsenic	nd	10											
20	Barium	nd	10											
21	Beryllium	nd	5											
22	Cadmium	nd	2											
23	Chromium	nd	10		41635.89									
24	Copper	nd	10											
25	Lead	nd	10		99808.03									
26	Manganese	nd	10											
27	Nickel	nd	10											
28	Selenium	nd	10											
29	Silver	nd	10											
30	Thallium	nd	10											
31														
32	SVM				338		300		356		357		338 lb/hr	
33	LVM				141		128		147		148		141 lb/hr	
34														
35	Stack Gas Flowrate						34344		33436		33647		33809	
36	Oxygen						9.2		8.5		8.9		8.87	
37														
38	Thermal Feedrate													
39	Estimated Firing Rate													
40														
41	<i>Feedrate MTEC Calculat</i>													
42	Ash						90186.4		94711.4		85892.3		90282.9	
43	Chlorine				26975096		27562090		25426540		26635630		26526428	
44	Mercury				4649		4627.5		4478.1		4606.3	0.05	4571.6	
45	Antimony											74.2	1578	
46	Arsenic											77.8	1657	
47	Barium											60.2	2148	
48	Beryllium											100	747	
49	Cadmium											100	299	
50	Chromium				1308390							0.08	1394204	
51	Copper											100	1494	
52	Lead				3136423							0.05	3137917	
53	Manganese											100	1494	
54	Nickel											100	1494	
55	Selenium											100	1494	
56	Silver											100	1494	
57	Thallium											100	1494	
58														
59	SVM				3136423		2770987.6		3188393.2		3282333.5	0.06	3084256.2	
60	LVM				1308390		1182288.0		1316555.6		1360743.3	0.24	1286627.6	



	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA			
1	<b>Feedstream 2</b>																												
2																													
3																													
4	<b>327C1</b>		R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2						
5																													
6	Feedstream Number		F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4						
7	Feed Class		Solid HW		Solid HW		Solid 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		Apron Solid		Apron Solid		Apron Solid		Aqueous		Aqueous		Aqueous		Blended liquid		Blended liquid		Blended liquid		Direct burn liquid		Direct burn liquid						
10	Feed Rate	lb/hr	195						1541		1901				1958		6044		5423		4658		908		746				
11	Heating Value	ppm	1699						200		200				200		11152		11168		12500		9926		9134				
12	Ash	wt %	31.24						1.51		0.40				0.38		0.24		0.21		0.18		0.03		0.11				
13	Chlorine	lb/hr																											
14	Antimony	ppmw	8.50						1274.08		11.11				8.69 nd		2.90 nd		2.90 nd		2.90 nd		3.00 nd		2.80 nd				
15	Arsenic	ppmw	66.00						3332.20		151.53				161.63 nd		2.40 nd		2.50 nd		2.40 nd		2.50 nd		2.30 nd				
16	Barium	ppmw	811.00						4959.10		52.23				42.43		7.92		14.80		1.57		2.62		2.55				
17	Beryllium	ppmw	176.41						71.50		0.68				0.45		0.29		0.29		0.38		0.35		0.09				
18	Cadmium	ppmw	0.77						293.04		35.66				41.32 nd		0.15		0.29 nd		0.14 nd		0.15 nd		0.14 nd				
19	Chromium	ppmw	89.20						5184.51		438.42				505.10		1.12		1.81		0.29		0.35		0.28				
20	Lead	ppmw	380.00						960.46		8.59				7.27		5.90		8.80		5.20 nd		2.50 nd		2.30 nd				
21	Mercury	ppmw	0.91						20.68		15.05				32.12 nd		0.13		0.16 nd		0.15 nd		0.11 nd		0.13 nd				
22	Silver	ppmw	13.00						28.42		0.43				0.24 nd		1.00 nd		0.98 nd		0.95 nd		0.99 nd		0.93 nd				
23	Thallium	ppmw	nd		11.00				98.01 nd		1.01				1.11 nd		4.90 nd		4.90 nd		4.80 nd		4.90 nd		4.60 nd				
24																													
25	Stack Gas Flowrate	dscfm	34258		32783		31149		34258		32783		31149		34258		32783		31149		34258		32783						
26	Oxygen	%	9.91		9.42		9.59		9.91		9.42		9.59		9.91		9.42		9.59		9.91		9.42						
27																													
28	<i>Feedrate MTEC Calculations</i>																												
29	Ash	mg/dscm	601		0		0		229		75				78		142.93		112		88		3		8				
30	Chlorine	ug/dscm																											
31	Antimony	ug/dscm	16						19349		208				179 100		173 100		155 100		142 100		27 100		21 100				
32	Arsenic	ug/dscm	127						50606		2841				3334 100		143 100		134 100		118 100		22 100		17 100				
33	Barium	ug/dscm	1560						75313		979				875		472		791		77		23		19				
34	Beryllium	ug/dscm	138						2679		13				9		17		16		19		3		1				
35	Cadmium	ug/dscm	1						4450		669				852 100		9		16 100		7 100		1 100		1 100				
36	Chromium	ug/dscm	172						78736		8220				10418		67		97		14		3		2				
37	Lead	ug/dscm	731						14586		161				150 100		351		471 100		255 100		22 100		17 100				
38	Mercury	ug/dscm	2						314		282				663 100		8		9 100		8 100		1 100		1 100				
39	Silver	ug/dscm	25						432		8			5 100		60 100		52 100		47 100		9 100		7 100					
40	Thallium	ug/dscm	100		21				1488 100		19				23 100		292 100		262 100		236 100		44 100		34 100				
41																													
42	SVM	ug/dscm	732						19037		830				1002 2		360		486 3		262 4		24 5		18 2				
43	LVM	ug/dscm	436						132021		11073				13761 63		227 54		246 78		151 78		29 86		20 26				
44																													
45	<b>327C2</b>		R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2						
46																													
47	Feedstream Number		F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4						
48	Feed Class		Solid HW		Solid HW		Solid HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW				
49	Feed Class 2																												
50	Feedstream Description		Apron Solid		Apron Solid		Apron Solid		Aqueous		Aqueous		Aqueous		Blended liquid		Blended liquid		Blended liquid		Direct burn liquid		Direct burn liquid						
51	Feed Rate	lb/hr	592		514		608		1142		1296				1297		5148		5988		5889		816		569				
52	Heating Value	Btu/lb	3326		683		4126		200		200				200		12060		11450		11525		200		200				
53	Ash	wt%	58.84		66.54		57.65		2.56		1.27				2.83		0.12		0.21		0.09		0.01		0.01				
54	Chlorine	lb/hr																											
55	Antimony	ppmw	11.00 nd		3.50 nd		4.10		8.34		4.94				3.14 nd		2.90 nd		2.90 nd		3.00 nd		0.61 nd		0.60				
56	Arsenic	ppmw	nd		33.00		370.00 nd		34.00		29.78				14.72 nd		2.50 nd		2.40 nd		2.50 nd		0.50 nd		0.50				
57	Barium	ppmw	741.00		758.00		450.00		4.10		22.62				1.08		2.06		8.60		12.80		0.11		0.07				
58	Beryllium	ppmw	93.00		89.70		58.20		1.64		0.76				0.38 nd		0.10 nd		0.10		0.10 nd		0.02 nd		0.02 nd				
59	Cadmium	ppmw	nd		1.95 nd		1.74		1.62		1.03 nd				0.03 nd		0.15		0.29		0.40 nd		0.03 nd		0.03 nd				
60	Chromium	ppmw	352.00		133.00		452.00		79.50		51.96				39.95		0.88		1.30		1.54 nd		0.04 nd		0.04				

	B	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
1	<b>Feedstream 2</b>																						
2																							
3																							
4	<b>327C1</b>	R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg	
5																							
6	Feedstream Numb	F4		F5		F5		F5		F5		F6		F6		F6		F6		F6		F6	
7	Feed Class	Liq HW		Sludge HW		Sludge HW		Sludge HW								Total		Total		Total		Total	
8	Feed Class 2								HW		HW			HW		Total		Total		Total		Total	
9	Feedstream Descr	Direct burn liquid		Pumpable sludge		Pumpable sludge		Pumpable sludge							Total		Total		Total		Total		Units for total
10	Feed Rate	684		1900		3902		3642															
11	Heating Value	8883		200		200		200															
12	Ash	0.18		3.37		3.39		4.18															
13	Chlorine															2068.4		2071.5		2168.3			lb/hr
14	Antimony	1.72 nd		2.70 nd		2.60 nd		2.80							0.38		7.55		4.27				lb/hr
15	Arsenic	1.43 nd		2.30 nd		2.20 nd		2.40							1.49		5.02		3.07				lb/hr
16	Barium	14.50		21.90		41.10		27.60							2.90		130.12		73.32				lb/hr
17	Beryllium	0.41		14.40		26.00		16.90							0.03		0.60		0.34				lb/hr
18	Cadmium	0.10		1.09		2.28		1.52							0.88		0.92		0.54				lb/hr
19	Chromium	3.60		47.80		73.30		49.80							9.60		67.74		40.34				lb/hr
20	Lead	6.27		50.00		92.00		62.00							3.88		166.54		94.46				lb/hr
21	Mercury	0.10		0.18 nd		0.13 nd		0.17							0.75		3.39		1.93				lb/hr
22	Silver	0.56 nd		0.91 nd		0.88 nd		0.95							0.00		1.22		1.83				lb/hr
23	Thallium	2.82 nd		4.60 nd		4.40 nd		4.70							0.15		1.22		0.76				lb/hr
24																							
25	Stack Gas Flowrat	31149		34258		32783		31149							34258		32783		31149				
26	Oxygen	9.59		9.91		9.42		9.59							9.91		9.42		9.59				
27																							
28	<i>Feedrate MTEC C:</i>																						
29	Ash	13		631		1304		1603		1607		1500		1783		1607		1500		1783		1630	
30	Chlorine														20379202		20425556		22836830				21213863
31	Antimony	12 100		51 100		100 100		107 1.3	19616 57.0	484 59		441 6.7		3744 0		74445 1		44972 1				41054	
32	Arsenic	10 100		43 100		85 100		92 0.4	50941 7.6	3076 6		3554 1.4		14680 0		49499 1		32334 1				32171	
33	Barium	104		410		1581		1059	77778	3371		2115 0.0		28573 0		1283019 0		772216 0				694603	
34	Beryllium	3		270		1000		648	3107	1030		679 0.0		296 0		5916 0		3581 0				3264	
35	Cadmium	1		20		88		58 0.2	4482 0.1	773 1		918 0.1		8670 0		9071 0		5687 0				7810	
36	Chromium	26		895		2820		1910	79873	11139		12368 0.0		94585 0		667935 0		424866 0				395796	
37	Lead	45		936		3540		2378 2.2	16627 0.4	4189 11		2829 1.0		38228 0		1642130 0		994866 0				891741	
38	Mercury	1		3 100		5 100		6 2.7	328 2.1	297 2		677 0.1		7389 0		33426 0		20327 0				20381	
39	Silver	4 100		17 100		34 100		36 15.8	542 92.0	101 95		92 0		0 1		12030 0		19274 1				10434	
40	Thallium	20 100		86 100		169 100		180 22.9	1931 100	484 95		459 30.0		1478 4		12030 5		8004 6				7171	
41																							
42	SVM	46		957		3628		2437 0	21109 0	4962 0		3747 1		46899 0		1651201 0		1000553 0				899551	
43	LVM	39 4		1208 2		3906 3		2651 0	133920 2	15245 1		16601 0		109561 0		723350 0		460781 0				431231	
44																							
45	<b>327C2</b>	R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg	
46																							
47	Feedstream Numb	F4		F5		F5		F5		F5		F6		F6		F6		F6		F6		F6	
48	Feed Class	Liq HW		Sludge HW		Sludge HW		Sludge HW							Total		Total		Total		Total		Units for total
49	Feed Class 2								HW		HW			HW		Total		Total		Total		Total	
50	Feedstream Descr	Direct burn liquid		Pumpable sludge		Pumpable sludge		Pumpable sludge							Total		Total		Total		Total		Units for total
51	Feed Rate	584		1147		868		1009															
52	Heating Value	200		200		200		200															
53	Ash	0.01		0.27		0.31		0.24															
54	Chlorine														1616.20		2312.00		4383.00				lb/hr
55	Antimony	0.07 nd		2.90 nd		3.00 nd		2.90							0.61		0.38		0.99				lb/hr
56	Arsenic	0.13 nd		2.50 nd		2.50		2.90							5.73		2.95		12.98				lb/hr
57	Barium	0.03		0.20		5.48		0.48							7.23		6		15.08				lb/hr
58	Beryllium	0.00		0.69 nd		0.10 nd		0.10							0		0		0				lb/hr
59	Cadmium	0.00 nd		0.15 nd		0.15 nd		0.14							0.25		0.14		0.35				lb/hr
60	Chromium	0.01 nd		0.20 nd		0.20 nd		0.19							8.87		4.75		40.29				lb/hr

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA		
61	Lead		ppmw		720.00		690.00		250.00		61.54		14.82		8.44		2.90		3.40		8.00 nd		0.50 nd		0.50 nd			
62	Mercury		ppmw		23.80		7.05		2.80		0.19		0.09 nd		0.20 nd		0.12 nd		0.14		0.13 nd		0.00 nd		0.00 nd			
63	Silver		ppmw	nd	1.30		3.50 nd		1.40 nd		0.20 nd		0.20 nd		1.96 nd		0.98 nd		0.96 nd		1.00 nd		0.20 nd		0.20 nd			
64	Thallium		ppmw	nd	70.00 nd		60.00 nd		70.00 nd		0.99 nd		0.99 nd		0.98 nd		4.90 nd		4.80 nd		5.00 nd		1.01 nd		0.10 nd			
65																												
66	Stack Gas Flowrate		dscfm		34278		31509		31127		34278		31509		31127		34278		31509		31127		34278		31509			
67	Oxygen		%		10.5		8.9		9.0		10.5		8.9		9.0		10.5		8.9		9.0		10.5		8.9			
68																												
69	<i>Feedrate MTEC Calculations</i>																											
70	Ash		mg/dscm		3603.12		3351.09		3500.95		302.56		161.33		366.67		63.94		123.26		52.94		0.84		0.56			
71	Chlorine		ug/dscm																									
72	Antimony		ug/dscm		67.4 100		17.6 100		24.9		98.5		62.7		40.7 100		154.5 100		170.2 100		176.5 100		5.1 100		3.4			
73	Arsenic		ug/dscm	100	202.1		1863.4 100		206.5		351.9		251.0		190.8 100		133.2 100		140.9 100		147.0 100		4.3 100		2.8			
74	Barium		ug/dscm		4537.6		3817.4		2732.7		48.4		287.4		14.0		109.8		504.8		752.9		1.0		0.4			
75	Beryllium		ug/dscm		569.5		451.7		353.4		19.4		9.7		4.9 100		5.2 100		5.6		5.9 100		0.2 100		0.1 100			
76	Cadmium		ug/dscm	100	11.9 100		8.8		25.0		19.1		13.1 100		0.4 100		7.8		16.9		23.4 100		0.3 100		0.2 100			
77	Chromium		ug/dscm		2155.5		669.8		2744.9		939.6		660.0		517.6		47.1		76.3		90.6 100		0.3 100		0.2			
78	Lead		ug/dscm		4409.0		3475.0		1518.2		727.3		188.2		109.4		154.5		199.6		470.6 100		4.3 100		2.8 100			
79	Mercury		ug/dscm		145.7		35.5		17.0		2.2		1.1 100		2.5 100		6.2 100		8.4		7.5 100		0.0 100		0.0 100			
80	Silver		ug/dscm	100	8.0		17.6 100		8.5 100		2.3 100		2.5 100		25.4 100		52.2 100		56.3 100		58.8 100		1.7 100		1.1 100			
81	Thallium		ug/dscm	100	428.7 100		302.2 100		425.1 100		11.7 100		12.5 100		12.7 100		261.1 100		281.7 100		294.1 100		8.5 100		0.6 100			
82																												
83	SVM		ug/dscm		4420.9 0		3483.7		1543.1		746.4		201.3 0		109.8 5		162.4		216.5		494.0 100		2.3 100		1.5 100			
84	LVM		ug/dscm	7	2927.1		2985.0 6		3304.8		1310.9		920.7		713.3 75		185.5 66		222.8 60		243.5 100		2.4 100		1.6			
85																												
86	<b>327C3</b>				R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2			
87																												
88	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4			
89	Feed Class				Solid HW		Solid HW		Solid HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW			
90	Feed Class 2																											
91	Feedstream Description				Apron Solid		Apron Solid		Apron Solid		Aqueous		Aqueous		Aqueous		Blended liquid		Blended liquid		Blended liquid		Direct burn liquid		Direct burn liquid			
92	Feedrate		lb/hr		4457		835		5203		1195		931		589		5947		6300		3245		906		755			
93	Heating value		Btu/lb		200		200		200		200		200		200		11087		10845		11103		3515		3323			
94	Ash		wt %		82.04		84.36		70.02		2.89		2.72		2.73		0.11		0.29		0.28		0.13		0.02			
95	Chlorine		lb/hr																									
96	Antimony		ppmw		4.80		9.90 nd		3.90 nd		3.00		5.05		0.05 nd		2.90 nd		3.00 nd		3.00 nd		2.55 nd		3.00 nd			
97	Arsenic		ppmw		63.00		190.00		32.00		18.00		21.77		1.86 nd		2.40 nd		2.50 nd		2.50 nd		1.50 nd		2.50 nd			
98	Barium		ppmw		313.00		690.00		312.00		1.39		6.25		0.42		8.78		47.50		49.90		0.56		470.00			
99	Beryllium		ppmw		47.30		56.90		38.20		0.55		0.73		0.05		0.10		0.54		0.35 nd		2.69		2.81			
100	Cadmium		ppmw		0.17 nd		0.18		0.24 nd		0.15		0.50		0.03		0.38		0.69		0.79 nd		5.62		6.31			
101	Chromium		ppmw		42.90		87.90		54.40		39.30		51.94		4.59		2.01		6.28		6.47		63.70		74.40			
102	Lead		ppmw		250.00		530.00		140.00		9.50		14.84		1.18		5.30		19.00		20.00 nd		155.00		180.00			
103	Mercury		ppmw		0.37		2.74		3.41		4.02		1.23		0.07		0.47		0.35		0.22 nd		0.36 nd		0.20			
104	Silver		ppmw		6.70		6.80		3.30 nd		1.00 nd		0.20 nd		0.02 nd		0.96 nd		0.99 nd		1.50 nd		1.10 nd		0.99			
105	Thallium		ppmw	nd	5.70 nd		5.90 nd		6.10 nd		5.00 nd		0.99 nd		0.10 nd		4.80 nd		4.90 nd		4.90 nd		3.00 nd		4.90 nd			
106																												
107	Stack Gas Flowrate		dscfm		31476		34124		33108		31476		34124		33108		31476		34124		33108		31476		34124			
108	Oxygen		%		8.1		9.9		12.2		8.1		9.9		12.2		8.1		9.9		12.2		8.1		9.9			
109																												
110	<i>Feedrate MTEC Calculations</i>																											
111	Ash		mg/dscm		33604.75		6957.90		46647.51		317.45		250.31		205.75		60.12		180.55		116.33		10.82		1.49			
112	Chlorine		ug/dscm																									
113	Antimony		ug/dscm		196.6		81.7 100		259.8 100		33.0		46.4		0.4 100		158.5 100		186.8 100		124.6 100		21.2 100		22.4 100			
114	Arsenic		ug/dscm		2580.6		1567.1		2131.8		197.7		200.3		14.0 100		131.2 100		155.6 100		103.9 100		12.5 100		18.6 100			
115	Barium		ug/dscm		12820.9		5691.0		20785.5		15.3		57.5		3.2		479.8		2957.3		2073.2		4.6		3505.8			
116	Beryllium		ug/dscm		1937.5		469.3		2544.9		6.0		6.7		0.4		5.2		33.9		14.4 100		22.4		21.0			
117	Cadmium		ug/dscm		7.0 100		1.5		16.3 100		1.6		4.6		0.2		21.0		43.1		32.9 100		46.8		47.1			
118	Chromium		ug/dscm		1757.2		725.0		3624.1		431.7		478.0		34.6		109.8		391.0		268.8		530.4		555.0			
119	Lead		ug/dscm		10240.4		4371.4		9326.8		104.4		136.6		8.9		289.7		1182.9		830.9 100		1290.6		1342.7			
120	Mercury		ug/dscm		15.0		22.6		227.2		44.2		11.3		0.5		25.6		22.0		9.0 100		3.0 100		1.5			

	B	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
61	Lead	0.50 nd		2.50 nd		2.50 nd		2.40								17		13.03		32.56			lb/hr
62	Mercury	0.00 nd		0.15 nd		0.15 nd		0.07								1.15		0.81		2.05			lb/hr
63	Silver	0.02 nd		0.98 nd		1.00 nd		0.95								0		0		0			lb/hr
64	Thallium	0.10 nd		4.90 nd		5.00 nd		4.80								0.15		0.08		0.31			lb/hr
65																							
66	Stack Gas Flowrat	31127		34278		31509		31127								34278		31509		31127			
67	Oxygen	9.0		10.5		8.9		9.0								10.5		8.9		9.0			
68																							
69	Feedrate MTEC C:																						
70	Ash	0.58		32.06		26.36		24.19		4003		3663		3945		4003		3663		3945			3870
71	Chlorine															16729131		22661925		43777799			27722951
72	Antimony	0.4 100		34.4 100		25.5 100		29.2 53.9		360 78		279 85		272 3		6314 6		3725 2		9888 3			6642
73	Arsenic	0.8 100		29.7 100		21.3		29.2 51.2		721 7.2		2279 61.6		574 1		59311 1		28916 0		129645 0			72624
74	Barium	0.2		2.3		46.6		4.8 0.0		4699 0.0		4657 0.0		3505 0		74837 0		58811 0		150620 0			94756
75	Beryllium	0.0		8.2 100		0.9 100		1.0 0.9		602 1.4		468 0.3		365		0		0		0			0
76	Cadmium	0.0 100		1.7 100		1.3 100		1.4 53.2		41 25.4		40 3.7		50 1		2588 1		1372 0		3496 0			2485
77	Chromium	0.0 100		2.3 100		1.7 100		2.0 0.1		3145 0.1		1408 0.1		3355 0		91813 0		46559 0		402420 0			180264
78	Lead	2.9 100		29.7 100		21.3 100		24.2 0.6		5325 0.6		3887 1.3		2125 0		175965 0		127718 0		325212 0			209632
79	Mercury	0.0 100		1.8 100		1.3 100		0.7 5.2		156 21.0		46 11.7		28 0		11904 0		7940 0		20476 0			13440
80	Silver	0.1 100		11.6 100		8.5 100		9.6 100		76 80		86 100		102		0		0		0			0
81	Thallium	0.6 100		58.2 100		42.5 100		48.4 100		768 100		640 100		781 49		1553 82		784 25		3096 40			1811
82																							
83	SVM	3.0 100		31.4 100		22.5 100		25.6 0.8		5363 0.8		3925 1.3		2175 0		178553 0		129091 0		328708 0			212117
84	LVM	0.8 80		40.2 100		23.8 9		32.1 8.4		4466 4.1		4154 8.3		4295 0		151123 0		75474 0		532066 0			252888
85																							
86	<b>327C3</b>	R3		R1		R2		R3		R1		R2		R3		R1		R2		R3			Cond Avg
87																							
88	Feedstream Numb	F4		F5		F5		F5								F6		F6		F6			F6
89	Feed Class	Liq HW		Sludge HW		Sludge HW		Sludge HW								Total		Total		Total			Total
90	Feed Class 2									HW		HW		HW		Total		Total		Total			Total
91	Feedstream Descr	Direct burn liquid		Pumpable sludge		Pumpable sludge		Pumpable sludge								Total		Total		Total			Total
92	Feedrate	526		750		266		217								Total		Total		Total			Total
93	Heating value	5314		200		200		200								Total		Total		Total			Total
94	Ash	0.16		0.27		0.27		0.04								Total		Total		Total			Total
95	Chlorine															1543.5		2070.90		1533.2			lb/hr
96	Antimony	2.90 nd		2.90 nd		3.00 nd		2.90								0.31		0.31		0.08			lb/hr
97	Arsenic	2.40 nd		2.40		4.00		3.80								1.46		1.55		0.66			lb/hr
98	Barium	597.00		0.24		0.60		0.43								5.68		6.33		3.34			lb/hr
99	Beryllium	4.41 nd		0.10		0.15		0.19								0		0.00		0			lb/hr
100	Cadmium	9.17 nd		0.14 nd		0.15 nd		0.14								1.44		1.73		0.79			lb/hr
101	Chromium	125.00 nd		0.19 nd		0.20		0.24								22.77		17.06		8.02			lb/hr
102	Lead	330.00 nd		2.40 nd		2.50		2.90								51.09		40.19		2.56			lb/hr
103	Mercury	0.50 nd		0.15 nd		0.13 nd		0.10								1.02		1.21		0.57			lb/hr
104	Silver	1.50 nd		0.96 nd		1.00 nd		0.95								0		0.00		0			lb/hr
105	Thallium	4.90 nd		4.80 nd		5.00 nd		4.80								0.15		0.31		0.08			lb/hr
106																							
107	Stack Gas Flowrat	33108		31476		34124		33108								31476		34124		33108			
108	Oxygen	12.2		8.1		9.9		12.2								8.1		9.9		12.2			
109																							
110	Feedrate MTEC C:																						
111	Ash	10.78		18.61		7.09		1.11		34012		7397		46981		34012		7397		46981			29464
112	Chlorine															14185316		20465503		19631404			18094074
113	Antimony	19.5 100		20.0 100		7.9 100		8.1 54.2		429 62.9		345 99.9		412 8		2849 7		3064 40		1024 12			2312
114	Arsenic	16.2 100		16.5		10.5		10.6 5.5		2938 8.9		1952 5.3		2276 1		13418 1		15318 1		8451 1			12395
115	Barium	4022.3		1.7		1.6		1.2		13322		12213		26885 0		52201 0		62556 0		42766 0			52508
116	Beryllium	29.7 100		0.7		0.4		0.5 1.2		1972		531		2590		0		0		0			0
117	Cadmium	61.8 100		1.0 100		0.4 100		0.4 63.8		77 1.9		97 0.4		111 0		13234 0		17097 0		10115 0			13482
118	Chromium	842.2 100		1.3 100		0.5		0.7 0.0		2830		2149		4770 0		209264 0		168594 0		102690 0			160183
119	Lead	2223.4 100		16.5 100		6.6		8.1 10.9		11942 0.1		7040		12398 0		469535 0		397174 0		32779 0			299830
120	Mercury	3.3 100		1.1 100		0.3 100		0.3 4.6		89 3.2		58 0.1		240 0		9374 0		11958 0		7298 0			9543

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
121	Silver		ug/dscm		274.4		56.1		219.8	100	11.0	100	1.8	100	0.1	100	52.5	100	61.6	100	62.3	100	9.2	100	7.4		
122	Thallium		ug/dscm	100	233.5	100	48.7	100	406.4	100	54.9	100	9.1	100	0.7	100	262.3	100	305.1	100	203.6	100	25.0	100	36.6	100	
123																											
124	SVM		ug/dscm		10247.4		4372.8		9343.1	2	106.0		141.2		9.1		310.6		1226.0		863.8	100	1337.4	100	1389.7		
125	LVM		ug/dscm		6275.3		2761.4		8300.9		635.4		685.0		49.0		180.7		502.7		335.1	6	565.3	3	594.6		
126																											
127	<b>327C4</b>				R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		
128																											
129	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		
130	Feed Class				Solid HW		Solid HW		Solid HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		
131	Feedstream Description				Apron Solid		Apron Solid		Apron Solid		Aqueous		Aqueous		Aqueous		Blended liquid		Blended liquid		Blended liquid		Direct burn liquid		Direct burn liquid		
132	Feed Rate		lb/hr		5504		7148		6692								822		834		420						
133	Heating Value		Btu/lb		5251		5260		5260								25547		26019		30952						
134	Ash		wt %		0.00		0.00		0.00								0.00		0.00		0.00						
135	Mercury		ppmw		19.99		20.01		20.02								0.17		0.17		0.17						
136																											
137	Stack Gas Flowrate		dscfm																								
138	Oxygen		%																								
139																											
140	<i>Feedrate MTEC Calculations</i>																										
141	Ash		mg/dscm																								
142	Mercury		ug/dscm																								
143																											
144	<b>327C5</b>				R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		
145																											
146	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		
147	Feed Class				Solid HW		Solid HW		Solid HW		Liq non-HW		Liq non-HW		Liq non-HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		
148	Feedstream Description				Apron Solid		Apron Solid		Apron Solid		Aqueous		Aqueous		Aqueous		Blended liquid		Blended liquid		Blended liquid		Direct burn liquid		Direct burn liquid		
149	Feed Rate		lb/hr		5006		8248		7085								918		474		1044						
150	Heating Value		Btu/lb		5254		5250		5251								20915		21941		20785						
151	Ash		wt %		0.00		0.00		0.00								0.00		0.00		0.00						
152	Mercury		ppmw		19.98		20.00		20.04								0.17		0.17		0.17						

	B	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
121	Silver	10.1	100	6.6	100	2.6	100	2.6	22.4	354	56.7	130	22.1	295		0		0		0		0	
122	Thallium	33.0	100	33.1	100	13.1	100	13.3	100	609	100	413	100	657	44	1379	13	3064	64	1024	31	1822	
123																							
124	SVM	2285.2	100	8.8	100	3.5	5	8.5	11.2	12010	19.5	7133	0.0	12510	0	482769	0	414271	0	42894	0	313312	
125	LVM	880.0	100	9.3	5	11.2		11.8		222682		183912		111140	0	222682	0	183912	0	111140	0	172578	
126																							
127	<b>327C4</b>	R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg	
128																							
129	Feedstream Numb	F4		F5		F5		F5								F6		F6		F6		F6	
130	Feed Class	Liq HW		Sludge HW		Sludge HW		Sludge HW								Total		Total		Total		Total	
131	Feedstream Descr	Direct burn liquid		Pumpable sludge		Pumpable sludge		Pumpable sludge								Total		Total		Total		Total	
132	Feed Rate																						
133	Heating Value																						
134	Ash																						
135	Mercury																						
136																							
137	Stack Gas Flowrat																						
138	Oxygen																						
139																							
140	Feedrate MTEC C:																						
141	Ash																						
142	Mercury																						
143																							
144	<b>327C5</b>	R3		R1		R2		R3								R1		R2		R3		Cond Avg	
145																							
146	Feedstream Numb	F4		F5		F5		F5								F6		F6		F6		F6	
147	Feed Class	Liq HW		Sludge HW		Sludge HW		Sludge HW								Total		Total		Total		Total	
148	Feedstream Descr	Direct burn liquid		Pumpable sludge		Pumpable sludge		Pumpable sludge								Total		Total		Total		Total	
149	Feed Rate			273		486		490															
150	Heating Value			0		0		0															
151	Ash			0.00		0.00		0.00															
152	Mercury			0.01		0.01		0.01															

	B	C	D	E	F	G
1	<b>Process Information</b>					
2						
3	<b>327C10</b>	Trial burn				
4						
5	Kiln Exit Temp	°F		1819	1824	1803
6	Afterburner Exit Temp	°F		2025	2015	2013
7	Activated Carbon Inj Rate	lb/hr		25	25	25
8	Baghouse Pressure Drop	w.c		5.31	5.18	5.11
9	Baghouse Temperature	°F		375	375	376
10	First Stage Scrubber pH	pH		5.41	5.55	5.44
11	First Stage Scrubber Flowrate	gpm		1952	1961	1954
12	Second Stage Scrubber pH	pH		6.32	6.43	5.94
13	Second Stage Scrubber Flowrate	gpm		2132	2142	2156
14	Second Stage Liquid Turbidity	NTU		378	329	315
15	WESP Power unit 1	KVA		9.49	10.35	10.22
16	WESP Power unit 2	KVA		14.11	15.27	14.67
17	Kiln Rotation	rpm		0.192	0.192	0.188

	C	D	E	F	G
1	<b>Process Information 2</b>				
2			R1	R2	R3
3	<b>327C1</b>				
4					
5	Afterburner Temperature	F	2099	2114	2185
6	Kiln Temperature	F	2090	2091	2085
7	WS Temperature	F	174	175	175
8	FF Temperature	F	469	470	470
9	FF Pressure Drop	in H2O	2.3		3
10	WESP Power	kVA	30	27.5	24.8
11	WS pH		7.44	7.5	7.4
12					
13	<b>327C2</b>				
14					
15	Afterburner Temperature	F	2060	2140	2095
16	Kiln Temperature	F	2145	2152	2209
17	WS Temperature	F	175	176	176
18	FF Temperature	F	460	471	468
19	FF Pressure Drop	in H2O	4.1	3.3	3.4
20	WESP Power	kVA	29.7	29.5	28.9
21	WS pH		7.6	7.5	6.5
22					
23	<b>327C3</b>				
24					
25	Afterburner Temperature	F	2185	1996	1920
26	Kiln Temperature	F	2170	2065	2087
27	WS Temperature	F	177	175	174
28	FF Temperature	F	468	467	466
29	FF Pressure Drop	in H2O		3.2	2.9
30	WESP Power	kVA	29.3	27.8	28
31	WS pH		8.5	8	6.9
32					
33	<b>327C4</b>				
34					
35	Afterburner Temperature	F	2066	2146	
36	Kiln Temperature	F	2084	2121	2147
37	FF Temperature	F	444	460	396
38	FF Pressure Drop	in H2O	3.1	2.8	2.9
39	WESP Power	kVA	41.5	41.8	42.1
40	WS pH		7.2	7.36	7.4
41					
42	<b>327C5</b>				
43					
44	Afterburner Temperature	F	2080	2161	2069
45	Kiln Temperature	F	2070	2141	2098
46	FF Temperature	F	467	468	408
47	FF Pressure Drop	in H2O	3.7	3.8	3.9
48	WESP Power	kVA	41.1	41.6	41.7
49	WS pH		7.2	7.1	7.1



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R			
1	<b>PCDD/PCDF</b>																				
2	N																				
3	Facility Name and ID:		Safety Kleen, Aragonite, UT																		
4	Condition ID:		327C10																		
5	Condition/Test Date:		Trial burn, to set oper limits on all constituents. June 13-16, 2001																		
6																					
7																					
8	I-TEF		Run 1				Run 2				Run 3										
9	Wght Fact		Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ			
10			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	Full ND	Full ND	1/2 ND	1/2 ND			
11	Detected in sample volume (ng)																				
12	2,3,7,8-TCDD	1	nd	0.021	0.02	0.01	0.01	nd	0.023	0.02	0.01	0.01	nd	0.019	0.019	0.010	0.010				
13	1,2,3,7,8-PCDD	0.5	nd	0.092	0.05	0.05	0.02	nd	0.102	0.05	0.05	0.03	nd	0.07	0.035	0.035	0.018				
14	1,2,3,4,7,8-HxCDD	0.1	nd	0.114	0.01	0.06	0.01	nd	0.131	0.01	0.07	0.01	nd	0.083	0.008	0.042	0.004				
15	1,2,3,6,7,8-HxCDD	0.1	nd	0.274	0.03	0.14	0.01	nd	0.322	0.03	0.16	0.02	nd	0.193	0.019	0.097	0.010				
16	1,2,3,7,8,9-HxCDD	0.1	nd	0.114	0.01	0.06	0.01	nd	0.138	0.01	0.07	0.01	nd	0.084	0.008	0.042	0.004				
17	1,2,3,4,6,7,8-HpCDD	0.01		1.084	0.01	1.08	0.01		1.076	0.01	1.08	0.01		0.703	0.007	0.703	0.007				
18	OCDD	0.001		0.88	0.00	0.88	0.00		0.819	0.00	0.82	0.00		0.558	0.001	0.558	0.001				
19	2,3,7,8-TCDF	0.1	nd	0.259	0.03	0.13	0.01	nd	0.3	0.03	0.15	0.02	nd	0.215	0.022	0.108	0.011				
20	1,2,3,7,8-PCDF	0.05		0.321	0.016	0.321	0.016		0.369	0.02	0.37	0.02		0.269	0.013	0.269	0.013				
21	2,3,4,7,8-PCDF	0.5		0.751	0.376	0.751	0.376		0.922	0.46	0.92	0.46		0.694	0.347	0.694	0.347				
22	1,2,3,4,7,8-HxCDF	0.1		0.687	0.069	0.687	0.069		0.617	0.06	0.62	0.06		0.479	0.048	0.479	0.048				
23	1,2,3,6,7,8-HxCDF	0.1		0.515	0.052	0.515	0.052		0.572	0.06	0.57	0.06		0.467	0.047	0.467	0.047				
24	2,3,4,6,7,8-HxCDF	0.1		1.019	0.102	1.019	0.102		1.236	0.12	1.24	0.12		1.002	0.100	1.002	0.100				
25	1,2,3,7,8,9-HxCDF	0.1		0.244	0.024	0.244	0.024		0.286	0.03	0.29	0.03		0.221	0.022	0.221	0.022				
26	1,2,3,4,6,7,8-HpCDF	0.01		2.355	0.024	2.355	0.024		2.107	0.02	2.11	0.02		1.795	0.018	1.795	0.018				
27	1,2,3,4,7,8,9-HpCDF	0.01		0.424	0.004	0.424	0.004		0.442	0.00	0.44	0.00		0.33	0.003	0.330	0.003				
28	OCDF	0.001		1.538	0.002	1.538	0.002		1.488	0.00	1.49	0.00		1.185	0.001	1.185	0.001				
29	Total TCDD	0	nd	1.621	0.000	0.811	0.000	nd	1.821	0.00	0.91	0.00	nd	1.362	0.000	0.681	0.000				
30	Total PCDD	0	nd	2.644	0.000	1.322	0.000	nd	2.982	0.00	1.49	0.00	nd	2.177	0.000	1.089	0.000				
31	Total HxCDD	0		3.99	0.000	3.990	0.000		4.778	0.00	4.78	0.00		3.077	0.000	3.077	0.000				
32	Total HpCDD	0		2.324	0.000	2.324	0.000		2.369	0.00	2.37	0.00		1.594	0.000	1.594	0.000				
33	Total TCDF	0	nd	8.321	0.000	4.161	0.000	nd	12.501	0.00	6.25	0.00	nd	8.422	0.000	4.211	0.000				
34	Total PCDF	0		7.083	0.000	7.083	0.000		9.143	0.00	9.14	0.00		6.84	0.000	6.840	0.000				
35	Total HxCDF	0		5.907	0.000	5.907	0.000		6.733	0.00	6.73	0.00		5.47	0.000	5.470	0.000				
36	Total HpCDF	0		4.157	0.000	4.157	0.000		3.993	0.00	3.99	0.00		3.318	0.000	3.318	0.000				
37	Gas sample volume (dscf)				112.20	112.20	112.20					115.63	115.63	115.63			114.22	114.22	114.22		
38	O2 (%)				8.20	8.20	8.20					8.4	8.4	8.4			8.60	8.60	8.60		
39																					
40	PCDD/PCDF (ng in sample)				0.82	32.2	0.75					0.952	38.0	0.871			0.72	28.0	0.66		
41	PCDD/PCDF (ng/dscm @ 7% O2) 17.4				0.28	11.08	0.26	17.1					0.32	12.89	0.30	15.5			0.25	9.79	0.23
42																					
43	TEQ Cond Avg		0.26																		
44	Total Cond Avg		11.25																		

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:	Safety Kleen, Aragonite, UT																
4	Condition ID:	327C1																
5	Condition/Test Date:																	
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	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	Full ND	Full ND	1/2 ND	1/2 ND
10	Detected in sample volume (ng)																	
11	2,3,7,8-TCDD	1	0.020	0.02	0.02	0.02	0.080	0.08	0.08	0.08	0.040	0.040	0.040	0.040				
12	1,2,3,7,8-PCDD	0.5	0.380	0.19	0.38	0.19	0.480	0.24	0.48	0.24	0.220	0.110	0.220	0.110				
13	1,2,3,4,7,8-HxCDD	0.1	0.490	0.05	0.49	0.05	0.700	0.07	0.70	0.07	0.290	0.029	0.290	0.029				
14	1,2,3,6,7,8-HxCDD	0.1	1.100	0.11	1.10	0.11	1.400	0.14	1.40	0.14	0.650	0.065	0.650	0.065				
15	1,2,3,7,8,9-HxCDD	0.1	1.100	0.11	1.10	0.11	1.500	0.15	1.50	0.15	0.620	0.062	0.620	0.062				
16	1,2,3,4,6,7,8-HpCDD	0.01	5.100	0.05	5.10	0.05	7.200	0.07	7.20	0.07	3.300	0.033	3.300	0.033				
17	OCDD	0.001	4.700	0.00	4.70	0.00	6.700	0.01	6.70	0.01	3.400	0.003	3.400	0.003				
18	2,3,7,8-TCDF	0.1	0.430	0.04	0.43	0.04	0.520	0.05	0.52	0.05	0.360	0.036	0.360	0.036				
19	1,2,3,7,8-PCDF	0.05	0.610	0.031	0.610	0.031	0.750	0.04	0.75	0.04	0.410	0.021	0.410	0.021				
20	2,3,4,7,8-PCDF	0.5	1.800	0.900	1.800	0.900	1.900	0.95	1.90	0.95	1.300	0.650	1.300	0.650				
21	1,2,3,4,7,8-HxCDF	0.1	2.800	0.280	2.800	0.280	3.300	0.33	3.30	0.33	2.200	0.220	2.200	0.220				
22	1,2,3,6,7,8-HxCDF	0.1	1.100	0.110	1.100	0.110	1.500	0.15	1.50	0.15	0.840	0.084	0.840	0.084				
23	2,3,4,6,7,8-HxCDF	0.1	2.200	0.220	2.200	0.220	2.800	0.28	2.80	0.28	2.100	0.210	2.100	0.210				
24	1,2,3,7,8,9-HxCDF	0.1	0.060	0.006	0.060	0.006	0.060	0.01	0.06	0.01	0.070	0.007	0.070	0.007				
25	1,2,3,4,6,7,8-HpCDF	0.01	3.500	0.035	3.500	0.035	4.500	0.05	4.50	0.05	3.100	0.031	3.100	0.031				
26	1,2,3,4,7,8,9-HpCDF	0.01	0.370	0.004	0.370	0.004	0.460	0.00	0.46	0.00	0.620	0.006	0.620	0.006				
27	OCDF	0.001	2.000	0.002	2.000	0.002	1.900	0.00	1.90	0.00	2.900	0.003	2.900	0.003				
28	Total TCDD	0	8.600	0.000	8.600	0.000	10.600	0.00	10.60	0.00	5.700	0.000	5.700	0.000				
29	Total PCDD	0	16.000	0.000	16.000	0.000	11.300	0.00	11.30	0.00	6.000	0.000	6.000	0.000				
30	Total HxCDD	0	20.600	0.000	20.600	0.000	27.300	0.00	27.30	0.00	13.200	0.000	13.200	0.000				
31	Total HpCDD	0	12.300	0.000	12.300	0.000	17.200	0.00	17.20	0.00	7.400	0.000	7.400	0.000				
32	Total TCDF	0	15.200	0.000	15.200	0.000	19.800	0.00	19.80	0.00	12.600	0.000	12.600	0.000				
33	Total PCDF	0	18.800	0.000	18.800	0.000	20.600	0.00	20.60	0.00	14.400	0.000	14.400	0.000				
34	Total HxCDF	0	20.600	0.000	20.600	0.000	17.900	0.00	17.90	0.00	11.700	0.000	11.700	0.000				
35	Total HpCDF	0	12.300	0.000	12.300	0.000	8.200	0.00	8.20	0.00	6.700	0.000	6.700	0.000				
36																		
37	Gas sample volume (dscf)			71.08	71.08	71.08		62.27	62.27	62.27		79.27	79.27	79.27				
38	O2 (%)			10.42	10.42	10.42		10.4	10.4	10.4		10.42	10.42	10.42				
39																		
40	PCDD/PCDF (ng in sample)			2.16	131.1	2.16		2.616	141.5	2.616		1.61	84.0	1.61				
41	PCDD/PCDF (ng/dscm @ 7% O2)	0.0		1.42	86.25	1.42	0.0	1.96	106.26	1.96	0.0	0.95	49.55	0.95				
42																		
43	TEQ Cond Avg	1.45																
44	Total Cond Avg	80.68																

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	<b>PCDD/PCDF</b>																
2	N																
3	Facility Name and ID:	Safety Kleen, Aragonite, UT															
4	Condition ID:	327C2															
5	Condition/Test Date:																
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	0.030	0.03	0.03	0.03	0.030	0.03	0.03	0.03	0.030	0.030	0.030	0.030	0.030	0.030	0.030
12	1,2,3,7,8-PCDD	0.5	0.260	0.13	0.26	0.13	0.320	0.16	0.32	0.16	0.180	0.090	0.180	0.090	0.180	0.090	0.090
13	1,2,3,4,7,8-HxCDD	0.1	0.280	0.03	0.28	0.03	0.330	0.03	0.33	0.03	0.170	0.017	0.170	0.017	0.170	0.017	0.017
14	1,2,3,6,7,8-HxCDD	0.1	0.640	0.06	0.64	0.06	0.660	0.07	0.66	0.07	0.410	0.041	0.410	0.041	0.410	0.041	0.041
15	1,2,3,7,8,9-HxCDD	0.1	0.730	0.07	0.73	0.07	0.830	0.08	0.83	0.08	0.460	0.046	0.460	0.046	0.460	0.046	0.046
16	1,2,3,4,6,7,8-HpCDD	0.01	2.900	0.03	2.90	0.03	2.900	0.03	2.90	0.03	1.600	0.016	1.600	0.016	1.600	0.016	0.016
17	OCDD	0.001	2.500	0.00	2.50	0.00	2.600	0.00	2.60	0.00	1.300	0.001	1.300	0.001	1.300	0.001	0.001
18	2,3,7,8-TCDF	0.1	0.370	0.04	0.37	0.04	0.310	0.03	0.31	0.03	0.240	0.024	0.240	0.024	0.240	0.024	0.024
19	1,2,3,7,8-PCDF	0.05	0.490	0.025	0.490	0.025	0.510	0.03	0.51	0.03	0.290	0.015	0.290	0.015	0.290	0.015	0.015
20	2,3,4,7,8-PCDF	0.5	1.400	0.700	1.400	0.700	1.200	0.60	1.20	0.60	0.830	0.415	0.830	0.415	0.830	0.415	0.415
21	1,2,3,4,7,8-HxCDF	0.1	1.600	0.160	1.600	0.160	1.500	0.15	1.50	0.15	1.000	0.100	1.000	0.100	1.000	0.100	0.100
22	1,2,3,6,7,8-HxCDF	0.1	0.600	0.060	0.600	0.060	0.620	0.06	0.62	0.06	0.440	0.044	0.440	0.044	0.440	0.044	0.044
23	2,3,4,6,7,8-HxCDF	0.1	1.700	0.170	1.700	0.170	1.400	0.14	1.40	0.14	1.000	0.100	1.000	0.100	1.000	0.100	0.100
24	1,2,3,7,8,9-HxCDF	0.1	0.080	0.008	0.080	0.008	0.070	0.01	0.07	0.01	0.040	0.004	0.040	0.004	0.040	0.004	0.004
25	1,2,3,4,6,7,8-HpCDF	0.01	1.900	0.019	1.900	0.019	1.700	0.02	1.70	0.02	1.200	0.012	1.200	0.012	1.200	0.012	0.012
26	1,2,3,4,7,8,9-HpCDF	0.01	0.330	0.003	0.330	0.003	0.240	0.00	0.24	0.00	0.140	0.001	0.140	0.001	0.140	0.001	0.001
27	OCDF	0.001	1.300	0.001	1.300	0.001	0.880	0.00	0.88	0.00	0.530	0.001	0.530	0.001	0.530	0.001	0.001
28	Total TCDD	0	5.700	0.000	5.700	0.000	5.800	0.00	5.80	0.00	3.700	0.000	3.700	0.000	3.700	0.000	0.000
29	Total PCDD	0	10.700	0.000	10.700	0.000	6.600	0.00	6.60	0.00	3.600	0.000	3.600	0.000	3.600	0.000	0.000
30	Total HxCDD	0	10.900	0.000	10.900	0.000	12.000	0.00	12.00	0.00	7.200	0.000	7.200	0.000	7.200	0.000	0.000
31	Total HpCDD	0	6.800	0.000	6.800	0.000	6.800	0.00	6.80	0.00	3.900	0.000	3.900	0.000	3.900	0.000	0.000
32	Total TCDF	0	13.900	0.000	13.900	0.000	13.200	0.00	13.20	0.00	8.900	0.000	8.900	0.000	8.900	0.000	0.000
33	Total PCDF	0	16.000	0.000	16.000	0.000	14.900	0.00	14.90	0.00	9.100	0.000	9.100	0.000	9.100	0.000	0.000
34	Total HxCDF	0	9.000	0.000	9.000	0.000	8.400	0.00	8.40	0.00	5.800	0.000	5.800	0.000	5.800	0.000	0.000
35	Total HpCDF	0	4.300	0.000	4.300	0.000	2.900	0.00	2.90	0.00	2.400	0.000	2.400	0.000	2.400	0.000	0.000
36																	
37	Gas sample volume (dscf)			72.71	72.71	72.71		71.93	71.93	71.93			75.45	75.45	75.45		
38	O2 (%)			10.02	10.02	10.02		10.02	10.02	10.02			10.02	10.02	10.02		
39																	
40	PCDD/PCDF (ng in sample)			1.54	81.1	1.54		1.439	74.1	1.439			0.96	46.4	0.96		
41	PCDD/PCDF (ng/dscm @ 7% O2)	0.0		0.95	50.25	0.95	0.0	0.90	46.40	0.90	0.0		0.57	27.73	0.57		
42																	
43	TEQ Cond Avg		0.81														
44	Total Cond Avg		41.46														

	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>327C4</b>													
2														
3	ng/dscm	I-TEF		Total	Run 1			Total	Run 2			Total	Run 3	
4		Wt Fact		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND
5	4D 2378	1	2	0.0131	0.0131	0.0131		0.0599	0.0599	0.0599		0.0235	0.0235	0.0235
6	4D Other	0		5.6281	5.6281	0.0000		7.8771	7.8771	0.0000		3.3290	3.3290	0.0000
7	4D Total	0		5.6412	5.6412	0.0000		7.9370	7.9370	0.0000		3.3525	3.3525	0.0000
8	5D 12378	0.5		0.2493	0.2493	0.1246		0.3594	0.3594	0.1797		0.1294	0.1294	0.0647
9	5D Other	0		10.2460	10.2460	0.0000		8.1018	8.1018	0.0000		3.3995	3.3995	0.0000
10	5D Total	0		10.4953	10.4953	0.0000		8.4612	8.4612	0.0000		3.5289	3.5289	0.0000
11	6D 123478	0.1		0.3214	0.3214	0.0321		0.5241	0.5241	0.0524		0.1706	0.1706	0.0171
12	6D 123678	0.1		0.7216	0.7216	0.0722		1.0483	1.0483	0.1048		0.3823	0.3823	0.0382
13	6D 123789	0.1		0.7216	0.7216	0.0722		1.1232	1.1232	0.1123		0.3647	0.3647	0.0365
14	6D Other	0		11.7482	11.7482	0.0000		17.7460	17.7460	0.0000		6.8462	6.8462	0.0000
15	6D Total	0		13.5127	13.5127	0.0000		20.4416	20.4416	0.0000		7.7637	7.7637	0.0000
16	7D 1234678	0.01		3.3454	3.3454	0.0335		5.3912	5.3912	0.0539		1.9409	1.9409	0.0194
17	7D Other	0		4.7229	4.7229	0.0000		7.4878	7.4878	0.0000		2.4114	2.4114	0.0000
18	7D Total	0		8.0682	8.0682	0.0000		12.8790	12.8790	0.0000		4.3524	4.3524	0.0000
19	8D	0.001		3.0830	3.0830	0.0031		5.0168	5.0168	0.0050		1.9997	1.9997	0.0020
20	4F 2378	0.1		0.2821	0.2821	0.0282		0.3894	0.3894	0.0389		0.2117	0.2117	0.0212
21	4F Other	0		9.6885	9.6885	0.0000		14.4364	14.4364	0.0000		7.1990	7.1990	0.0000
22	4F Total	0		9.9705	9.9705	0.0000		14.8258	14.8258	0.0000		7.4108	7.4108	0.0000
23	5F 12378	0.05		0.4001	0.4001	0.0200	2	0.5616	0.5616	0.0281		0.2411	0.2411	0.0121
24	5F 23478	0.5		1.1807	1.1807	0.5904		1.4227	1.4227	0.7113		0.7646	0.7646	0.3823
25	5F Other	0		10.7511	10.7511	0.0000		13.4406	13.4406	0.0000		7.4637	7.4637	0.0000
26	5F Total	0		12.3319	12.3319	0.0000		15.4248	15.4248	0.0000		8.4695	8.4695	0.0000
27	6F 123478	0.1		1.8367	1.8367	0.1837		2.4710	2.4710	0.2471		1.2939	1.2939	0.1294
28	6F 123678	0.1		0.7216	0.7216	0.0722		1.1232	1.1232	0.1123		0.4941	0.4941	0.0494
29	6F 123789	0.1		0.0394	0.0394	0.0039		0.0449	0.0449	0.0045		0.0412	0.0412	0.0041
30	6F 234678	0.1		1.4431	1.4431	0.1443		2.0966	2.0966	0.2097		1.2351	1.2351	0.1235
31	6F Other	0		4.4867	4.4867	0.0000		7.6675	7.6675	0.0000		3.8171	3.8171	0.0000
32	6F Total	0		8.5274	8.5274	0.0000		13.4031	13.4031	0.0000		6.8814	6.8814	0.0000
33	7F 1234678	0.01		2.2958	2.2958	0.0230		3.3695	3.3695	0.0337		1.8233	1.8233	0.0182
34	7F 1234789	0.01		0.2427	0.2427	0.0024		0.3444	0.3444	0.0034		0.3647	0.3647	0.0036
35	7F Other	0		0.9380	0.9380	0.0000		2.4260	2.4260	0.0000		1.7527	1.7527	0.0000
36	7F Total	0		3.4766	3.4766	0.0000		6.1400	6.1400	0.0000		3.9407	3.9407	0.0000
37	8F	0.001		1.3119	1.3119	0.0013		1.4227	1.4227	0.0014		1.7057	1.7057	0.0017
38	Total PCDD/PCDF			76.4187	76.4187			105.9520	105.9520			49.4052	49.4052	
39	TEQ		0.0	1.4201		1.4201	0.0	1.9586		1.9586	0.0	0.9469		0.9469

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	<b>327C5</b>														
2					Run 1				Run 2				Run 3		
3	ng/dscm	I-TEF		Total	Total	TEQ		Total	Total	TEQ		Total	Total	TEQ	
4		Wt Fact		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND	
5	4D 2378	1	1	0.0185	0.0093	0.0093	1	0.0187	0.0094	0.0094		0.0179	0.0179	0.0179	
6	4D Other	0		3.5036	3.5036	0.0000		3.6041	3.6041	0.0000		2.1854	2.1854	0.0000	
7	4D Total	0		3.5221	3.5221	0.0000		3.6229	3.6229	0.0000		2.2032	2.2032	0.0000	
8	5D 12378	0.5	1	0.1607	0.0803	0.0402		0.1999	0.1999	0.0999		0.1072	0.1072	0.0536	
9	5D Other	0		6.4510	6.4510	0.0000		3.9227	3.9227	0.0000		2.0365	2.0365	0.0000	
10	5D Total	0		6.6117	6.6117	0.0000		4.1226	4.1226	0.0000		2.1437	2.1437	0.0000	
11	6D 123478	0.1		0.1730	0.1730	0.0173		0.2061	0.2061	0.0206		0.1012	0.1012	0.0101	
12	6D 123678	0.1		0.3955	0.3955	0.0395		0.4123	0.4123	0.0412		0.2441	0.2441	0.0244	
13	6D 123789	0.1		0.4511	0.4511	0.0451		0.5184	0.5184	0.0518		0.2739	0.2739	0.0274	
14	6D Other	0		5.7157	5.7157	0.0000		6.3588	6.3588	0.0000		3.6681	3.6681	0.0000	
15	6D Total	0		6.7353	6.7353	0.0000		7.4956	7.4956	0.0000		4.2874	4.2874	0.0000	
16	7D 1234678	0.01		1.7919	1.7919	0.0179		1.8114	1.8114	0.0181		0.9527	0.9527	0.0095	
17	7D Other	0		2.4099	2.4099	0.0000		2.4361	2.4361	0.0000		1.3696	1.3696	0.0000	
18	7D Total	0		4.2018	4.2018	0.0000		4.2475	4.2475	0.0000		2.3223	2.3223	0.0000	
19	8D	0.001		1.5448	1.5448	0.0015		1.6240	1.6240	0.0016		0.7741	0.7741	0.0008	
20	4F 2378	0.1		0.2286	0.2286	0.0229		0.1936	0.1936	0.0194		0.1429	0.1429	0.0143	
21	4F Other	0		8.3604	8.3604	0.0000		8.0515	8.0515	0.0000		5.1567	5.1567	0.0000	
22	4F Total	0		8.5890	8.5890	0.0000		8.2451	8.2451	0.0000		5.2996	5.2996	0.0000	
23	5F 12378	0.05		0.3028	0.3028	0.0151		0.3186	0.3186	0.0159		0.1727	0.1727	0.0086	
24	5F 23478	0.5		0.8651	0.8651	0.4325		0.7496	0.7496	0.3748		0.4942	0.4942	0.2471	
25	5F Other	0		8.7188	8.7188	0.0000		8.2389	8.2389	0.0000		4.7518	4.7518	0.0000	
26	5F Total	0		9.8866	9.8866	0.0000		9.3070	9.3070	0.0000		5.4187	5.4187	0.0000	
27	6F 123478	0.1		0.9887	0.9887	0.0989		0.9369	0.9369	0.0937		0.5955	0.5955	0.0595	
28	6F 123678	0.1		0.3707	0.3707	0.0371		0.3873	0.3873	0.0387		0.2620	0.2620	0.0262	
29	6F 123789	0.1		0.0494	0.0494	0.0049	1	0.0437	0.0219	0.0022		0.0238	0.0238	0.0024	
30	6F 234678	0.1		1.0505	1.0505	0.1050		0.8745	0.8745	0.0874		0.5955	0.5955	0.0595	
31	6F Other	0		3.1019	3.1019	0.0000		3.0045	3.0045	0.0000		1.9769	1.9769	0.0000	
32	6F Total	0		5.5612	5.5612	0.0000		5.2469	5.2469	0.0000		3.4537	3.4537	0.0000	
33	7F 1234678	0.01		1.1740	1.1740	0.0117		1.0619	1.0619	0.0106		0.7146	0.7146	0.0071	
34	7F 1234789	0.01		0.2039	0.2039	0.0020		0.1499	0.1499	0.0015		0.0834	0.0834	0.0008	
35	7F Other	0		1.2791	1.2791	0.0000		0.5996	0.5996	0.0000		0.6312	0.6312	0.0000	
36	7F Total	0		2.6570	2.6570	0.0000		1.8114	1.8114	0.0000		1.4291	1.4291	0.0000	
37	8F	0.001		0.8033	0.8033	0.0008		0.5497	0.5497	0.0005		0.3156	0.3156	0.0003	
38	Total PCDD/PCDF			50.1128	50.1128			46.2727	46.2727			27.6475	27.6475		
39	TEQ		10.4	0.9513		0.9019	2.6	0.8991		0.8875	0.0	0.5697		0.5697	