

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	300
4	EPA ID No.	IND005081542
5	Facility Name	Essroc
6	Facility Location	
7	City	Logansport
8	State	IN
9	Unit ID Name/No.	Kiln No. 1
10	Other Sister Facilities	Kiln No. 2 (ID No. 491)
11	Number of Sister Facilities	1
12	Combustor Class	Cement Kiln (CK)
13	Combustor Type	Wet, long
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	
16	APCS Detailed Acronym	ESP
17	APCS General Class	ESP
18	APCS Characteristics	5 compartments, 2 fields/compartment, 54,000 ft2 plate area, Research Cottrell, 360 SCA
19	Hazardous Wastes	Liq, solid
20	Haz Waste Description	Containerized solids mid kiln for Kiln 1
21	Supplemental Fuel	Coal
22		
23	Stack Characteristics	
24	Diameter (ft)	15.6
25	Height (ft)	204.0
26	Gas Velocity (ft/sec)	4.4
27	Gas Temperature (°F)	331.7
28		
29	Permitting Status	Tier I for Hg, Ag, Tl, Sb, Ba; Tier III for Pb, As, Be, Cd, Cr
30	HWC Burn Status (Date if Terminated)	Y

	B	C
1	Cond Description	
2		
3	300C10	
4		
5	Report Name/Date	RCRA Trial Burn for the Burning of Waste-Derived Fuels for Energy Recovery at Essroc Cement Corp., Logansport, Indiana, APCC Project 98062, March 1999
6	Report Prepare	Air Pollution Characterization and Control, LTD
7	Testing Firm	
8	Testing Dates	October 13-14, 1998
9	Cond Dates	Oct-98
10	Condition Descr	CoC; Min temp, max CO, POHC DRE, min ESP power
11	Content	PM, HCl/Cl ₂ , CO, HC, D/F, SVOC, VOC, TOE
12		
13	300C11	
14		
15	Report Name/Date	RCRA Trial Burn for the Burning of Waste-Derived Fuels for Energy Recovery at Essroc Cement Corp., Logansport, Indiana, APCC Project 98062, March 1999
16	Report Prepare	Air Pollution Characterization and Control, LTD
17	Testing Firm	
18	Testing Dates	October 15, 1998
19	Cond Dates	Oct-98
20	Condition Descr	CoC; Max operating temp, max temp, feedrates
21	Content	Metals, D/F, PM, HCl/Cl ₂ , CO, HC
22		
23	300C12	
24		
25	Report Name/Date	RCRA Trial Burn for the Burning of Waste-Derived Fuels for Energy Recovery at Essroc Cement Corp., Logansport, Indiana, APCC Project 98062, March 1999
26	Report Prepare	Air Pollution Characterization and Control, LTD
27	Testing Firm	
28	Testing Dates	October 17-18, 1998
29	Cond Dates	Oct-98
30	Condition Descr	Risk burn, normal operations
31	Content	PM/PSD, D/F, organics (SVOC, VOC), HCl/Cl ₂ , CO, HC
32		
33	300C13	
34		
35	Report Name/Date	RCRA Trial Burn for the Burning of Waste-Derived Fuels for Energy Recovery at Essroc Cement Corp., Logansport, Indiana, APCC Project 98062, March 1999
36	Report Prepare	Air Pollution Characterization and Control, LTD
37	Testing Firm	
38	Testing Dates	October 16, 1998
39	Cond Dates	Oct-98
40	Condition Descr	Risk burn, normal operations
41	Content	PM/PSD, metals, D/F, HCl/Cl ₂ , CO, HC
42		
43		
44	Condition 13 and 11 -- Kiln No. 2	
45	Condition 10 and 12 -- Kiln No. 1	
46	Putting all data under one kiln since both kilns are identical in design and operation	
47		
48	300C1	
49		
50	Report Name/Date	B.I.F. Certification of Compliance, C.O.C. Report & Attachments, Stack Test Report and Appendix, Submitted August 20, 1992
51	Report Prepare	Essroc Materials
52	Testing Firm	Air Pollution Characterization and Control, Ltd.
53	Cond Descr	CoC, LOW COMB TEMP
54	Testing Dates	May 29-30, 1992
55	Cond Dates	May-92
56		
57	300C2	
58		
59	Report Name/Date	B.I.F. Certification of Compliance, C.O.C. Report & Attachments, Stack Test Report and Appendix, Submitted August 20, 1992
60	Report Prepare	Essroc Materials

	B	C
61	Testing Firm	Air Pollution Characterization and Control, Ltd.
62	Cond Descr	CoC, HIGH COMB TEMP
63	Testing Dates	May 31-Jun 1, 1992
64	Cond Dates	May-92
65		
66	300C3	
67		
68	Report Name/Date	Particulate Emissions, ESP Collection Efficiency, and Dioxin/Furan (PCDD/PCDF) Emission Testing at Essroc Materials Inc., Logansport, Indiana, prepared by Air Pollution Characterization and Control, Ltd., September 1993, APCC Project No. 93023
69	Report Prepare	Air Pollution Characterization and Control, Ltd.
70	Testing Firm	Air Pollution Characterization and Control, Ltd.
71	Cond Descr	?
72	Testing Dates	July 26-28, 1993
73	Cond Dates	Jul-93
74		
75	300C4	
76		
77	Report Name/Date	Supplemental Fuel Trial Burn, Coplay Cement, Logansport Indiana, May 1987, prepared by TRC, TRC project No. 3919-E71, September 1987
78	Report Prepare	TRC
79	Testing Firm	TRC
80	Cond Descr	BASELINE
81	Testing Dates	May 20, 1987
82	Cond Dates	May-87
83		
84	300C5	
85		
86	Report Name/Date	Supplemental Fuel Trial Burn, Coplay Cement, Logansport Indiana, May 1987, prepared by TRC, TRC project No. 3919-E71, September 1987
87	Report Prepare	TRC
88	Testing Firm	TRC
89	Cond Descr	DRE
90	Testing Dates	May 20-29, 1987
91	Cond Dates	May-87
92		
93	300C6	
94		
95	Report Name/Date	Supplemental Fuel Trial Burn, Coplay Cement, Logansport Indiana, May 1987, prepared by TRC, TRC project No. 3919-E71, September 1987
96	Report Prepare	TRC
97	Testing Firm	TRC
98	Cond Descr	BASELINE
99	Testing Dates	May 19-20, 1987
100	Cond Dates	May-87
101		
102	300C7	
103		
104	Report Name/Date	Supplemental Fuel Trial Burn, Coplay Cement, Logansport Indiana, May 1987, prepared by TRC, TRC project No. 3919-E71, September 1987
105	Report Prepare	TRC
106	Testing Firm	TRC
107	Cond Descr	Haz waste firing
108	Testing Dates	May 28-29, 1987
109	Cond Dates	May-87

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Stack Gas Emissions 1													
2														
3	300C10	POHC DRE, min comb temp, r				R1		R2		R3		R4		Cond Avg
4						ESP upset during run 1, not used in average								
5	PM	E1	gr/dscf	y		0.0559		0.052		0.0161		0.0216		0.0299
6														
7	CO (RA)	E1	ppmv	y		651		870		971				830.7
8	CO (MHRA)	E1	ppmv	y		1550		1523		1502				1525.0
9														
10	HC (RA)	E1	ppmv	y		9.9		13.3		12.3				11.8
11	HC (MHRA)	E1	ppmv	y		16		17		18				17.0
12														
13	HCl		g/hr			1322		1959		643		2358		
14	Cl2		g/hr			6.03		7.24		12.23		9.45		
15														
16														
17	POHC DRE	Trichloroethene												
18	POHC Feedrate		g/hr			140,452		87,133		87,060				
19	Emission Rate	E1	g/hr			0.171		0.157		0.092				
20	DRE	E1	%			99.9999		99.9998		99.9999				
21														
22	POHC DRE	Carbon Tetrachloride												
23	POHC Feedrate		g/hr			157,818		157,802		155,636				
24	Emission Rate	E1	g/hr			0.322		0.386		0.418				
25	DRE	E1	g/hr			99.9998		99.9998		99.9997				
26														
27	POHC DRE	Tetrachloroethene												
28	POHC Feedrate		g/hr			35,859,649		151,397		115,727				
29	Emission Rate	E1	g/hr			0.241		0.205		0.193				
30	DRE	E1	g/hr			100.0000		99.9999		99.9998				
31														
32	POHC DRE	1,2,4-Trichlorobenzene												
33	POHC Feedrate		g/hr			11,444		11,725		11,432				
34	Emission Rate	E1	g/hr			0.457		0.354		0.319				
35	DRE	E1	%			99.9960		99.9970		99.9972				
36														
37	Sampling Train	PM, HCl E1												
38	Stack Gas Flowrate		dscfm			60422		64332		73380		65998		66045
39	O2		%			6.2		6.3		6.2		6.2		6.2
40	Moisture		%			31.75		34.96		30.06		34.59		32.3
41	Temperature		°F			365		357		380		346		367.3
42														
43	Sampling Train	PCDD/P E2												
44	Stack Gas Flowrate		dscfm			61394		52117		61044				58185
45	O2		%			6.2		6.3		6.2				6.2
46	Moisture		%			28.9		34.9		32.1				32.0
47	Temperature		°F			367		359		373				366.3
48														
49	HCl	E1	ppmv	y		8.03		11.25		3.22		13.11		9.19
50	Cl2	E1	ppmv	y		0.02		0.02		0.03		0.03		0.03
51	Total Chlorine	E1	ppmv	y		8.1		11.3		3.3		13.2		9.25
52														
53	300C11	Max operating conditi				R1		R2		R3		R4		Cond Avg
54														
55	PM	E1	gr/dscf	y		0.067		0.0587		0.0361				0.0539
56														
57	CO (RA)	E1	ppmv	y		564		67.3		186				272.4
58	CO (MHRA)	E1	ppmv	y		1106		75.8		365				515.6
59														
60	HC (RA)	E1	ppmv	y		7.4		5.6		7.6				6.9
61	HC (MHRA)	E1	ppmv	y		13		7		9				9.7
62														
63	HCl		g/hr			6534		3424		6266				
64	Cl2		g/hr			2.54 nd		9.96 nd		10.7				
65														
66	HCl	E1	ppmv	y		37.04		21.29		39.56				32.63

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
67	Cl2	E1	ppmv	y		0.01		0.03		0.03				0.02
68	Total Chlorine	E1	ppmv	y		37.06		21.35		39.63				32.68
69														
70	Anitmony		ug/dscm	n		4.51		2.67		4.31				
71	Arsenic		ug/dscm	n		2.02		4.19		6.82				
72	Barium		ug/dscm	n		39.8		36.1		45.6				
73	Beryllium		ug/dscm	n		0.318		0.169		0.141				
74	Cadmium		ug/dscm	n		73.3		43.9		57.3				
75	Chromium		ug/dscm	n		12.4		7.4		12.6				
76	Lead		ug/dscm	n		1009		690		757				
77	Mercury		ug/dscm	n		64.4		66.9		115				
78	Nickel		ug/dscm	n		16.6		4.81		11.8				
79	Selenium		ug/dscm	n		22		1.59		12.9				
80	Silver		ug/dscm	n		2.37		1.02		3				
81	Thallium		ug/dscm	n		5.71		5.18		4.45				
82	Chromium (Hex)		ug/dscm	n		0.209		0.201		0.301				
83														
84	Anitmony	E2	ug/dscm	y		5.0		3.2		5.0				4.42
85	Arsenic	E2	ug/dscm	y		2.2		5.1		8.0				5.09
86	Barium	E2	ug/dscm	y		44.2		43.6		53.2				47.00
87	Beryllium	E2	ug/dscm	y		0.4		0.2		0.2				0.24
88	Cadmium	E2	ug/dscm	y		81.4		53.0		66.9				67.09
89	Chromium	E2	ug/dscm	y		13.8		8.9		14.7				12.47
90	Lead	E2	ug/dscm	y		1121.1		832.8		883.2				945.68
91	Mercury	E2	ug/dscm	y		71.6		80.7		134.2				95.49
92	Nickel	E2	ug/dscm	y		18.4		5.8		13.8				12.67
93	Selenium	E2	ug/dscm	y		24.4		1.9		15.1				13.80
94	Silver	E2	ug/dscm	y		2.6		1.2		3.5				2.45
95	Thallium	E2	ug/dscm	y		6.3		6.3		5.2				5.93
96	Chromium (Hex)	E2	ug/dscm	y		0.2		0.2		0.4				0.28
97														
98	SVM	E2	ug/dscm	y		1202.6		885.7		950.0				1012.77
99	LVM	E2	ug/dscm	y		16.38		14.19		22.82				17.80
100														
101	Sampling Train	PM, HCl	E1											
102	Stack Gas Flowrate		dscfm			76035		75307		71692				74344.7
103	O2		%			8.4		9.4		9				8.9
104	Moisture		%			30.57		30.79		31.97				31.1
105	Temperature		°F			381		383		387				383.7
106														
107	Sampling Train	Metals	E2											
108	Stack Gas Flowrate		dscfm			79712		80412		79916				80013.3
109	O2		%			8.4		9.4		9				8.9
110	Moisture		%			30.66		31.24		32.35				31.4
111	Temperature		°F			383		376		371				376.7
112														
113	Sampling Train	PCDD/P	E3											
114	Stack Gas Flowrate		dscfm			77711		82086		79422				79739.7
115	O2		%			8.4		9.4		9				8.9
116	Moisture		%			31.01		30.39		31.28				30.9
117	Temperature		°F			387		387		383				385.7
118														
119	300C12	Risk Burn	normal operating coi			R1		R2		R3		R4		Cond Avg
120														
121	PM	E1	gr/dscf	y		0.005		0.008		0.01				0.0077
122														
123	CO (RA)	E1	ppmv	y		774		433		362				523.0
124	CO (MHRA)	E1	ppmv	y		1103		1119		872				1031.3
125														
126	HC (RA)	E1	ppmv	y		13.6		10.1		9.6				11.1
127	HC (MHRA)	E1	ppmv	y		18		16		12				15.3
128														
129	HCl		g/hr			5531		898		6089				
130	Cl2		g/hr			0.106		0.294		0.125				
131														
132	HCl	E1	ppmv	y		29.88		5.30		34.72				23.30

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
133	Cl2	E1	ppmv	y		0.00		0.00		0.00				0.00
134	Total Chlorine	E1	ppmv	y		29.88		5.30		34.72				23.30
135														
136	Sampling Train	PM, HCl E1												
137	Stack Gas Flowrate		dscfm			71819		65241		66149				67736
138	O2		%			7		6.9		6.6				6.8
139	Moisture		%			32.1		33.9		30.7				32.2
140	Temperature		°F			369		373		387				376.3
141														
142	Sampling Train	PCDD/P E2												
143	Stack Gas Flowrate		dscfm			58130		58016		62125				59424
144	O2		%			7		6.9		6.6				6.8
145	Moisture		%			34.52		33.31		342				136.6
146	Temperature		°F			374		375		390				379.7
147														
148														
149	300C13	Risk Burn normal operating coi				R1		R2		R3		R4		Cond Avg
150														
151	PM	E1	gr/dscf	y		0.0398		0.0371		0.0561				0.0443
152														
153	CO (RA)	E1	ppmv	y		212		661		141				338.0
154	CO (MHRA)	E1	ppmv	y		869		1350		496.7				905.2
155														
156	HC (RA)	E1	ppmv	y		5.3		6.8		6.2				6.1
157	HC (MHRA)	E1	ppmv	y		6		9		9				8.0
158														
159	HCl		g/hr			2092		6411		1334				
160	Cl2		g/hr			11.1		154		8.97				
161														
162	HCl	E1	ppmv	y		11.60		39.95		8.99				20.18
163	Cl2	E1	ppmv	y		0.03		0.49		0.03				0.19
164	Total Chlorine	E1	ppmv	y		11.66		40.94		9.05				20.55
165														
166	Anitmony		ug/dscm	n		2.67		3.66		3.63				
167	Arsenic		ug/dscm	n		1.7		1.42		1.78				
168	Barium		ug/dscm	n		27.5		30.3		55.3				
169	Beryllium		ug/dscm	n	nd	0.0782	nd	0.0791	nd	0.0806				
170	Cadmium		ug/dscm	n		28.1		23.4		30.2				
171	Chromium		ug/dscm	n		7.58		9.4		9.32				
172	Lead		ug/dscm	n		393		357		500				
173	Mercury		ug/dscm	n		41.1		32.1		35				
174	Nickel		ug/dscm	n		6.25		10.5		8.9				
175	Selenium		ug/dscm	n		22.7		19.2		11				
176	Silver		ug/dscm	n		1.66		1.14		0.946				
177	Thallium		ug/dscm	n		2.45		2.72		6.02				
178	Chromium (Hex)		ug/dscm	n	nd	0.315		0.148		0.221				
179														
180	Anitmony	E2	ug/dscm	y		2.9		4.2		4.6				3.92
181	Arsenic	E2	ug/dscm	y		1.9		1.6		2.3				1.92
182	Barium	E2	ug/dscm	y		30.3		34.8		70.4				45.16
183	Beryllium	E2	ug/dscm	y	nd	0.1	nd	0.1	nd	0.1		##		0.09
184	Cadmium	E2	ug/dscm	y		31.0		26.9		38.4				32.09
185	Chromium	E2	ug/dscm	y		8.4		10.8		11.9				10.33
186	Lead	E2	ug/dscm	y		433.2		409.7		636.4				493.09
187	Mercury	E2	ug/dscm	y		45.3		36.8		44.5				42.23
188	Nickel	E2	ug/dscm	y		6.9		12.0		11.3				10.09
189	Selenium	E2	ug/dscm	y		25.0		22.0		14.0				20.35
190	Silver	E2	ug/dscm	y		1.8		1.3		1.2				1.45
191	Thallium	E2	ug/dscm	y		2.7		3.1		7.7				4.49
192	Chromium (Hex)	E2	ug/dscm	y	nd	0.3		0.2		0.3				0.27
193														
194	SVM	E2	ug/dscm	y		464.2		436.5		674.8				525.18
195	LVM	E2	ug/dscm	y		10.32		12.51		14.23				12.35
196														
197	Sampling Train	PM, HCl E1												
198	Stack Gas Flowrate		dscfm			77129		71443		73278				73950

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
199	O2		%			8.3		8.8		10				9.0
200	Moisture		%			30.55		30.31		30.13				30.3
201	Temperature		°F			356		349		387				364.0
202														
203	Sampling Train	Metals	E2											
204	Stack Gas Flowrate		dscfm			80546		77571		79928				79348
205	O2		%			8.3		8.8		10				9.0
206	Moisture		%			31.45		31.93		31.89				31.8
207	Temperature		°F			351		346		349				348.7
208														
209	Sampling Train	PCDD/P	E3											
210	Stack Gas Flowrate		dscfm			77153		82257		77781				79064
211	O2		%			8.3		8.8		10				9.0
212	Moisture		%			31.51		31.82		32.34				31.9
213	Temperature		°F			356		352		353				353.7

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Stack Gas Emissions 2															
2																
3																
4	300C1					R1		R2		R3		R4		Cond Avg		
5																
6	PM	E1	gr/dscf	y		0.08300		0.07500		0.06800		0.05700		0.07075		
7	CO (MHRA)	E1	ppmv	y		757.0		557.0		556.0		621.0		622.8		
8	CO (RA)	E1	ppmv	y		595.0		234.0		353.0		333.0		378.8		
9	HC (MHRA)	E1	ppmv	y		19.2		19.1		18.9		18.9		19.0		
10	HC (RA)	E1	ppmv	y		16.4		14.0		15.9		16.9		15.8		
11	HCl	E1	ppmv	y		35.2		23.4		31.4		42.4		33.1		
12	Cl2	E1	ppmv	y		0.2		0.2		0.4		0.7		0.4		
13	Total Chlorine	E1	ppmv	y		35.5		23.8		32.2		43.7		33.8		
14																
15	1,1,1-Trichloroethane	E2	%			99.999		99.998		99.996		99.999				
16	Carbontetrachloride	E2	%			99.998		99.994		99.991		99.998				
17	Tetrachloroethene	E2	%			99.999		99.998		99.998		99.999				
18	Trichlorobenzene	E2	%			99.999		99.999		99.999		99.999				
19																
20	Sampling Train	Halogens	E1													
21	Stack Gas Flowrate		dscfm			96208		85919		80671		81873				
22	O2		%			11.5		11.9		12		12.2				
23	Moisture		%			19.9		22.3		24		23.8				
24	Temperature		°F			301		291		296		302				
25																
26	Sampling Train	SVOC	E2													
27	Stack Gas Flowrate		dscfm			82924		100618		86309		89298				
28	O2		%			11.5		11.9		12		12.2				
29	Moisture		%			23.16		23.43		24.4		23.92				
30	Temperature		°F			296		290		290		292				
31																
32	300C2					R1		R2		R3		R4		Cond Avg		
33																
34	CO (MHRA)	E1	ppmv	y		296.0		73.0		156.0		154.0		169.8		
35	CO (RA)	E1	ppmv	y		186.0		56.0		70.0		79.0		97.8		
36	HC (MHRA)	E1	ppmv	y		18.9		18.9		19.6		19.8		19.3		
37	HC (RA)	E1	ppmv	y		17.2		16.4		17.9		16.7		17.1		
38	Antimony	E1	ug/dscm	y		88.6		39.6		10.1		13.4		37.9		
39	Arsenic	E1	ug/dscm	y		53.9		33.3		15.5		16.8		29.9		
40	Beryllium	E1	ug/dscm	y		8.3		0.1		0.1		0.1		2.1		
41	Cadmium	E1	ug/dscm	y		51.1		24.6		8.0		5.6		22.3		
42	Chromium	E1	ug/dscm	y		43.6		31.6		12.3		37.7		31.3		
43	Chromium (Hex)	E2	ug/dscm	y		6.7		12.8		4.9		1.6		6.5		
44	Lead	E1	ug/dscm	y		4,735.4		2,944.7		857.2		665.7		2,300.7		
45	SVM	E1	ug/dscm	y		4,786.5		2,969.2		865.2		671.3		2,323.1		
46	LVM	E1	ug/dscm	y		105.8		65.0		27.9		54.6		63.3		
47																
48	Sampling Train	Metals	E1													
49	Stack Gas Flowrate		dscfm			84806		88245		88643		89700				
50	O2		%			11.6		12.6		11.9		12.3				
51	Moisture		%			24.46		23.08		20.12		23.47				
52	Temperature		°F			331		324		336		334				
53																
54	Sampling Train	Cr Hex	E2													
55	Stack Gas Flowrate		dscfm			72467		85243		88255		82294				
56	O2		%			11.6		12.6		11.9		12.3				
57	Moisture		%			23.5		23.81		21.17		22.78				
58	Temperature		°F			330		324		333		333				
59																
60	Sampling Train	Dioxin &	E3													
61	Stack Gas Flowrate		dscfm			83772		88761		89173		85692				
62	O2		%			11.6		12.6		11.9		12.3				
63	Moisture		%			20.44		23.99		24.3		23.7				
64	Temperature		°F			334		328		336		337				
65																
66	300C3					R1		R2		R3		R4		Cond Avg		

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
67																
68	PM	E1	gr/dscf			0.01200		0.01500		0.01200				0.01300		
69																
70	Sampling Train	Particulat	E1													
71	Stack Gas Flowrate		dscfm			68627		69812		65504						
72	O2		%			8.9		9.1		9.5						
73	Moisture		%			30.99		31.48		31.93						
74	Temperature		°F			392		388		396						
75																
76	Sampling Train	Dioxin &	E2													
77	Stack Gas Flowrate		dscfm			65855		67833		65366						
78	O2		%			8.4		8.8		8.6						
79	Moisture		%			31.1		31.6		32						
80	Temperature		°F			385		392		386						
81																
82	300C5					R1		R2		R3		R4		Cond Avg		
83																
84	1,1,1-Trichloroethane	DRE	%			99.9992		99.9999		99.9993		99.9993				
85	Carbon Tetrachloride	DRE	%			99.9999		99.9999		99.9999		99.9999				
86	Freon 113	DRE	%			99.9999		99.9999		99.9999		99.9999				
87																
88	300C6					R1		R2		R3		R4		Cond Avg		
89																
90	PM	E1	gr/dscf	y		0.02252		0.01683		0.03023				0.0232		
91	CO (RA)	E1	ppmv	y		96.35		91.96		89.48				92.60		
92	HCl	E1	ppmv	y		8.06		9.10		7.82				8.3		
93	Arsenic	E1	ug/dscm	y	nd	2.87	nd	2.66	nd	5.04		100		3.52		
94	Cadmium	E1	ug/dscm	y		18.96		10.08		15.11				14.71		
95	Chromium	E1	ug/dscm	y		60.52		7.03		43.47				37.01		
96	Lead	E1	ug/dscm	y		76.28		58.84		83.50				72.87		
97	Nickel	E1	ug/dscm	y		108.34	nd	1.73		46.39				52.15		
98	SVM	E1	ug/dscm	y		95.24		68.92		98.61				87.59		
99	LVM	E1	ug/dscm	y	5	63.40	27	9.69	10	48.51		9		40.53	LVM (no Be)	
100																
101	Sampling Train	Metals	E1													
102	Stack Gas Flowrate		dscfm			147000		145000		150000						
103	O2		%			11.8		11.1		11.6						
104	Moisture		%			21.2		22.5		22.9						
105	Temperature		°F			273		259		258						
106																
107	300C7					R1		R2		R3		R4		Cond Avg		
108																
109	PM	E1	gr/dscf	y		0.05553		0.04383		0.03333				0.04423		
110	CO (RA)	E1	ppmv	y		87.43		82.40		88.53				86.12		
111	HCl	E1	ppmv	y		17.17		17.83		15.27				16.76		
112	Arsenic	E2	ug/dscm	y	nd	5.74	nd	4.86	nd	2.91		100		4.50		
113	Cadmium	E2	ug/dscm	y		13.12		11.89		11.58				12.20		
114	Chromium	E2	ug/dscm	y		18.58		30.20		14.91				21.23		
115	Lead	E2	ug/dscm	y		287.12		26.73		307.44				207.09		
116	Nickel	E2	ug/dscm	y		73.20		9.57		8.48				30.42		
117	SVM	E2	ug/dscm	y		300.23		38.62		319.02				219.29		
118	LVM	E2	ug/dscm	y	24	24.32	14	35.07	16	17.81		18		25.73		
119																
120	Sampling Train	HCl	E1													
121	Stack Gas Flowrate		dscfm			139000		152000		148000						
122	O2		%			11.2		10.5		11.1						
123	Moisture		%			0		0		0						
124	Temperature		°F			279.3		277.9		278						
125																
126	Sampling Train	Metals	E2													
127	Stack Gas Flowrate		dscfm			139000		152000		148000						
128	O2		%			12		11.8		11.8						
129	Moisture		%			24.9		24.7		23.7						
130	Temperature		°F			275		274		273						

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1	Feedstreams 1																						
2																							
3	300C10		R1	R2	R3	Cond Avg		R1	R2	R3	Cond Avg		R1	R2									
4																							
5	Feedstream Number		F1	F1	F1	F1	F2	F2	F2	F2	F3	F3											
6	Feed Class		Misc. Fuel	Misc. Fuel	Misc. Fuel	Misc. Fuel	Raw Material	Raw Material	Raw Material	Raw Material	Liq HW	Liq HW											
7	Feed Class 2		MF	MF	MF	MF	RM	RM	RM	RM													
8	Feedstream Description		Petrol Coke	Petrol Coke	Petrol Coke	Petrol Coke	Raw Matl	Raw Matl	Raw Matl	Raw Matl	Liq Waste	Liq Waste											
9	Feed Rate	lb/min	0	0	0	0	1,890	1,987	2,033	1,970	255	281											
10	Heating Value	Btu/lb	14,211	14211	14211	14,211					11,607	11,607											
11	Thermal Feedrate	MMBtu/hr									178	196											
12	Chlorine	lb/hr	0	0	0	0	7.1	9.4	6.1	7.5	243	185											
13																							
14	Stack Gas Flowrate	dscfm	60,422	64,332	73,380	66,045	60,422	64,332	73,380	66,045	60,422	64,332											
15	Oxygen	%	6.2	6.3	6.2	6.2	6.2	6.3	6.2	6.2	6.2	6.3											
16																							
17	<i>Feedrate MTEC Calculations</i>																						
18	Chlorine	ug/dscm	0	0	0	0	29,678	37,247	20,887	28,863	1,017,175	732,274											
19																							
20	300C11		R1	R2	R3	Cond Avg		R1	R2	R3	Cond Avg		R1	R2									
21																							
22	Feedstream Number		F1	F1	F1	F1	F2	F2	F2	F2	F3	F3											
23	Feed Class		Misc. Fuel	Misc. Fuel	Misc. Fuel	Misc. Fuel	Raw Material	Raw Material	Raw Material	Raw Material	Liq HW	Liq HW											
24	Feed Class 2		MF	MF	MF	MF	RM	RM	RM	RM													
25	Feedstream Description		Petrol Coke	Petrol Coke	Petrol Coke	Petrol Coke	Raw Matl	Raw Matl	Raw Matl	Raw Matl	Liq Waste	Liq Waste											
26	Feed Rate	lb/min	7	0	0	2	2,090	2,063	2,100	2,084	312	315											
27	Heating Value	Btu/lb	14,211	14,211	14,211	14,211					11,607	11,607											
28	Thermal Feedrate	MMBtu/hr	6	0	0	2					218	220											
29	Chlorine	lb/hr					5	5	4	5	312	761											
30	Antimony	lb/hr	0.014	0.004	0.005	0.008	0.5	0.5	0.6	0.5	0.8	0.4											
31	Arsenic	lb/hr	0.016	0.005	0.006	0.009	0.7	0.6	0.6	0.7	0.5	0.8											
32	Barium	lb/hr	0.156	0.045	0.061	0.087	55.9	57.5	57.4	56.9	39.9	32.7											
33	Beryllium	lb/hr	0.001	0.000	0.000	0.001	0.1	0.1	0.1	0.1	0.0	0.0											
34	Cadmium	lb/hr	0.002	0.001	0.001	0.001	0.1	0.1	0.1	0.1	0.6	0.7											
35	Chromium	lb/hr	0.032	0.009	0.012	0.018	3.3	3.3	3.1	3.2	3.9	3.1											
36	Lead	lb/hr	0.044	0.013	0.017	0.025	4.4	4.5	4.5	4.5	8.7	7.5											
37	Mercury	lb/hr	0.003	0.001	0.001	0.002	0.6	0.6	0.6	0.6	0.1	0.1											
38	Nickel	lb/hr	0.190	0.052	0.070	0.104	1.6	1.5	1.5	1.5	1.3	0.7											
39	Selenium	lb/hr	0.026	0.007	0.010	0.014	1.0	1.0	1.0	1.0	0.4	0.4											
40	Silver	lb/hr	0.014	0.004	0.005	0.008	0.4	0.4	0.4	0.4	0.1	0.1											
41	Thallium	lb/hr	0.018	0.005	0.007	0.010	1.1	1.1	1.3	1.2	0.2	0.2											
42																							
43	Stack Gas Flowrate	dscfm	79712	80412	79916	80013.3	79712	80412	79916	80013.3	79712	80412											
44	Oxygen	%	8.4	9.4	9	8.9	8.4	9.4	9	8.9	8.4	9.4											
45																							
46	<i>Feedrate MTEC Calculations</i>																						
47	Chlorine	ug/dscm	0.0	0.0	0.0	0.0	20,386	19,062	14,130	17,886	1,162,804	3,053,880											
48	Antimony	ug/dscm	52.2	16.1	21.2	30.3	1,811	2,006	2,436	2,081	2,814	1,517											
49	Arsenic	ug/dscm	59.6	18.4	24.2	34.6	2,717	2,508	2,436	2,556	1,714	3,110											
50	Barium	ug/dscm	581.4	179.8	236.5	337.8	208,336	230,747	224,049	220,731	148,705	131,225											
51	Beryllium	ug/dscm	3.7	1.2	1.5	2.2	451	502	488	479	69	76											
52	Cadmium	ug/dscm	7.5	2.3	3.0	4.3	451	502	488	479	2,333	2,653											
53	Chromium	ug/dscm	119.3	36.8	48.4	69.2	12,224	13,042	12,178	12,471	14,535	12,601											

	B	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
1	Feedstreams 1																				
2																					
3	300C10		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
4																					
5	Feedstream Number		F3		F3		F4		F4		F4		F4		F4		F4		F4		F4
6	Feed Class		Liq HW		Liq HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW
7	Feed Class 2														HW		HW		HW		HW
8	Feedstream Description		Liq Waste		Liq Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste
9	Feed Rate		268		268		6		6		4		5								
10	Heating Value		11,607				7,697		7,697		7,697										
11	Thermal Feedrate		187		187		3		3		2		2		180		198		189		189
12	Chlorine		265		231		19		4		2		8								
13																					
14	Stack Gas Flowrate		73,380		66,045		60,422		64,332		73,380		66,045								
15	Oxygen		6.2		6.2		6.2		6.3		6.2		6.2								
16																					
17	<i>Feedrate MTEC Calculati</i>																				
18	Chlorine		913,382		886,621		79,532		15,833		6,893		31,985		1,096,707		748,107		920,276		918,606
19																					
20	300C11		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
21																					
22	Feedstream Number		F3		F3		F4		F4		F4		F4		F4		F4		F4		F4
23	Feed Class		Liq HW		Liq HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW
24	Feed Class 2														HW		HW		HW		HW
25	Feedstream Description		Liq Waste		Liq Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste
26	Feed Rate		314		314																
27	Heating Value		11,607		11,607		7,697		7,697		7,697										
28	Thermal Feedrate		219		219										218		220		219		219
29	Chlorine		765		613																
30	Antimony		0.4		0.5																
31	Arsenic		0.8		0.7																
32	Barium		32.6		35.1																
33	Beryllium		0.0		0.0																
34	Cadmium		0.5		0.6																
35	Chromium		3.1		3.4																
36	Lead		7.0		7.7																
37	Mercury		0.1		0.1																
38	Nickel		0.5		0.9																
39	Selenium		0.4		0.4																
40	Silver		0.1		0.1																
41	Thallium		0.2		0.2																
42																					
43	Stack Gas Flowrate		79916		80013.3		79712		80412		79916		80013.3								
44	Oxygen		9		8.9		8.4		9.4		9		8.9								
45																					
46	<i>Feedrate MTEC Calculati</i>																				
47	Chlorine		2,986,020		2,375,313		0		0		0		0		1,162,804		3,053,880		2,986,020		2,375,313
48	Antimony		1,397		1,927		0		0		0		0		2,814		1,517		1,397		1,927
49	Arsenic		3,088		2,618		0		0		0		0		1,714		3,110		3,088		2,618
50	Barium		127,247		135,954		0		0		0		0		148,705		131,225		127,247		135,954
51	Beryllium		73		73		0		0		0		0		69		76		73		73
52	Cadmium		1,838		2,272		0		0		0		0		2,333		2,653		1,838		2,272
53	Chromium		11,905		13,040		0		0		0		0		14,535		12,601		11,905		13,040

	B	AS	AT	AL	AV	AX	AZ	BA	BB	BC	BD	BE	BF	BH			
1	Feedstreams 1																
2																	
3	300C10		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
4																	
5	Feedstream Number		F5		F5		F5		F5		F6		F6		F6		F6
6	Feed Class		Spike		Spike		Spike		Spike		Total		Total		Total		Total
7	Feed Class 2		Spike		Spike		Spike		Spike		Total		Total		Total		Total
8	Feedstream Description		Spike		Spike		Spike		Spike		Total		Total		Total		Total
9	Feed Rate																
10	Heating Value																
11	Thermal Feedrate										180		198		189		189
12	Chlorine		387		351		316		351		656		550		589		598
13																	
14	Stack Gas Flowrate		60,422		64,332		73,380		66,045		60,422		64,332		73,380		66,045
15	Oxygen		6.2		6.3		6.2		6.2		6.2		6.3		6.2		6.2
16																	
17	<i>Feedrate MTEC Calculati</i>																
18	Chlorine		1,620,783		1,390,925		1,087,787		1,348,738		2,747,168		2,176,278		2,028,950		2,296,207
19																	
20	300C11		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
21																	
22	Feedstream Number		F5		F5		F5		F5		F6		F6		F6		F6
23	Feed Class		Spike		Spike		Spike		Spike		Total		Total		Total		Total
24	Feed Class 2		Spike		Spike		Spike		Spike		Total		Total		Total		Total
25	Feedstream Description		Spike		Spike		Spike		Spike		Total		Total		Total		Total
26	Feed Rate																
27	Heating Value																
28	Thermal Feedrate										223		220		219		221
29	Chlorine		252		56		0		103		570		821		769		720
30	Antimony																
31	Arsenic		2.58		2.24		2.13		2.32E+00								3.66E+00
32	Barium																
33	Beryllium		0.95		0.98		1		9.77E-01								
34	Cadmium		1.83		1.88		1.9		1.87E+00								
35	Chromium		13.1		13.3		13.4		1.33E+01								
36	Lead		21.4		22.6		23.1		2.24E+01								3.46E+01
37	Mercury																
38	Nickel																
39	Selenium																
40	Silver																
41	Thallium																
42																	
43	Stack Gas Flowrate		79712		80412		79916		80013.3								80013.3
44	Oxygen		8.4		9.4		9		8.9								8.9
45																	
46	<i>Feedrate MTEC Calculati</i>																
47	Chlorine		939,561		223,282		0		397,703		2,122,751		3,296,224		3,000,150		2,791,445
48	Antimony		0		0		0		0		4,677		3,540		3,854		4,038
49	Arsenic		9,615		8,989		8,314		8,982		14,106		14,626		13,861		14,191
50	Barium		0		0		0		0		357,622		362,151		351,533		357,022
51	Beryllium		3,541		3,933		3,903		3,787		4,064		4,511		4,466		4,341
52	Cadmium		6,820		7,544		7,416		7,250		9,612		10,701		9,746		10,006
53	Chromium		48,823		53,373		52,304		51,435		75,702		79,052		76,436		77,015

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
54	Lead		ug/dscm		164.0		50.6		66.7		95.2		16,287		18,058		17,526		17,266		32,238		30,178
55	Mercury		ug/dscm		11.2		3.5		4.5		6.5		2,262		2,508		2,436		2,399		410		453
56	Nickel		ug/dscm		708.1		208.3		274.4		403.5		5,889		6,019		5,855		5,919		4,994		2,958
57	Selenium		ug/dscm		96.9		29.9		39.0		56.2		3,623		4,013		3,899		3,840		1,509		1,669
58	Silver		ug/dscm		52.2		16.1		19.5		29.7		1,357		1,505		1,464		1,440		274		303
59	Thallium		ug/dscm		67.1		20.7		27.3		39.0		4,062		4,495		4,879		4,471		824		911
60																							
61	SVM		ug/dscm		171.4		52.9		69.8		99.6		16,738		18,560		18,014		17,745		34,571		32,830
62	LVM		ug/dscm		182.6		56.4		74.2		106.0		15,392		16,052		15,102		15,507		16,318		15,787
63																							
64	300C12				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2
65																							
66	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3
67	Feed Class				Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Raw Material		Raw Material		Raw Material		Raw Material		Liq HW		Liq HW
68	Feed Class 2				MF		MF		MF		MF		RM		RM		RM		RM				
69	Feedstream Description				Petrol Coke		Petrol Coke		Petrol Coke		Petrol Coke		Raw Matl		Raw Matl		Raw Matl		Raw Matl		Liq Waste		Liq Waste
70	Feed Rate		lb/hr										112,731		98,619		111,223		107,524		15,261		14,582
71	Heating Value		Btu/lb		14,211		14,211		14,211		14,211										11,607		11,607
72	Thermal Feedrate		MMBtu/hr		0.0		0.0		0.0		0.0										177.1		169.3
73	Chlorine		lb/hr										6.65		5.82		8.34		6.94		315		295
74																							
75	Stack Gas Flowrate		dscfm										71,819		65,241		66,149		67,736		71,819		65,241
76	Oxygen		%										7		6.9		6.6		6.8		7		6.9
77																							
78	<i>Feedrate MTEC Calculations</i>																						
79	Chlorine		ug/dscm								0.0		24,757		23,683		32,774		27,059		1,172,707		1,200,407
80																							
81	300C13				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2
82																							
83	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3
84	Feed Class				Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		Raw Material		Raw Material		Raw Material		Raw Material		Liq HW		Liq HW
85	Feed Class 2				MF		MF		MF		MF		RM		RM		RM		RM				
86	Feedstream Description				Petrol Coke		Petrol Coke		Petrol Coke		Petrol Coke		Raw Matl		Raw Matl		Raw Matl		Raw Matl		Liq Waste		Liq Waste
87	Feed Rate		lb/min		40		27		0		22.3		2,057		2,210		2,007		2,091		272		281
88	Heating Value		Btu/lb		14,211		14,211		14,211		14,211										11,607		11,607
89	Thermal Feedrate		MMBtu/hr		34.1		23.0		0.0		19.0										190		196
90	Chlorine		lb/hr										6.45		8.1		6.76		7.1		316		304
91																							
92	Stack Gas Flowrate		dscfm										77,129		71,443		73,278		73,950		77,129		71,443
93	Oxygen		%										8		9		10		9		8		8.8
94																							
95	<i>Feedrate MTEC Calculations</i>																						
96	Chlorine		ug/dscm								0.0		24,648		34,787		31,393		30,047		1,207,569		1,305,570

	B	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
54	Lead		27,284		29,930		0		0		0		0		32,238		30,178		27,284		29,930
55	Mercury		441		434		0		0		0		0		410		453		441		434
56	Nickel		2,131		3,390		0		0		0		0		4,994		2,958		2,131		3,390
57	Selenium		1,616		1,596		0		0		0		0		1,509		1,669		1,616		1,596
58	Silver		294		290		0		0		0		0		274		303		294		290
59	Thallium		882		871		0		0		0		0		824		911		882		871
60																					
61	SVM		29,122		32,202		0		0		0		0		34,571		32,830		29,122		32,202
62	LVM		15,066		15,730		0		0		0		0		16,318		15,787		15,066		15,730
63																					
64	300C12		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
65																					
66	Feedstream Number		F3		F3		F4		F4		F4		F4		F4		F4		F4		F4
67	Feed Class		Liq HW		Liq HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW
68	Feed Class 2														HW		HW		HW		HW
69	Feedstream Description		Liq Waste		Liq Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste
70	Feed Rate		14,787		14,877		165		0		227		131								
71	Heating Value		11,607		11,607		7,697		7,697		7,697		7,697								
72	Thermal Feedrate		171.6		172.7		1.3		0.0		1.7		1.0		178		169		173		174
73	Chlorine		211		273.67		1.89		0		3										
74																					
75	Stack Gas Flowrate		66,149		67,736		71,819		65,241		66,149		67,736								
76	Oxygen		6.6		6.8		7		6.9		6.6		6.8								
77																					
78	<i>Feedrate MTEC Calculati</i>																				
79	Chlorine		829,169		1,067,527		7,036		0		11,789		6,275		1,179,743		1,200,407		840,958		1,073,802
80																					
81	300C13		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
82																					
83	Feedstream Number		F3		F3		F4		F4		F4		F4		F4		F4		F4		F4
84	Feed Class		Liq HW		Liq HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW
85	Feed Class 2														HW		HW		HW		HW
86	Feedstream Description		Liq Waste		Liq Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste		Solid Waste
87	Feed Rate		285		279																
88	Heating Value		11,607		11,607		7,697		7,697		7,697										
89	Thermal Feedrate		198		195										190		196		198		195
90	Chlorine		318		312.7																
91																					
92	Stack Gas Flowrate		73278		73950.0																
93	Oxygen		10		9.0																
94																					
95	<i>Feedrate MTEC Calculati</i>																				
96	Chlorine		1,476,750		1,322,563										1,207,569		1,305,570		1,476,750		1,322,563

	B	AS	AT	AL	AV	AX	AZ	BA	BB	BC	BD	BE	BF	BC	BH
54	Lead		79,756		90,693	90,166	86,716		128,445		138,980		135,043		134,007
55	Mercury		0		0	0	0		2,683		2,965		2,881		2,839
56	Nickel		0		0	0	0		11,591		9,185		8,261		9,712
57	Selenium		0		0	0	0		5,229		5,712		5,554		5,492
58	Silver		0		0	0	0		1,683		1,824		1,778		1,760
59	Thallium		0		0	0	0		4,953		5,426		5,789		5,381
60															
61	SVM		86,577		98,238	97,582	93,966		138,057		149,681		144,788		144,013
62	LVM		61,979		66,294	64,521	64,203		93,872		98,190		94,763		95,546
63															
64	300C12		R1		R2	R3	Cond Avg		R1		R2		R3		Cond Avg
65															
66	Feedstream Number		F5		F5	F5	F5		F6		F6		F6		F6
67	Feed Class		Spike		Spike	Spike	Spike		Total		Total		Total		Total
68	Feed Class 2		Spike		Spike	Spike	Spike		Total		Total		Total		Total
69	Feedstream Description		Spike		Spike	Spike	Spike		Total		Total		Total		Total
70	Feed Rate														
71	Heating Value														
72	Thermal Feedrate								178.4		169.3		173.4		173.7
73	Chlorine								321.7		300.8		219.3		283
74															
75	Stack Gas Flowrate														67736.3
76	Oxygen														6.8
77															
78	<i>Feedrate MTEC Calculati</i>														
79	Chlorine								1,197,464		1,224,090		861,942		1,103,934
80															
81	300C13		R1		R2	R3	Cond Avg		R1		R2		R3		Cond Avg
82															
83	Feedstream Number		F5		F5	F5	F5		F6		F6		F6		F6
84	Feed Class		Spike		Spike	Spike	Spike		Total		Total		Total		Total
85	Feed Class 2		Spike		Spike	Spike	Spike		Total		Total		Total		Total
86	Feedstream Description		Spike		Spike	Spike	Spike		Total		Total		Total		Total
87	Feed Rate														
88	Heating Value														
89	Thermal Feedrate								223.7		219.0		198.3		213.7
90	Chlorine								322.5		312.1		324.8		322
91															
92	Stack Gas Flowrate														73950.0
93	Oxygen														9.0
94															
95	<i>Feedrate MTEC Calculati</i>														
96	Chlorine								1,232,217		1,340,357		1,508,143		1,362,043

	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
1	Feedstreams 2																								
2																									
3																									
4	300C1				R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5
5																									
6	Feedstream Number				F1		F1		F1		F1		F1		F1		F2		F2		F2		F2		F2
7	Feed Class				Coal		Coal		Coal		Coal		Coal		Coal		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material
8	Feed Class 2				Coal		Coal		Coal		Coal		Coal		Coal		RM		RM		RM		RM		RM
9	Feedstream Description				Coal		Coal		Coal		Coal		Coal		Coal		Raw material		Raw material		Raw material		Raw material		Raw material
10	Feed Rate	lb/hr			2,880		2,880		2,860		3,600						101,411		101,411		104,056		107,804		
11	Heating Value	Btu/lb			13,715		14,201		13,951		14,056														
12	Thermal Feedrate	MMBtu/hr			39.5		40.9		39.9		50.6														
13	Chlorine	ppmw			399		300		300		400						70		50		50		50		
14																									
15	Stack Gas Flowrate	dscfm			96,208		85,919		80,671		81,873						96,208		85,919		80,671		81,873		
16	O2	%			11.5		11.9		12		12.2						11.5		11.9		12		12.2		
17																									
18	Chlorine	ug/dscm			4,710		4,136		4,424		7,481						29,078		24,273		26,810		28,003		
19																									
20	300C2				R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5
21																									
22	Feedstream Number				F1		F1		F1		F1		F1		F1		F2		F2		F2		F2		F2
23	Feed Class				Coal		Coal		Coal		Coal		Coal		Coal		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material
24	Feed Class 2				Coal		Coal		Coal		Coal		Coal		Coal		RM		RM		RM		RM		RM
25	Feedstream Description				Coal		Coal		Coal		Coal		Coal		Coal		Raw material		Raw material		Raw material		Raw material		Raw material
26	Feed Rate	lb/hr			660		420		1,760		400						102,600		99,000		104,400		103,800		
27	Heating Value	Btu/lb			13,848		13,905		13,920		13,800														
28	Thermal Feedrate	MMBtu/hr			9		6		25		6														
29	Chlorine	ppmw			300		400		300		400						50		50		59.9617		50		
30	Antimony	ppmw	nd		0.4	nd	0.0	nd	0.4	nd	0.3					nd	0.4	nd	0.3	nd	0.2	nd	0.3		
31	Arsenic	ppmw			0.7		0.6		0.9		1.0						1.6		0.5		2.2		3.1		
32	Barium	ppmw			2.1		2.5		5.4		2.0					nd	6.4		4.8		2.8		4.7		
33	Beryllium	ppmw			0.1	nd	0.0	nd	0.0		0.0						0.5		0.1		0.4		0.2		
34	Cadmium	ppmw	nd		0.1	nd	0.1		0.2	nd	0.1						0.2	nd	0.1		0.2		0.1		
35	Chromium	ppmw			3.0		4.0		2.0		3.0						6.0		4.0		2.0		2.0		
36	Lead	ppmw			1.5		3.6		9.9		1.7						4.1		1.7		12.7		5.2		
37	Mercury	ppmw	nd		0.1	nd	0.1	nd	0.1	nd	0.1					nd	0.1	nd	0.1	nd	0.1	nd	0.1		
38	Silver	ppmw	nd		0.1		0.1		0.1		0.1					nd	0.1		0.1		0.1		1.0		
39	Thallium	ppmw	nd		0.2	nd	0.2	nd	0.2		0.4					nd	0.2	nd	0.2	nd	0.2	nd	0.2		
40																									
41	Stack Gas Flowrate	dscfm			84,806		88,245		88,643		89,700						84,806		88,245		88,643		89,700		
42	O2	%			11.6		12.6		11.9		12.3						11.6		12.6		11.9		12.3		
43																									
44	Chlorine	ug/dscm			930		848		2450		767						24,088		24,997		29,049		24,894		
45	Antimony	ug/dscm	100		1	100	0	100	3	100	1					100	187	100	163	100	115	100	169		
46	Arsenic	ug/dscm			2		1		8		2						771		250		1,080		1,558		
47	Barium	ug/dscm			6		5		44		4				100	3,083		2,390		1,356		2,320			
48	Beryllium	ug/dscm			0	100	0	100	0		0						251		28		186		87		
49	Cadmium	ug/dscm	100		0	100	0		2	100	0						107	100	41		103		61		
50	Chromium	ug/dscm			9		8		16		6						2,891		2,000		969		996		
51	Lead	ug/dscm			4		8		81		3						1,951		850		6,153		2,599		
52	Mercury	ug/dscm	100		0	100	0	100	1	100	0				100	45	100	43	100	39	100	38			
53	Silver	ug/dscm	100		0		0		1		0				100	41		34	100	41		476			

	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	
1																										
2																										
3																										
4		R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		
5																										
6		F2		F3		F3		F3		F3		F3		F3		F4		F4		F4		F4		F4		F4
7		Raw Material		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike
8		RM																								
9		Raw material		Spiked liquid		Spiked liquid		Spiked liquid		Spiked liquid		Spiked liquid		Spiked liquid		Spiked solid		Spiked solid		Spiked solid		Spiked solid		Spiked solid		Spiked solid
10				9,414		9,700		9,303		8,399						2,249		1,874		1,689		1,706				
11				10,453		11,134		9,792		9,286						7,693		6,137		5,821		6,095				
12				98.4		108		91.1		78						17.3		11.5		9.83		10.4				
13				45,041		41,958		35,041		54,051						26,015		25,989		34,997		40,027				
14																										
15				96,208		85,919		80,671		81,873						96,208		85,919		80,671		81,873				
16				11.5		11.9		12		12.2						11.5		11.9		12		12.2				
17																										
18				1,736,510		1,948,543		1,680,753		2,358,732						239,589		233,155		304,701		354,849				
19																										
20		R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		
21																										
22		F2		F3		F3		F3		F3		F3		F3		F4		F4		F4		F4		F4		F4
23		Raw Material		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike
24		RM																								
25		Raw material		Spiked liquid		Spiked liquid		Spiked liquid		Spiked liquid		Spiked liquid		Spiked liquid		Spiked solid		Spiked solid		Spiked solid		Spiked solid		Spiked solid		Spiked solid
26				13,020		14,100		12,000		13,020						2,125		1,908		2,158		2,221				
27				11,521		11,064		11,000		11,290						7,012		6,551		6,441		6,484				
28				150		156		132		147						15		13		14		14				
29				48,003.1		40,992.9		43,000.0		56,989.2						1,802.4		1,200.2		1,000.9		1,202.2				
30				427.0		389.4		473.3		425.5						3,783.5		4,407.8		4,555.1		4,362.9				
31				150.5		166.0		198.3		159.0						5,600.0		6,656.2		6,626.5		5,898.2				
32				56.6		38.8		11.6		11.9						806.0		524.1		611.7		738.4				
33				16.3		14.7		19.8		20.1						321.4		388.4		364.7		348.5				
34				47.1		37.0		43.8		45.0						11.6		5.8		6.1		6.9				
35				1,036.9		872.3		983.3		960.1						19,905.9		19,549.3		21,130.7		20,846.5				
36				1,413.2		1,482.3		1,391.7		1,259.6						32,047.1		39,308.2		36,283.6		35,524.5				
37				0.1		0.1		0.1		0.0						11.9		16.2		12.3		17.9				
38				3.6		1.2		0.9 nd		0.1						9.6		3.5		3.1		3.0				
39				0.2 nd		0.2 nd		0.2 nd		0.2						nd		0.2 nd		0.2 nd		0.3				
40																										
41				84,806		88,245		88,643		89,700						84,806		88,245		88,643		89,700				
42				11.6		12.6		11.9		12.3						11.6		12.6		11.9		12.3				
43																										
44				2,934,755		2,918,802		2,394,474		3,559,085						17,984		11,564		10,023		12,807				
45				26,108		27,724		26,358		26,573						37,753		42,469		45,616		46,479				
46				9,203		11,817		11,044		9,929						55,878		64,133		66,358		62,836				
47				3,460		2,763		646		743						8,042		5,050		6,125		7,866				
48				995		1,045		1,104		1,257						3,207		3,742		3,652		3,713				
49				2,878		2,636		2,436		2,811						116		56		61		74				
50				63,391		62,113		54,757		59,958						198,624		188,359		211,605		222,083				
51				86,399		105,541		77,496		78,664						319,771		378,737		363,347		378,453				
52				3		4		4		2						119		156		123		190				
53				218		87		50	100	6						96		33		31		32				

	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BV	BX	BY
1																									
2																									
3																									
4	R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6
5																									
6	F4		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5
7	Spike		Spike		Spike		Spike		Spike		Spike		Spike												
8															Spike		Spike		Spike		Spike		Spike		Spike
9	Spiked solid		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2												
10																									
11																									
12															116		120		101		88				
13																									
14																									
15			96,208		85,919		80,671		81,873																
16			11.5		11.9		12		12.2																
17																									
18			0		0		0		0					1,976,099		2,181,698		1,985,454		2,713,581		0		0	
19																									
20	R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6
21																									
22	F4		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5
23	Spike		Spike		Spike		Spike		Spike		Spike		Spike												
24															Spike		Spike		Spike		Spike		Spike		Spike
25	Spiked solid		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2												
26			59		46		50		61																
27																									
28															165		169		146		161				
29																									
30																									
31																									
32																									
33																									
34																									
35			276,882.8		594,283.5		135,803.4		166,248.5																
36																									
37																									
38																									
39																									
40																									
41			84,806		88,245		88,643		89,700																
42			11.6		12.6		11.9		12.3																
43																									
44			0		0		0		0					2,936,786		2,406,038		3,569,109		12,807					
45			0		0		0		0					65,476		68,827		72,189		46,479					
46			0		0		0		0					67,694		75,177		76,287		62,836					
47			0		0		0		0					10,805		5,696		6,869		7,866					
48			0		0		0		0					4,252		4,846		4,909		3,713					
49			0		0		0		0					2,752		2,492		2,872		74					
50			76,708		138,047		31,509		48,643					337,445		381,163		303,072		270,726					
51			0		0		0		0					425,312		456,233		442,012		378,453					
52			0		0		0		0					123		160		125		190					
53			0		0		0		0					182		83	16	36		32					

	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CQ	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	
1																												
2																												
3																												
4	R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6		R1		R2	
5																												
6	F6		F6		F6		F6		F6		F6		F7		F7		F7		F7		F7		F7		F8		F8	
7	Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Total		Total	
8																									Total		Total	
9	liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Solid waste		Solid waste		Solid waste		Solid waste		Solid waste		Solid waste		Total		Total	
10																									Total		Total	
11																												
12																										155.2		160.4
13																												
14																												
15	96,208		85,919		80,671		81,873						96,208		85,919		80,671		81,873									
16	11.5		11.9		12		12.2						11.5		11.9		12		12.2									
17																												
18	0		0		0		0						0		0		0		0						2,009,887		2,210,107	
19																												
20	R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6		R1		R2	
21																												
22	F6		F6		F6		F6		F6		F6		F7		F7		F7		F7		F7		F7		F8		F8	
23	Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Total		Total	
24																									Total		Total	
25	liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Solid waste		Solid waste		Solid waste		Solid waste		Solid waste		Solid waste		Total		Total	
26																									Total		Total	
27																												
28																										174		174
29																												
30																												
31																												
32																												
33																												
34																												
35																												
36																												
37																												
38																												
39																												
40																												
41	84,806		88,245		88,643		89,700						84,806		88,245		88,643		89,700									
42	11.6		12.6		11.9		12.3						11.6		12.6		11.9		12.3									
43																												
44	0		0		0		0						0		0		0		0						2,961,804		2,431,883	
45	0		0		0		0						0		0		0		0					0	65,665	0	68,990	
46	0		0		0		0						0		0		0		0						68,467		75,429	
47	0		0		0		0						0		0		0		0					22	13,895		8,091	
48	0		0		0		0						0		0		0		0						4,503		4,875	
49	0		0		0		0						0		0		0		0						2,859	2	2,533	
50	0		0		0		0						0		0		0		0						340,345		383,172	
51	0		0		0		0						0		0		0		0						427,268		457,090	
52	0		0		0		0						0		0		0		0					27	168	21	203	
53	0		0		0		0						0		0		0		0					18	224		117	

	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ
1										
2										
3										
4		R3		R4		R5		R6		Cond Avg
5										
6		F8		F8		F8		F8		F8
7		Total		Total		Total		Total		Total
8		Total		Total		Total		Total		Total
9		Total		Total		Total		Total		Total
10										
11										
12		140.83		139						148.9
13										
14										
15										
16										
17										
18		2,016,687		2,749,066						2,246,437
19										
20		R3		R4		R5		R6		Cond Avg
21										
22		F8		F8		F8		F8		F8
23		Total		Total		Total		Total		Total
24		Total		Total		Total		Total		Total
25		Total		Total		Total		Total		Total
26										
27										
28		170		167						171
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44		3,600,608		38,469						2,258,191
45	0	72,307		46,649				0		63,403
46		77,375		64,396						71,417
47		8,269		10,190				8		10,111
48		5,095		3,799						4,568
49		2,977		135				0		2,126
50		304,057		271,728						324,825
51		448,245		381,055						428,415
52	24	165	17	228				22		191
53	60	79		508				10		232

	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
54	Thallium		ug/dscm	100	1	100	0	100	2		1					100	82	100	82	100	83	100	82		
55	SVM		ug/dscm		5		8		83		3						2,058	5	891		6,256		2,660		
56	LVM		ug/dscm		11		10		24		8						3,912		2,279		2,235		2,641		
57																									
58	300C3				R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5
59																									
60	Feedstream Number				F1		F1		F1		F1		F1		F1		F2		F2		F2		F2		F2
61	Feed Class				Coal		Coal		Coal		Coal		Coal		Coal		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material
62	Feedstream Description				Coal		Coal		Coal		Coal		Coal		Coal		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material
63	Feed Rate		lb/hr																						
64	Heating Value		Btu/lb								17736		17916		17879										
65	Chlorine		ppmw								6400		5400		6000								40		38
66	Antimony		ppmw								2.54		151		2.66								0.804		0.851
67	Arsenic		ppmw								1.11		1.57		1.52								6.16		6.75
68	Barium		ppmw								142		3180		136								35.8		41.7
69	Beryllium		ppmw						nd		0.396	nd	0.392	nd	0.4								0.682		0.773
70	Cadmium		ppmw						nd		1.98		17.5	nd	2						nd		0.85	nd	1.4
71	Chromium		ppmw								9.44		151		23.4								19.8		21.9
72	Cobalt		ppmw								8.36		66.1		69.6								5.34		6.05
73	Copper		ppmw								162		741		206								9.03		10.2
74	Iron		ppmw								1780		2360		1970								4820		5580
75	Lead		ppmw								31.8		947		63.8								3.87	nd	4.21
76	Manganese		ppmw								80		70.3		152								71.1		79.7
77	Mercury		ppmw						nd		0.029		0.819	nd	0.029						nd		0.031	nd	0.03
78	Nickel		ppmw								40.4		31.8		115								20.9		23.4
79	Selenium		ppmw						nd		0.715		1.76	nd	0.714								2.25		3.08
80	Silver		ppmw						nd		2.15		2.66		2.77						nd		1.28	nd	2.1
81	Thallium		ppmw						nd		0.715	nd	0.516	nd	0.714						nd		0.425	nd	0.721
82	Vanadium		ppmw						nd		1.43		30.7		62.7								17.3		20.2
83																									
84	300C5				R1		R2		R3		R4														
85																									
86	Feedstream Number				F1		F1		F1		F1														
87	Feed Class				Coal		Coal		Coal		Coal														
88	Feedstream Description				Coal		Coal		Coal		Coal														
89	Feed Rate		lb/hr		9600		10400		9200		9200														
90	Feed Rate		gal/min																						
91	Heating value		Btu/lb																						
92	Chlorine		ppmw																						
93																									
94	300C6				R1		R2		R3																
95																									
96	Feedstream Number				F1		F1		F1																
97	Feed Class				Coal		Coal		Coal																
98	Feedstream Description				Coal		Coal		Coal		Coal														
99	Feedrate		lb/hr		20800		20800		21000																
100	Heating value		Btu/lb																						
101																									
102	300C7				R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5
103																									
104	Feedstream Number				F1		F1		F1		F1		F1		F1		F2		F2		F2		F2		F2
105	Feed Class				Coal		Coal		Coal		Coal		Coal		Coal		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material
106	Feed Class 2																								

	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY
54				11	100	12	##	10	100	11					100	2	100	2	100	2		3			
55				89,278		108,177		79,932		81,475						319,887		378,793		363,409		378,526			
56				73,590		74,975		66,906		71,143						257,709		256,233		281,615		288,631			
57																									
58		R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5	
59																									
60		F2		F3		F3		F3		F3		F3		F3		F4		F4		F4		F4		F4	
61	al	Raw Material		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike	
62	al	Raw Material		Spiked liquid		Spiked liquid		Spiked liquid		Spiked liquid		Spiked liquid		Spiked liquid		Spiked solid		Spiked solid		Spiked solid		Spiked solid		Spiked solid	
63																									
64																									
65		37																							
66		0.965																							
67		6.66																							
68		44.4																							
69		0.797																							
70	nd	1.68																							
71		24.5																							
72		7																							
73		11.1																							
74		7010																							
75	nd	5.04																							
76		101																							
77	nd	0.026																							
78		28.1																							
79		3.19																							
80	nd	2.52																							
81	nd	0.84																							
82		21.8																							
83																									
84																									
85																									
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99																									
100																									
101																									
102		R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5	
103																									
104		F2		F3		F3		F3		F3		F3		F3		F4		F4		F4		F4		F4	
105	erial	Raw Materia		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike	
106																									

	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY
54			0		0		0		0				100	14	100	12	100	13		3					
55			0		0		0		0					428,064		486,970		443,341		460,002					
56			76,708		138,047		31,509		48,643					409,392		469,256		380,031		408,418					
57																									
58	R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6
59																									
60	F4		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5
61	Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike
62	Spiked solid		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2		Spiked liquid2
63																									
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99																									
100																									
101																									
102	R6		R1		R2		R3		R4		R5		R6												
103																									
104	F4		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5		F5
105	Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike		Spike
106																									

	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CQ	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ
54	0		0		0		0						0		0		0		0					100	97	100	94
55	0		0		0		0						0		0		0		0						430,127		487,869
56	0		0		0		0						0		0		0		0						413,315		471,544
57																											
58	R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6		R1		R2
59																											
60	F6		F6		F6		F6		F6		F6		F7		F7		F7		F7		F7		F7		F8		F8
61	Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Total		Total
62	liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Solid waste		Solid waste		Solid waste		Solid waste		Solid waste		Solid waste		Total		Total
63	12594		12552		12600		12540		12600		12594		1062		918		1470		1464		1572		1482				
64	0		0		0		11732		11639		11588		0		0		0		7142		7645		7086				
65							25600		27800		28400								2600		1900		1800				
66							163		2.09		147								1230		1020		756				
67							1.72		1.21		1.95								409		336		210				
68							2000		62.3		4270								302		303		215				
69					nd		0.398 nd		0.393 nd		0.396					nd			0.385 nd		0.394 nd		0.385				
70							16.5 nd		1.96		28.3								3.5		2.94		3.27				
71							235		72.7		257								586		575		344				
72							104		9.35		79.7								24.3		21.9		17.5				
73							646		159		1011								947		442		318				
74							1790		1610		2350								12700		11600		18200				
75							840		26		1400								333		304		224				
76							77.1		53.3		133								98.9		101		150				
77							0.838 nd		0.032		0.835								2.11		0.18		2.82				
78							68.1		38.6		69.8								88.4		78.98		58.2				
79							0.976 nd		0.79		1.27					nd			0.963 nd		0.984 nd		0.963				
80							3.7		2.39		4.13								8.63		7.83		6.13				
81					nd		0.607 nd		0.79 nd		0.662					nd			0.963 nd		0.984 nd		0.963				
82							59.9		2.35		43								113		96.1		63.7				
83																											
84																											
85																											
86																											
87																											
88																											
89																											
90	30		30		29.9		30																				
91	0		0		0		0																				
92	46700		54000		51700		52000																				
93																											
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101																											
102	R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6		R1		R2
103																											
104	F6		F6		F6		F6		F6		F6		F7		F7		F7		F7		F7		F7		F8		F8
105	Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Total		Total
106	HW		HW		HW		HW		HW		HW		HW		HW		HW		HW		HW		HW		Total		Total

	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ
54	100	98	95	86					99	94
55		449,679		462,665						457,585
56		382,290		411,066						419,554
57										
58		R3		R4		R5		R6		Cond Avg
59										
60		F8		F8		F8		F8		F8
61		Total		Total		Total		Total		Total
62		Total		Total		Total		Total		Total
63										
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100										
101										
102		R3		R4		R5		R6		Cond Avg
103										
104		F8		F8		F8		F8		F8
105		Total		Total		Total		Total		Total
106		Total		Total		Total		Total		Total

	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
107	Feedstream Description				Coal		Coal		Coal		Coal		Coal		Coal		Raw material : Raw material s Raw material sl Raw material Raw mate								
108	Feedrate		lb/hr		10000		11000		10200																
109	Feedrate		gal/min																						
110	Heating value		Btu/lb																						
111	Chlorine		ppmw																						
112	Arsenic		ppmw																						
113	Cadmium		ppmw																						
114	Chromium		ppmw																						
115	Lead		ppmw																						
116	Nickel		ppmw																						
117																									
118	Stack Gas Flowrate		dscfm																						
119	O2		%																						
120																									
121	Chlorine		ug/dscm																						
122	Arsenic		ug/dscm																						
123	Cadmium		ug/dscm																						
124	Chromium		ug/dscm																						
125	Lead		ug/dscm																						
126	Nickel		ug/dscm																						
127	SVM		ug/dscm																						
128	LVM		ug/dscm																						

	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY
107	erial	Raw materia	Spiked metals liq	Spiked metals li	Spiked metals liq	Spiked metals	Spiked met	Spiked metals	Spiked metals solid	Spiked metals solid	Spiked metals soli	Spiked metals sol	Spiked met												
108																									
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128																									

	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY
107	Spiked metals - Spiked metals Spiked metals Spiked metals Spiked metals Spiked metals Spiked metals liquid																									
108																										
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	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CQ	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	
107	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Solid waste	Solid waste	Solid waste	Solid waste	Solid waste	Solid waste	Solid waste	Solid waste	Solid waste	Solid waste	Solid waste	Total	Total	Total	Total	
108																												
109	0.5001		30.1		30																							
110																												
111	27200		28200		46900																							
112	3.59		2.81	1	0.42																							
113	26.4		30.8	1	0.169																							
114	213		199		62.1																							
115	676		842	1	1.92																							
116	86.2		146		108																							
117																												
118	139000		152000		148000																							
119	12		11.8		11.8																							
120																												
121	19537		1090615		1856658																				19537	1090615		
122	3		109	100	17																				3	109		
123	19		1191	100	7																				19	1191		
124	153		7696		2458																				153	7696		
125	486		32564	100	76																				486	32564		
126	62		5646		4275																				62	5646		
127	505		33755	100	83																				505	33755		
128	156		7805	0.7	2475																				156	7805		

	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ
107	Total		Total		Total		Total		Total	
108										
109										
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116										
117										
118										
119										
120										
121		1856658								988937
122	100	17								43
123	100	7								406
124		2458								3436
125	100	76								11042
126		4275								3328
127	100	83								11447
128	0.7	2475								3478

	B	C	D	E	F	G	H	I	J	K
1	Process Information									
2				Run 1	Run 2	Run 3				
3	300C10		CoC, low temp POHC DRE							
4										
5	ESP Power	kVA		32.3	36.3	38.3				
6	ESP Inlet Temp	F		464	465	469	466 same as kiln back end temp			
7	Kiln Mid Zone Temp	F		1744	1765	1756				
8										
9	300C11		CoC, max operating cond							
10										
11	ESP Power	kVA		35.6	32.8	34.2				
12	ESP Inlet Temp	F		582	558	549	563 same as kiln back end temp			
13	Kiln Mid Zone Temp	F		1936	1909	1891				
14										
15	300C12		Risk Burn Kiln 1							
16										
17	ESP Power	kVA		46.5	45.7	51.4				
18	ESP Inlet Temp	F		485	499	522	502 same as kiln back end temp			
19	Kiln Mid Zone Temp	F		1746	1799	1875				
20										
21	300C13		Risk Burn Kiln 2							
22										
23	ESP Power	kVA		41.3	38.3	39.5				
24	ESP Inlet Temp	F		489	474	495	486 same as kiln back end temp			
25	Kiln Mid Zone Temp	F		1895	1817	1802				

	C	D	E	F	G	H
1	Process Info					
2			Run 1	Run 2	Run 3	Run 4
3	300C1					
4						
5	Combustion Temperature (back end?)	F	496	504	492	517
6	ESP Temperature	F	496	504	492	517
7	ESP Power	kVA	31.6	31.7	39.8	42.4
8						
9	300C2					
10						
11	Combustion Temperature (back end?)	F	606	605	607	614
12	ESP Temperature	F	606	605	607	614
13	ESP Power	kVA	44.7	34.2	40.5	39.7

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:	Essroc, Logansport, IN																
4	Condition ID:	300C10																
5	Condition/Test Date:	CoC burn, low temp, October 1998																
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	0.1	0.1000	0.100	0.1000	0.092	0.0920	0.092	0.0920	0.084	0.0840	0.084	0.0840				
12	1,2,3,7,8-PCDD	0.5	0.29	0.1450	0.290	0.1450	0.423	0.2115	0.423	0.2115	0.51	0.2550	0.510	0.2550				
13	1,2,3,4,7,8-HxCDD	0.1	1.39	0.1390	1.390	0.1390	2.69	0.2690	2.690	0.2690	4.11	0.4110	4.110	0.4110				
14	1,2,3,4,6,7,8-HpCDD	0.01	4.5	0.0450	4.500	0.0450	6.69	0.0669	6.690	0.0669	9.9	0.0990	9.900	0.0990				
15	OCDD	0.001	4.2	0.0042	4.200	0.0042	4	0.0040	4.000	0.0040	4.1	0.0041	4.100	0.0041				
16	2,3,7,8-TCDF	0.1	2.1	0.2100	2.100	0.2100	2.2	0.2200	2.200	0.2200	0.056	0.0056	0.056	0.0056				
17	1,2,3,7,8-PCDF	0.05	1.22	0.0610	1.220	0.0610	1.307	0.0654	1.307	0.0654	1.11	0.0555	1.110	0.0555				
18	2,3,4,7,8-PCDF	0.5	1.65	0.8250	1.650	0.8250	2.62	1.3100	2.620	1.3100	2.04	1.0200	2.040	1.0200				
19	1,2,3,4,7,8-HxCDF	0.1	2.94	0.2940	2.940	0.2940	5.357	0.5357	5.357	0.5357	3.81	0.3810	3.810	0.3810				
20	1,2,3,4,7,8,9-HpCDF	0.01	1.79	0.0179	1.790	0.0179	2.82	0.0282	2.820	0.0282	1.44	0.0144	1.440	0.0144				
21	OCDF	0.001	0.59	0.0006	0.590	0.0006	0.62	0.0006	0.620	0.0006	0.63	0.0006	0.630	0.0006				
22																		
23	Gas sample volume (dscf)			79.01	79.01	79.01		85.03	85.03	85.03		109.12	109.12	109.12				
24	O2 (%)			6.20	6.20	6.20		6.3	6.3	6.3		6.20	6.2	6.20				
25																		
26	PCDD/PCDF (ng in sample)				1.842	1.842		2.803	2.803	2.803		2.330	2.330	2.330				
27	PCDD/PCDF (ng/dscm @ 7% O2)	0.0		0.779	0.779	0.779	0.0	1.109	1.109	1.109	0.0	0.714	0.714	0.714				
28																		
29	TEQ Cond Avg	0.867																
30																		
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	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:		Essroc, Logansport, IN															
4	Condition ID:		300C11															
5	Condition/Test Date:		CoC burn, max oper cond, October 1998															
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	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	0.04	0.0400	0.040	0.0400	0.075	0.0750	0.075	0.0750	0.11	0.1100	0.110	0.1100			
12	1,2,3,7,8-PCDD		0.5	0.12	0.0600	0.120	0.0600	0.2	0.1000	0.200	0.1000	0.3	0.1500	0.300	0.1500			
13	1,2,3,4,7,8-HxCDD		0.1	0.86	0.0860	0.860	0.0860	1.48	0.1480	1.480	0.1480	2.9	0.2900	2.900	0.2900			
14	1,2,3,4,6,7,8-HpCDD		0.01	2.53	0.0253	2.530	0.0253	5.13	0.0513	5.130	0.0513	8.96	0.0896	8.960	0.0896			
15	OCDD		0.001	2	0.0020	2.000	0.0020	2.47	0.0025	2.470	0.0025	3.01	0.0030	3.010	0.0030			
16	2,3,7,8-TCDF		0.1	0.77	0.0770	0.770	0.0770	3.21	0.3210	3.210	0.3210	4.7	0.4700	4.700	0.4700			
17	1,2,3,7,8-PCDF		0.05	0.31	0.0155	0.310	0.0155	1.8	0.0900	1.800	0.0900	2.81	0.1405	2.810	0.1405			
18	2,3,4,7,8-PCDF		0.5	0.64	0.3200	0.640	0.3200	2.53	1.2650	2.530	1.2650	5.03	2.5150	5.030	2.5150			
19	1,2,3,4,7,8-HxCDF		0.1	1.32	0.1320	1.320	0.1320	3.66	0.3660	3.660	0.3660	7.94	0.7940	7.940	0.7940			
20	1,2,3,4,7,8,9-HpCDF		0.01	0.63	0.0063	0.630	0.0063	1.12	0.0112	1.120	0.0112	1.78	0.0178	1.780	0.0178			
21	OCDF		0.001	0.19	0.0002	0.190	0.0002	0.27	0.0003	0.270	0.0003	0.4	0.0004	0.400	0.0004			
22																		
23	Gas sample volume (dscf)			74.54	74.54	74.54		80.23	80.23	80.23		76.21	76.21	76.21				
24	O2 (%)			8.40	8.40	8.40		9.4	9.4	9.4		9.00	9.0	9.00				
25																		
26	PCDD/PCDF (ng in sample)			0.764		0.764		2.430		2.430		4.580		4.580				
27	PCDD/PCDF (ng/dscm @ 7% O2)		0.0	0.403		0.403	0.0	1.292		1.292	0.0	2.478		2.478				
28																		
29	TEQ Cond Avg		1.391															
30																		
31																		
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1	PCDD/PCDF																
2	N																
3	Facility Name and ID:	Essroc, Logansport, IN, Kiln No. 1															
4	Condition ID:	300C12															
5	Condition/Test Date:	Risk burn, normal operations, October 1998															
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
10	Detected in sample volume (ng)																
11	2,3,7,8-TCDD	1	0.042	0.0420	0.042	0.0420	0.071	0.0710	0.071	0.0710	0.063	0.0630	0.063	0.0630			
12	1,2,3,7,8-PCDD	0.5	0.285	0.1425	0.285	0.1425	0.328	0.1640	0.328	0.1640	0.645	0.3225	0.645	0.3225			
13	1,2,3,4,7,8-HxCDD	0.1	2.17	0.2170	2.170	0.2170	2.9	0.2900	2.900	0.2900	5.55	0.5550	5.550	0.5550			
14	1,2,3,4,6,7,8-HpCDD	0.01	8.97	0.0897	8.970	0.0897	11	0.1100	11.000	0.1100	23.3	0.2330	23.300	0.2330			
15	OCDD	0.001	2.95	0.0030	2.950	0.0030	3.47	0.0035	3.470	0.0035	5.75	0.0058	5.750	0.0058			
16	2,3,7,8-TCDF	0.1	2.21	0.2210	2.210	0.2210	2.61	0.2610	2.610	0.2610	3.01	0.3010	3.010	0.3010			
17	1,2,3,7,8-PCDF	0.05	0.985	0.0493	0.985	0.0493	1.11	0.0555	1.110	0.0555	1	0.0500	1.000	0.0500			
18	2,3,4,7,8-PCDF	0.5	2.31	1.1550	2.310	1.1550	2.42	1.2100	2.420	1.2100	3.41	1.7050	3.410	1.7050			
19	1,2,3,7,8,9-HxCDF	0.1	2.63	0.2630	2.630	0.2630	2.954	0.2954	2.954	0.2954	4.75	0.4750	4.750	0.4750			
20	1,2,3,4,7,8,9-HpCDF	0.01	0.859	0.0086	0.859	0.0086	0.997	0.0100	0.997	0.0100	1.22	0.0122	1.220	0.0122			
21	OCDF	0.001	0.33	0.0003	0.330	0.0003	0.41	0.0004	0.410	0.0004	0.32	0.0003	0.320	0.0003			
22																	
23	Gas sample volume (dscf)			77.26	77.26	77.26		78.18	78.18	78.18		84.03	84.03	84.03			
24	O2 (%)			7	7	7		6.9	6.9	6.9		6.60	6.6	6.60			
25																	
26	PCDD/PCDF (ng in sample)			2.191		2.191		2.471		2.471		3.723		3.723			
27	PCDD/PCDF (ng/dscm @ 7% O2)	0.0		1.002		1.002	0.0	1.109		1.109	0.0	1.522		1.522			
28																	
29	TEQ Cond Avg	1.211															
30																	
31																	
32																	
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35																	
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
54																		

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:	Essroc, Logansport, IN, Kiln No. 2															
4	Condition ID:	300C13															
5	Condition/Test Date:	Risk burn, normal operations, October 1998															
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
10	Detected in sample volume (ng)																
11	2,3,7,8-TCDD	1	0.044	0.0440	0.044	0.0440	0.053	0.0530	0.053	0.0530	0.054	0.0540	0.054	0.0540			
12	1,2,3,7,8-PCDD	0.5	0.147	0.0735	0.147	0.0735	0.115	0.0575	0.115	0.0575	0.13	0.0650	0.130	0.0650			
13	1,2,3,4,7,8-HxCDD	0.1	1.19	0.1190	1.190	0.1190	1.05	0.1050	1.050	0.1050	1.54	0.1540	1.540	0.1540			
14	1,2,3,4,6,7,8-HpCDD	0.01	2.96	0.0296	2.960	0.0296	3.55	0.0355	3.550	0.0355	7.25	0.0725	7.250	0.0725			
15	OCDD	0.001	2.07	0.0021	2.070	0.0021	3.2	0.0032	3.200	0.0032	2.83	0.0028	2.830	0.0028			
16	2,3,7,8-TCDF	0.1	1.6	0.1600	1.600	0.1600	1.91	0.1910	1.910	0.1910	2.31	0.2310	2.310	0.2310			
17	1,2,3,7,8-PCDF	0.05	0.644	0.0322	0.644	0.0322	0.82	0.0410	0.820	0.0410	1.31	0.0655	1.310	0.0655			
18	2,3,4,7,8-PCDF	0.5	1.51	0.7550	1.510	0.7550	1.72	0.8600	1.720	0.8600	2.51	1.2550	2.510	1.2550			
19	1,2,3,7,8,9-HxCDF	0.1	2.47	0.2470	2.470	0.2470	2.84	0.2840	2.840	0.2840	4.9	0.4900	4.900	0.4900			
20	1,2,3,4,7,8,9-HpCDF	0.01	1.08	0.0108	1.080	0.0108	1.13	0.0113	1.130	0.0113	1.65	0.0165	1.650	0.0165			
21	OCDF	0.001	0.29	0.0003	0.290	0.0003	0.298	0.0003	0.298	0.0003	0.42	0.0004	0.420	0.0004			
22																	
23	Gas sample volume (dscf)			72.46	72.46	72.46		79.28	79.28	79.28		72.98	72.98	72.98			
24	O2 (%)			8.3	8.3	8.3		8.8	8.8	8.8		10	10	10			
25																	
26	PCDD/PCDF (ng in sample)				1.473		1.473		1.642		1.642		2.407		2.407		2.407
27	PCDD/PCDF (ng/dscm @ 7% O2)	0.0		0.792		0.792	0.0	0.840		0.840	0.0	1.483		1.483		1.483	
28																	
29	TEQ Cond Avg	1.038															
30																	
31																	
32																	
33																	
34																	
35																	
36																	
37																	
38																	

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	300C2	I-TEF			R1				R2				R3				R4	
2		Wght Fact			Total	Total	TEQ	Total	Total	TEQ	Total	Total	TEQ	Total	Total	TEQ	Total	TEQ
3	ng/dscm			Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND
4																		
5	4D 2378	1	1	0.0167	0.0083	0.0083	1	0.0322	0.0161	0.0161	1	0.0174	0.0087	0.0087	1	0.0187	0.0094	0.0094
6	4D Other	0		209.6139	209.6139	0.0000		199.4901	199.4901	0.0000		227.1339	227.1339	0.0000		291.8947	291.8947	0.0000
7	4D Total	0		209.6306	209.6306	0.0000		199.5223	199.5223	0.0000		227.1513	227.1513	0.0000		291.9134	291.9134	0.0000
8	5D 12378	0.5		1.2789	1.2789	0.6395		1.5447	1.5447	0.7723		1.6225	1.6225	0.8113		1.9960	1.9960	0.9980
9	5D Other	0		316.7813	316.7813	0.0000		297.7388	297.7388	0.0000		343.7401	343.7401	0.0000		450.8440	450.8440	0.0000
10	5D Total	0		318.0602	318.0602	0.0000		299.2834	299.2834	0.0000		345.3626	345.3626	0.0000		452.8400	452.8400	0.0000
11	6D 123478	0.1		1.6681	1.6681	0.1668		2.1883	2.1883	0.2188		1.9122	1.9122	0.1912		2.1831	2.1831	0.2183
12	6D 123678	0.1		5.3381	5.3381	0.5338		6.6937	6.6937	0.6694		6.7798	6.7798	0.6780		8.5453	8.5453	0.8545
13	6D 123789	0.1		5.2269	5.2269	0.5227		7.4016	7.4016	0.7402		8.4602	8.4602	0.8460		9.9176	9.9176	0.9918
14	6D Other	0		493.7718	493.7718	0.0000		482.5222	482.5222	0.0000		463.8058	463.8058	0.0000		555.0720	555.0720	0.0000
15	6D Total	0		506.0049	506.0049	0.0000		498.8057	498.8057	0.0000		480.9580	480.9580	0.0000		575.7181	575.7181	0.0000
16	7D 1234678	0.01		25.6895	25.6895	0.2569		31.5374	31.5374	0.3154		31.4651	31.4651	0.3147		37.1129	37.1129	0.3711
17	7D Other	0		62.1663	62.1663	0.0000		93.9686	93.9686	0.0000		97.1767	97.1767	0.0000		115.0812	115.0812	0.0000
18	7D Total	0		87.8558	87.8558	0.0000		125.5060	125.5060	0.0000		128.6418	128.6418	0.0000		152.1942	152.1942	0.0000
19	8D	0.001		6.7838	6.7838	0.0068		6.7580	6.7580	0.0068		6.6639	6.6639	0.0067		7.6721	7.6721	0.0077
20	4F 2378	0.1		19.2949	19.2949	1.9295		44.5385	44.5385	4.4539		39.0561	39.0561	3.9056		43.5999	43.5999	4.3600
21	4F Other	0		81.9061	81.9061	0.0000		184.5903	184.5903	0.0000		154.4860	154.4860	0.0000		189.0576	189.0576	0.0000
22	4F Total	0		101.2010	101.2010	0.0000		229.1288	229.1288	0.0000		193.5421	193.5421	0.0000		232.6575	232.6575	0.0000
23	5F 12378	0.05		1.8350	1.8350	0.0917		4.1835	4.1835	0.2092		3.5348	3.5348	0.1767		4.1167	4.1167	0.2058
24	5F 23478	0.5		3.2807	3.2807	1.6403		7.2085	7.2085	3.6043		5.5049	5.5049	2.7525		6.9236	6.9236	3.4618
25	5F Other	0		36.4212	36.4212	0.0000		93.5180	93.5180	0.0000		66.2911	66.2911	0.0000		91.2541	91.2541	0.0000
26	5F Total	0		41.5369	41.5369	0.0000		104.9101	104.9101	0.0000		75.3308	75.3308	0.0000		102.2944	102.2944	0.0000
27	6F 123478	0.1		3.8923	3.8923	0.3892		8.4958	8.4958	0.8496		6.8377	6.8377	0.6838		7.6097	7.6097	0.7610
28	6F 123678	0.1		1.2789	1.2789	0.1279		3.2181	3.2181	0.3218		2.5497	2.5497	0.2550		2.9316	2.9316	0.2932
29	6F 123789	0.1		0.1668	0.1668	0.0167		0.3669	0.3669	0.0367		0.2550	0.2550	0.0255		0.2807	0.2807	0.0281
30	6F 234678	0.1		2.7802	2.7802	0.2780		6.0500	6.0500	0.6050		4.8675	4.8675	0.4868		5.9256	5.9256	0.5926
31	6F Other	0		9.9533	9.9533	0.0000		23.2540	23.2540	0.0000		18.4039	18.4039	0.0000		22.0494	22.0494	0.0000
32	6F Total	0		18.0716	18.0716	0.0000		41.3848	41.3848	0.0000		32.9138	32.9138	0.0000		38.7970	38.7970	0.0000
33	7F 1234678	0.01		1.5013	1.5013	0.0150		3.1537	3.1537	0.0315		2.4917	2.4917	0.0249		2.6821	2.6821	0.0268
34	7F 1234789	0.01		0.2725	0.2725	0.0027		0.9011	0.9011	0.0090		0.5795	0.5795	0.0058		0.7485	0.7485	0.0075
35	7F Other	0		1.6181	1.6181	0.0000		1.9952	1.9952	0.0000		2.7814	2.7814	0.0000		3.1811	3.1811	0.0000
36	7F Total	0		3.3919	3.3919	0.0000		6.0500	6.0500	0.0000		5.8526	5.8526	0.0000		6.6117	6.6117	0.0000
37	8F	0.001	2	0.4337	0.4337	0.0004	2	0.7080	0.7080	0.0007	2	0.5505	0.5505	0.0006	2	0.6861	0.6861	0.0007
38	Total PCDD/PCDF			1292.9705	1292.9705			1512.0572	1512.0572			1496.9673	1496.9673			1861.3844	1861.3844	
39	TEQ		0.3	6.6347		6.6264	0.2	12.8767		12.8606	0.2	11.1822		11.1736	0.1	13.1975		13.1881

	C	D	E	F	G	H	I	J
1	300C3			R1		R2		R3
2								
3	ng/dscm							
4								
5	Total PCDD/PCDF			257.31		182.34		238.33
6	TEQ			1.13		1.27		1.30