

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	336
4	EPA ID No.	VAD046970521
5	Facility Name	Solite Corp
6	Facility Location	
7	City	Cascade
8	State	Virginia
9	Unit ID Name/No.	Kiln #1
10	Other Sister Facilities	Currently a sister kiln of kiln No. 2 (311)
11	Number of Sister Facilities	0
12	Combustor Class	Lightweight Aggregate Kiln (LWAK)
13	Combustor Type	
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	
16	Soot Blowing	
17	APCS Detailed Acronym	QS/FF
18	APCS General Class	WQ, FF
19	APCS Characteristics	Quench system (air and water). Baghouse (reverse air cleaning, 580 bags, cloth area = 29,155 ft ² , net air to cloth ratio = 2.23:1, design operating temp < 450 °F at inlet)
20	Hazardous Wastes	Liq
21	Haz Waste Description	The raw material was excavated from the Virginia Solite quarry
22	Supplemental Fuel	
23		
24	Stack Characteristics	
25	Diameter (ft)	4.3
26	Height (ft)	80
27	Gas Velocity (ft/sec)	60.2
28	Gas Temperature (°F)	366.1
29		
30	Permitting Status	
31	HWC Burn Status (Date if Terminated)	

	B	C
1	Condition Description	
2		
3	336C10	
4		
5	Report Name/Date	Trial Burn Report, Solite Corp, Virginia Solite Div., March 2000
6	Report Preparation	Solite/Entropy/Blue Ridge
7	Testing Firm	Entropy
8	Testing Dates	November 8-19, 1999
9	Cond Dates	Nov-99
10	Condition Descr	Trial Burn, organics DRE, HCl/Cl2 emissions limits
11	Content	CO,HC, PM, HCl/Cl2, POHC DRE, PCCD/F
12		
13	336C11	
14		
15	Report Name/Date	Trial Burn Report, Kiln 1 DRE Retest, Kilns 1-4 D/F. Solite Corp, Virginia Solite Div., July 2000
16	Report Preparation	Solite/Entropy/B3 Systems
17	Testing Firm	Entropy
18	Testing Dates	May 9-19, 2000
19	Cond Dates	May-00
20	Condition Descr	Trial Burn, D/F and DRE Retest
21	Content	POHC DRE, D/F, CO
22		
23	336C1	
24		
25	Report Name/Date	Stationary Source Sampling Report, Reference No. 12327, Virginia Solite Cascade, Virginia, Kiln No. 1 Stack, March 24, 1994
26	Report Prepare	Entropy
27	Testing Firm	Entropy
28	Cond Descr	DRE / dioxin testing, MAX CL FEED, HIGH COMB TEMP
29	Testing Dates	October 27, 1993
30	Cond Dates	Oct-93
31		
32	336C2	
33		
34	Report Name/Date	Stationary Source Sampling Report, Reference No. 12327, Virginia Solite Cascade, Virginia, Kiln No. 1 Stack, March 24, 1994
35	Report Prepare	Entropy
36	Testing Firm	Entropy
37	Cond Descr	DRE / dioxin testing, MAX CL FEED, low COMB TEMP
38	Testing Dates	October 27, 1993
39	Cond Dates	Oct-93
40		
41	336C3	
42		
43	Report Name/Date	Stationary Source Sampling Report, Reference No. 13967, Virginia Solite, Leaksville Plant, Cascade VA, Kiln Nos. 1 and 4 Stack, May 1995
44	Report Prepare	Entropy
45	Testing Firm	Entropy
46	Cond Descr	
47	Testing Dates	May 22, 1995
48	Cond Dates	May-95
49		
50	336C4	
51		
52	Report Name/Date	Particulate Matter, Sulfur Dioxide, NOx, Lead, CO, and PM-10 Emission Measurements at Virginia Solite Cascade, Oldover Corp., June 25, 1991
53	Report Prepare	Oldover
54	Testing Firm	Oldover
55	Cond Descr	Consent order compliance testing
56	Testing Dates	May 6, 1991
57	Cond Dates	May-91
58		
59	336C5	
60		
61	Report Name/Date	BIF CoC forms prepared by Calvin Gover, Dick Carnes, and James Peters
62	Report Prepare	Virginia Solite, Calvin Gover
63	Testing Firm	Four Nines, IEA
64	Cond Descr	CoC
65	Test Dates	June 18, 1992
66	Cond Date	Jun-92

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions 1											
2												
3												
4	336C10	Trial Burn				R1		R2		R3		Cond Avg
5												
6												
7	PM	E1	gr/dscf	y		0.0040		0.0011		0.0017		0.0023
8	HCl	E1	ppmv	y		1516		1592		1731		1613
9	Cl2	E1	ppmv	y	nd	0.36		5.89 nd		0.58		2.27
10	Total Chlorine	E1	ppmv	y		1517		1604		1732		1618
11												
12	POHC DRE	Perchloroethylene										
13	POHC Feedrate		lb/hr			45.55		45.55		45.55		45.55
14	Emission Rate	E2	lb/hr			0.00138		0.0107		0.00102		0.0044
15	DRE	E2	%			99.9970		99.9765		99.9978		
16												
17	POHC DRE	1,2,4 Trichlorobenzene										
18	POHC Feedrate		lb/hr			45.60		45.60		45.60		45.60
19	Emission Rate	E2	lb/hr			0.00126		0.0062		0.00136		0.002940
20	DRE	E2	%			99.9972		99.9864		99.9970		
21												
22	Sampling Train	PM, HCl/Cl2	E1									
23	Stack Gas Flowrate		dscfm			27944		26511		29649		28035
24	O2		%			16.2		15.8		16.7		16.2
25	Moisture		%			11.0		10.7		8.2		10.0
26	Temperature		°F			350		349		364		354
27												
28	Sampling Train	D/F	E2									
29	Stack Gas Flowrate		dscfm			27479		27297		32506		29094
30	O2		%			16.2		15.8		16.7		16.2
31	Moisture		%			11.6		10.4		8.1		10.0
32	Temperature		°F			362		358		370		363
33												
34												
35	336C11	Trial Burn				R1		R2		R3		Cond Avg
36												
37												
38	CO (RA)	E1	ppmv	y		42.5		51.0		38.9		44
39												
40	POHC DRE	Perchloroethylene										
41	POHC Feedrate		lb/hr			32.01		32.01		32.01		32.01
42	Emission Rate	E1	lb/hr			0.000185		0.000103		0.000106		0.0001
43	DRE	E1	%			99.9994		99.9997		99.9997		
44												
45	POHC DRE	1,2,4 Trichlorobenzene										
46	POHC Feedrate		lb/hr			32.01		32.01		32.01		32.01
47	Emission Rate	E1	lb/hr			0.000107		0.000158		0.000198		0.000154
48	DRE	E1	%			99.9997		99.9995		99.9994		
49												
50												
51	Sampling Train	D/F	E1									
52	Stack Gas Flowrate		dscfm			22242		21327		21052		21540
53	O2		%			16.6		16.9		16.5		16.7
54	Moisture		%			14.2		11.5		13.4		13.0
55	Temperature		°F			302		296		292		297

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions 2											
2												
3												
4	336C1					R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.00744		0.01085				0.00915
7	CO (MHRA)	E1	ppmv	y		54.48		92.22				73.35
8	CO (RA)	E1	ppmv	y		50.50		70.30				60.40
9	HC (MHRA)	E1	ppmv	y		5.23		5.71				5.47
10	HC (RA)	E1	ppmv	y		4.50		5.10				4.80
11	HCl	E1	ppmv	y		983.06		935.71				959.38
12	Cl2	E1	ppmv	y		0.91		0.59				0.75
13	Total Chlorine	E1	ppmv	y		984.89		936.88				960.88
14												
15	Sampling Train	Particulate	E1									
16	Stack Gas Flowrate		dscfm			20054		19745				
17	O2		%			16.8		17				
18	Moisture		%			4.3		4.6				
19	Temperature		°F			314		311				
20												
21	Sampling Train	PAH	E2									
22	Stack Gas Flowrate		dscfm			20269.33		19839				
23	O2		%			16.8		17				
24	Moisture		%									
25	Temperature		°F									
26												
27	Sampling Train	Dioxin & Furan	E3									
28	Stack Gas Flowrate		dscfm			20700		20027				
29	O2		%			16.8		17				
30	Moisture		%			4.8		4.4				
31	Temperature		°F			319		317				
32												
33	1,2,4-Trichlorobenzene	E2	%			99.9992		99.9992				
34	Tetrachloroethene	E2	%			99.9998		99.99989				
35												
36	336C2					R1						Cond Avg
37												
38	PM	E1	gr/dscf	y		0.00712						0.00712
39	CO (MHRA)	E1	ppmv	y		66.78						66.8
40	CO (RA)	E1	ppmv	y		58.90						58.9
41	HC (MHRA)	E1	ppmv	y		4.94						4.9
42	HC (RA)	E1	ppmv	y		4.60						4.6
43	HCl	E1	ppmv	y		1048.42						1048.4
44	Cl2	E1	ppmv	y		0.72						0.7
45	Total Chlorine	E1	ppmv	y		1049.87						1049.9
46												
47	1,2,4-Trichlorobenzene	E2	%			99.9993						
48	Tetrachloroethene	E2	%			99.99995						
49												
50	Sampling Train	Particulate	E1									
51	Stack Gas Flowrate		dscfm			19283						
52	O2		%			17.1						
53	Moisture		%			4.2						
54	Temperature		°F			301						
55												
56	Sampling Train	PAH	E2									
57	Stack Gas Flowrate		dscfm			19099						
58	O2		%			17.1						
59	Moisture		%									
60	Temperature		°F									
61												
62	Sampling Train	Dioxin & Furan	E3									
63	Stack Gas Flowrate		dscfm			18731						
64	O2		%			17.1						
65	Moisture		%			4.9						
66	Temperature		°F			319						
67												
68	336C3					R1		R2		R3		Cond Avg
69												
70	PM	E1	gr/dscf	y		0.0028		0.0017		0.0018		0.0021
71	Antimony	E2	ug/dscm	y nd		2.03 nd		2.04		2.11		2.06

	B	C	D	E	F	G	H	I	J	K	L	M
72	Arsenic	E2	ug/dscm	y		3.45	nd	2.04		4.02		3.17
73	Barium	E2	ug/dscm	y		260.53		24.69		21.28		102.17
74	Beryllium	E2	ug/dscm	y		0.65	nd	0.20		0.30		0.38
75	Cadmium	E2	ug/dscm	y		2.85		4.24		6.26		4.45
76	Chromium	E2	ug/dscm	y		34.28		5.72		11.82		17.27
77	Chromium (Hex)	E3	ug/dscm	y	nd	2.69	nd	2.93	nd	3.42	100	3.01
78	Lead	E2	ug/dscm	y		29.53		17.34		40.73		29.20
79	Mercury	E2	ug/dscm	y		10.65		12.87		11.22		11.58
80	Nickel	E2	ug/dscm	y		5.59		0.53		3.13		3.08
81	Selenium	E2	ug/dscm	y	nd	2.03	nd	2.04	nd	1.87	100	1.98
82	Silver	E2	ug/dscm	y		1.20		4.74		2.05		2.67
83	Thallium	E2	ug/dscm	y	nd	2.03	nd	2.04	nd	1.87	100	1.98
84	SVM	E2	ug/dscm	y		32.38		21.58		46.98		33.65
85	LVM	E2	ug/dscm	y		38.38		7.96		16.14		20.83
86												
87	Sampling Train	Particulate	E1									
88	Stack Gas Flowrate		dscfm			27368		27218		30179		
89	O2		%			15.8		16.1		16		
90	Moisture		%			12		14.2		11.9		
91	Temperature		°F			366		365		371		
92												
93	Sampling Train	Metals	E2									
94	Stack Gas Flowrate		dscfm			27258		27493		30102		
95	O2		%			15.8		16.1		16		
96	Moisture		%			12		14.5		11.8		
97	Temperature		°F			365		365		366		
98												
99	Sampling Train	Cr Hex	E3									
100	Stack Gas Flowrate		dscfm			29875		32329		26855		
101	O2		%			15.8		16.1		16		
102	Moisture		%			12.1		10		12		
103	Temperature		°F			369		369		359		
104												
105	336C4					R1		R2		R3		Cond Avg
106												
107	PM		gr/dscf	y		0.03700		0.01630		0.02340		0.02557
108												
109	336C5					R1		R2		R3		Cond Avg
110												
111	PM	E1	gr/dscf	y		0.004		0.007		0.006		0.00567
112	CO (RA)	E1	ppmv	y		50.5		70.3		58.9		59.9
113	CO (MHRA)	E1	ppmv	y		54.5		92.2		66.8		71.2
114	HC (RA)	E1	ppmv	y		4.5		5.1		4.5		4.7
115	HC (MHRA)	E1	ppmv	y		5.23		5.71		4.94		5.3
116												
117	HCl		g/hr			30400		24800		26000		
118	Cl2		g/hr			1380		163		305		
119	Arsenic		g/hr			0.106		0.17		0.059		
120	Beryllium		g/hr			0.023		0.037		0.024		
121	Cadmium		g/hr			0.264		2.06		5.84		
122	Chromium		g/hr			0.374		0.484		0.409		
123	Chromium (Hex)		g/hr		nd	0.052	nd	0.034	nd	0.027		
124	Lead		g/hr			2.52		4.59		7.56		
125	Mercury		g/hr		nd	0.172	nd	0.291	nd	0.22		
126												
127	need stack gas flowrate to convert to concentrations											

	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	AB	AC	AD					
1	Feedstream 1																																	
2																																		
3																																		
4	336C10	Trial burn			R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg					
5																																		
6	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		F4		F4					
7	Feed Class				Raw Material		Raw Material		Raw Material		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Total		Total		Total		Total					
8	Feed Class 2				RM		RM		RM		HW		HW		HW		Spike		Spike		Spike		Total		Total		Total		Total					
9	Feedstream Description				Raw Material		Raw Material		Raw Material		LBM		LBM		LBM		Spike		Spike		Spike		Total		Total		Total		Total					
10	Feed Rate	lb/min									35.27		29.01		33.71																			
11	Density	g/cc									0.914		0.905		0.915																			
12																																		
13	Heating Value	Btu/lb									11614		12503		11682																			
14																																		
15	Ash	%									2.54		1.83		2.78																			
16	Chlorine	%			0.1		0.018		0.019		0.38		0.5		0.45																			
17																																		
18	Chlorine	g/hr																												34756				
19																																		
20	Stack Gas Flowrate	dscfm			27944		26511		29649		27944		26511		29649		27944		26511		29649		27944		26511		29649		28035					
21	Oxygen	%			16.2		15.8		16.7		16.2		15.8		16.7		16.2		15.8		16.7		16.2		15.8		16.7		16.2					
22																																		
23	Thermal Feedrate	MMBtu/hr									24.6		21.8		23.6								24.6		21.8		23.6		23.3					
24	Estimated Firing Rate	MMBtu/hr																					42.58		43.76		40.47		42.3					
25																																		
26	<i>Feedrate MTEC Calculations</i>																																	
27	Chlorine	ug/dscm																												2144421				
28																																		
29																																		
30	336C11	Trial burn			R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg					
31																																		
32	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		F4		F4					
33	Feed Class				Raw Material		Raw Material		Raw Material		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Total		Total		Total		Total					
34	Feed Class 2				RM		RM		RM		HW		HW		HW		Spike		Spike		Spike		Total		Total		Total		Total					
35	Feedstream Description				RM		RM		RM		LBM		LBM		LBM		Spike		Spike		Spike		Total		Total		Total		Total					
36	Feed Rate	lb/min									40.76		38.87		36.96																			
37	Density	g/cc									0.958		0.948		0.932																			
38																																		
39	Heating Value	Btu/lb									12217		12370		12954																			
40																																		
41	Ash	%									4.92		6.89		0.92																			
42	Chlorine	%			0.0085		0.009		0.009		3.39		3.06		3.47																			
43																																		
44	Chlorine	g/hr																												23276				
45																																		
46	Stack Gas Flowrate	dscfm			22242		21327		21052		22242		21327		21052		22242		21327		21052		22242		21327		21052		21540					
47	Oxygen	%			16.6		16.9		16.5		16.6		16.9		16.5		16.6		16.9		16.5		16.6		16.9		16.5		16.7					
48																																		
49	Thermal Feedrate	MMBtu/hr									29.88		28.85		28.73								29.88		28.85		28.73		29.2					
50	Est Thermal Firing Rate	MMBtu/hr																					31.07		27.76		30.07		29.6					
51																																		
52	<i>Feedrate MTEC Calculations</i>																																	
53	Chlorine	ug/dscm																												1869096				

	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	AB	AC	AD	
61	Mercury		ppmw		25							1																		
62	Silver		ppmw		25						6.97																			
63	Thallium		ppmw		25						45.9																			
64																														
65	Stack Gas Flowrate		dscfm		19283						19283						19283													
66	Oxygen		%		17.1						17.1						17.1													
67																														
68	Thermal Feedrate		MMBtu/hr		24.9																		24.9							24.9
69																														
70	Feedrate MTEC Calculations																													
71	Chlorine		ug/dscm		1362104						381100						0						1743204						1743204	
72																														
73	336C3				R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg	
74																														
75	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		F4		F4	
76	Feed Class				Liq HW		Liq HW		Liq HW		Raw Material		Raw Material		Raw Material		Spike		Spike		Spike		Total		Total		Total		Total	
77	Feedstream Description				Liquid waste		Liquid waste		Liquid waste		Raw material		Raw material		Raw material		Spike		Spike		Spike		Total		Total		Total		Total	
78	Feed Rate		lb/hr		?		?		?		?		?		?		?		?		?		Total		Total		Total		Total	
79	Heating Value		Btu/lb		12900		12850		12900																					
80	Chlorine		ppmw		3800		3900		4900		25 nc		17 nd		16															
81	Antimony		ppmw		48.3		50.5		51 nd		1 nc		1 nd		1															
82	Arsenic		ppmw	nd	1 nd		1 nd		1		3.8		2.63		3.2		39900		39300		40600									
83	Barium		ppmw		1169		952		1035		300		243		386															
84	Beryllium		ppmw	nd	0.25 nd		0.25 nd		0.25		1.5		1.55		1.45		4260		4020		4560									
85	Cadmium		ppmw		69.7		67.4		67.9		1.3		0.59 nd		0.4		36800		25900		41400									
86	Chromium		ppmw		309		278		298		38.2		39		39.2		188000		205000		201000									
87	Chromium (Hex)		ppmw		81.2		49.7		47.7 nd		0.1 nc		0.14 nd		0.1															
88	Lead		ppmw		286		274		258		17.4		9.58		10.4		366000		358000		358000									
89	Mercury		ppmw	nd	0.0718		0.0826 nd		0.0561 nd		0.0495 nc		0.0509 nd		0.0505															
90	Nickel		ppmw		29.5		29.6		30.7		267		27.5		29.7															
91	Selenium		ppmw		3.9		3.86		4.2 nd		1 nc		1 nd		1															
92	Silver		ppmw		1.55		1.48		1.55 nd		0.4 nc		0.4 nd		0.4															
93	Thallium		ppmw	nd	1 nd		1 nd		1 nd		1 nc		1 nd		1															
94																														
95	Gas flowrate				27368		27218		30179		27368		27218		30179		27368		27218		30179									
96	Oxygen				15.8		16.1		16		15.8		16.1		16		15.8		16.1		16									
97																														
98	Feedrate MTECs																													
99	Chlorine		ug/dscm																											
100	Antimony		ug/dscm																											
101	Arsenic		ug/dscm																											
102	Barium		ug/dscm																											
103	Beryllium		ug/dscm																											
104	Cadmium		ug/dscm																											
105	Chromium		ug/dscm																											
106	Chromium (Hex)		ug/dscm																											
107	Lead		ug/dscm																											
108	Mercury		ug/dscm																											
109	Nickel		ug/dscm																											
110	Selenium		ug/dscm																											
111	Silver		ug/dscm																											
112	Thallium		ug/dscm																											

	B	C	D	E	F	G	H
1	Process Information 1						
2				R1	R2	R3	Cond Avg
3	336C10	Trial Burn					
4							
5	Combustion zone temperature	°F		1955	2147	2389	2164
6	Mid kiln temperature	°F		978	1050	1070	959
7	Kiln exit temperature	°F		463	454	451	456
8	Max baghouse inlet temperature	°F		433	429	429	444
9	Kiln maximum negative pressure						-4.4
10							
11	336C11	Trial Burn					
12							
13	Combustion zone temperature	°F		2333	2318	2069	2240
14	Mid kiln temperature	°F		1011	967	1022	1198
15	Kiln exit temperature	°F		366	368	371	368
16	Baghouse inlet temperature	°F		364	364	353	361
17	Kiln negative pressure						-4.97

	C	D	E	F
1	Process Information 2			
2				
3	336C1		R1	R2
4				
5	FF Temperature	F	400	400
6				
7	336C2			
8				
9	FF Temperature	F	400	

	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:		Solite Corp, Lightweight Aggregate Kiln #2															
4	Condition ID:		336C10 Trial Burn															
5	Condition/Test Date:		Nov 9-11, 1999															
6																		
7	I-TEF																	
8	Wght Fact																	
9																		
10	Detected in sample volume (ng)																	
11	2,3,7,8-TCDD	1	0.260	0.260	0.260	0.260	0.550	0.550	0.550	0.550	1.190	1.190	1.190	1.190				
12	1,2,3,7,8-PCDD	0.5	0.470	0.235	0.470	0.235	1.370	0.685	1.370	0.685	2.580	1.290	2.580	1.290				
13	1,2,3,4,7,8-HxCDD	0.1	0.260	0.026	0.260	0.026	0.930	0.093	0.930	0.093	1.490	0.149	1.490	0.149				
14	1,2,3,6,7,8-HxCDD	0.1	0.460	0.046	0.460	0.046	2.400	0.240	2.400	0.240	7.030	0.703	7.030	0.703				
15	1,2,3,7,8,9-HxCDD	0.1	0.580	0.058	0.580	0.058	2.350	0.235	2.350	0.235	4.430	0.443	4.430	0.443				
16	1,2,3,4,6,7,8-HpCDD	0.01	1.690	0.017	1.690	0.017	6.900	0.069	6.900	0.069	17.430	0.174	17.430	0.174				
17	OCDD	0.001	5.570	0.006	5.570	0.006	3.138	0.003	3.138	0.003	6.260	0.006	6.260	0.006				
18	2,3,7,8-TCDF	0.1	5.650	0.565	5.650	0.565	11.410	1.141	11.410	1.141	26.200	2.620	26.200	2.620				
19	1,2,3,7,8-PCDF	0.05	3.390	0.170	3.390	0.170	8.900	0.445	8.900	0.445	18.650	0.933	18.650	0.933				
20	2,3,4,7,8-PCDF	0.5	6.659	3.330	6.659	3.330	18.270	9.135	18.270	9.135	36.220	18.110	36.220	18.110				
21	1,2,3,4,7,8-HxCDF	0.1	4.190	0.419	4.190	0.419	13.180	1.318	13.180	1.318	24.840	2.484	24.840	2.484				
22	1,2,3,6,7,8-HxCDF	0.1	2.000	0.200	2.000	0.200	6.830	0.683	6.830	0.683	12.820	1.282	12.820	1.282				
23	2,3,4,6,7,8-HxCDF	0.1	0.120	0.012	0.120	0.012	0.550	0.055	0.550	0.055	13.320	1.332	13.320	1.332				
24	1,2,3,7,8,9-HxCDF	0.1	1.940	0.194	1.940	0.194	6.980	0.698	6.980	0.698	13.890	1.389	13.890	1.389				
25	1,2,3,4,6,7,8-HpCDF	0.01	2.110	0.021	2.110	0.021	8.490	0.085	8.490	0.085	13.890	0.139	13.890	0.139				
26	1,2,3,4,7,8,9-HpCDF	0.01	0.190	0.002	0.190	0.002	0.120	0.001	0.120	0.001	2.450	0.025	2.450	0.025				
27	OCDF	0.001	0.300	0.000	0.300	0.000	1.020	0.001	1.020	0.001	1.900	0.002	1.900	0.002				
28	Total TCDD	0	11.080	0.000	11.080	0.000	20.360	0.000	20.360	0.000	40.000	0.000	40.000	0.000				
29	Total PCDD	0	8.880	0.000	8.880	0.000	29.480	0.000	29.480	0.000	63.090	0.000	63.090	0.000				
30	Total HxCDD	0	6.630	0.000	6.630	0.000	30.710	0.000	30.710	0.000	75.150	0.000	75.150	0.000				
31	Total HpCDD	0	3.360	0.000	3.360	0.000	15.640	0.000	15.640	0.000	37.440	0.000	37.440	0.000				
32	Total TCDF	0	213.16	0.000	213.160	0.000	300.66	0.000	300.660	0.000	396.50	0.000	396.500	0.000				
33	Total PCDF	0	76.889	0.000	76.889	0.000	29.560	0.000	29.560	0.000	247.710	0.000	247.710	0.000				
34	Total HxCDF	0	20.430	0.000	20.430	0.000	30.710	0.000	30.710	0.000	127.810	0.000	127.810	0.000				
35	Total HpCDF	0	3.120	0.000	3.120	0.000	12.900	0.000	12.900	0.000	23.300	0.000	23.300	0.000				
36																		
37	Gas sample volume (dscf)			120.15	120.15	120.15		123.85	123.85	123.85		143.32	143.32	143.32				
38	O2 (%)			16.20	16.20	16.20		15.8	15.8	15.8		16.70	16.70	16.70				
39																		
40	PCDD/PCDF (ng in sample)			5.560	349.4	5.560		15.437	474.2	15.437		32.270	1019.2	32.270				
41	PCDD/PCDF (ng/dscm @ 7% O2)		0.0	4.769	299.73	4.769	0.0	11.858	364.24	11.858	0.0	25.904	818.09	25.904				
42																		
43	TEQ Cond Avg		14.177															
44	Total Cond Avg		494.02															

	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:		Solite Corp, Lightweight Aggregate Kiln #2																
4	Condition ID:		336C11 Trial Burn																
5	Condition/Test Date:		May 9-10, 2000																
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 (pg)																		
11	2,3,7,8-TCDD		1	56	55.9	56	55.9	28	27.80	28	27.80	306	306.00	306	306.00	306	306.00	306	306.00
12	1,2,3,7,8-PCDD		0.5	64	32.1	64	32.1	54	26.75	54	26.75	396	198.00	396	198.00	396	198.00	396	198.00
13	1,2,3,4,7,8-HxCDD		0.1	66	6.6	66	6.6	42	4.15	42	4.15	99	9.90	99	9.90	99	9.90	99	9.90
14	1,2,3,6,7,8-HxCDD		0.1	138	13.8	138	13.8	89	8.85	89	8.85	150	15.00	150	15.00	150	15.00	150	15.00
15	1,2,3,7,8,9-HxCDD		0.1	90	9.0	90	9.0	54	5.39	54	5.39	72	7.24	72	7.24	72	7.24	72	7.24
16	1,2,3,4,6,7,8-HpCDD		0.01	1220	12.2	1220	12.2	382	3.82	382	3.82	236	2.36	236	2.36	236	2.36	236	2.36
17	OCDD		0.001	5250	5.3	5250	5.3	1040	1.04	1040	1.04	618	0.62	618	0.62	618	0.62	618	0.62
18	2,3,7,8-TCDF		0.1	1130	113.0	1130	113.0	477	47.70	477	47.70	6980	698.00	6980	698.00	6980	698.00	6980	698.00
19	1,2,3,7,8-PCDF		0.05	827	41.4	827	41.4	437	21.85	437	21.85	4640	232.00	4640	232.00	4640	232.00	4640	232.00
20	2,3,4,7,8-PCDF		0.5	1200	600.0	1200	600.0	694	347.00	694	347.00	6820	3410.00	6820	3410.00	6820	3410.00	6820	3410.00
21	1,2,3,4,7,8-HxCDF		0.1	439	43.9	439	43.9	399	39.90	399	39.90	1985	198.50	1985	198.50	1985	198.50	1985	198.50
22	1,2,3,6,7,8-HxCDF		0.1	395	39.5	395	39.5	355	35.50	355	35.50	1710	171.00	1710	171.00	1710	171.00	1710	171.00
23	2,3,4,6,7,8-HxCDF		0.1	81	8.1	81	8.1	74	7.44	74	7.44	215	21.50	215	21.50	215	21.50	215	21.50
24	1,2,3,7,8,9-HxCDF		0.1	275	27.5	275	27.5	225	22.50	225	22.50	747	74.70	747	74.70	747	74.70	747	74.70
25	1,2,3,4,6,7,8-HpCDF		0.01	1210	12.1	1210	12.1	651	6.51	651	6.51	834	8.34	834	8.34	834	8.34	834	8.34
26	1,2,3,4,7,8,9-HpCDF		0.01	168	1.7	168	1.7	74	0.74	74	0.74	79	0.79	79	0.79	79	0.79	79	0.79
27	OCDF		0.001	904	0.9	904	0.9	183	0.18	183	0.18	132	0.13	132	0.13	132	0.13	132	0.13
28	Total TCDD		0	3860	0.0	3860	0.0	1410	0.00	1410	0.00	11900	0.00	11900	0.00	11900	0.00	11900	0.00
29	Total PCDD		0	2000	0.0	2000	0.0	1030	0.00	1030	0.00	1071	0.00	1071	0.00	1071	0.00	1071	0.00
30	Total HxCDD		0	1630	0.0	1630	0.0	1090	0.00	1090	0.00	1870	0.00	1870	0.00	1870	0.00	1870	0.00
31	Total HpCDD		0	2440	0.0	2440	0.0	764	0.00	764	0.00	472	0.00	472	0.00	472	0.00	472	0.00
32	Total TCDF		0	115000	0.0	115000	0.0	37900	0.00	37900	0.00	323000	0.00	323000	0.00	323000	0.00	323000	0.00
33	Total PCDF		0	36600	0.0	36600	0.0	13100	0.00	13100	0.00	132000	0.00	132000	0.00	132000	0.00	132000	0.00
34	Total HxCDF		0	4720	0.0	4720	0.0	3430	0.00	3430	0.00	18605	0.00	18605	0.00	18605	0.00	18605	0.00
35	Total HpCDF		0	1840	0.0	1840	0.0	1187	0.00	1187	0.00	1375	0.00	1375	0.00	1375	0.00	1375	0.00
36																			
37	Gas sample volume (dscf)				103.91	103.91	103.91		131.56	131.56	131.56		127.35	127.35	127.35		127.35	127.35	127.35
38	O2 (%)				16.60	16.60	16.60		16.9	16.9	16.9		16.50	16.50	16.50		16.50	16.50	16.50
39																			
40	PCDD/PCDF (ng in sample)					1.023	174.2	1.023		0.607	61.1	0.607		5.354	491.0	5.354		4.622	423.87
41	PCDD/PCDF (ng/dscm @ 7% O2)			0.0		1.107	188.54	1.107	0.0	0.56	56.07	0.56	0.0	4.622	423.87	4.622		4.622	423.87
42																			
43	TEQ Cond Avg		2.095																
44	Total Cond Avg		222.83																

	C	D	E	F	G	H	I	J	K	L
1	336C1	I-TEF			Run 1				Run 2	
2		Wght Fact		Total	Total	TEQ		Total	Total	TEQ
3	ng/dscm			Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND
4										
5	4D 2378	1	2	0.0043	0.0043	0.0043	1	0.0037	0.0019	0.0019
6	4D Other	0		0.0167	0.0167	0.0000	2	0.0178	0.0178	0.0000
7	4D Total	0		0.0210	0.0210	0.0000		0.0216	0.0216	0.0000
8	5D 12378	0.5	2	0.0119	0.0119	0.0060	1	0.0062	0.0031	0.0016
9	5D Other	0		0.0598	0.0598	0.0000		0.0152	0.0152	0.0000
10	5D Total	0		0.0717	0.0717	0.0000		0.0214	0.0214	0.0000
11	6D 123478	0.1		0.0083	0.0083	0.0008	2	0.0041	0.0041	0.0004
12	6D 123678	0.1		0.0149	0.0149	0.0015		0.0081	0.0081	0.0008
13	6D 123789	0.1		0.0192	0.0192	0.0019		0.0144	0.0144	0.0014
14	6D Other	0		0.0486	0.0486	0.0000		0.0373	0.0373	0.0000
15	6D Total	0		0.0911	0.0911	0.0000		0.0639	0.0639	0.0000
16	7D 1234678	0.01		0.1006	0.1006	0.0010		0.1120	0.1120	0.0011
17	7D Other	0		0.0765	0.0765	0.0000		0.0910	0.0910	0.0000
18	7D Total	0		0.1771	0.1771	0.0000		0.2030	0.2030	0.0000
19	8D	0.001		0.2631	0.2631	0.0003		0.4759	0.4759	0.0005
20	4F 2378	0.1		0.0290	0.0290	0.0029		0.0156	0.0156	0.0016
21	4F Other	0		0.4815	0.4815	0.0000		0.1918	0.1918	0.0000
22	4F Total	0		0.5105	0.5105	0.0000		0.2073	0.2073	0.0000
23	5F 12378	0.05		0.0309	0.0309	0.0015		0.0209	0.0209	0.0010
24	5F 23478	0.5		0.0288	0.0288	0.0144	2	0.0185	0.0185	0.0092
25	5F Other	0		0.1990	0.1990	0.0000		0.1110	0.1110	0.0000
26	5F Total	0		0.2587	0.2587	0.0000		0.1505	0.1505	0.0000
27	6F 123478	0.1		0.0512	0.0512	0.0051	2	0.0437	0.0437	0.0044
28	6F 123678	0.1		0.0234	0.0234	0.0023		0.0198	0.0198	0.0020
29	6F 123789	0.1	2	0.0095	0.0095	0.0010		0.0137	0.0137	0.0014
30	6F 234678	0.1		0.0330	0.0330	0.0033		0.0326	0.0326	0.0033
31	6F Other	0		0.0761	0.0761	0.0000		0.0231	0.0231	0.0000
32	6F Total	0		0.1932	0.1932	0.0000		0.1329	0.1329	0.0000
33	7F 1234678	0.01	2	0.0494	0.0494	0.0005	2	0.0994	0.0994	0.0010
34	7F 1234789	0.01		0.0154	0.0154	0.0002	2	0.0180	0.0180	0.0002
35	7F Other	0		0.0088	0.0088	0.0000	2	0.1731	0.1731	0.0000
36	7F Total	0		0.0736	0.0736	0.0000		0.2904	0.2904	0.0000
37	8F	0.001		0.0791	0.0791	0.0001	2	0.1064	0.1064	0.0001
38	Total PCDD/PCDF			1.7391	1.7391			1.6733	1.6733	
39	TEQ		0.0	0.0470		0.0470	19.5	0.0352		0.0318

	C	D	E	F	G	H
1	336C2	I-TEF			Run 1	
2		Wght Fact		Total	Total	TEQ
3	ng/dscm			Full ND	1/2 ND	1/2 ND
4						
5	4D 2378	1	1	0.0055	0.0027	0.0027
6	4D Other	0	2	0.0276	0.0276	0.0000
7	4D Total	0		0.0331	0.0331	0.0000
8	5D 12378	0.5	1	0.0096	0.0048	0.0024
9	5D Other	0		0.0124	0.0124	0.0000
10	5D Total	0		0.0220	0.0220	0.0000
11	6D 123478	0.1	1	0.0096	0.0048	0.0005
12	6D 123678	0.1	2	0.0070	0.0070	0.0007
13	6D 123789	0.1	2	0.0106	0.0106	0.0011
14	6D Other	0		0.0696	0.0696	0.0000
15	6D Total	0		0.0968	0.0968	0.0000
16	7D 1234678	0.01		0.0824	0.0824	0.0008
17	7D Other	0		0.0675	0.0675	0.0000
18	7D Total	0		0.1499	0.1499	0.0000
19	8D	0.001		0.2758	0.2758	0.0003
20	4F 2378	0.1		0.0209	0.0209	0.0021
21	4F Other	0		0.5168	0.5168	0.0000
22	4F Total	0		0.5377	0.5377	0.0000
23	5F 12378	0.05		0.0203	0.0203	0.0010
24	5F 23478	0.5		0.0185	0.0185	0.0092
25	5F Other	0		0.1238	0.1238	0.0000
26	5F Total	0		0.1625	0.1625	0.0000
27	6F 123478	0.1		0.0375	0.0375	0.0037
28	6F 123678	0.1		0.0177	0.0177	0.0018
29	6F 123789	0.1	1	0.0082	0.0041	0.0004
30	6F 234678	0.1		0.0258	0.0258	0.0026
31	6F Other	0		0.0547	0.0547	0.0000
32	6F Total	0		0.1439	0.1439	0.0000
33	7F 1234678	0.01		0.0512	0.0512	0.0005
34	7F 1234789	0.01		0.0178	0.0178	0.0002
35	7F Other	0		0.0248	0.0248	0.0000
36	7F Total	0		0.0937	0.0937	0.0000
37	8F	0.001		0.0752	0.0752	0.0001
38	Total PCDD/PCDF			1.5905	1.5905	
39	TEQ		33.3	0.0361		0.0301