

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase I ID No.	313
4	EPA ID No.	VAD042755082
5	Facility Name	Solite Corp
6	Facility Location	
7	City	Arvonnia
8	State	Virginia
9	Unit ID Name/No.	Kiln # 7
10	Other Sister Facilities	
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	WQ/FF
18	APCS General Class	WQ, FF
19	APCS Characteristics	Water quench lance, Fabric filter, 29,000 ft2 bag area, A/C = 2, fiberglass bag material
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)	80.0
27	Gas Velocity (ft/sec)	12.4
28	Gas Temperature (°F)	342.1
29		
30	Permitting Status	Tier III for As, Be, Cd, Cr, Pb; Tier I for Hg, Sb, Ba, Ag, Tl
31	HWC Burn Status (Date if Terminated)	

	B	C
1	<b>Condition Description</b>	
2		
3	<b>313C10</b>	
4		
5	Report Name/Date	Trial Burn Report, Solite Corporation, A. F. Old Facility, Arvonía, Virginia, March 2000; Entropy Stationary Sampling Report, Reference No. 1702, Solite Corp Arvonía, VA, November and December 1999
6	Report Preparation	Solite/Entropy/Blue Ridge
7	Testing Firm	Entropy
8	Testing Dates	December 1-2, 1999
9	Cond Dates	Dec-99
10	Condition Descr	Trial Burn, organics DRE, HCl/Cl2 emissions limits
11	Content	HC/CO, PM, HCl/Cl2, POHC DRE, PCCD/F
12		
13	<b>313C11</b>	
14		
15	Report Name/Date	Recertification of Compliance for Kilns 7 and 8, Solite Corp, Arvonía, VA, July 27, 1999; Entropy Stationary Sampling Report, Reference No. 17091, Solite Corp Arvonía, VA, May 1999;
16	Report Preparation	Solite/Entropy/Blue Ridge
17	Testing Firm	Entropy
18	Testing Dates	May 4-5, 1999
19	Cond Dates	May-99
20	Condition Descr	CoC, metals and chlorine SRE testing
21	Content	Metals, HCl/Cl2, PM, HC/CO
22		
23	<b>313C12</b>	
24		
25	Report Name/Date	Recertification of Compliance for Kilns 7 and 8, Solite Corp, Arvonía, VA, July 27, 1999; Entropy Stationary Sampling Report, Reference No. 17091, Solite Corp Arvonía, VA, May 1999;
26	Report Preparation	Solite/Entropy/Blue Ridge
27	Testing Firm	Entropy
28	Testing Dates	May 6, 1999
29	Cond Dates	May-99
30	Condition Descr	CoC, PM and chlorine retest
31	Content	HCl/Cl2, PM
32		
33	<b>313C1</b>	
34		
35	Report Name/Date	Emmision Test Results for No. 7 and No. 8 Aggregate Kilns, Solite Corporation, Arvonía, Virginia, Prepared by IEA, Project # 1381-003, August 8, 1992; COC Forms attached, August 21, 1992
36	Report Prepare	IEA
37	Testing Firm	IEA
38	Cond Descr	MAX HW FEED,MAX RAW MATERIAL
39	Testing Dates	
40	Cond Dates	Aug-92

	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Stack Gas Emissions 1</b>											
2												
3												
4	<b>313C10</b>	Trial Burn				R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.00746		0.0214		0.0146		0.0145
7	CO (RA)	E1	ppmv	y		3.05		0.94		12.43		5.5
8	CO (MHRA)	E1	ppmv	y		4.66		2.75		20.44		9.3
9	HC (RA)	E1	ppmv	y		0.1		0.1		0.1		0.1
10	HC (MHRA)	E1	ppmv	y		0.2		0.3		0.3		0.3
11												
12	HCl	E1	ppmv	y		1208		1195		1189		1197.3
13	Cl2	E1	ppmv	y		2.13		1.37		8.43		3.98
14	Total Chlorine	E1	ppmv	y		1212.3		1197.7		1205.9		1205.3
15												
16	POHC DRE	Perchloroethylene										
17	POHC Feedrate		lb/hr			32.74		32.83		32.74		32.77
18	Emission Rate	E2	lb/hr			0.000483		0.000462		0.000502		0.000482
19	DRE	E2	%			99.99852		99.99859		99.99847		
20												
21	POHC DRE	1,2,4 Trichlorobenzene										
22	POHC Feedrate		lb/hr			32.71		32.8		32.71		32.74
23	Emission Rate	E2	lb/hr			0.000442		0.00059		0.000314		0.000449
24	DRE	E2	%			99.99865		99.99820		99.99904		
25												
26	Sampling Train	PM, HCl/Cl2	E1									
27	Stack Gas Flowrate		dscfm			20836		23624		21264		21908.0
28	O2		%			15.3		16		16.1		15.8
29	Moisture		%			12.1		12.6		12		12.2
30	Temperature		°F			294		312		297		301.0
31												
32	Sampling Train	PCDD/PCDF	E2									
33	Stack Gas Flowrate		dscfm			22265		22364		21696		22108
34	O2		%			15.3		16		16.1		15.8
35	Moisture		%			11		11.6		11.5		11
36	Temperature		°F			306		311		308		308
37												
38	<b>313C11</b>	CoC				R1		R2		R3		Cond Avg
39												
40	PM	E1	gr/dscf	y		0.0224		0.022		0.0112		0.0185
41	CO (RA)	E1	ppmv	y		19.3		0		25.2		14.8
42	CO (MHRA)	E1	ppmv	y		83.2		0		62.1		48.4
43												
44	HCl	E1	ppmv	y		1805		1957		1733		1831.7
45	Cl2	E1	ppmv	y		2.44		1.77		0.246		1.5
46	Total Chlorine	E1	ppmv	y		1809.9		1960.5		1733.5		1834.6
47												
48	Antimony		lb/hr			3.70E-04		2.55E-04		1.03E-04		
49	Arsenic		lb/hr			0.00349		0.00337		0.00303		
50	Barium		lb/hr			1.79E-03		1.46E-03		9.00E-04		
51	Beryllium		lb/hr			3.00E-04		2.96E-04		2.32E-04		
52	Cadmium		lb/hr			0.00212		0.00204		0.00209		
53	Chromium		lb/hr			0.00415		0.00444		0.00343		
54	Chromium (Hex)		lb/hr		nd	5.48E-05	nd	4.38E-05	nd	5.40E-05		
55	Cobalt		lb/hr			1.97E-04		1.63E-04		9.85E-05		
56	Copper		lb/hr			1.13E-03		7.85E-04		3.73E-04		
57	Lead		lb/hr			0.0385		0.0376		0.0362		
58	Manganese		lb/hr			2.30E-03		1.29E-03		6.90E-04		
59	Mercury		lb/hr			1.43E-04		1.31E-04		1.21E-04		
60	Nickel		lb/hr			3.29E-04		3.30E-04		9.93E-05		
61	Selenium		lb/hr			4.45E-04		2.24E-04		1.30E-04		
62	Silver		lb/hr			1.78E-04		6.60E-05		1.71E-05		
63	Thallium		lb/hr		nd	3.70E-05	nd	3.76E-05	nd	3.72E-05		
64	Zinc		lb/hr		nd	2.15E-03	nd	2.98E-03	nd	7.13E-04		
65												
66	Sampling Train	PM, HCl/Cl2	E1									
67	Stack Gas Flowrate		dscfm			20841		20571		19927		20446
68	O2		%			14.1		14.4		14.2		14.2
69	Moisture		%			17.1		16.4		17.8		17.1
70	Temperature		°F			328		336		334		333
71												

	B	C	D	E	F	G	H	I	J	K	L	M
72	Sampling Train	Metals	E2									
73	Stack Gas Flowrate		dscfm			20529		21188		20396		20704.3
74	O2		%			14.1		14.4		14.2		14.2
75	Moisture		%			16.9		16.2		17.6		16.9
76	Temperature		°F			323		333		323		326.3
77												
78	Antimony	E2	ug/dscm	y		9.8		6.8		2.8		6.46
79	Arsenic	E2	ug/dscm	y		92.2		90.2		81.8		88.07
80	Barium	E2	ug/dscm	y		47.3		39.1		24.3		36.89
81	Beryllium	E2	ug/dscm	y		7.9		7.9		6.3		7.37
82	Cadmium	E2	ug/dscm	y		56.0		54.6		56.4		55.68
83	Chromium	E2	ug/dscm	y		109.7		118.8		92.6		107.03
84	Chromium (Hex)	E2	ug/dscm	y		1.4		1.2		1.5		1.36
85	Cobalt	E2	ug/dscm	y		5.2		4.4		2.7		4.08
86	Copper	E2	ug/dscm	y		29.9		21.0		10.1		20.31
87	Lead	E2	ug/dscm	y		1017.4		1006.5		977.0		1000.29
88	Manganese	E2	ug/dscm	y		60.8		34.5		18.6		37.98
89	Mercury	E2	ug/dscm	y		3.8		3.5		3.3		3.52
90	Nickel	E2	ug/dscm	y		8.7		8.8		2.7		6.74
91	Selenium	E2	ug/dscm	y		11.8		6.0		3.5		7.09
92	Silver	E2	ug/dscm	y		4.7		1.8		0.5		2.31
93	Thallium	E2	ug/dscm	y		1.0		1.0		1.0		1.00
94	Zinc	E2	ug/dscm	y		56.8		79.8		19.2		51.94
95												
96	LVM	E2	ug/dscm	y		209.8		217.0		180.6		202.5
97	SVM	E2	ug/dscm	y		1073.4		1061.1		1033.4		1056.0
98												
99	<b>313C12</b>	CoC, PM, chlorine retest				R1		R2		R3		Cond Avg
100												
101	PM	E1	gr/dscf	y		0.0514		0.0372		0.0211		0.0366
102	HCl	E1	ppmv	y		627		1014		1231		957.3
103	Cl2	E1	ppmv	y		1.84		0.408		0.279		0.8
104	Total Chlorine	E1	ppmv	y		630.7		1014.8		1231.6		959.0
105												
106	Sampling Train	PM, HCl/Cl2	E1									
107	Stack Gas Flowrate		dscfm			22017		21437		22344		21933
108	O2		%			14.4		14.4		14.5		14.4
109	Moisture		%			16.5		16.2		15.7		16.1
110	Temperature		°F			326		339		336		334

	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Stack Gas Emissions 2</b>											
2												
3												
4	<b>313C1</b>					R1	R2	R3				Cond Avg
5												
6	PM	E1	gr/dscf	y		0.00800	0.00600	0.00600				0.00667
7	CO (MHRA)	E1	ppmv	y		46.90	19.00	16.00				27.30
8	CO (RA)	E1	ppmv	y		22.20	15.10	6.60				14.63
9	HC (MHRA)	E1	ppmv	y		4.30	4.00	5.60				4.63
10	HC (RA)	E1	ppmv	y		3.70	3.50	1.60				2.93
11	HCl	E1	ppmv	y		1569.93	1531.47	1487.04				1529.48
12	Cl2	E1	ppmv	y		2.14	0.60	0.54				1.09
13	Total Chlorine	E1	ppmv	y		1574.20	1532.67	1488.12				1531.66
14												
15	Antimony	E2	ug/dscm	y		303.21	255.79	201.64				253.55
16	Arsenic	E2	ug/dscm	y		2.03	34.28	31.09				22.47
17	Barium	E2	ug/dscm	y		15.76	nd	31.90	nd	23.82		23.83
18	Beryllium	E2	ug/dscm	y		1.25	2.43	1.41				1.70
19	Cadmium	E2	ug/dscm	y		21.79	44.12	31.38				32.43
20	Chromium	E2	ug/dscm	y	nd	12.29	nd	20.63	nd	13.66	100	15.53
21	Chromium (Hex)	E3	ug/dscm	y		1.59	nd	1.81		1.93		1.78
22	Lead	E2	ug/dscm	y		219.56	1326.65	424.20				656.80
23	Mercury	E2	ug/dscm	y	nd	0.36	nd	0.07	nd	0.71	100	0.38
24	Silver	E2	ug/dscm	y	nd	2.73	nd	4.92	nd	2.82	100	3.49
25	Thallium	E2	ug/dscm	y	nd	0.78	nd	2.17	nd	0.83	100	1.26
26	SVM	E2	ug/dscm	y		241.35	1370.77	455.58				689.23
27	LVM	E2	ug/dscm	y		15.57	57.35	46.15				39.69
28												
29	Sampling Train	Halogens	E1									
30	Stack Gas Flowrate		dscfm			21700	22100	19400				
31	O2		%			15	14.8	14.6				
32	Moisture		%			11.4	11.4	12.3				
33	Temperature		°F			344	349	341				
34												
35	Sampling Train	Metals	E2									
36	Stack Gas Flowrate		dscfm			23400	19900	20100				
37	O2		%			15.1	14.7	14.6				
38	Moisture		%			10.4	13	12.9				
39	Temperature		°F			340	341	336				
40												
41	Sampling Train	Cr Hex	E3									
42	Stack Gas Flowrate		dscfm			22800	22400	20400				
43	O2		%			15.1	14.9	14.3				
44	Moisture		%			4.6	2.6	8.9				
45	Temperature		°F			346	344	338				

	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	<b>Feedstream 1</b>																												
2																													
3																													
4	<b>313C10</b>	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 Matl		Raw Matl		Raw Matl		LBM		LBM		LBM		Spike		Spike		Spike		Total		Total		Total		Total
10	Feed Rate	lb/min									43.24		46.54		47.02														
11	Density	g/cc																											
12	Heating Value	Btu/lb									10418		10418		10418														
13	Chlorine	%																											
14																													
15	Chlorine	g/hr																											25263
16																													
17	Stack Gas Flowrate	dscfm			20836		23624		21264		20836		23624		21264		20836		23624		21264		20836		23624		21264		21908
18	Oxygen	%			15.3		16.0		16.1		15.3		16.0		16.1		15.3		16.0		16.1		15.3		16.0		16.1		15.8
19																													
20	Thermal Feedrate	MMBtu/hr									27.0		29.1		29.4								27.0		29.1		29.4		28.5
21	Estimated Firing Rate	MMBtu/hr																					37.70		37.50		33.08		36.1
22																													
23	<i>Feedrate MTEC Calculations</i>																												
24	Chlorine	ug/dscm																											1828392
25																													
26	<b>313C11</b>	CoC			R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg
27																													
28	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		F4		F4
29	Feed Class				Raw Material		Raw Material		Raw Material		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Total		Total		Total		Total
30	Feed Class 2				RM		RM		RM		HW		HW		HW		Spike		Spike		Spike		Total		Total		Total		Total
31	Feedstream Description				Raw Matl		Raw Matl		Raw Matl		LBM		LBM		LBM		Spike		Spike		Spike		Total		Total		Total		Total
32	Feed Rate	lb/hr			29220		29060		29140		3359		3156		3457								32579		32216		32597		32464.0
33	Heating Value	Btu/lb			0		0		0		10416		9783		10516														
34	Chlorine	g/hr			1246 nd		660 nd		661		19127		20361		20781.05		28702		28584		28456		49074		49605		49899		
35	Antimony	g/hr	nd		6.63 nd		6.60 nd		6.61		2.62		3.04		3.33								9.3		9.6		9.9		
36	Arsenic	g/hr			170.98		169.36		188.11		2.13		1.93		1.56		558.64		544.44		645.58		731.8		715.7		835.3		
37	Barium	g/hr			221.35		235.14		218.36		84.25		94.64		101.27								306		330		320		
38	Beryllium	g/hr			3.04		2.96		2.78 nd		0.076 nd		0.072 nd		0.078		116.3		117.6		111.8		119.4		120.6		114.6		
39	Cadmium	g/hr			1.46		2.57 nd		2.646		3.68		3.74		3.56		330.5		311.9		339.7		335.6		318.2		345.9		
40	Chromium	g/hr			231.95		224.07		235.46		20.71		127.3		19.96		1390.0		1360.4		1434.4		1643		1712		1690		
41	Cobolt	g/hr			220.21		209.11		226.23		118.66		17.98		120.993														
42	Lead	g/hr			229.3		254.69		281.5		8.24		8.78		13.79		7669.8		7496.0		7626.3		7907		7759		7922		
43	Manganese	g/hr			9118.88		8734.87		8129.42		5.82		6.06		6.15														
44	Mercury	g/hr	nd		0.265 nd		0.264 nd		0.265 nd		0.032		0.029 nd		0.031								0.297		0.293		0.296		
45	Nickel	g/hr			449.32		435.77		459.09		3.29		2.46		1.96								452.6		438.2		461.1		
46	Silver	g/hr	nd		2.653 nd		2.639 nd		2.65		0.32		0.39		0.41								2.97		3.03		3.06		
47	Thallium	g/hr	nd		6.633 nd		6.597 nd		6.615 nd		0.763 nd		0.716 nd		0.785								7.40		7.31		7.40		
48																													
49	Stack Gas Flowrate	dscfm			20529		21188		20396		20529		21188		20396		20529		21188		20396		20529		21188		20396		20704
50	Oxygen	%			14.1		14.4		14.2		14.1		14.4		14.2		14.1		14.4		14.2		14.1		14.4		14.2		14.2
51																													
52	Thermal Feedrate	MMBtu/hr									35.0		30.9		36.3								35.0		30.9		36.3		34.1
53	Estimated Firing Rate	MMBtu/hr																					44.97		44.39		44.03		44.5
54																													
55	<i>Feedrate MTEC Calculations</i>																												
56	Chlorine	ug/dscm			72519 100		38894 100		39323		1113293		1200480		1235390		1670651		1685309		1691649		0 2856463		1 2924682		1 2966362		1 2915836
57	Antimony	ug/dscm 100			386 100		389 100		393		153		179		198		0		0		0 72		539 68		568 67		591 69		566
58	Arsenic	ug/dscm			9952		9985		11183		124		114		93		32517		32100		38378		42593		42199		49654		44,815
59	Barium	ug/dscm			12884		13864		12981		4904		5580		6020		0		0		0		17788		19444		19001		18,744
60	Beryllium	ug/dscm			177		175		165 100		4 100		4 100		5		6767		6931		6646		6949		7110		6816		6,958

	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	Cadmium		ug/dscm		85		152	100	157		214		221		212		19235		18391		20194		19534		18763	1	20563		19,620
62	Chromium		ug/dscm		13501		13211		13998		1205		7506		1187		80908		80211		85270		95615		100928		100454		98,999
63	Cobolt		ug/dscm		12818		12329		13449		6907		1060		7193		0		0		0		19725		13389		20641		17,918
64	Lead		ug/dscm		13347		15016		16735		480		518		820		446434		441961		453369		460260		457496		470924		462,893
65	Manganese		ug/dscm		530781		515007		483277		339		357		366		0		0		0		531119		515364		483642		510,042
66	Mercury		ug/dscm 100		15	100	16	100	16	100	2		2	100	2		0		0		0	100	17.3	90	17.2	100	17.6	97	17
67	Nickel		ug/dscm		26153		25693		27292		192		145		117		0		0		0	0	26345	0	25838	0	27408		26,530
68	Silver		ug/dscm 100		154	100	156	100	157		19		23		24		0		0		0	89	173	87	179	87	182	88	178
69	Thallium		ug/dscm 100		386	100	389	100	393	100	44	100	42	100	47		0		0		0	100	430	100	431	100	440	100	434
70																													
71	SVM		ug/dscm		13432		15168		16892		694		738		1031		465669		460352		473563		479794		476258		491486		482513
72	LVM		ug/dscm		23630		23371		25346		1334		7624		1284		120192		119243		130294		145156		150237		156924		150772
73																													
74																													
75																													
76	<b>313C12</b>	<b>CoC</b>			<b>R1</b>		<b>R2</b>		<b>R3</b>		<b>R1</b>		<b>R2</b>		<b>R3</b>		<b>R1</b>		<b>R2</b>		<b>R3</b>		<b>R1</b>		<b>R2</b>		<b>R3</b>		<b>Cond Avg</b>
77																													
78	Feedstream Number				<b>F1</b>		<b>F1</b>		<b>F1</b>		<b>F2</b>		<b>F2</b>		<b>F2</b>		<b>F3</b>		<b>F3</b>		<b>F3</b>		<b>F4</b>		<b>F4</b>		<b>F4</b>		<b>F4</b>
79	Feed Class				<b>Raw Material</b>		<b>Raw Material</b>		<b>Raw Material</b>		<b>Liq HW</b>		<b>Liq HW</b>		<b>Liq HW</b>		<b>Spike</b>		<b>Spike</b>		<b>Spike</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>
80	Feed Class 2				<b>RM</b>		<b>RM</b>		<b>RM</b>		<b>HW</b>		<b>HW</b>		<b>HW</b>		<b>Spike</b>		<b>Spike</b>		<b>Spike</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>
81	Feedstream Description				<b>Raw Matl</b>		<b>Raw Matl</b>		<b>Raw Matl</b>		<b>LBM</b>		<b>LBM</b>		<b>LBM</b>		<b>Spike</b>		<b>Spike</b>		<b>Spike</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>
82	Feed Rate		lb/hr		29060		29320		29200		3405.6		3612		3292.2								32466		32932		32492		32629.9
83	Heating Value		Btu/lb		0		0		0		10749		10888		10147														
84	Chlorine		g/hr	nd	659.662	nd	665.564	nd	662.840		5848.28		5395.05		5086.64		10714.49		25304.94		25360.99		17222		31366		31110		
85																													
86	Stack Gas Flowrate		dscfm		22017		21437		22344		22017		21437		22344		22017		21437		22344		22017		21437		22344		21933
87	Oxygen		%		14		14		15		14.4		14.4		14.5		14.4		14.4		14.5		14.4		14.4		14.5		14.4
88																													
89	Thermal Feedrate		MMBtu/hr								36.6		39.3		33.4								36.6		39.3		33.4		36.4
90	Estimated Firing Rate		MMBtu/hr																				46.13		44.92		46.11		45.7
91																													
92	<i>Feedrate MTEC Calculations</i>																												
93	Chlorine		ug/dscm 100		37429	100	38786	100	37629		331831		314397		288767		607939		1474646		1439734	4	977198	2	1827828	2	1766130	2	1523719



	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	<b>Feedstream 2</b>																												
2																													
3																													
4	<b>313C1</b>				R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg
5	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		F4		F4
6	Feed Class				Raw Material		Raw Material		Raw Material		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Total		Total		Total		Total
7	Feed Class 2				RM		RM		RM		HW		HW		HW		Spike		Spike		Spike		Total		Total		Total		Total
8	Feedstream Description				Raw material sha		Raw material s		Raw material s		Liq waste		Liq waste		Liq waste		Spike		Spike		Spike		Total		Total		Total		Total
9	Feed rate	lb/hr			25794		26433		24824		2847		3024		2880		23		25		27								
10	Heating value	Btu/lb							14436		14385		13785																
11	Thermal Feedrate	MMBtu/hr							41.1		43.5		39.7									41.1		43.5		39.7		41.4	
12	Chlorine	lb/hr	nd		9.85 nd		10.6 nd		9.93		73.06		73.85		74.95														
13	Antimony	lb/hr	nd		0.010 nd		0.009 nd		0.010		0.033		0.270		0.326														
14	Arsenic	lb/hr			0.35		0.341		0.51		0.006		0.008		0.007		0.929		0.903		0.858								
15	Barium	lb/hr			0.50		0.55		0.49		0.002		0.666		0.608														
16	Beryllium	lb/hr			0.03 nd		0.002 nd		0.002 nd		0.0002 nd		0.0002 nd		0.0002		0.084		0.140		0.100								
17	Cadmium	lb/hr	nd		0.01 nd		0.001 nd		0.01		0.034		0.062		0.062		1.267		1.601		1.649								
18	Chromium	lb/hr			1.05		1.21		1.09		0.158		0.872		0.879		0.513		0.471		0.524								
19	Chromium (Hex)	lb/hr															0.513		0.471		0.524								
20	Lead	lb/hr			0.374		0.685		0.406		0.170		1.934		0.346		20.23		21.95		23.42								
21	Mercury	lb/hr	nd		0.0010		0.0010		0.0015		0.0004		0.0007		0.0007														
22	Silver	lb/hr	nd		0.0172 nd		0.0168 nd		0.0172 nd		0.0020 nd		0.0022 nd		0.0020														
23	Thallium	lb/hr			0.0303 nd		0.0096		0.0305 nd		0.0011 nd		0.0011 nd		0.0011														
24	Stack Gas Flowrate	dscfm			23400		19900		20100		23400		19900		20100		23400		19900		20100								
25	Oxygen	%			15.1		14.7		14.6		15.1		14.7		14.6		15.1		14.7		14.6								
26	<i>Feedrate MTEC Calculations</i>																												
27	Chlorine	ug/dscm	100		133532	100	158244	100	144474		1981000		2205006		2180829		0		0		6.3	2114532	6.7	2363251	6.2	2325303	6	2267695	
28	Antimony	ug/dscm	100		261	100	280	100	280		891		8063		9475		0		0		23	1151	3.4	8343	2.9	9755	4	6416	
29	Arsenic	ug/dscm			9490		10181		14840		167		230		212		25194		26948		24980		34851		37360		40032		37415
30	Barium	ug/dscm			13502		16481		14258		48		19879		17699		0		0				13550		36360		31957		27289
31	Beryllium	ug/dscm			887		50		50	100	6	100	7	100	6		2265		4186		2912	0.2	3158		4243	0.2	2969		3457
32	Cadmium	ug/dscm	100		301	100	29	100	323		926		1843		1790		34340		47788		47991	0.8	35567		49660	0.6	50104		45110
33	Chromium	ug/dscm			28469		36128		31717		4286		26027		25583		13903		14067		15249		46658		76221		72549		65143
34	Chromium (Hex)	ug/dscm			0		0		0		0		0		0		13903		14067		15249		13903		14067		15249		14406
35	Lead	ug/dscm			10140		20452		11814		4620		57747		10065		548511		655380		681573		563272		733580		703452		666768
36	Mercury	ug/dscm	100		13	100	29	100	43		12		20		19		0		0		0	53	25	59	49	69	62	63	45
37	Silver	ug/dscm	100		466	100	502	100	500	100	54	100	66	100	58		0		0		0	100	520	100	567	100	558	100	549
38	Thallium	ug/dscm			822		287		888	100	30	100	33	100	32		0		0		0	3.5	851	10	320	3.5	920	5	697
39	SVM	ug/dscm	2.9		10441	0.1	20467	2.7	11975		5547		59590		11855		582851		703168		729564		598839		783225		753395		711820
40	LVM	ug/dscm			38845		46334		46583		4456		26260		25798		41363		45201		43141		84664		117795		115522		105994

	B	C	D	E	F	G	H
1	<b>Process Information 1</b>						
2		Units		R1	R2	R3	Cond Avg
3							
4	<b>313C10</b>	Trial burn					
5							
6	Min mid kiln temperature	°F		1046	1019	1016	1027
7	Max baghouse inlet temperature	°F		445	440	441	442
8	Kiln exit temperature	°F		510	511	514	512
9							
10	<b>313C11</b>	CoC					
11							
12	Max comb zone temperature	°F		2468	2524	2500	2497
13	Max baghouse inlet temperature	°F		442.8	441.4	441.4	442
14	Min baghouse pressure drop	in. w.c.		3.6	3.67	3.69	3.7
15							
16	<b>313C12</b>	CoC					
17							
18	Max comb zone temperature	°F		2413		2427	2420
19	Max baghouse inlet temperature	°F		437.1		440.7	438.9
20	Min baghouse pressure drop	in. w.c.		4.63		3.98	4.3

	C	D	E	F	G
1	<b>Process Information 2</b>				
2			1	2	3
3	<b>313C1</b>				
4					
5	Combustion Temperature	F	2438	2403	2325
6	FF Temperature	F	419	419	420
7	FF Pressure Drop	in H2O	4.5	3	4.5

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	PCDD/PCDF																
2	N																
3	Facility Name and ID:	Solite, Arvonnia															
4	Condition ID:	313C10 Kiln No. 7															
5	Condition/Test Date:	Trial burn, 12/99															
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	0.0958	0.0958	0.096	0.0958	0.0545	0.0545	0.055	0.0545	0.0471	0.0471	0.047	0.0471			
12	Other TCDD	0	6.1042	0.0000	6.104	0.0000	2.0455	0.0000	2.046	0.0000	1.7529	0.0000	1.753	0.0000			
13	1,2,3,7,8-PCDD	0.5	0.5092	0.2546	0.509	0.2546	0.215	0.1075	0.215	0.1075	0.1953	0.0977	0.195	0.0977			
14	Other PCDD	0	12.4908	0.0000	12.491	0.0000	4.285	0.0000	4.285	0.0000	4.404	0.0000	4.404	0.0000			
15	1,2,3,4,7,8-HxCDD	0.1	0.4107	0.0411	0.411	0.0411	0.1609	0.0161	0.161	0.0161	0.2011	0.0201	0.201	0.0201			
16	1,2,3,6,7,8-HxCDD	0.1	1.6936	0.1694	1.694	0.1694	0.6432	0.0643	0.643	0.0643	0.716	0.0716	0.716	0.0716			
17	1,2,3,7,8,9-HxCDD	0.1	1.1817	0.1182	1.182	0.1182	0.4819	0.0482	0.482	0.0482	0.5872	0.0587	0.587	0.0587			
18	Other HxCDD	0	14.1069	0.0000	14.107	0.0000	5.2151	0.0000	5.215	0.0000	6.337	0.0000	6.337	0.0000			
19	1,2,3,4,6,7,8-HpCDD	0.01	5.8176	0.0582	5.818	0.0582	2.6643	0.0266	2.664	0.0266	3.4886	0.0349	3.489	0.0349			
20	Other HpCDD	0	5.8035	0.0000	5.804	0.0000	2.382	0.0000	2.382	0.0000	3.2408	0.0000	3.241	0.0000			
21	OCDD	0.001	4.196	0.0042	4.196	0.0042	2.104	0.0021	2.104	0.0021	4.2862	0.0043	4.286	0.0043			
22	2,3,7,8-TCDF	0.1	2.2814	0.2281	2.281	0.2281	1.1927	0.1193	1.193	0.1193	1.2918	0.1292	1.292	0.1292			
23	Other TCDF	0	56.2688	0.0000	56.269	0.0000	28.266	0.0000	28.266	0.0000	34.0082	0.0000	34.008	0.0000			
24	1,2,3,7,8-PCDF	0.05	2.5576	0.1279	2.558	0.1279	1.3932	0.0697	1.393	0.0697	1.4835	0.0742	1.484	0.0742			
25	2,3,4,7,8-PCDF	0.5	4.6931	2.3466	4.693	2.3466	2.514	1.2570	2.514	1.2570	3.127	1.5635	3.127	1.5635			
26	Other PCDF	0	33.9493	0.0000	33.949	0.0000	17.393	0.0000	17.393	0.0000	22.268	0.0000	22.268	0.0000			
27	1,2,3,4,7,8-HxCDF	0.1	4.6515	0.4652	4.652	0.4652	2.3184	0.2318	2.318	0.2318	2.9097	0.2910	2.910	0.2910			
28	1,2,3,6,7,8-HxCDF	0.1	2.5113	0.2511	2.511	0.2511	1.2663	0.1266	1.266	0.1266	1.5612	0.1561	1.561	0.1561			
29	2,3,4,6,7,8-HxCDF	0.1	2.6824	0.2682	2.682	0.2682	1.3767	0.1377	1.377	0.1377	1.6844	0.1684	1.684	0.1684			
30	1,2,3,7,8,9-HxCDF	0.1	0.36	0.0360	0.360	0.0360	0.1849	0.0185	0.185	0.0185	0.2457	0.0246	0.246	0.0246			
31	Other HxCDF	0	12.4948	0.0000	12.495	0.0000	6.0162	0.0000	6.016	0.0000	7.5804	0.0000	7.580	0.0000			
32	1,2,3,4,6,7,8-HpCDF	0.01	6.5186	0.0652	6.519	0.0652	2.2181	0.0222	2.218	0.0222	2.6408	0.0264	2.641	0.0264			
33	1,2,3,4,7,8,9-HpCDF	0.01	1.1308	0.0113	1.131	0.0113	0.5752	0.0058	0.575	0.0058	0.7454	0.0075	0.745	0.0075			
34	Other HpCDF	0	2.7247	0.0000	2.725	0.0000	1.1794	0.0000	1.179	0.0000	1.5744	0.0000	1.574	0.0000			
35	OCDF	0.001	2.3921	0.0024	2.392	0.0024	0.9723	0.0010	0.972	0.0010	1.4297	0.0014	1.430	0.0014			
36																	
37	Gas sample volume (dscf)			116.11	116.11	116.11		113.35	113.35	113.35		109.50	109.50	109.50			
38	O2 (%)			15.30	15.30	15.30		16.0	16.0	16.0		16.1	16.1	16.1			
39																	
40	PCDD/PCDF (ng in sample)			4.543	187.626	4.543		2.309	87.117	2.309		2.777	107.806	2.777			
41	PCDD/PCDF (ng/dscm @ 7% O2)	0.0		3.396	140.244	3.396	0.0	2.015	76.044	2.015	0.0	2.560	99.399	2.560			
42																	
43	TEQ Cond Avg		2.657														
44	Total Cond Avg		105.23														