



Suwannee American Cement
P.O. Box 410
Branford, FL 32008-0410
Phone (386) 935-5000 Fax (386) 935-5080

RECEIVED

JUN 04 2013

DIVISION OF AIR
RESOURCE MANAGEMENT

May 30, 2013

Syed Arif, P.E.
FDEP - Air Permitting
2600 Blair Stone Road, MS 5000
Tallahassee, Florida 32399-2400

Re: Permit 1210465-023-AC
Calciner Burner Pneumatic Alternative Fuel Feeding System
Engineered Fuel Assessment Summary Report

Dear Mr. Arif,

Enclosed is the "Calciner Burner Pneumatic Alternative Fuel Feeding System Engineered Fuel Assessment Summary Report". This report is being provided in compliance with Specific Condition 26, "Reports for Shakedown and AF Assessments," for the 60 day Engineered Fuel Assessment period which ended on March 31, 2013.

If you have any questions or comments please contact me.

Sincerely,

Krishna C. Cole, P.E.
Environmental Manager

Cc. Tom Messer, Plant Manager
Dr. Max Lee, Koogler & Associates

Calciner Burner Alternate Fuel Feeder System Engineered Fuel Assessment Summary Report

Suwannee American Cement Company
Branford, Suwannee County, Florida
Permit 1210465-023-AC

Prepared By: Krishna C. Cole, P.E.
Dated: May 30, 2013

Introduction

This report is provided in accordance with Specific Condition 26 of Suwannee American Cement's Title V Air Construction Permit Number 1210465-023-AC.

Suwannee American Cement notified the Department on November 29, 2012 that commencement of an engineered fuel assessment on the calciner burner pneumatic alternative fuel feeding system would begin on December 4th, 2012. Due to process starts and stops the 60 day "Assessment" period lasted until March 31, 2013. This report is being provided within 60 days of completion of the end of this assessment period in accordance with the 45 day permit requirement and a 15 day extension granted by the Department on May 5th, 2013.

Specific Condition 26 (a):

"For a 24-hour period representing good operating practices and steady kiln operation, report: the representative analysis of the AF fired; hourly AF and fossil fuel firing rates; hourly clinker production; hourly CO (process monitor), NOx, SO2 and THC emissions data from the CEMS; the 6-minute block averages from the COMS; and the inlet temperature to main kiln baghouse (3-hour average). Identify the good operating practices resulting in steady kiln operation."

All Specific Condition 26 a. requested data is provided in Appendix A through F. Identification of good operating practices resulting in steady kiln operation is provided in this reports conclusions section.

Specific Condition 26 (a):

"Emissions from the initial AF assessment of a new fuel may be excluded from the report requiring a comparison of actual-to-baseline emissions (Rules 62 212.300(1)(e) and 62-210.370, F.A.C.) since operators are still establishing good operating practices and the AF will not have been available for the full calendar year. To exclude emissions data collected during an authorized shakedown and/or AF assessment period from this report, the permittee shall submit the following information for: total clinker production; fossil fuel fired; AF fired; total CO, NOx, SO2 and THC emissions (tons)."

This information is provided in Table 1 below:

Alt Fuel Assessment Period		Calciner Feeder		Calciner Burner Pneumatic Alternative Fuel Feeder System Engineered Fuel Assessment Period Mass Emissions			
Start		12/4/2012					
End		3/31/2013					
		Qty.	Units	Month	THC [tons]	NOX [tons]	SO2 [tons]
Alt Fuel Feeder "Trial" Operating Days		60	days	^a Dec-12	1.46	30.6	0.95
Kiln Production Days in "Period"		62	days	Jan-13	0.00	0.0	0.00
Clinker Production (Period)		123,941	tons	Feb-13	1.82	29.9	1.15
Clinker Production (Trial)		123,711	tons	Mar-13	7.59	57.5	0.49
Coal Consumed (Period)		2,062	tons	Total	10.87	118.0	2.59
Coal Consumed (Trial)		2,026	tons				
Natural Gas (Period)		237,488	MMBtu (LHV)	^a Partial Month			
Natural Gas (Trial)		234,958	MMBtu (LHV)				
Alt Fuel Consumed (Operating)		4038	tons				
*Alt Fuel Consumed (Trial)		6092	tons				

*During this period both the main burner and calciner feeder operated.

Table 1: Specific Condition 26 (b) information for exclusion of emissions data.

Conclusions

During this alternate fuel assessment, Suwannee American Cement (SAC) demonstrated that the engineered fuel material produced is suitable for use in the calciner burner system.

Appendix A. Hourly Process Data

Suwannee American Cement - Process Data									
	U2F01	U3F01	S1F02	S1F03	K1F19	K1F18	K1A02	K1A04	K1A06
Start Time	Alt Fuel - Calciner tons/hr	Alt Fuel - Main tons/hour	Coal - Main tons/hr	Coal- Calciner tons/hr	Gas - Main ft3/min	Gas - Calciner ft3/min	PH exit CO ppm	Post Combust CO ppm	Kiln inlet CO ppm
3/15/13 0:00	3.9	2.5	0.8	0.2	104305	91193	26.7	578.5	-29.6
3/15/13 1:00	4.2	2.5	0.8	0.2	106658	86397	19.0	457.7	-29.6
3/15/13 2:00	4.4	2.5	0.8	0.2	118844	80547	19.8	359.3	-29.6
3/15/13 3:00	4.3	2.4	0.8	0.2	113952	82173	20.7	316.2	-29.6
3/15/13 4:00	4.3	2.5	0.8	0.2	115622	79897	26.8	446.8	-29.6
3/15/13 5:00	4.2	2.5	0.8	0.2	118177	82403	28.9	660.0	-29.6
3/15/13 6:00	4.4	2.3	0.8	0.2	121808	78071	20.0	706.8	-29.6
3/15/13 7:00	4.4	2.5	0.8	0.2	118552	74253	18.4	401.6	-27.1
3/15/13 8:00	4.5	2.5	0.8	0.2	120294	77125	18.4	401.2	-13.3
3/15/13 9:00	4.5	2.5	0.8	0.2	124275	79496	18.4	447.0	1.8
3/15/13 10:00	4.5	2.5	0.8	0.2	124035	78425	18.4	414.6	17.0
3/15/13 11:00	4.5	2.4	0.8	0.2	120833	76804	18.4	441.0	32.1
3/15/13 12:00	4.5	2.5	0.8	0.2	115235	79459	18.4	396.6	47.2
3/15/13 13:00	4.3	1.8	0.8	0.2	117642	82980	18.4	624.7	62.4
3/15/13 14:00	4.4	2.3	0.8	0.2	109601	85585	21.8	687.6	77.5
3/15/13 15:00	4.5	2.1	0.8	0.2	108390	92836	80.9	1663.8	248.9
3/15/13 16:00	4.5	2.5	0.8	0.2	97709	94620	18.4	1002.9	72.1
3/15/13 17:00	4.4	1.9	0.8	0.2	108585	77578	18.4	370.3	58.8
3/15/13 18:00	4.4	2.5	0.8	0.2	122618	64788	18.4	769.2	45.5
3/15/13 19:00	4.5	1.7	0.8	0.3	134945	65885	18.4	651.9	32.3
3/15/13 20:00	4.4	2.5	0.8	0.1	121460	73502	20.4	687.5	19.0
3/15/13 21:00	4.5	2.5	0.8	0.1	122702	78640	19.9	1246.8	5.8
3/15/13 22:00	4.5	2.5	0.8	0.1	123109	80296	17.1	1001.9	-7.5
3/15/13 23:00	4.5	2.5	0.8	0.1	122806	81237	17.2	951.7	-11.2
Average	4.39	2.37	0.81	0.20	117,173	80,175	23	654	19
Maximum	4.52	2.51	0.81	0.27	134,945	94,620	81	1664	249
Minimum	3.93	1.69	0.80	0.11	97,709	64,788	17	316	-30

Appendix B. Hourly Continuous Emissions Monitoring Data

Suwannee American Cement - CEMS Data												
Start Time	Clink Prod tons	Feed tons/hr	NOx Mass Rate lb/hr	NOx Prod Rate lb/ton	NOx Measured ppm wet	SO2 Mass Rate lb/hr	SO2 Prod Rate lb/ton	SO2 Measured ppm wet	THC Mass Rate lb/hr	THC Prod Rate lb/ton	THC Measured ppm wet	THC Corrected ppmv
3/15/13 0:00	105.5	175.0	223.2	2.12	161.7	0.04	0.000	0.02	26.54	0.251	20.05	29.57
3/15/13 1:00	105.7	175.2	193.4	1.83	139.6	0.01	0.000	0.01	23.58	0.223	17.76	26.46
3/15/13 2:00	105.6	175.1	229.5	2.17	164.3	0.16	0.002	0.08	24.90	0.236	18.60	27.45
3/15/13 3:00	105.6	175.1	221.6	2.10	160.6	0.18	0.002	0.10	28.24	0.267	21.34	31.39
3/15/13 4:00	105.6	175.1	198.6	1.88	146.9	0.13	0.001	0.07	31.86	0.302	24.60	35.03
3/15/13 5:00	105.5	175.0	208.8	1.98	152.9	0.13	0.001	0.07	31.14	0.295	23.80	33.88
3/15/13 6:00	105.6	175.1	222.8	2.11	163.4	0.09	0.001	0.05	30.04	0.285	23.00	32.82
3/15/13 7:00	105.5	175.0	224.2	2.12	164.3	0.00	0.000	0.00	18.71	0.177	14.31	20.63
3/15/13 8:00	105.6	175.1	202.5	1.98	153.0	0.00	0.000	0.00	20.01	0.196	15.68	24.02
3/15/13 9:00	105.6	175.1	233.9	2.21	170.3	0.00	0.000	0.00	16.93	0.160	12.86	18.79
3/15/13 10:00	105.6	175.1	239.4	2.27	175.3	0.00	0.000	0.00	14.36	0.136	10.97	16.12
3/15/13 11:00	105.6	175.1	307.3	2.91	225.7	0.00	0.000	0.00	17.11	0.162	13.11	19.41
3/15/13 12:00	105.5	175.0	290.3	2.75	214.6	0.00	0.000	0.00	18.61	0.176	14.35	21.31
3/15/13 13:00	105.6	175.1	253.6	2.40	188.1	0.00	0.000	0.00	19.15	0.181	14.82	22.01
3/15/13 14:00	105.6	175.2	196.3	1.86	146.3	0.00	0.000	0.00	31.67	0.300	24.80	35.38
3/15/13 15:00	105.6	175.1	197.7	1.87	148.6	0.05	0.000	0.03	48.53	0.520	43.38	63.33
3/15/13 16:00	105.5	175.0	215.0	2.04	168.9	0.16	0.002	0.09	26.61	0.280	24.49	32.77
3/15/13 17:00	105.5	174.9	146.6	1.39	121.0	0.50	0.005	0.30	25.19	0.239	21.66	28.21
3/15/13 18:00	100.1	165.9	146.1	1.46	109.7	0.00	0.000	0.00	19.97	0.200	15.65	22.16
3/15/13 19:00	104.6	173.4	293.5	2.81	221.1	0.09	0.001	0.05	28.78	0.275	22.62	30.88
3/15/13 20:00	108.4	179.8	235.2	2.17	177.0	0.54	0.005	0.29	39.18	0.361	30.76	41.69
3/15/13 21:00	108.6	180.1	221.2	2.04	165.8	1.98	0.018	1.06	55.22	0.509	43.17	57.96
3/15/13 22:00	108.6	180.1	223.9	2.06	168.2	2.22	0.020	1.20	49.52	0.456	38.81	52.52
3/15/13 23:00	108.6	180.1	223.5	2.06	168.9	0.99	0.009	0.54	42.96	0.395	33.87	46.44
Average	105.8	175.5	222.8	2.11	165.7	0.30	0.003	0.16	28.70	0.274	22.68	32.09
Maximum	108.6	180.1	307.3	2.91	225.7	2.22	0.020	1.20	55.22	0.520	43.38	63.33
Minimum	100.1	165.9	146.1	1.39	109.7	0.00	0.000	0.00	14.36	0.136	10.97	16.12

NOTE: Suwannee American Cement began testing use of Bottom Ash on March 13th, 2013 per Permit No. 1210465-026-AC. This testing resulted in higher THC emissions, but within the limits of the AC permit.

Appendix C. Kiln Stack 6-Minute Average Continuous Opacity Monitoring Data

6-min report for 3/15/2013 12:00:00 AM to 3/15/2013 11:59:59 PM

Device:OMD41_K Component:Opacity K (%)

H	M	0	6	12	18	24					
							March, 2013				
0	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
1	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
2	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
3	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
4	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
5	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
6	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
7	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.01	
	30	0.00	0.01	0.00	0.00	0.00	Min.	0.00			
8	0	0.00	0.00	0.00 C	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
9	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
10	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
11	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
12	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
13	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
14	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
15	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
16	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.01	
	30	0.01	0.00	0.00	0.00	0.00	Min.	0.00			
17	0	0.00	0.00	0.01	0.00	0.00	Avg.	0.02	Max.	0.13	
	30	0.00	0.01	0.01	0.13	0.01	Min.	0.00			
18	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
19	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
20	0	0.00	0.00	0.00	0.00	0.01	Avg.	0.00	Max.	0.01	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
21	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.00	
	30	0.00	0.00	0.00	0.00	0.00	Min.	0.00			
22	0	0.00	0.00	0.00	0.00	0.00	Avg.	0.00	Max.	0.01	
	30	0.00	0.00	0.01	0.00	0.00	Min.	0.00			
23	0	0.01	0.04	0.00	0.00	0.00	Avg.	0.02	Max.	0.04	
	30	0.02	0.03	0.04	0.00	0.01	Min.	0.00			

Summary of data

Fixed Block 6-min data availability for Opacity K

Total hours:24.00
 Operating hours:24.00
 Valid hours:23.90
 Percent operating:100.00%
 Availability:99.58%

6-min Opacity K (%)
 Minimum:0.00
 Maximum:0.13
 Average:0.00
 1-hour Opacity K (%)
 Minimum:0.00
 Maximum:0.02
 Average:0.00

I - Invalid U - User Data D - Kiln Process Down K - Cooler Process Down C - Calibration
 M - Maintenance P - PreMeasure E - Error O - Out-of-Control Q - Kiln Feed Off
 R - Out-of-Range X - Excess Emission W - Caution L - Raw Mill Run A - Raw Mill Down
 S - Kiln Startup N - Not Calibrated F - Frozen FIFO G - SNCR Malfunction

Appendix D. Cooler Stack 6-Minute Average Continuous Opacity Monitoring Data

6-min report for 3/15/2013 12:00:00 AM to 3/15/2013 11:59:59 PM

Device: OMD41_C Component: Opacity C (%)

H	M	0	6	12	18	24				
March, 2013										
0	0	1.31	1.32	1.34	1.28	1.29	Avg.	1.34	Max.	1.40
	30	1.35	1.37	1.39	1.35	1.40	Min.	1.28		
1	0	1.38	1.52	1.57	1.46	1.46	Avg.	1.47	Max.	1.57
	30	1.46	1.48	1.43	1.48	1.48	Min.	1.38		
2	0	1.44	1.41	1.42	1.43	1.44	Avg.	1.43	Max.	1.45
	30	1.45	1.43	1.42	1.42	1.45	Min.	1.41		
3	0	1.41	1.40	1.42	1.43	1.43	Avg.	1.42	Max.	1.44
	30	1.43	1.40	1.44	1.43	1.42	Min.	1.40		
4	0	1.43	1.42	1.42	1.45	1.46	Avg.	1.44	Max.	1.47
	30	1.47	1.46	1.45	1.42	1.45	Min.	1.42		
5	0	1.45	1.45	1.42	1.39	1.39	Avg.	1.42	Max.	1.45
	30	1.43	1.45	1.40	1.44	1.41	Min.	1.39		
6	0	1.44	1.39	1.39	1.43	1.46	Avg.	1.43	Max.	1.46
	30	1.44	1.44	1.43	1.43	1.40	Min.	1.40		
7	0	1.42	1.40	1.42	1.41	1.44	Avg.	1.43	Max.	1.44
	30	1.44	1.43	1.44	1.43	1.44	Min.	1.40		
8	0	1.38	1.42	1.41 C	1.21	1.22	Avg.	1.24	Max.	1.42
	30	1.23	1.18	1.17	1.16	1.18	Min.	1.16		
9	0	1.18	1.17	1.18	1.15	1.19	Avg.	1.18	Max.	1.22
	30	1.22	1.14	1.16	1.19	1.17	Min.	1.14		
10	0	1.17	1.16	1.15	1.15	1.11	Avg.	1.14	Max.	1.17
	30	1.13	1.12	1.14	1.15	1.15	Min.	1.11		
11	0	1.18	1.20	1.17	1.18	1.15	Avg.	1.18	Max.	1.23
	30	1.13	1.16	1.23	1.21	1.22	Min.	1.13		
12	0	1.24	1.27	1.25	1.20	1.21	Avg.	1.29	Max.	1.40
	30	1.27	1.29	1.37	1.39	1.40	Min.	1.20		
13	0	1.35	1.33	1.42	1.40	1.37	Avg.	1.39	Max.	1.42
	30	1.41	1.40	1.42	1.39	1.39	Min.	1.33		
14	0	1.40	1.37	1.41	1.43	1.48	Avg.	1.41	Max.	1.48
	30	1.43	1.40	1.40	1.40	1.40	Min.	1.37		
15	0	1.43	1.40	1.39	1.39	1.42	Avg.	1.42	Max.	1.46
	30	1.39	1.45	1.45	1.45	1.46	Min.	1.39		
16	0	1.48	1.44	1.45	1.40	1.44	Avg.	1.45	Max.	1.50
	30	1.45	1.42	1.44	1.44	1.50	Min.	1.40		
17	0	1.51	1.49	1.50	1.49	1.49	Avg.	1.48	Max.	1.51
	30	1.48	1.48	1.44	1.46	1.48	Min.	1.44		
18	0	1.46	1.47	1.45	1.38	1.36	Avg.	1.39	Max.	1.47
	30	1.38	1.34	1.34	1.35	1.33	Min.	1.33		
19	0	1.32	1.29	1.32	1.30	1.30	Avg.	1.29	Max.	1.32
	30	1.30	1.29	1.29	1.25	1.20	Min.	1.20		
20	0	1.21	1.22	1.26	1.28	1.25	Avg.	1.26	Max.	1.30
	30	1.30	1.30	1.28	1.28	1.27	Min.	1.21		
21	0	1.26	1.27	1.27	1.27	1.30	Avg.	1.28	Max.	1.30
	30	1.26	1.30	1.28	1.29	1.30	Min.	1.26		
22	0	1.31	1.31	1.32	1.26	1.27	Avg.	1.29	Max.	1.32
	30	1.29	1.29	1.27	1.26	1.31 C	Min.	1.26		
23	0	1.49	1.53	1.50	1.51	1.49	Avg.	1.50	Max.	1.53
	30	1.51	1.49	1.49	1.48	1.49	Min.	1.48		

Summary of data

Fixed Block 6-min data availability for Opacity C

Total hours: 24.00

Operating hours: 24.00

Valid hours: 23.80

Percent operating: 100.00%

Availability: 99.17%

6-min Opacity C (%)

Minimum: 1.11

Maximum: 1.57

Average: 1.36

1-hour Opacity C (%)

Minimum: 1.14

Maximum: 1.50

Average: 1.36

I - Invalid U - User Data D - Kiln Process Down K - Cooler Process Down C - Calibration
M - Maintenance P - PreMeasure E - Error O - Out-of-Control Q - Kiln Feed Off
R - Out-of-Range X - Excess Emission W - Caution L - Raw Mill Run A - Raw Mill Down
S - Kiln Startup N - Not Calibrated F - Frozen FIFO G - SNCR Malfunction

Appendix E. Main Bag House Inlet Temperature 3-Hour Rolling Average Data

3-hour report for 3/15/2013 12:00:00 AM to 3/15/2013 11:59:59 PM

Device:VD1 Component:Temp RMR (°F)

H	M	0	1	2	3	4	5	6	7	8	9
March, 2013											
0	0	268.4 L	268.4 L	268.3 L	268.3 L	268.2 L	268.2 L	268.2 L	268.2 L	268.1 L	268.1 L
	10	268.1 L	268.1 L	268.1 L	268.1 L	268.1 L	268.0 L	268.0 L	268.0 L	268.0 L	268.0 L
	20	268.0 L	268.0 L	268.0 L	267.9 L	267.9 L	267.9 L	267.9 L	267.9 L	267.9 L	267.9 L
	30	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.7 L	267.7 L
	40	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L
	50	267.7 L	267.7 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L
1	0	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L
	10	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L	267.7 L
	20	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.6 L	267.6 L
	30	267.6 L	267.5 L	267.5 L	267.5 L	267.5 L	267.5 L	267.5 L	267.5 L	267.4 L	267.4 L
	40	267.4 L	267.4 L	267.4 L	267.4 L	267.4 L	267.3 L	267.3 L	267.3 L	267.4 L	267.3 L
	50	267.3 L	267.4 L	267.3 L	267.4 L	267.4 L	267.3 L	267.4 L	267.4 L	267.4 L	267.4 L
2	0	267.4 L	267.4 L	267.4 L	267.5 L	267.5 L	267.5 L	267.5 L	267.5 L	267.6 L	267.6 L
	10	267.7 L	267.7 L	267.7 L	267.8 L	267.8 L	267.8 L	267.9 L	267.9 L	268.0 L	268.0 L
	20	268.1 L	268.1 L	268.1 L	268.2 L	268.2 L	268.2 L	268.3 L	268.3 L	268.3 L	268.4 L
	30	268.4 L	268.5 L	268.5 L	268.5 L	268.6 L	268.6 L	268.7 L	268.7 L	268.8 L	268.8 L
	40	268.8 L	268.9 L	268.9 L	268.9 L	268.9 L	268.9 L	269.0 L	269.0 L	269.0 L	269.0 L
	50	269.0 L	269.0 L	269.0 L	269.0 L	269.1 L	269.1 L	269.1 L	269.1 L	269.1 L	269.1 L
3	0	269.1 L	269.1 L	269.2 L	269.2 L	269.2 L	269.2 L	269.2 L	269.2 L	269.2 L	269.2 L
	10	269.2 L	269.2 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L
	20	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L
	30	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L
	40	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.3 L	269.4 L	269.4 L	269.4 L
	50	269.4 L	269.4 L	269.4 L	269.3 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L
4	0	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L
	10	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L	269.4 L
	20	269.4 L	269.4 L	269.5 L	269.5 L	269.5 L	269.5 L	269.5 L	269.5 L	269.5 L	269.6 L
	30	269.6 L	269.6 L	269.6 L	269.6 L	269.6 L	269.6 L	269.6 L	269.6 L	269.6 L	269.7 L
	40	269.7 L	269.7 L	269.7 L	269.7 L	269.8 L	269.8 L	269.8 L	269.8 L	269.8 L	269.8 L
	50	269.8 L	269.8 L	269.9 L	269.9 L	269.9 L	269.9 L	269.9 L	269.9 L	269.8 L	269.8 L
5	0	269.8 L	269.8 L	269.7 L	269.7 L	269.6 L	269.6 L	269.5 L	269.4 L	269.4 L	269.3 L
	10	269.2 L	269.2 L	269.1 L	269.0 L	269.0 L	268.9 L	268.8 L	268.8 L	268.7 L	268.6 L
	20	268.6 L	268.5 L	268.5 L	268.4 L	268.4 L	268.3 L	268.3 L	268.2 L	268.2 L	268.2 L
	30	268.1 L	268.1 L	268.1 L	268.1 L	268.0 L	268.0 L	268.0 L	268.0 L	267.9 L	267.9 L
	40	267.9 L	267.9 L	267.9 L	267.9 L	267.9 L	267.8 L	267.8 L	267.8 L	267.8 L	267.8 L
	50	267.8 L	267.8 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L	267.7 L
6	0	267.7 L	267.7 L	267.6 L	267.6 L	267.6 L	267.6 L	267.6 L	267.6 L	267.6 L	267.5 L
	10	267.5 L	267.5 L	267.5 L	267.5 L	267.5 L	267.4 L	267.4 L	267.4 L	267.4 L	267.4 L
	20	267.3 L	267.3 L	267.3 L	267.3 L	267.2 L	267.2 L	267.2 L	267.2 L	267.2 L	267.2 L
	30	267.1 L	267.1 L	267.1 L	267.1 L	267.1 L	267.1 L	267.1 L	267.1 L	267.1 L	267.0 L
	40	267.0 L	267.0 L	267.0 L	267.0 L	266.9 L	266.9 L	266.9 L	266.9 L	266.8 L	266.8 L
	50	266.7 L	266.7 L	266.6 L	266.6 L	266.5 L	266.5 L	266.4 L	266.4 L	266.3 L	266.3 L

3-hour report for 3/15/2013 12:00:00 AM to 3/15/2013 11:59:59 PM

Device:VD1 Component:Temp RMR (°F)

H	M	0	1	2	3	4	5	6	7	8	9
March, 2013											
7	0	266.2 L	266.2 L	266.1 L	266.1 L	266.0 L	266.0 L	266.0 L	265.9 L	265.9 L	265.9 L
	10	265.8 L	265.8 L	265.8 L	265.8 L	265.7 L	265.7 L	265.6 L	265.6 L	265.5 L	265.5 L
	20	265.4 L	265.4 L	265.3 L	265.3 L	265.3 L	265.2 L	265.2 L	265.1 L	265.1 L	265.1 L
	30	265.1 L	265.1 L	265.1 L	265.1 L	265.0 L	265.0 L	265.0 L	265.0 L	265.0 L	265.0 L
	40	264.9 L	264.9 L	264.9 L	264.8 L	264.8 L	264.7 L	264.7 L	264.7 L	264.6 L	264.6 L
	50	264.6 L	264.5 L	264.5 L	264.5 L	264.5 L	264.5 L	264.4 L	264.4 L	264.4 L	264.4 L
8	0	264.4 L	264.4 L	264.4 L	264.4 L	264.4 L	264.5 L	264.5 L	264.5 L	264.5 L	264.5 L
	10	264.5 L	264.5 L	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L
	20	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L	264.6 L
	30	264.6 L	264.5 L	264.5 L	264.5 L	264.4 L	264.4 L	264.4 L	264.4 L	264.3 L	264.3 L
	40	264.2 L	264.2 L	264.2 L	264.1 L	264.1 L	264.1 L	264.0 L	264.0 L	264.0 L	263.9 L
	50	263.9 L	263.9 L	263.8 L	263.8 L	263.8 L	263.7 L	263.7 L	263.7 L	263.6 L	263.6 L
9	0	263.6 L	263.5 L	263.5 L	263.5 L	263.4 L	263.4 L	263.4 L	263.4 L	263.4 L	263.4 L
	10	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L
	20	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L	263.3 L
	30	263.3 L	263.3 L	263.3 L	263.4 L	263.4 L	263.4 L	263.4 L	263.4 L	263.4 L	263.4 L
	40	263.4 L	263.4 L	263.5 L	263.5 L	263.5 L	263.5 L	263.6 L	263.6 L	263.6 L	263.6 L
	50	263.6 L	263.7 L	263.7 L	263.7 L	263.8 L	263.8 L	263.8 L	263.9 L	263.9 L	263.9 L
10	0	264.0 L	264.0 L	264.1 L	264.1 L	264.1 L	264.2 L	264.2 L	264.3 L	264.3 L	264.3 L
	10	264.4 L	264.4 L	264.4 L	264.5 L	264.5 L	264.6 L	264.6 L	264.7 L	264.7 L	264.8 L
	20	264.8 L	264.9 L	264.9 L	265.0 L	265.1 L	265.1 L	265.2 L	265.2 L	265.2 L	265.3 L
	30	265.3 L	265.4 L	265.4 L	265.5 L	265.5 L	265.5 L	265.6 L	265.6 L	265.7 L	265.7 L
	40	265.7 L	265.8 L	265.8 L	265.9 L	265.9 L	266.0 L	266.1 L	266.1 L	266.2 L	266.2 L
	50	266.3 L	266.4 L	266.4 L	266.5 L	266.5 L	266.6 L	266.6 L	266.7 L	266.7 L	266.8 L
11	0	266.9 L	266.9 L	267.0 L	267.0 L	267.1 L	267.1 L	267.2 L	267.2 L	267.3 L	267.3 L
	10	267.4 L	267.4 L	267.5 L	267.5 L	267.6 L	267.6 L	267.7 L	267.8 L	267.8 L	267.9 L
	20	267.9 L	268.0 L	268.1 L	268.2 L	268.2 L	268.3 L	268.4 L	268.5 L	268.6 L	268.6 L
	30	268.7 L	268.8 L	268.8 L	268.9 L	269.0 L	269.1 L	269.2 L	269.2 L	269.3 L	269.4 L
	40	269.5 L	269.5 L	269.6 L	269.6 L	269.7 L	269.8 L	269.9 L	270.0 L	270.0 L	270.1 L
	50	270.2 L	270.3 L	270.3 L	270.4 L	270.5 L	270.6 L	270.7 L	270.8 L	270.9 L	271.0 L
12	0	271.1 L	271.2 L	271.3 L	271.4 L	271.5 L	271.6 L	271.7 L	271.8 L	272.0 L	272.1 L
	10	272.2 L	272.3 L	272.4 L	272.5 L	272.6 L	272.7 L	272.8 L	272.9 L	273.0 L	273.1 L
	20	273.2 L	273.4 L	273.5 L	273.6 L	273.7 L	273.7 L	273.8 L	273.9 L	274.0 L	274.1 L
	30	274.2 L	274.3 L	274.4 L	274.5 L	274.5 L	274.6 L	274.7 L	274.7 L	274.8 L	274.9 L
	40	275.0 L	275.1 L	275.1 L	275.2 L	275.3 L	275.3 L	275.4 L	275.5 L	275.6 L	275.7 L
	50	275.8 L	275.9 L	275.9 L	276.1 L	276.1 L	276.2 L	276.3 L	276.4 L	276.5 L	276.5 L

3-hour report for 3/15/2013 12:00:00 AM to 3/15/2013 11:59:59 PM

Device:VD1 Component:Temp RMR (°F)

H	M	0	1	2	3	4	5	6	7	8	9
March, 2013											
13	0	276.6 L	276.7 L	276.8 L	276.8 L	276.9 L	277.0 L	277.0 L	277.1 L	277.2 L	277.2 L
	10	277.3 L	277.4 L	277.4 L	277.5 L	277.6 L	277.7 L	277.7 L	277.8 L	277.9 L	278.0 L
	20	278.0 L	278.1 L	278.1 L	278.2 L	278.3 L	278.4 L	278.4 L	278.5 L	278.6 L	278.6 L
	30	278.7 L	278.8 L	278.8 L	278.9 L	279.0 L	279.0 L	279.1 L	279.1 L	279.2 L	279.2 L
	40	279.3 L	279.3 L	279.4 L	279.4 L	279.5 L	279.5 L	279.6 L	279.6 L	279.7 L	279.7 L
	50	279.8 L	279.8 L	279.9 L	279.9 L	280.0 L	280.0 L	280.1 L	280.1 L	280.2 L	280.2 L
14	0	280.3 L	280.3 L	280.4 L	280.4 L	280.5 L	280.6 L	280.6 L	280.7 L	280.7 L	280.8 L
	10	280.8 L	280.9 L	280.9 L	281.0 L	281.0 L	281.1 L	281.1 L	281.2 L	281.2 L	281.3 L
	20	281.3 L	281.3 L	281.4 L	281.4 L	281.4 L	281.4 L	281.4 L	281.5 L	281.5 L	281.5 L
	30	281.5 L	281.6 L	281.6 L	281.7 L	281.7 L	281.8 L	281.8 L	281.9 L	281.9 L	282.0 L
	40	282.0 L	282.1 L	282.1 L	282.2 L	282.3 L	282.3 L	282.4 L	282.4 L	282.5 L	282.5 L
	50	282.5 L	282.6 L	282.6 L	282.7 L	282.7 L	282.7 L	282.8 L	282.8 L	282.8 L	282.8 L
15	0	282.8 L	282.8 L	282.8 L	282.7 L	282.7 L	282.7 L	282.6 L	282.6 L	282.6 L	282.5 L
	10	282.5 L	282.4 L	282.4 L	282.3 L	282.3 L	282.3 L	282.3 L	282.2 L	282.2 L	282.2 L
	20	282.2 L	282.1 L	282.1 L	282.1 L	282.1 L	282.0 L	282.0 L	282.0 L	282.0 L	282.0 L
	30	282.0 L	281.9 L	281.9 L	281.9 L	281.9 L	281.9 L	281.9 L	281.9 L	281.9 L	281.8 L
	40	281.8 L	281.8 L	281.8 L	281.8 L	281.8 L	281.8 L	281.7 L	281.7 L	281.7 L	281.7 L
	50	281.7 L	281.7 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.5 L	281.5 L	281.5 L
16	0	281.5 L	281.6 L	281.6 L	281.5 L	281.6 L	281.5 L	281.5 L	281.5 L	281.5 L	281.5 L
	10	281.5 L	281.5 L	281.5 L	281.5 L	281.5 L	281.5 L	281.5 L	281.5 L	281.5 L	281.5 L
	20	281.5 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L
	30	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L
	40	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L
	50	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L
17	0	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L
	10	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L
	20	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L
	30	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L
	40	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L	281.6 L
	50	281.6 L	281.6 L	281.8 L	281.9 L	281.8 L	281.8 L	281.7 L	281.5 L	281.4 L	281.3 L
18	0	281.2 L	281.2 L	281.1 L	281.0 L	280.9 L	280.9 L	280.8 L	280.8 L	280.7 L	280.7 L
	10	280.7 L	280.7 L	280.7 L	280.6 L	280.6 L	280.6 L	280.6 L	280.6 L	280.5 L	280.5 L
	20	280.4 L	280.4 L	280.3 L	280.3 L	280.3 L	280.2 L	280.2 L	280.2 L	280.2 L	280.2 L
	30	280.2 L	280.2 L	280.2 L	280.1 L	280.1 L	280.1 L	280.1 L	280.1 L	280.1 L	280.1 L
	40	280.1 L	280.1 L	280.0 L	280.0 L	280.0 L	280.0 L	280.0 L	279.9 L	279.9 L	279.9 L
	50	279.9 L	279.9 L	279.9 L	279.9 L	279.8 L	279.8 L	279.8 L	279.8 L	279.7 L	279.7 L

3-hour report for 3/15/2013 12:00:00 AM to 3/15/2013 11:59:59 PM

Device:VD1 Component:Temp RMR (°F)

H	M	0	1	2	3	4	5	6	7	8	9
March, 2013											
19	0	279.6 L	279.6 L	279.5 L	279.5 L	279.4 L	279.4 L	279.3 L	279.3 L	279.2 L	279.2 L
	10	279.1 L	279.1 L	279.0 L	279.0 L	278.9 L	278.9 L	278.9 L	278.9 L	278.9 L	278.9 L
	20	278.9 L	278.8 L	278.8 L	278.8 L	278.8 L	278.8 L	278.8 L	278.8 L	278.8 L	278.8 L
	30	278.8 L	278.9 L	278.9 L	278.9 L	278.9 L	278.9 L	278.9 L	278.9 L	278.9 L	278.9 L
	40	278.9 L	278.9 L	278.8 L	278.8 L	278.8 L	278.8 L	278.8 L	278.8 L	278.8 L	278.7 L
	50	278.7 L	278.7 L	278.7 L	278.7 L	278.7 L	278.7 L	278.7 L	278.7 L	278.7 L	278.7 L
20	0	278.6 L	278.6 L	278.6 L	278.6 L	278.7 L	278.7 L	278.7 L	278.7 L	278.7 L	278.6 L
	10	278.6 L	278.6 L	278.6 L	278.6 L	278.6 L	278.6 L	278.5 L	278.5 L	278.5 L	278.4 L
	20	278.4 L	278.4 L	278.3 L	278.3 L	278.3 L	278.2 L	278.2 L	278.1 L	278.0 L	278.0 L
	30	277.9 L	277.9 L	277.8 L	277.8 L	277.7 L	277.7 L	277.6 L	277.5 L	277.5 L	277.4 L
	40	277.3 L	277.3 L	277.2 L	277.1 L	277.1 L	277.0 L	276.9 L	276.9 L	276.8 L	276.7 L
	50	276.6 L	276.5 L	276.3 L	276.1 L	276.1 L	276.1 L	276.1 L	276.1 L	276.2 L	276.2 L
21	0	276.3 L	276.3 L	276.3 L	276.3 L	276.3 L	276.3 L	276.3 L	276.3 L	276.3 L	276.3 L
	10	276.3 L	276.2 L	276.2 L	276.1 L	276.1 L	276.0 L	276.0 L	275.9 L	275.9 L	275.8 L
	20	275.8 L	275.8 L	275.7 L	275.7 L	275.6 L	275.6 L	275.5 L	275.4 L	275.4 L	275.3 L
	30	275.3 L	275.2 L	275.1 L	275.0 L	274.9 L	274.9 L	274.8 L	274.7 L	274.6 L	274.6 L
	40	274.5 L	274.4 L	274.3 L	274.2 L	274.1 L	274.1 L	274.0 L	274.0 L	273.9 L	273.8 L
	50	273.8 L	273.7 L	273.7 L	273.6 L	273.6 L	273.5 L	273.5 L	273.4 L	273.3 L	273.3 L
22	0	273.3 L	273.2 L	273.2 L	273.1 L	273.1 L	273.1 L	273.1 L	273.0 L	273.0 L	273.0 L
	10	272.9 L	272.9 L	272.9 L	272.8 L	272.8 L	272.8 L	272.7 L	272.6 L	272.6 L	272.5 L
	20	272.5 L	272.5 L	272.4 L	272.4 L	272.4 L	272.3 L	272.3 L	272.3 L	272.3 L	272.2 L
	30	272.2 L	272.2 L	272.2 L	272.1 L	272.1 L	272.1 L	272.1 L	272.1 L	272.1 L	272.2 L
	40	272.2 L	272.2 L	272.2 L	272.2 L	272.2 L	272.2 L	272.2 L	272.2 L	272.2 L	272.1 L
	50	272.1 L	272.1 L	272.1 L	272.1 L	272.1 L	272.1 L	272.0 L	272.0 L	272.0 L	272.0 L
23	0	272.0 L	272.0 L	272.0 L	271.9 L	271.9 L	271.9 L	271.9 L	271.9 L	271.9 L	271.9 L
	10	271.9 L	271.9 L	271.9 L	271.9 L	271.8 L	271.8 L	271.8 L	271.8 L	271.8 L	271.8 L
	20	271.8 L	271.8 L	271.8 L	271.8 L	271.8 L	271.8 L	271.9 L	271.9 L	271.9 L	271.9 L
	30	272.0 L	272.0 L	272.0 L	272.0 L	272.1 L	272.1 L	272.1 L	272.1 L	272.2 L	272.2 L
	40	272.2 L	272.2 L	272.2 L	272.2 L	272.3 L	272.3 L	272.3 L	272.3 L	272.3 L	272.4 L
	50	272.4 L	272.4 L	272.4 L	272.4 L	272.5 L	272.5 L	272.5 L	272.6 L	272.6 L	272.6 L

Summary of data

Rolling 3-hour : 1-min data availability for Temp RMR

Total hours:24.00	Percent operating:100.00%
Operating hours:24.00	Availability:100.00%
Valid hours:24.00	
3-hour Temp RMR (°F)	
Minimum:263.3	
Maximum:282.8	
Average:272.6	

I - Invalid U - User Data D - Kiln Process Down K - Cooler Process Down C - Calibration
M - Maintenance P - PreMeasure E - Error O - Out-of-Control Q - Kiln Feed Off
R - Out-of-Range X - Excess Emission W - Caution L - Raw Mill Run A - Raw Mill Down
S - Kiln Startup N - Not Calibrated F - Frozen FIFO G - SNCR Malfunction

Appendix F. Sample Analysis Summary Results

Results from both external and internal lab analysis are reported in this section. All results are reported as dry basis.

Fuel Quality Analysis Summary

SAC's Feeder Sampling & Analysis Summary				
Sample Count	119	28	27	59
Analyte	Moisture	Ash	Volatile	Calorific Value
Unit	%	%	%	Btu/lb
Max	61.10	32.70	90.43	15,360
Avg	35.36	16.24	81.73	11,464
Min	3.50	6.42	66.42	7,661
Std. Dev.	10.38	5.71	5.72	1,789

Proximate & Ultimate Analysis Composite Feeder Sample									
Sample Count	3	3	3	3	3	3	3	3	3
Analyte	Ash	Volat.	Fixed C.	Sulfur	Calorific Value	C	H	N	O
Unit	%	%	%	%	Btu/lb	%	%	%	%
Max	15.76	85.09	7.96	0.26	14,167	70.55	9.08	0.61	20.55
Avg	14.00	83.09	2.91	0.16	11,704	63.97	8.06	0.34	13.47
Min	11.77	80.27	0.33	0.10	9,221	56.15	7.29	0.15	5.52
Std. Dev.	2.04	2.51	4.38	0.09	2,473	7.28	0.92	0.24	7.55

Proximate & Ultimate Analysis of Carpet Samples Summary									
Sample Count	14	14	14	14	14	14	14	14	14
Analyte	Ash	Volat.	Fixed C.	Sulfur	Calorific Value	C	H	N	O
Unit	%	%	%	%	Btu/lb	%	%	%	%
Max	29.18	90.00	5.57	0.21	9,940	61.35	6.85	1.93	35.80
Avg	15.64	82.79	1.57	0.10	8,027	49.21	4.69	0.72	29.37
Min	9.71	65.25	0.19	0.01	4,498	34.80	3.71	0.10	17.69
Std. Dev.	5.30	6.23	1.57	0.06	1,727	8.13	0.77	0.54	4.98

Proximate & Ultimate Analysis of Engineered Fuel Samples Summary									
Sample Count	3	3	3	3	3	3	3	3	3
Analyte	Ash	Volat.	Fixed C.	Sulfur	Calorific Value	C	H	N	O
Unit	%	%	%	%	Btu/lb	%	%	%	%
Max	22.76	81.42	3.58	0.16	13,054	68.80	9.17	0.27	15.06
Avg	17.82	79.54	2.64	0.11	11,216	62.01	8.06	0.21	11.80
Min	15.00	76.16	1.08	0.06	9,084	54.60	7.25	0.17	6.01
Std. Dev.	4.29	2.93	1.36	0.05	2,001	7.12	0.99	0.06	5.03

Metals & Chloride Analysis

RCRA Metals & Chloride Analysis of Composite Feeder Samples							
Sample Count	6	3	3	3	3	3	3
Analyte	Mercury	Arsenic	Cadmium	Chloride	Chromium	Lead	Selenium
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Max	0.044				6.38	7.45	
Avg	0.025	ND	0.078	ND	3.84	4.21	ND
Min	0.010				1.30	0.97	
Std. Dev.	0.014				3.59	4.58	

RCRA Metals & Chloride Analysis of Carpet Samples							
Sample Count	11	8	8	8	8	8	8
Analyte	Mercury	Arsenic	Cadmium	Chloride	Chromium	Lead	Selenium
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Max	0.082	19.5	0.84	559	9.51	11.60	
Avg	0.033	12.8	0.52	270	3.35	6.03	ND
Min	0.011	6.2	0.20	108	0.66	1.27	
Std. Dev.	0.028	9.4	0.46	151	2.86	5.30	
# Non Detect	4	6	6	0	0	4	8

RCRA Metals & Chloride Analysis of Engineered Fuel Samples							
Sample Count	1	1	1	1	1	1	1
Analyte	Mercury	Arsenic	Cadmium	Chloride	Chromium	Lead	Selenium
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Max							
Avg	ND	0.6	ND	9.6	2.61	4.19	ND
Min							
Std. Dev.							

ND = Non Detect