Elastec, Inc.

Texas Test Summary of Results

The following, are results of Stack sampling tests performed on Elastec's Smart Ash unit. Tests were conducted July 28, 1995 by Air Pollution Testing, Inc. of Denver, CO. at facilities of Darsan Inc. of Garland, TX.. Tests were performed on the behalf of Elastec, Inc.

	Run #1	Run #2	Run #3	Run # 4	Average
Start Time	11:00	14:40	16:49	18:54	
Stop Time	12:06	15:43	17:52	19:56	
Load Weight (lb)	70	70	70	70	
Stack Temp (F)	1122	1082	1052	1152	1102
Stack Flow (dscfm)	200	200	200	200	200
O^2 (%vd)	6.7	7.0	8.8	4.3	6.7
H2O (%vw)	9.9	11.8	9.9	11.9	10.9
Isokinetic Ratio (%)	95	89	90	89	91
Emissions Data					
PM (grdscf)	0.046	0.032	0.025	0.041	0.036
PM (lb/hr)	0.080	0.045	0.059	0.058	0.060
CPM (gr/dscf)	0.027	0.018	0.015	0.024	0.021
CPM (lb/hr)	0.046	0.032	0.025	0.041	0.036
Opacity (%)	6.3	0.0	0.0	0.0	1.6
CO (ppmv)	72	62	93	151	94
CO (lb/hr)	0.062	0.054	0.081	0.132	0.082
VOC (ppmvw as C3H8)	1.0	1.3	1.1	1.6	1.3
VOC (lb/hr as C3 H8)	0.0015	0.0020	0.0017	0.0025	0.0019

The values of the averages are for test runs #2 thru #4. Run # 1 demonstrated a post test leak check. However, the data is presented and appears to be representative. This indicates the leak occurring late in the sampling run or immediately following sampling.

This is condensed version of the actual Stack Test results. Complete test results can be supplied upon request.

Elastec, Inc.

Colorado Test Summary of Results

The following, are results of Stack sampling tests performed on Elastec's, Smart Ash units. Tests were conducted July 7, 1994 by Air Pollution Testing, Inc., at Air Pollution Testing, Inc. facility located in Lakewood, CO. Hill enterprises contracted Air Pollution testing, on the behalf of Elastec, Inc. for the testing on the Smart Ash unit.

Run #	1	2	3	Average
Start Time	09:14	11:24	13:34	
Stop Time	10:12	12:24	14:34	
Sample Duration (Min)	35.5	60.0	60.0	51.8
O2 (%)	8.6	10.2	8.2	9.0
CO2 (%)	10.9	8.7	8.0	9.2
H2O (%)	8.3	5.2	6.8	6.7
Stack Temp (F)	799	843	894	845
ACFM	<448	<455	<467	<457
DSCFM	<142	<144	<140	<142
Particulate Emissions	<0.07	<0.01	<0.01	<0.03
lb/hr	0.0557	0.0080	0.0080	0.0230
gr/dscf	0.0613	0.0111	0.0119	0.0281
Gr/dscf @ 12% CO2				
CO Emissions	<0.081	<0.030	<0.012	<0.041
lb/hr	131	48	19	66
ppmvd	144	66	29	80
ppmvd @ 12 % CO2				

The short run time of sampling test # 1 was due to rapid burning of the cardboard material used for testing purposes. 17 lbs. of material was stacked in the drum to fit as much material as possible for the test.

This is a condensed version of the actual test results. Complete test results can be supplied upon request.

Elastec, Inc.

Kansas Test Summary of Results

The following, are results of Stack sampling tests performed on Elastec's Smart Ash unit. Tests were conducted by Air Source Technologies at the Air Source Technologies facility in Lenexa, Kansas Feburary 4, 1994 for Elastec, Inc.

SUMMARY OF SAMPLING AND PARTICULATE RESULTS

Parameters	Units	Run 1	Run 2	Run 3
Particulate Emissions				
Uncorrected	gr/dscf	0.0437	0.0320	0.0459
Corrected to 7% O2	gr/dscf	0.0490	0.0344	0.0535
Corrected to 12% CO2	gr/dscf	0.0477	0.0349	0.0501
Emission Rate	lb/hr	0.06	0.04	0.05
Emission per 100 lb of material	lb/100 lbs	0.095	0.072	0.080
weight	grams	0.0450	0.0476	0.0705
Stack flow rate				
Actual	acfm	425	454	451
Standard Conditions	dscfm	150	140	138
Velocity	fr./min	541	579	575
Sampling Results				
Sampling Volume	dscf	15.838	22.916	23.662
Avg. Stack Temp.	F	886	1073	1033
Avg. P	in/H2O	0.010	0.01.	0.010
Avg. H	in/H2O	0.53	0.47	.050
Avg. Meter Temperature	F	52	52	60
Oxygen, Orsat	%	8.5	8.0	9.0
Carbon Dioxide, Orsat	%	11.0	11.0	11.0
Static Pressure	in/H2O	0.01	0.01	0.01
Moisture Collected	mls	28.8	44.9	6605
Percent Water	%	7.9	8.4	11.7
Sampling Time	min.	40	64	64
THC uncorrected	ppm	0 - 115	0	0 - 100
Opacity	%	<5	<5	<5

Conclusions

THC's are shown on the summary at range of 0 ppm to as high as 115 ppm, the high ends were seen as spikes on the chart. These spikes were viewed in the first 5 min. of operation, then dropped off to less than 5 ppm, to finish the test runs.

These results indicate, Elastec's Smart Ash units fall into compliance with all federal mandates for air quality.

This is a condensed version of the actual test results. Complete test results can be supplied upon request.