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EVALUATION OF EMISSIONS FROM THE OPEN BURNING OF HOUSEHOLD WASTE IN BARRELS

Volume 2. Appendices A-G

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FOREWORD

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E. Timothy Oppelt, Director
National Risk Management Research Laboratory

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EVALUATION OF EMISSIONS FROM THE OPEN BURNING OF HOUSEHOLD WASTE IN BARRELS

Volume 2. Appendices A-G

Prepared by:

Paul M. Lemieux
U.S. Environmental Protection Agency
National Risk Management Research Laboratory
Air Pollution Prevention and Control Division
Research Triangle Park, NC 27711

Prepared in Cooperation with:

New York State Department of Health
Bureau of Toxic Substances Assessment
and
New York State Department of Health
Wadsworth Center for Laboratories and Research
Albany, NY 12202

Prepared for:

U.S. Environmental Protection Agency
Office of Research and Development
Washington, D.C. 20460

ABSTRACT

A detailed emissions characterization study was undertaken to examine, characterize, and quantify emissions from the simulated burning of household waste materials in barrels. This study evaluated two separate waste streams: that of an avid recycler, who removes most of the recyclable content from the waste stream prior to combustion; and that of a non-recycler, who combusts the entire stream of household waste. Estimated emissions were developed in units of mass emitted per mass of waste burned. Continuous gas samples were analyzed for oxygen, carbon dioxide, carbon monoxide, nitric oxide, and total hydrocarbons. Gas-phase samples were collected using SUMMA® canisters and analyzed by gas chromatography/mass spectrometry (GC/MS) for volatile organic compounds (VOCs). Extractive samples from the combined particulate- and gas-phase were analyzed for semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), chlorobenzenes (CBs), polychlorinated dibenzo-*p*-dioxins and polychlorinated dibenzofurans (PCDDs/PCDFs), aldehydes and ketones, hydrogen chloride (HCl), hydrogen cyanide (HCN), and metals. Emissions of PM_{10} and $PM_{2.5}$ were also measured. Ash residue samples were analyzed for SVOCs, PCBs, PCDDs/PCDFs, and metals.

It was found that for most of the non-chlorinated compounds, including VOCs, SVOCs, PAHs, and aldehydes and ketones, emissions from the non-recycler were higher, both on a per mass burned basis and on a per day basis (using waste generation estimates from New York State). However, emissions of many of the chlorinated organics, particularly CBs and PCDDs/PCDFs, were higher from the avid recycler, on a per mass burned basis. From estimates of waste generated each day by New York households for the avid recycler and non-recycler scenarios, emissions per day of PCDDs/PCDFs are significantly higher for the avid recycler. Emissions of PCBs were higher from the non-recycler, although the cause of this phenomenon is not known. This phenomenon is likely due to several factors, including the higher mass fraction of PVC in the avid recycler's waste. It is also possible that some component of the non-recycler's waste may potentially serve to poison the metallic catalysts believed to be responsible for enhancing formation rates of PCDDs/PCDFs. Results from HCl sampling indicated much higher HCl emissions from the avid recycler, which is consistent with the higher emissions of chlorinated organics, and ash residue analysis indicated that the avid recycler's residue had more copper, which could contribute to higher emissions of PCDDs/PCDFs. It was noted that the temperature at the base of the burning bed was significantly lower in the case of the avid recycler than it was for the non-recycler. Gas-phase emissions of metals were not a strong function of the test conditions. PM emissions were much higher from the non-recycler. Almost all of the PM emissions from both test conditions were < 2.5 μm in diameter.

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APPENDIX A
QUALITY CONTROL EVALUATION REPORT

This project was conducted under the guidance of an EPA-approved QA Test Plan (APPCD Category III) and an approved Facility Manual for the test facility. These documents establish data quality objectives suitable for this study. The quality control measures employed during this study were used to ensure that the data collected would be suitable to measure air emissions resulting from open combustion of household waste.

Table A-1 lists the sample start and stop times for all of the sampling devices.

Table A-1. Start and Stop Times for the Various Sampling Systems During the Experiments

date	Test #1 Avid Recycler 8/30/95	Test #2 Avid Recycler 9/1/95	Test #3 Hut Blank 9/6/95	Test #4 Non Recycler 9/8/95	Test #5 Non Recycler 9/12/95
start background sampling	14:26	11:38	13:06	12:17	10:15
ignition time	14:39-14:41	12:00-12:01	n/a	12:32-12:35	10:30-10:31
Dioxin train	14:43-15:55	12:03-13:22	13:25-14:25	12:36-13:36	10:32-12:02
Aldehyde/Ketone train	14:43-15:43	12:03-13:03	13:25-14:25	12:36-13:36	10:32-11:32
Dichotomous Sampler	14:43-15:32	12:03-13:22	13:25-14:55	12:36-13:36	10:32-12:02
Semi-Vol train	14:43-15:55	12:03-13:22	13:25-14:25	12:36-13:36	10:32-12:02
Multi-Metals train	14:43-15:53	12:03-13:22	13:25-14:55	12:36-13:36	10:32-12:02
HCN train	14:43-15:55	12:03-13:22	13:25-14:55	12:36-13:36	10:32-12:02
HCl train	14:43-15:55	12:03-13:22	13:25-14:55	12:36-13:36	10:32-12:02
SUMMA Can	14:42-15:55	12:03-13:19	13:27-14:57	12:37-13:37	10:32-12:02
Burn Ends/Door Opened	15:58	13:24	14.57	13:37	12:02

Table A-2 presents the data quality indicator (DQI) summaries for accuracy, precision, and completeness achieved during testing along with the planned DQI goals for each measurement or analysis performed. In general, the intended DQI goals were achieved. In several instances, however, targeted DQI goals were not achieved or could not be assessed from the available data.

Case narratives for specific analytical activities are included in the following subsections.

TableA-2 Data Quality Indicator Summary for Critical Measurements

Measurement	Objective Accuracy (% Bias)	Objective Accuracy (% QA/QC Recovery)	Objective Precision (% RPD)	Objective Recovery (%)	Objective Completeness (%)	Achieved Accuracy (% bias)	Achieved Accuracy (% QA/QC Recovery)	Achieved Precision (%)	Achieved Recovery (%)	Achieved Completeness (%)
O2	±5	NA	5	NA	70	0	NA	5	NA	100
CO2	±5	NA	5	NA	70	3	NA	5	NA	100
CO	±5	NA	5	NA	70	3	NA	5	NA	100
THC	±5	NA	5	NA	70	0.1	NA	5	NA	100
NO	±5	NA	5	NA	70	4	NA	5	NA	100
Temperature	±2	NA	±2	NA	100	NA	NA	±2	NA	100
Burn Hut Weight	±15	NA	15	NA	100	NA	NA	5.75	NA	100
Filter Weight	±15	NA	15	NA	100	NA	NA	0.25	NA	100
VOCs	NA	40-120	30	50-150	75	NA	79-102	25	79-102	100
SVOCs	NA	40-120	30	18-120	70	NA	NA	NA	15-135	100
PCDDs/PCDFs	NA	40-120	30	40-120	75	NA	*	*	*	42
Metals	10	75-125	20	NA	80	NA	75-125	20	NA	100
HCl	NA	80-120	15	NA	75	NA	NA	NA	NA	100
Aldehydes & Ketones	NA	70-130	15	NA	75	NA	75-125	±25	NA	100
HCN	NA	80-120	15	NA	75	NA	4.3	3	NA	100
Burn Hut Flow Rates	25	NA	25	NA	100	NA	NA	2.4	NA	100
Dichotomous Flow Rates	25	NA	25	NA	90	-2.41 -> 6.59	NA	1.2	NA	100

* - see narrative text

A.1 Air Continuous Measurement Results

The O_2 analyzer was behaving erratically, and could not be feasibly replaced during the tests. For those reasons, an Ecom suitcase-type O_2 analyzer was used as a supplement, but computer problems marred the use of the Ecom analyzer as well. For this reason, the O_2 data shown in the CEM traces is of questionable accuracy, however, qualitatively serves to show that O_2 levels did not significantly deviate from ambient levels.

The CEM data also included temperature data. The data were recorded using two EXP-16 analog to digital converter boards connected to a DASH-8 computer interface board. The computer was running LabTech Notebook software which has the capability to convert voltages to temperatures for common thermocouple types. After the tests were completed, the data were examined and it was found that the data was not intuitively correct, showing much lower temperatures than would be reasonably expected. On further examination is was found that the gain switch on the EXP-16 board used to acquire thermocouple data was in the wrong position. To derive a correction factor for the data, a thermocouple temperature generator was used to replace one of the thermocouples. Signals corresponding to temperatures ranging from 0-1200 °C were fed into the EXP-16 board using the same gain switch setting as during the tests. The temperatures recorded by the data system were observed. These observations yielded a calibration curve recorded during the burn. This calibration curve was used to correct thermocouple readings during the experiments. An examination of the calibration curve and the transformed data set suggests that this gain switch setting resulted in a loss of sensitivity to small temperature changes near ambient and a greater potential for error in this temperature range.

The filter weight balance was calibrated on September 5, 1995. It registered 1.00247 g on a 1g weight and 0.50138 g on a 0.5 g weight. The balance in the burn hut was calibrated and Table A-3 lists results from the calibration.

Table A-3. Weight Accuracy Check

Test Weight (lb)	Observed Weight (lb)	Bias (% of measured value)
1	0.8	25.00
3	2.8	7.14
6.1	5.6	8.93
6.6	6.6	0.00
7.4	7.2	2.78
11	11	0.00
17	16.8	1.19
30.5	30.2	0.99

A.2 Air Volatile Organic Compound Analyses

Recoveries of the standards were acceptable for the volatile organic analyses. However, it should be noted that the volatile organic analysis was done using the external standardization provisions of Method TO-14, and thus the internal standards are really surrogates, and it would be expected that recoveries would be good for these types of analytes since the spiking is performed into the purge vessel at the time of analysis. Table A-4 lists the recoveries of the standards.

Table A-4. Volatiles Recoveries (Surrogates and Internal Standards)

Compound	Target Mass ng	Avid Recycler Test #2 Meas. Mass ng	Rec. %	Hut Blank Meas. Mass ng	Rec. %	Non Recycler Test #1 Meas. Mass ng	Rec. %	Non Recycler Test #2 Meas. Mass ng	Rec. %
bromochloromethane	100	102.3	102.3	92.97	92.97	102.01	102.01	101.44	101.44
d4-1,2-dichloroethane	100	97.71	97.71	99.27	99.27	100.22	100.22	95.66	95.66
1,4-diflurobenzene	100	94.81	94.81	98.35	98.35	96.38	96.38	90.18	90.18
d8-toluene	100	94.18	94.18	99.65	99.65	95.79	95.79	90.79	90.79
d5-chlorobenzene	100	91.08	91.08	100.4	100.4	94.11	94.11	90.34	90.34
4-bromofluorobenzene	100	80.81	80.81	91.02	91.02	83.29	83.29	79.05	79.05

A.3 Air Semivolatile Organic Compound Analyses

A.3.1 AEC Analyses

Table A-5 lists the post-sampling surrogate recovery limits. A pre-sampling surrogate, D10-anthracene, was added to these samples and recovery limits should parallel those listed for the post-sampling surrogates. These samples were extracted in late summer of 1995 but were analyzed in late summer of 1996, (the delay was due to budgetary constraints) therefore analytical hold times were exceeded. However, most samples demonstrated acceptable post-sampling surrogate recoveries with the main exceptions being the Hut Blank and Non-Recycler #4. The Hut Blank had post sampling surrogate recoveries between 7.5 and 14.3 % and Non-Recycler #4 had post sampling recoveries between 1.1-17.0%. Pre-sampling surrogates had recovery values of 69.3 and 80.5 %, respectively. This indicates a spiking problem for the post-sampling surrogates and does not invalidated the reported target analyte values for these samples. All samples demonstrated an increasing trend with an increase in surrogate boiling point. This is likely due to the extraction process and likely biased lighter target analytes slightly downward. The top 20 peaks which were non-target analytes were also reported as tentatively identified compounds. Two different batches of XAD may have been used during the sampling process. Both batches were analyzed (9608002 and 9608003) and found to have slight phthalate contamination. A glassware blank (9608004) was also analyzed and this also had slight phthalate contamination.

Table A-5. Post-Sampling Surrogate Recoveries

Compound	Lower Limit (%)	Upper Limit (%)
2-fluorophenol	17.4	131.8
D5-phenol	22.4	133.2
D5-nitrobenzene	10.0	130.6
2-fluorobiphenyl	15.3	136.5
2,4,6-tribromophenol	10.0	135.0
D14-terphenyl	13.8	143.4

A.3.2 WCL&R Analyses

Daily QC performance checks met all EPA criteria.

Instrument detection limits were obtained by replicate injection of 20 ng of each analyte. MDLs were also obtained for our 8270 method but these were based on replicate extractions of aqueous samples, not entirely relevant to these analyses. Standards were not available for several analytes at the time of injection but ions and retention times obtained from the EPA method were used to scan for these.

The initial calibration performed prior to air sample analysis was slightly improved over the previous curve for ash analysis. 1,4-Phenylenediamine, N-Nitrosodimethylamine, benzyl alcohol, hexachlorocyclopentadiene, chlorobenzilate, famphur, benzo(b)fluoranthene and 7,12- dimethylbenz(a)anthracene exhibited %RSDs greater than 25%. Of these, only 1,4-phenylenediamine and famphur exhibited a %RSD greater than 32%. 1,4-Phenylenediamine is not readily chromatographed and Famphur had not been evaluated for the earlier curve.

In addition to a subset of CLP surrogate spikes, anthracene-d10 had been added to extracts as a recovery standard. Although an ampule of anthracene-d10 was provided by Acurex, this was not included in the mixture of surrogates which we analyzed. Quantification of this analyte was performed by assuming a response of 1 relative to phenanthrene-d10.

The concentrations of anthracene-d10 and other surrogates were clearly much higher than expected from the description we received and also beyond our calibration range, except where recoveries were low. Further, the phenols exhibited concentration-dependent shifts in retention times at these high levels (an advantage of MS detection is that we can still identify and quantify, even where such shifts occur; no ambiguities resulted from these shifts). Since it is inappropriate to dilute samples for which only surrogates are beyond the calibration range, we reported results only for the undiluted runs.

The XAD extracts from the air sampling procedure had plasticizers (di-C8 to di-C10 phthalates and di-C8-adipates) as their most abundant non-target analytes (these were even more abundant in the hut and/or field blanks than in the

samples). Some samples and blanks also exhibited abundant siloxanes, from hexamethylcyclotri-siloxane to hexadecamethylcyclooctasiloxane. We also found di-lauryl thiopropionate in these samples and blanks, as we also had for the ash samples [this is not a background substance which we normally encounter].

A.4 Air Chlorobenzene Analyses

A 100 µL portion of the extracts was spiked with 26 µL of a 10 ng/µL ^{13}C-Cl_{1-6} Chlorobenzene internal standard mix. A 1 µL portion of the resulting 126 µL was injected onto the GC/MS system operating in selected ion monitoring (SIM) mode. Quantitation of the chlorobenzene isomers was perfomed using the internal standard method. Calculations for all these analyses were based on 1 mL original extract volume.

Analysis was performed on a Hewlett Packard 5890 Series II Gas Chromatograph (fitted with a Hewlett Packard 7673 automated injector), with programmable carrier gas pressure, the column of which was interfaced directly to the source of a Hewlett Packard 5971 Mass Selective Detector. The column was a 60M x 0.25mm DB-5 column (0.25µ film). Injection volume was 1 µL using splitless injection. The helium pressure was programmed to start at 80 PSI for 1 minutes then ramped at 99 PSI/min to 30 PSI then ramped at 5 PSI/min to 45 PSI and maintained at that pressure for the remainder of the run. The oven temperature was held at 70°C for 2 min, ramped at 8 deg/min to 300°C then held for 5 minutes.

Daily performance checks met all criteria for mass calibration and tuning. Multilevel standards were run to establish linearity and response factors obtained were checked for continuing calibration.

Average recovery for the five labeled chlorobenzene internal standards was 80% (average sample range 35% to 95%). Sample 9582045 had a low average recovery 35% the five other samples were all in excess of 80%. Detection limits were generally less than 0.5 ng/mL of original extract.

A.5 Air PAH Analyses

A 10 µL portion of the extracts was spiked with 1 µL of a 10 ng/µL ^{2}H-PAH internal standard mix containing 17 deuterated compounds. A 1 µL portion of the resulting 11 µL was injected onto the GC/MS system operating in selected ion monitoring (SIM) mode. Quantitation of the PAHs was perfomed using the internal standard method. Calculations for all these analyses were based on 1 mL original extract volume.

Analysis was performed on a Hewlett Packard 5890 Series II Gas Chromatograph (fitted with a Hewlett Packard 7673 automated injector), with programmable carrier gas pressure, the column of which was interfaced directly to the source of a Hewlett Packard 5971 Mass Selective Detector. The column was a 60M x 0.25mm DB-5 column (0.25 µm film). Injection volume was 1 µL using splitless injection. The helium pressure was programmed to start at 80 PSI for 1 minute then ramped at 99 PSI/min to 30 PSI then ramped at 5 PSI/min to 45 PSI and maintained at that pressure for the remainder of the run. The oven temperature was held at 130°C for 2 min, ramped at 8 deg/min

to 300°C then held for 30 minutes.

Daily performance checks met all criteria for mass calibration and tuning. Multilevel standards were run to establish linearity and response factors obtained were checked for continuing calibration.

Average recovery for the labeled PAH internal standards was 82% (average sample ranged 63% to 90%). Detection limits for PAHs were generally less than 50 pg/mL of original extract.

A.6 Air PCDD/PCDF Analyses

Air sampler XAD was spiked for PCDD/PCDF (^{13}C-internal standard mix + M-23 ^{13}C-standard mix) and PCBs (BZ-14, 65 and 166), extracted by Acurex and received at Wadsworth Labs on 10/5/95. Extracts were brought to 10 mL with toluene and spiked with 12.5 ng of ^{13}C-1,2,3,4 TCDD as clean-up standard. A final cleaned-up extract of 75 µL in xylene which contained the PCDD/PCDF fraction was obtained which included 12.5 ng of an injection standard of ^{13}C 1,2,3,7,8,9 HxCDD added during the final concentration step. The samples were cleaned up for PCDD/PCDF analysis. Due to an oversight the PCB fraction from this clean-up was not retained and was lost to waste. This required a request for an additional 250 µL of the original extract held by Acurex for this type of eventuality. The supplemental extract was cleaned-up in the same way but this time retaining the PCB fraction which was analyzed by GC/EC using DEC method 91-11 as specificed in the QATP. Calculations for all these analyses were based on 1 mL original extract volume.

PCDD/PCDF analysis was performed on a Hewlett Packard 5890 Series II Gas Chromatograph (fitted with a Hewlett Packard 7673 automated injector), with programmable carrier gas pressure, the column of which was interfaced directly to the source of a Hewlett Packard 5971 Mass Selective Detector. The column was a 60M x 0.25mm DB-XLB column (0.25 µm film). Injection volume was 2 µL using splitless injection. The helium pressure was programmed to start at 80 PSI for 1 minutes then ramped at 99 PSI/min to 30 PSI then ramped at 5 PSI/min to 45 PSI and maintained at that pressure for the remainder of the run. The oven temperature was held at 130°C for 1 min, ramped at 20 deg/min to 190°C then ramped at 5 deg/min to 240°C and held for 13.5 minutes, ramped at 10 deg/min to 290°C and held for 19.5 minutes.

Daily performance checks met all criteria for mass and retention time calibration and for the GC column performance for 2,3,7,8- TCDD isomer resolution.

Table A-6 details the recoveries of the internal standards. It is expected that 40-60% recoveries would constitute fully valid data, although trends may still be valid for lower recoveries. Most samples exhibited recoveries in the 40-120% range. However, for some of the avid recycler samples in particular, some congeners showed recoveries in the 10-20% range. The numbers are still reported, though, with caveats.

A.7 Air PCB Analyses

PCB analysis was performed on a Hewlett Packard 5890 Series II Gas Chromatograph (fitted with a Hewlett Packard 7673 automated injector), with programmable carrier gas pressure, and electron capture detector. The column was a 60M x 0.25mm DB-5 column (0.1μ film). Injection volume was 2 μL using splitless injection. The helium carrier gas was programmed to a constant pressure of 19.5 PSI throughout the run. The oven temperature was held at 90°C for 1 min, ramped at 25 deg/min to 150°C then held for 4 minutes before a final ramp at 1.5 deg/min to 290°C then held for 40 minutes. Total time before the next run was 140 minutes.

Calibration of the GC/EC was by means of a 3 point calibration. Response was checked using continuing calibration which contains 120 PCB congeners each at 10ng/ul concentration which was run during sample batches.

Recovery of the 3 PCB congeners through the extraction and clean-up was within QC limits of 40 140% (range 45-115%). The 3,5-dichlorobiphenyl (BZ-14) showed a lower recovery in all the extracts which may be a result of the higher vapor pressure and loss due to volatility during sample manipulations.

A.8 Air Acid Gas Analyses

Relatively little QA/QC was done for HCl measurements. A five point calibration curve was run and found to be linear and a laboratory blank was run and found to be clean. Data were not available to determine the value of this DQO. For HCN measurements, a matrix spike of 10 μg/mL was analyzed in duplicate. The analyses resulted in a measurement of 10.27351 and 10.58133, respectively.

A.9 Air Aldehyde and Ketone Analyses

For the determination of precision and accuracy of these analyses, the results from a EPA audit of Acurex ERO laboratory prior to the time of the analyses of these samples. An additional blind audit was performed after these samples were run. Both audits supported a ±25 % accuracy and precision level.

A.10 Air Mercury Analyses Performed by Triangle Laboratories

Six 4% KMnO4/10% H2SO4 samples were analyzed for Hg; five of these samples were test samples and one was a blank sample. For Hg analysis, the samples and associated QC samples were prepared and analyzed following the guidelines of Method 101A (6/93). Hg concentrations were determined by cold vapor atomic absorption (CVAA). All samples were non-detects. The samples were re-prepared using a larger aliquot and reanalyzed. The results of the reanalyses were also non-detects. The original analysis was reported. The analytical data were considered valid based on the guidelines of EPA Method 101A.

Table A- 6. PCDD/PCDF Sample Recoveries (%)

Run	2378 TCDD	12378 PCDD	123478 HXCDD	123678 HXCDD	123789 HXCDD	1234678 HPCDD	12346789 OCDD	2378 TCDF	12378 PCDF	23478 PCDF	123478 HXCDF	123678 HXCDF	234678 HXCDF	123789 HXCDF	1234678 HPCDF	1234789 HPCDF	12346789 OCDF
Avid Recycler #1	8	7	44	7	7	5	5	5	9	44	47	7	7	7	6	37	5
Avid Recycler #2	12	11	51	10	10	8	8	10	12	52	54	10	10	10	9	46	8
Hut Blank	33	32	65	27	27	27	27	29	36	59	75	28	28	28	27	58	27
Non-Recycler #1	80	72	68	48	48	52	52	75	79	66	78	48	48	48	54	51	52
Non-Recycler #2	59	53	57	36	36	39	39	53	58	55	59	37	37	37	4	42	39

A.11 Air Inorganic Analyses

Four filter samples, one hut blank filter and one filter blank were each cut into four quarters. One quarter from each of the filters and the associated quality control (QC) were digested in a microwave oven using nitric acid. The digestates were analyzed using ICP-MS for arsenic, barium, beryllium, cadmium, magnesium, copper, nickel, lead, silver, and zinc. A portion of each digestate was analyzed for selenium using a graphite furnace. One quarter from each filter was analyzed for mercury using cold vapor atomic absorption. One quarter from each filter was digested in a microwave oven using nitric and hydrofluoric acids and analyzed for chromium and aluminum using an atomic absorption spectrometer.

Three nitric acid wash samples, one hut blank and one reagent blank were concentrated and then digested in a microwave oven. They were analyzed as above except for mercury which was not analyzed and hydrofluoric acid was not used in the digestion procedure for chromium and aluminum.

Three hydrochloric acid rinse samples, one hut blank and one reagent blank were analyzed for mercury using cold vapor atomic absorption.

All analytical procedures followed acceptable laboratory standards. A duplicate, spike and a Standard Reference Material (SRM) (#1648 Urban Particulate Matter) accompanied the samples from digestion through analysis with the results within acceptable limits.

All samples, hut blanks, reagent and filter blanks were received on September 20, 1995 in good condition except for one nitric acid wash which had no sample due to a broken cap.

A.12 Ash Semivolatile Organic Analyses

Separate initial calibrations were run for ash and air runs. Initial calibrations prior to ash analysis resulted in %RSDs of less than 10% for most analytes, less than 25% for most others and greater than 25% for pyridine, N-Nitrosodimethylamine, 3- or 4-methyl phenol, 2,4-dinitrophenol, 4-nitrophenol, pentachlorophenol, 4-nitroquinoline-1-oxide and kepone.

EPA CLP surrogates were added to the ash samples and EPA CLP matrix spikes were added to sample 9582036 (Non Avid). Surrogate recoveries were within acceptance limits; matrix spike recoveries were good except for 25% recovery of 2,4-dinitrotoluene in MS (low limit 28% for soil, 24% for water). Three RPDs were above acceptance limits: 1,4-dichlorobenzene (39%, high limit 27%), 1,2,4-trichlorobenzene (34%, high limit 23%) and acenaphthene (21%, high limit 19%).

Most of the non-target substances detected in the ash samples were either those also detected in the blank (Aldol condensation products and di-lauryl-thio-di-propionate) or were hydrocarbons. An apparent modified form of the

surrogate 2,4,6-tribromophenol was also detected in one sample; this was not in the corresponding blank but is sometimes seen in blanks. The avid recycler sample 9582035 also contained substances tentatively identified as 6 - 9 carbon branched alkanes, alcohols, esters, aldehydes and ketones, 16 and 18 carbon possibly (1)-alkenes, benzoic acid, hexdecanoic acid and a substance tentatively identified as 4,4'-butylidinebis[2-(1,1-dimethylethyl)-5-methylphenol].

A.13 Ash PCDD/PCDF Analyses

Recovery of 10 ^{13}C-internal standards through the cleanup averaged 50%. Injection standard recovery was 66-72%. The matrix spike (MS 9582038) recovery for the 17 2,3,7,8 substituted PCDD/PCDF compounds (Cl_{4-8}) was 92 to 143% and for the matrix spike duplicate (MSD 9582039) was 69 to 113% (except 1,2,3,4,6,7,8-HpCDF at 23% probably due to large matrix concentration). The relative percent difference for the duplicates with the one compound exception as noted above was less than 13% for the 16 remaining PCDD/PCDF compounds.

A.14 Ash PCB Analyses

Ash samples were spiked with a 200 µL of a surrogate mix (tetrachloro-m-xylene [TCMX] and BZ 209)and with the 100 µL of a 3 PCB congener mix which contained BZ-14, 65, and 166 prior to extraction and clean-up. Recoveries ranged between 65 and 95%.

A.15 Ash Metal Analyses

A representative 2.0 g of ash samples were digested and refluxed in HNO_3 and/or HCI and H_2O_2. HCI was used as the final reflux acid for Inductively Coupled Atomic Emission Spectrophotometry (ICP-AES) analyses of beryllium, silver, barium, cadmium, chromium, copper, iron, manganese, nickel, strontium, titanium, vanadium, zinc, lead, tin, aluminum, calcium, potassium, magnesium, and sodium using EPA method 200.7. HNO_3 was used as the complete reflux acid for the Electrothermal Atomic Absorption Spectrophotometry (graphite furnace) analyses of arsenic, selenium, antimony, and thallium using EPA method 206.2, 270.2, 204.2, and 279.2, respectively. Aqueous acid digestates for mercury were analyzed using Cold Vapor Atomic Absorption and EPA method 101A.

The solid Laboratory Control Sample (LCS 0287) was prepared by the UNLV Quality Assurance laboratory and was distributed by ICF Technology, Inc. under contract to the EPA. The “True Value” concentrations were derived from the results of an EPA multi-laboratory analysis of the solid material by Contract Laboratory Program procedures. Calibration check standards were maintained at $\pm$10% throughout the analysis. Spike recoveries were good for all trace metals (within 75 - 125%) except for those metals where the spike amount was too low relative to the endogenous concentration (aluminum, copper, iron, and zinc) or too low relative to the instrument’s reporting limit (silver). Reproducibility was acceptable for all trace metals except silver (23 vs. <8 mg/kg) and copper (3520 vs. 4520 or 26% RPD). Digestion QC sample (Soil Lot 214 from Environmental Resource Associates) was well within the acceptable limits for all analytes.

APPENDIX B. CONTINUOUS EMISSION MONITORING DATA

Barrel Burning Test No. 1 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB)
-20.08	1	0.3	21.5	5	0.06	46	46	46	50.1	46	50.1	46	42	27.6
-19.58	2	0.2	23.5	4	0.05	46	46	46	54.1	46	50.1	46	42	27.8
-19.08	2	0.4	24.2	4	0.06	46	46	46	54.1	46	50.1	46	42	27.8
-18.58	0	0.3	23.1	5	0.05	46	46	46	50.1	46	50.1	46	42	27.8
-18.08	1	0.3	20.1	4	0.06	46	46	46	50.1	46	50.1	46	38	27.8
-17.58	0	0.2	20.7	4	0.04	46	46	46	54.1	46	50.1	46	42	27.8
-17.08	1	0.3	21.1	5	0.05	46	46	46	54.1	46	50.1	46	42	27.8
-16.58	2	0.3	21	4	0.05	46	46	46	50.1	46	50.1	46	42	27.8
-16.08	-2	0.1	20.9	5	0.03	46	46	46	50.1	46	54.1	46	42	27.8
-15.58	-1	0.4	20.9	5	0.04	46	50.1	46	54.1	46	54.1	46	42	27.8
-15.08	2	0.4	21	4	0.04	46	46	46	54.1	46	54.1	46	42	27.8
-14.58	2	0.3	20.8	5	0.04	46	46	46	50.1	46	54.1	46	42	27.8
-14.08	2	0.2	19.9	5	0.05	50.1	46	50.1	50.1	46	54.1	46	42	27.8
-13.58	2	0.3	18.3	4	0.04	46	46	46	50.1	46	54.1	46	42	27.6
-13.08	3	0.4	17.9	4	0.02	46	46	50.1	50.1	46	54.1	46	46	27.8
-12.58	4	0.2	18.6	3	0.04	50.1	50.1	46	50.1	46	54.1	46	46	27.8
-12.08	2	0.3	19.9	3	0.05	50.1	50.1	50.1	54.1	46	54.1	46	46	27.8
-11.58	1	0.4	20.5	6	0.06	50.1	46	50.1	50.1	46	54.1	46	46	27.6
-11.08	2	0.2	20.9	4	0.06	50.1	46	50.1	50.1	46	54.1	46	46	27.6
-10.58	2	0.3	21	4	0.05	50.1	50.1	50.1	54.1	46	54.1	46	46	27.8
-10.08	1	0.2	20.9	5	0.04	50.1	46	50.1	54.1	46	54.1	46	42	27.6
-9.58	2	0.2	21	4	0.04	50.1	50.1	50.1	54.1	46	54.1	46	42	27.6
-9.08	2	0.3	21.1	3	0.04	50.1	46	50.1	54.1	50.1	54.1	46	50.1	27.8
-8.58	1	0.3	21	6	0.05	50.1	46	50.1	54.1	46	54.1	46	46	27.8
-8.08	1	0.3	21	4	0.06	50.1	50.1	50.1	54.1	50.1	54.1	46	42	27.8
-7.58	1	0.3	21	5	0.05	50.1	46	50.1	50.1	46	54.1	46	46	27.6
-7.08	1	0.2	20.9	5	0.05	50.1	46	50.1	50.1	46	54.1	46	46	27.8
-6.58	0	0.4	20.9	4	0.03	50.1	50.1	50.1	50.1	46	54.1	46	42	27.8
-6.08	0	0.2	21	5	0.04	50.1	50.1	46	54.1	50.1	54.1	46	46	27.8
-5.58	0	0.2	20.9	4	0.07	50.1	46	50.1	54.1	50.1	54.1	46	46	27.8
-5.08	0	0.3	20.9	4	0.04	50.1	50.1	50.1	50.1	46	54.1	46	46	27.6
-4.58	1	0.2	20.9	4	0.05	50.1	50.1	50.1	50.1	46	54.1	46	46	27.6
-4.08	1	0.3	20.9	5	0.04	50.1	46	50.1	50.1	46	54.1	46	46	27.8
-3.58	-1	0.4	20.9	4	0.03	50.1	50.1	50.1	50.1	46	54.1	46	46	27.6
-3.08	0	0.4	20.9	5	0.06	50.1	50.1	50.1	50.1	46	54.1	46	42	27.8
-2.58	-1	0.2	21	5	0.04	50.1	50.1	50.1	54.1	46	54.1	46	46	27.8
-2.08	1	0.4	21	3	0.04	50.1	50.1	50.1	50.1	46	54.1	46	46	27.6
-1.58	0	0.4	21.1	4	0.05	50.1	50.1	50.1	50.1	46	54.1	46	46	27.8
-1.08	0	0.4	21	4	0.04	50.1	50.1	50.1	50.1	46	54.1	46	46	27.8
-0.58	-1	0.4	21	4	0.04	50.1	46	50.1	50.1	46	54.1	46	46	27.6
-0.08	1	0.3	21.1	4	0.04	50.1	50.1	50.1	50.1	50.1	54.1	50.1	46	27.4
0.42	2	0.2	21	4	0.04	50.1	50.1	50.1	50.1	50.1	54.1	58.1	46	27.4
0.92	2	0.4	20.9	5	0.05	50.1	46	50.1	50.1	50.1	54.1	74.1	46	27.6
1.42	1	0.4	21	4	0.05	54.1	50.1	50.1	54.1	54.1	54.1	70.1	46	27.4
1.92	2	0.4	20.9	3	0.05	54.1	50.1	54.1	50.1	54.1	54.1	70.1	46	27.4
2.42	2	0.4	20.9	4	0.05	58.1	50.1	54.1	50.1	54.1	54.1	70.1	46	27.4
2.92	2	0.4	20.9	3	0.04	66.1	50.1	54.1	54.1	54.1	54.1	70.1	42	27.2
3.42	2	0.5	21	3	0.05	74.1	46	54.1	50.1	54.1	54.1	74.1	42	26.8
3.92	4	0.6	21	6	0.07	82.1	42	54.1	50.1	58.1	54.1	78.1	42	26.8
4.42	5	0.7	21	5	0.07	94.1	42	54.1	50.1	58.1	54.1	90.1	42	26.6
4.92	4	0.4	21	7	0.08	102.1	46	58.1	54.1	58.1	54.1	94.1	42	26.2
5.42	8	0.8	20.9	7	0.09	102.1	46	58.1	54.1	62.1	54.1	94.1	42	26.2
5.92	11	0.8	20.9	7	0.09	114.2	46	58.1	54.1	62.1	54.1	102.1	42	26
6.42	11	0.8	21	8	0.09	118.2	46	58.1	54.1	62.1	54.1	106.1	42	25.6
6.92	8	1	20.8	7	0.09	130.2	46	62.1	54.1	62.1	54.1	114.2	42	25.4
7.42	8	0.9	20.8	7	0.11	142.2	46	62.1	54.1	66.1	54.1	126.2	42	25.2
7.92	7	1.1	20.8	6	0.11	150.2	46	62.1	54.1	66.1	54.1	130.2	42	24.8
8.42	7	1.3	20.8	7	0.11	154.2	46	62.1	54.1	66.1	54.1	130.2	42	24.6
8.92	7	1	20.8	7	0.13	154.2	46	62.1	54.1	66.1	54.1	130.2	42	24.4
9.42	7	0.9	20.8	6	0.11	154.2	46	66.1	54.1	70.1	54.1	130.2	42	24
9.92	11	0.8	20.9	9	0.13	150.2	46	66.1	54.1	70.1	54.1	126.2	42	23.8
10.42	12	0.9	20.7	8	0.13	138.2	46	66.1	54.1	70.1	54.1	118.2	42	23.6
10.92	20	0.7	20.9	12	0.11	126.2	50.1	66.1	54.1	70.1	54.1	110.2	38	23.4
11.42	32	0.4	20.8	18	0.1	118.2	50.1	66.1	54.1	70.1	54.1	98.1	42	23.2
11.92	39	0.6	20.9	20	0.09	114.2	50.1	66.1	54.1	70.1	54.1	98.1	42	22.8
12.42	39	0.5	20.8	22	0.09	110.2	50.1	66.1	54.1	70.1	54.1	94.1	42	22.6
12.92	39	0.5	20.9	25	0.09	106.1	50.1	66.1	54.1	66.1	54.1	90.1	42	22.6
13.42	43	0.4	20.9	26	0.08	106.1	50.1	66.1	54.1	70.1	54.1	94.1	46	22.2
13.92	44	0.6	20.9	24	0.08	110.2	50.1	66.1	54.1	70.1	54.1	102.1	46	22
14.42	37	0.7	20.9	20	0.1	126.2	54.1	66.1	54.1	70.1	54.1	118.2	42	21.6

Barrel Burning Test No. 1 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB)
14.92	31	0.8	21.1	17	0.09	142.2	54.1	66.1	58.1	70.1	54.1	134.2	42	21.2
15.42	27	0.7	20.9	16	0.11	158.2	54.1	70.1	58.1	74.1	54.1	154.2	42	20.8
15.92	24	1	20.8	13	0.11	166.2	54.1	70.1	66.1	74.1	54.1	154.2	42	20.2
16.42	19	0.8	20.8	13	0.12	170.3	54.1	74.1	66.1	78.1	54.1	166.2	42	19.8
16.92	21	0.7	20.7	14	0.13	174.3	54.1	74.1	74.1	78.1	54.1	174.3	46	19.4
17.42	17	0.8	20.7	10	0.13	174.3	54.1	74.1	90.1	78.1	54.1	198.3	42	19.2
17.92	15	0.9	20.7	10	0.15	178.3	58.1	74.1	114.2	78.1	54.1	198.3	42	19.4
18.42	14	0.9	20.8	10	0.16	186.3	58.1	74.1	130.2	78.1	54.1	218.3	46	19
18.92	17	0.9	20.9	9	0.15	186.3	58.1	74.1	138.2	82.1	54.1	230.4	42	18.6
19.42	16	0.9	20.8	8	0.15	190.3	58.1	78.1	146.2	82.1	54.1	246.4	42	18.2
19.92	17	0.9	20.7	11	0.15	194.3	58.1	78.1	158.2	82.1	54.1	246.4	42	18
20.42	21	1	20.7	12	0.15	194.3	62.1	78.1	154.2	82.1	54.1	262.4	42	17.6
20.92	25	0.9	20.9	13	0.17	198.3	62.1	78.1	162.2	86.1	54.1	266.4	46	17.2
21.42	26	0.7	20.8	11	0.13	198.3	62.1	82.1	162.2	86.1	54.1	258.4	42	16.6
21.92	22	0.9	20.8	10	0.14	206.3	62.1	82.1	166.2	86.1	54.1	254.4	42	16.4
22.42	24	0.8	20.8	11	0.16	214.3	62.1	82.1	170.3	90.1	54.1	250.4	42	16.2
22.92	22	1	20.7	13	0.15	218.3	62.1	86.1	174.3	90.1	54.1	258.4	46	16
23.42	21	0.9	20.8	11	0.16	214.3	62.1	86.1	174.3	90.1	54.1	270.4	46	15.6
23.92	20	0.7	20.8	10	0.17	198.3	62.1	86.1	178.3	90.1	50.1	274.4	46	15.4
24.42	14	0.6	20.8	10	0.12	194.3	66.1	90.1	182.3	90.1	54.1	274.4	46	15.2
24.92	14	0.8	20.7	9	0.09	190.3	66.1	90.1	182.3	94.1	54.1	262.4	46	14.8
25.42	13	0.7	20.8	8	0.11	182.3	66.1	90.1	186.3	94.1	54.1	238.4	46	14.6
25.92	9	0.6	20.9	8	0.09	182.3	66.1	90.1	190.3	94.1	54.1	234.4	46	14.4
26.42	12	0.4	21	9	0.12	174.3	66.1	90.1	190.3	98.1	54.1	230.4	46	14.2
26.92	10	0.8	20.8	8	0.07	174.3	66.1	90.1	194.3	94.1	54.1	242.4	46	14
27.42	9	0.6	20.8	8	0.07	170.3	66.1	90.1	198.3	94.1	54.1	230.4	42	13.6
27.92	10	0.7	20.8	8	0.09	166.2	66.1	90.1	202.3	98.1	54.1	230.4	46	13.4
28.42	10	0.6	20.9	10	0.09	162.2	70.1	90.1	206.3	98.1	54.1	226.3	46	13.4
28.92	10	0.6	20.9	8	0.08	162.2	66.1	90.1	210.3	98.1	54.1	226.3	46	13
29.42	10	0.6	21	7	0.07	154.2	70.1	90.1	214.3	98.1	54.1	214.3	46	12.8
29.92	11	0.6	21	8	0.08	150.2	70.1	90.1	214.3	94.1	54.1	206.3	46	12.8
30.42	11	0.6	21.1	8	0.08	146.2	70.1	86.1	222.3	98.1	54.1	202.3	46	12.4
30.92	10	0.7	21.1	8	0.07	146.2	70.1	90.1	226.3	98.1	54.1	194.3	46	12.4
31.42	11	0.4	21.1	9	0.07	138.2	70.1	86.1	230.4	82.1	54.1	182.3	46	12.2
31.92	9	0.5	21.1	7	0.07	134.2	70.1	86.1	234.4	62.1	54.1	178.3	46	12.2
32.42	9	0.4	21	9	0.08	130.2	70.1	86.1	242.4	62.1	54.1	162.2	46	12
32.92	8	0.6	21	7	0.07	126.2	70.1	86.1	242.4	62.1	54.1	162.2	46	12
33.42	9	0.4	21	10	0.07	122.2	70.1	86.1	250.4	62.1	54.1	162.2	46	11.8
33.92	8	0.6	21.1	8	0.07	118.2	70.1	86.1	254.4	62.1	54.1	150.2	46	11.6
34.42	9	0.4	21.2	10	0.07	114.2	70.1	86.1	258.4	62.1	54.1	142.2	46	11.6
34.92	8	0.4	21.2	8	0.06	110.2	70.1	82.1	262.4	62.1	54.1	142.2	46	11.4
35.42	8	0.7	21	7	0.06	106.1	70.1	82.1	266.4	62.1	54.1	138.2	46	11.4
35.92	7	0.3	21	7	0.05	102.1	70.1	82.1	274.4	58.1	54.1	126.2	46	11.2
36.42	7	0.4	21	9	0.04	98.1	66.1	82.1	278.4	58.1	54.1	122.2	42	11.2
36.92	5	0.6	21	7	0.04	94.1	70.1	82.1	286.4	58.1	54.1	118.2	42	11.2
37.42	6	0.5	20.9	8	0.04	94.1	70.1	82.1	290.4	58.1	54.1	114.2	46	11
37.92	7	0.5	20.8	8	0.04	90.1	66.1	78.1	298.5	58.1	54.1	114.2	42	11
38.42	7	0.4	20.7	7	0.04	90.1	66.1	78.1	302.5	58.1	54.1	110.2	46	10.8
38.92	8	0.6	20.8	7	0.04	86.1	66.1	78.1	310.5	58.1	54.1	110.2	46	10.6
39.42	9	0.4	20.8	9	0.04	86.1	66.1	78.1	318.5	58.1	54.1	114.2	46	10.6
39.92	9	0.4	20.8	9	0.06	86.1	66.1	78.1	322.5	58.1	54.1	110.2	46	10.4
40.42	7	0.4	20.8	9	0.05	86.1	66.1	78.1	330.5	58.1	54.1	114.2	42	10.2
40.92	7	0.6	20.9	6	0.05	82.1	66.1	74.1	334.5	58.1	54.1	110.2	42	10.2
41.42	7	0.5	21.1	7	0.07	82.1	66.1	74.1	342.5	58.1	54.1	110.2	46	10
41.92	7	0.4	21	7	0.04	82.1	66.1	74.1	350.5	58.1	54.1	114.2	46	9.8
42.42	7	0.2	21	7	0.04	82.1	62.1	74.1	354.6	58.1	54.1	118.2	46	9.8
42.92	6	0.5	21	7	0.04	78.1	66.1	74.1	362.6	58.1	54.1	114.2	42	9.6
43.42	6	0.3	21	6	0.03	78.1	62.1	74.1	366.6	58.1	54.1	114.2	42	9.6
43.92	6	0.5	20.9	7	0.04	82.1	62.1	74.1	374.6	58.1	54.1	114.2	42	9.6
44.42	6	0.3	21	8	0.06	78.1	66.1	74.1	382.6	58.1	54.1	114.2	46	9.4
44.92	7	0.5	21.1	6	0.04	78.1	62.1	74.1	386.6	58.1	54.1	114.2	42	9.4
45.42	6	0.4	21	7	0.07	78.1	62.1	74.1	394.6	58.1	54.1	110.2	42	9.4
45.92	4	0.3	20.9	7	0.03	78.1	62.1	74.1	398.6	58.1	54.1	110.2	42	9.4
46.42	7	0.4	21.1	5	0.04	78.1	62.1	74.1	402.6	58.1	54.1	110.2	42	9.4
46.92	4	0.3	20.9	8	0.06	78.1	62.1	74.1	410.6	58.1	54.1	106.1	46	9.4
47.42	7	0.4	21	7	0.05	78.1	62.1	74.1	414.7	58.1	54.1	106.1	46	9.4
47.92	5	0.4	20.9	9	0.05	74.1	62.1	70.1	418.7	58.1	54.1	102.1	42	9.4
48.42	4	0.4	21	7	0.04	74.1	62.1	70.1	422.7	58.1	54.1	98.1	46	9.4
48.92	5	0.4	21	7	0.03	74.1	62.1	70.1	426.7	58.1	54.1	90.1	46	9.4
49.42	4	0.4	20.9	7	0.04	70.1	62.1	70.1	426.7	58.1	54.1	90.1	42	9.4

Barrel Burning Test No. 1 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB)
49.92	7	0.3	21	8	0.05	70.1	62.1	70.1	430.7	58.1	54.1	90.1	42	9.4
50.42	7	0.5	21.1	9	0.03	70.1	62.1	70.1	430.7	58.1	54.1	90.1	42	9.4
50.92	6	0.5	20.9	6	0.03	66.1	62.1	70.1	434.7	58.1	54.1	90.1	42	9.6
51.42	7	0.5	21	7	0.04	66.1	62.1	70.1	434.7	54.1	54.1	86.1	42	9.6
51.92	6	0.4	21	7	0.04	66.1	62.1	66.1	434.7	54.1	54.1	82.1	42	9.6
52.42	9	0.4	21.1	9	0.05	66.1	58.1	70.1	434.7	58.1	54.1	82.1	42	9.6
52.92	8	0.4	21.1	8	0.04	66.1	58.1	66.1	438.7	58.1	54.1	82.1	42	9.8
53.42	9	0.3	21	7	0.03	66.1	58.1	66.1	438.7	58.1	54.1	82.1	42	9.6
53.92	7	0.3	20.9	8	0.03	66.1	58.1	66.1	438.7	58.1	54.1	82.1	42	9.8
54.42	9	0.5	20.9	9	0.06	66.1	58.1	66.1	438.7	54.1	54.1	78.1	42	9.8
54.92	8	0.5	21	9	0.07	66.1	58.1	66.1	434.7	54.1	54.1	78.1	46	9.8
55.42	6	0.3	21.1	8	0.04	66.1	58.1	66.1	438.7	54.1	54.1	78.1	42	9.8
55.92	5	0.3	20.9	7	0.04	62.1	58.1	66.1	438.7	54.1	54.1	74.1	42	9.8
56.42	7	0.2	21.1	8	0.03	66.1	58.1	66.1	438.7	54.1	54.1	74.1	42	9.8
56.92	6	0.4	21	7	0.04	62.1	58.1	66.1	438.7	54.1	54.1	70.1	42	9.8
57.42	6	0.4	21	8	0.04	62.1	58.1	66.1	438.7	54.1	54.1	70.1	42	9.8
57.92	8	0.3	21.1	7	0.04	62.1	58.1	66.1	434.7	54.1	54.1	66.1	42	9.8
58.42	5	0.3	21	7	0.02	62.1	58.1	62.1	434.7	54.1	54.1	66.1	42	9.8
58.92	4	0.4	20.9	8	0.03	62.1	58.1	62.1	434.7	54.1	54.1	66.1	42	9.8
59.42	4	0.3	21	8	0.03	62.1	58.1	62.1	430.7	54.1	54.1	62.1	46	9.8
59.92	7	0.3	21.1	5	0.03	62.1	58.1	62.1	430.7	54.1	50.1	66.1	42	10
60.42	8	0.4	21.1	7	0.03	58.1	54.1	62.1	430.7	54.1	54.1	62.1	42	9.8
60.92	10	0.4	21.1	6	0.04	58.1	54.1	62.1	430.7	54.1	50.1	58.1	42	9.8
61.42	8	0.4	21	7	0.04	58.1	54.1	62.1	426.7	54.1	54.1	58.1	42	9.8
61.92	5	0.4	21	7	0.03	58.1	54.1	62.1	426.7	54.1	54.1	58.1	42	9.8
62.42	6	0.3	20.9	7	0.04	58.1	54.1	62.1	426.7	54.1	54.1	58.1	46	9.6
62.92	6	0.5	21.1	6	0.03	58.1	54.1	58.1	422.7	54.1	50.1	58.1	46	9.8
63.42	7	0.2	21.1	8	0.04	58.1	54.1	62.1	422.7	54.1	54.1	58.1	42	9.8
63.92	5	0.4	21	6	0.03	58.1	54.1	62.1	418.7	54.1	54.1	58.1	42	9.6
64.42	2	0.4	20.9	6	0.03	58.1	54.1	62.1	418.7	54.1	54.1	62.1	42	9.8
64.92	6	0.4	21	6	0.03	58.1	54.1	58.1	418.7	54.1	54.1	58.1	42	9.6
65.42	6	0.5	21.1	5	0.03	58.1	54.1	58.1	414.7	54.1	50.1	58.1	42	9.4
65.92	7	0.3	21.1	5	0.03	58.1	54.1	58.1	414.7	54.1	50.1	58.1	50.1	9.8
66.42	6	0.3	21	6	0.02	58.1	54.1	58.1	410.6	54.1	54.1	58.1	42	9.8
66.92	5	0.2	20.9	6	0.04	58.1	54.1	58.1	410.6	54.1	54.1	58.1	46	9.6
67.42	4	0.5	21	5	0.02	58.1	54.1	62.1	410.6	54.1	54.1	58.1	46	9.6
67.92	6	0.4	21.1	7	0.04	58.1	54.1	58.1	410.6	54.1	54.1	58.1	46	9.6
68.42	7	0.4	21.2	6	0.04	58.1	54.1	58.1	410.6	54.1	54.1	58.1	42	9.4
68.92	6	0.3	21.1	5	0.04	54.1	54.1	58.1	406.6	54.1	54.1	58.1	42	9.6
69.42	5	0.4	21	4	0.02	58.1	50.1	58.1	406.6	58.1	54.1	58.1	46	9.6
69.92	6	0.4	20.9	4	0.02	58.1	54.1	58.1	402.6	54.1	54.1	58.1	46	9.6
70.42	5	0.5	20.9	4	0.02	58.1	54.1	58.1	402.6	54.1	54.1	58.1	46	9.6
70.92	6	0.4	20.9	6	0.04	58.1	54.1	58.1	402.6	54.1	54.1	58.1	46	9.6
71.42	7	0.5	21.1	5	0.04	58.1	54.1	58.1	398.6	54.1	54.1	58.1	46	9.6
71.92	6	0.4	21.1	6	0.02	54.1	54.1	58.1	402.6	54.1	54.1	54.1	46	9.6
72.42	7	0.4	21.1	5	0.04	54.1	54.1	58.1	402.6	54.1	54.1	54.1	46	9.6
72.92	5	0.2	21	6	0.04	54.1	54.1	58.1	398.6	58.1	54.1	54.1	46	9.6
73.42	5	0.4	20.9	6	0.02	54.1	54.1	58.1	394.6	54.1	54.1	54.1	46	9.6
73.92	6	0.4	21.1	6	0.03	54.1	46	58.1	394.6	54.1	54.1	54.1	46	9.6
74.42	5	0.4	21.1	5	0.03	54.1	54.1	58.1	394.6	54.1	54.1	54.1	46	9.6
74.92	3	0.2	21	4	0.02	54.1	50.1	58.1	394.6	54.1	54.1	58.1	46	9.6
75.42	7	0.2	21.2	7	0.04	58.1	54.1	58.1	390.6	54.1	54.1	58.1	46	9.4
75.92	5	0.4	21	4	0.02	58.1	54.1	58.1	394.6	54.1	54.1	54.1	46	9.4
76.42	6	0.4	21	4	0.02	54.1	54.1	58.1	390.6	54.1	54.1	54.1	46	9.4
76.92	6	0.3	21.1	4	0.02	54.1	54.1	58.1	390.6	54.1	54.1	58.1	46	9.6
77.42	5	0.4	21	4	0.02	54.1	54.1	58.1	390.6	58.1	54.1	54.1	46	9.6
77.92	2	0.3	21	4	0.04	54.1	54.1	58.1	390.6	54.1	54.1	54.1	46	9.4
78.42	5	0.2	21	5	0.03	58.1	54.1	58.1	390.6	54.1	54.1	54.1	46	9.6
78.92	18	0.4	19.2	5	0.02	54.1	54.1	58.1	386.6	54.1	54.1	54.1	46	9.2

Barrel Burning Test No. 2 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	Temp9 (C)	weight (LB
-19.92	0	0.4	21.3	3	0.03	46	50.1	22	46	50.1	50.1	46	42	30
-19.42	1	0.5	21.3	2	0.02	46	50.1	26	46	50.1	50.1	46	42	30.2
-18.92	1	0.3	21.3	5	0.04	46	46	22	46	50.1	50.1	46	42	29.8
-18.42	-1	0.5	21	5	0.03	46	50.1	6	46	50.1	50.1	46	42	30
-17.92	-1	0.5	20.9	4	0.03	46	46	6	50.1	50.1	50.1	46	42	30
-17.42	1	0.4	21	4	0.03	46	46	18	50.1	50.1	50.1	42	42	30
-16.92	-1	0.6	21	4	0.04	46	46	18	46	50.1	50.1	46	42	30
-16.42	1	0.3	20.9	4	0.01	46	46	10	46	50.1	50.1	42	42	30
-15.92	0	0	20.9	5	0.03	46	46	2	50.1	50.1	50.1	46	42	30
-15.42	0	0.2	20.9	4	0.02	46	46	6	50.1	50.1	50.1	42	42	30
-14.92	2	0	20.9	5	0.03	46	46	6	50.1	50.1	50.1	42	42	30
-14.42	-1	0.1	20.8	5	0.02	46	46	6	46	50.1	50.1	46	42	30
-13.92	0	0	20.9	3	0.03	46	46	18	50.1	50.1	50.1	46	42	30
-13.42	-2	0	20.8	5	0.02	46	46	18	50.1	50.1	50.1	46	42	30
-12.92	0	-0.1	20.9	4	0.03	46	46	6	50.1	50.1	50.1	46	42	30
-12.42	1	-0.1	20.8	5	0.03	46	46	18	46	50.1	50.1	46	42	30
-11.92	-2	-0.1	20.8	3	0.01	46	46	18	50.1	54.1	50.1	46	42	30
-11.42	0	0	20.9	3	0.02	46	46	10	50.1	50.1	50.1	46	42	30
-10.92	0	0	20.8	5	0.02	46	50.1	18	46	50.1	50.1	46	42	30
-10.42	0	0	20.8	5	0.04	46	50.1	2	46	50.1	50.1	46	42	30
-9.92	-1	0	20.9	4	0.02	46	46	2	50.1	54.1	50.1	46	42	30
-9.42	0	-0.1	20.8	4	0.02	46	46	6	50.1	50.1	50.1	46	42	29.8
-8.92	-1	0	21	5	0.03	46	46	6	50.1	50.1	50.1	46	42	30
-8.42	0	0.1	20.9	4	0.01	46	46	2	50.1	50.1	50.1	46	42	30
-7.92	1	0	20.9	5	0.02	46	46	2	50.1	54.1	50.1	46	42	30
-7.42	2	0.1	20.9	5	0.02	46	46	14	46	50.1	50.1	46	42	30
-6.92	0	0	20.9	5	0.02	46	46	14	50.1	54.1	50.1	46	42	30
-6.42	1	0	20.9	5	0.02	46	50.1	22	50.1	50.1	50.1	46	42	29.8
-5.92	0	0.2	20.9	4	0	46	46	22	46	54.1	50.1	46	42	30
-5.42	2	0.1	20.9	3	0.03	46	46	22	46	50.1	50.1	46	42	29.8
-4.92	-1	0.1	20.8	4	0.02	46	46	22	50.1	54.1	50.1	46	42	30
-4.42	0	-0.1	20.9	4	0.01	46	46	22	46	50.1	50.1	46	42	30
-3.92	2	-0.1	20.9	5	0.02	46	46	2	50.1	54.1	50.1	46	42	30
-3.42	0	0	20.9	6	0.03	46	50.1	14	50.1	50.1	50.1	46	42	30
-2.92	1	0.1	20.9	5	0.02	46	46	14	50.1	54.1	50.1	46	42	29.8
-2.42	1	0	20.9	4	0.04	46	50.1	26	50.1	50.1	50.1	46	42	30
-1.92	0	0	20.9	3	0.02	46	46	26	46	50.1	50.1	42	42	30
-1.42	0	0	20.9	4	0.02	46	46	22	46	50.1	50.1	46	42	30
-0.92	1	0.2	20.8	4	0.02	46	46	22	50.1	54.1	50.1	46	42	30
-0.42	1	0	20.9	5	0.02	46	50.1	18	46	50.1	50.1	46	42	29.8
0.08	0	0.2	20.9	4	0.02	46	46	2	46	54.1	50.1	46	42	29.8
0.58	-1	0	20.8	6	0.02	50.1	46	2	46	50.1	50.1	46	42	30
1.08	0	0.1	20.9	3	0.01	50.1	46	22	50.1	50.1	50.1	50.1	42	30
1.58	0	0.2	20.9	4	0.03	58.1	46	10	50.1	50.1	50.1	54.1	42	29.6
2.08	1	0.2	20.8	4	0.02	74.1	46	10	46	50.1	50.1	62.1	42	29.4
2.58	2	0.4	21	6	0.04	102.1	46	10	50.1	50.1	50.1	102.1	42	29.2
3.08	5	0.7	20.7	7	0.04	134.2	50.1	10	46	50.1	50.1	190.3	42	29
3.58	8	1.2	20.8	5	0.04	154.2	42	14	50.1	54.1	50.1	222.3	42	28.6
4.08	2	0.9	20.6	5	0.05	166.2	42	14	50.1	54.1	50.1	214.3	42	28.2
4.58	5	0.7	20.7	6	0.07	170.3	42	18	50.1	54.1	50.1	226.3	42	28
5.08	4	0.9	20.7	5	0.08	162.2	42	10	46	54.1	50.1	206.3	42	27.8
5.58	6	0.9	20.5	4	0.08	158.2	46	2	46	54.1	50.1	202.3	42	27.2
6.08	4	0.8	20.7	7	0.08	162.2	42	2	50.1	54.1	50.1	206.3	42	27
6.58	3	0.8	20.8	7	0.07	158.2	42	6	50.1	54.1	50.1	198.3	42	26.6
7.08	7	0.7	20.8	7	0.09	150.2	46	10	50.1	54.1	50.1	194.3	42	26.4
7.58	10	0.7	20.8	10	0.09	146.2	46	14	50.1	54.1	50.1	206.3	42	26.2
8.08	12	0.8	20.7	15	0.08	146.2	46	6	50.1	54.1	50.1	198.3	42	25.8
8.58	20	0.6	20.6	14	0.08	146.2	46	18	50.1	54.1	50.1	230.4	42	25.6
9.08	20	0.7	20.8	13	0.09	146.2	46	46	50.1	54.1	54.1	250.4	42	25.2
9.58	20	0.7	20.7	17	0.08	150.2	46	14	50.1	54.1	50.1	234.4	42	25
10.08	22	0.4	20.7	15	0.09	150.2	50.1	46	50.1	54.1	50.1	226.3	42	24.6
10.58	22	0.6	20.9	11	0.08	150.2	50.1	54.1	50.1	54.1	54.1	214.3	42	24.2
11.08	20	0.5	20.9	11	0.08	146.2	50.1	46	50.1	54.1	50.1	206.3	42	24.2
11.58	20	0.4	20.9	16	0.09	158.2	50.1	50.1	50.1	54.1	54.1	230.4	42	23.6
12.08	26	0.7	20.8	14	0.08	162.2	54.1	46	50.1	54.1	54.1	226.3	42	23.4
12.58	23	0.6	20.8	14	0.07	170.3	54.1	46	50.1	54.1	50.1	238.4	42	22.8
13.08	22	0.7	20.9	13	0.09	174.3	54.1	54.1	50.1	54.1	54.1	250.4	42	22.6
13.58	21	0.6	20.9	10	0.09	178.3	54.1	54.1	50.1	54.1	54.1	246.4	42	22
14.08	17	0.7	20.9	10	0.1	178.3	54.1	54.1	50.1	54.1	54.1	246.4	42	21.8
14.58	16	0.7	20.8	10	0.09	178.3	54.1	62.1	50.1	54.1	54.1	242.4	42	21.2

Barrel Burning Test No. 2 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	Temp9 (C)	weight (LB
15.08	18	0.7	20.7	8	0.09	174.3	54.1	62.1	50.1	54.1	54.1	250.4	42	21
15.58	16	0.6	20.7	10	0.08	178.3	54.1	50.1	50.1	54.1	54.1	302.5	42	20.6
16.08	16	0.8	20.7	8	0.08	186.3	54.1	42	50.1	54.1	54.1	322.5	42	20.2
16.58	13	0.7	20.7	8	0.08	190.3	58.1	62.1	50.1	54.1	50.1	334.5	42	19.6
17.08	11	0.7	20.8	8	0.09	194.3	58.1	66.1	54.1	54.1	54.1	346.5	42	19.2
17.58	10	0.8	20.7	7	0.11	194.3	54.1	38	54.1	58.1	54.1	358.6	42	18.8
18.08	7	0.8	20.6	7	0.08	198.3	58.1	30	54.1	54.1	50.1	402.6	42	18.2
18.58	10	0.9	20.6	8	0.1	202.3	58.1	34	54.1	54.1	54.1	402.6	42	17.8
19.08	11	0.8	20.7	8	0.09	206.3	58.1	58.1	54.1	54.1	50.1	414.7	42	17.4
19.58	11	0.8	20.8	7	0.11	198.3	62.1	82.1	58.1	54.1	54.1	422.7	42	16.8
20.08	9	0.7	20.7	7	0.1	190.3	58.1	58.1	58.1	58.1	54.1	418.7	46	16.8
20.58	7	0.7	20.6	7	0.11	190.3	58.1	46	62.1	54.1	54.1	438.7	42	16.4
21.08	9	0.8	20.8	7	0.09	194.3	62.1	78.1	62.1	54.1	54.1	442.7	46	16.2
21.58	10	0.6	20.8	6	0.11	198.3	62.1	78.1	66.1	58.1	54.1	446.7	46	16
22.08	9	0.8	20.7	6	0.07	202.3	62.1	50.1	70.1	58.1	54.1	514.8	46	15.8
22.58	10	0.7	20.7	7	0.09	202.3	62.1	86.1	70.1	58.1	54.1	506.8	46	15.4
23.08	10	0.9	20.8	6	0.1	202.3	62.1	82.1	74.1	58.1	50.1	486.8	42	15
23.58	8	0.7	20.7	7	0.08	198.3	62.1	66.1	78.1	58.1	54.1	450.7	46	14.6
24.08	9	0.6	20.8	8	0.08	194.3	66.1	102.1	82.1	58.1	54.1	434.7	46	14.6
24.58	9	0.6	20.8	7	0.07	190.3	62.1	78.1	90.1	54.1	54.1	406.6	46	14.6
25.08	10	0.4	20.7	8	0.09	186.3	62.1	90.1	94.1	58.1	54.1	410.6	46	14.4
25.58	13	0.6	20.8	5	0.09	182.3	66.1	118.2	98.1	54.1	54.1	402.6	46	14
26.08	10	0.4	20.9	7	0.08	182.3	70.1	114.2	106.1	58.1	54.1	406.6	46	13.8
26.58	9	0.5	20.8	8	0.08	178.3	66.1	94.1	114.2	58.1	54.1	378.6	46	13.6
27.08	9	0.5	20.7	8	0.07	174.3	66.1	90.1	114.2	58.1	54.1	378.6	46	13.4
27.58	9	0.4	20.7	8	0.06	174.3	66.1	98.1	118.2	58.1	50.1	366.6	42	13.2
28.08	12	0.3	20.8	7	0.07	170.3	66.1	122.2	118.2	58.1	54.1	334.5	46	13
28.58	9	0.3	20.8	7	0.05	170.3	66.1	130.2	118.2	58.1	54.1	342.5	46	13
29.08	10	0.3	20.8	7	0.06	166.2	66.1	134.2	122.2	58.1	54.1	346.5	46	12.8
29.58	10	0.5	20.8	6	0.04	166.2	66.1	134.2	122.2	58.1	54.1	358.6	46	12.6
30.08	9	0.4	20.8	6	0.05	166.2	66.1	150.2	126.2	58.1	54.1	342.5	46	12.6
30.58	10	0.5	20.9	7	0.06	162.2	70.1	166.2	126.2	58.1	54.1	330.5	46	12.2
31.08	9	0.4	20.8	6	0.05	162.2	70.1	150.2	130.2	58.1	54.1	322.5	46	12.2
31.58	8	0.4	20.9	7	0.06	158.2	70.1	154.2	130.2	58.1	54.1	290.4	46	12.2
32.08	7	0.4	20.9	7	0.05	154.2	66.1	162.2	134.2	58.1	54.1	298.5	46	12
32.58	9	0.4	20.9	7	0.04	154.2	70.1	166.2	134.2	54.1	54.1	290.4	42	11.6
33.08	9	0.4	20.9	7	0.04	150.2	66.1	166.2	138.2	54.1	54.1	278.4	46	11.6
33.58	8	0.4	20.8	7	0.04	150.2	70.1	162.2	142.2	58.1	54.1	278.4	46	11.6
34.08	7	0.5	20.8	6	0.04	146.2	66.1	162.2	142.2	58.1	54.1	274.4	46	11.4
34.58	7	0.4	20.9	7	0.04	146.2	70.1	166.2	142.2	58.1	54.1	266.4	46	11.2
35.08	7	0.5	20.9	5	0.04	142.2	66.1	174.3	146.2	54.1	54.1	246.4	46	11.2
35.58	7	0.5	20.9	6	0.04	142.2	-38.1	174.3	150.2	58.1	54.1	230.4	46	11.2
36.08	6	0.5	20.9	6	0.04	138.2	66.1	170.3	150.2	54.1	54.1	238.4	46	11
36.58	5	0.3	20.9	5	0.04	138.2	66.1	178.3	154.2	54.1	54.1	222.3	46	11
37.08	6	0.3	20.9	5	0.03	134.2	66.1	194.3	154.2	58.1	54.1	218.3	46	11
37.58	6	0.3	20.9	5	0.02	130.2	66.1	186.3	158.2	54.1	54.1	218.3	46	11
38.08	5	0.2	20.9	6	0.02	130.2	66.1	178.3	158.2	54.1	54.1	210.3	42	10.8
38.58	5	0.3	20.9	7	0.04	126.2	66.1	170.3	162.2	58.1	54.1	194.3	46	10.8
39.08	6	0.2	20.9	7	0.05	126.2	66.1	182.3	162.2	54.1	54.1	190.3	46	10.8
39.58	8	0.3	21	5	0.04	122.2	66.1	194.3	162.2	54.1	54.1	178.3	46	10.6
40.08	6	0.4	20.9	6	0.02	118.2	66.1	166.2	166.2	58.1	54.1	186.3	46	10.6
40.58	9	0.2	21	5	0.02	114.2	66.1	190.3	170.3	54.1	54.1	194.3	42	10.6
41.08	9	0.2	20.8	5	0.04	114.2	66.1	162.2	170.3	54.1	54.1	182.3	46	10.4
41.58	9	0.1	21	6	0.04	110.2	66.1	198.3	174.3	54.1	54.1	178.3	46	10.4
42.08	4	0.4	20.9	4	0.02	106.1	62.1	154.2	174.3	54.1	50.1	178.3	42	10.4
42.58	7	0.3	21	5	0.04	106.1	66.1	190.3	178.3	54.1	54.1	162.2	42	10.4
43.08	6	0.1	21	7	0.04	102.1	66.1	194.3	178.3	54.1	54.1	166.2	42	10.4
43.58	9	0.3	21	5	0.04	98.1	66.1	190.3	182.3	54.1	54.1	154.2	46	10.4
44.08	8	0.1	20.9	5	0.01	94.1	62.1	186.3	182.3	54.1	54.1	146.2	46	10.4
44.58	6	0.2	20.9	5	0.02	94.1	66.1	178.3	186.3	54.1	54.1	146.2	46	10.4
45.08	7	0.2	21	5	0.03	90.1	62.1	166.2	186.3	54.1	54.1	150.2	46	10.4
45.58	4	0.4	20.9	5	0.02	86.1	62.1	150.2	190.3	54.1	54.1	146.2	46	10.4
46.08	4	0.2	21	7	0.02	86.1	62.1	146.2	190.3	54.1	54.1	150.2	46	10.4
46.58	3	0.3	21	5	0.02	82.1	62.1	150.2	194.3	54.1	54.1	142.2	46	10.2
47.08	5	0.3	21	6	0.04	82.1	62.1	162.2	194.3	54.1	54.1	146.2	46	10
47.58	5	0.1	21	6	0.02	78.1	62.1	174.3	194.3	54.1	54.1	154.2	42	10.2
48.08	4	0.2	21	4	0	78.1	62.1	162.2	198.3	54.1	54.1	150.2	46	10.2
48.58	0	0.2	20.9	4	0.02	78.1	62.1	142.2	198.3	54.1	54.1	142.2	46	10.2
49.08	3	0.4	21	4	0.02	74.1	62.1	142.2	202.3	54.1	54.1	142.2	42	10.2
49.58	2	0.2	21.1	6	0.03	74.1	58.1	162.2	206.3	54.1	54.1	142.2	46	10.2

Barrel Burning Test No. 2 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	Temp9 (C)	weight (LB
50.08	4	0.2	21.1	6	0.02	74.1	58.1	170.3	206.3	54.1	54.1	138.2	42	10.2
50.58	3	0.2	21.1	4	0.02	70.1	58.1	170.3	206.3	54.1	54.1	134.2	46	10
51.08	4	0.1	20.9	4	0.01	70.1	58.1	162.2	210.3	54.1	54.1	130.2	42	10
51.58	3	0.1	21	6	0.02	70.1	58.1	166.2	210.3	54.1	54.1	122.2	46	10
52.08	3	0.2	21.1	5	0.02	70.1	58.1	170.3	214.3	54.1	50.1	122.2	42	10
52.58	2	0.1	21.1	4	0	70.1	58.1	170.3	218.3	54.1	54.1	122.2	42	10
53.08	6	0.2	21.1	3	0.03	70.1	58.1	162.2	218.3	54.1	54.1	122.2	46	10
53.58	5	0.2	21	5	0.04	66.1	58.1	138.2	218.3	54.1	54.1	114.2	46	10
54.08	1	0.2	21	4	0.03	66.1	58.1	138.2	222.3	54.1	54.1	110.2	46	9.8
54.58	3	0.2	21.1	3	0.02	66.1	58.1	138.2	222.3	54.1	54.1	106.1	46	10
55.08	4	0.2	21.1	5	0.03	66.1	58.1	150.2	226.3	54.1	54.1	106.1	46	10
55.58	4	0	21.2	5	0.02	66.1	58.1	158.2	226.3	54.1	54.1	106.1	46	9.8
56.08	5	0.2	21.1	4	0	66.1	58.1	162.2	230.4	54.1	54.1	102.1	46	10
56.58	4	0.1	21	5	0.01	66.1	58.1	150.2	230.4	54.1	54.1	98.1	46	9.8
57.08	5	0.3	21	5	0.02	66.1	58.1	138.2	230.4	54.1	54.1	94.1	46	9.8
57.58	2	0.2	20.9	5	0.01	66.1	58.1	122.2	234.4	54.1	54.1	90.1	46	9.8
58.08	4	0.2	20.9	5	0.02	66.1	58.1	122.2	234.4	54.1	54.1	90.1	46	9.8
58.58	4	0.1	20.9	5	0	62.1	58.1	122.2	234.4	54.1	54.1	86.1	46	9.8
59.08	3	0.2	20.9	5	0.01	66.1	58.1	118.2	238.4	54.1	54.1	86.1	46	9.8
59.58	5	0.2	20.9	5	0.02	62.1	58.1	118.2	238.4	54.1	54.1	82.1	46	9.8
60.08	2	0.2	20.9	6	0.01	58.1	54.1	114.2	242.4	54.1	54.1	82.1	46	9.8
60.58	4	0.3	20.9	4	0.02	62.1	54.1	114.2	242.4	54.1	54.1	78.1	46	9.8
61.08	3	0.1	20.9	7	0.01	62.1	54.1	122.2	234.4	54.1	54.1	82.1	46	10
61.58	5	0.2	21	6	0.02	62.1	50.1	126.2	246.4	54.1	54.1	78.1	46	9.8
62.08	4	0.2	21	4	0.01	62.1	54.1	126.2	250.4	54.1	54.1	78.1	46	9.8
62.58	7	0.2	21	5	0.02	62.1	54.1	126.2	250.4	54.1	54.1	78.1	46	9.8
63.08	5	0.2	21	5	0.02	62.1	54.1	122.2	250.4	54.1	54.1	78.1	46	9.6
63.58	4	0.2	21	7	0.03	62.1	54.1	114.2	254.4	54.1	54.1	78.1	46	9.8
64.08	6	0.3	21.1	6	0.03	62.1	54.1	130.2	254.4	54.1	54.1	82.1	46	9.6
64.58	7	0.2	21.1	5	0.03	62.1	54.1	142.2	258.4	54.1	54.1	78.1	46	9.8
65.08	4	0.2	21	7	0.02	62.1	54.1	118.2	258.4	54.1	54.1	78.1	46	9.8
65.58	5	0.2	21	6	0.03	62.1	54.1	110.2	262.4	54.1	54.1	74.1	46	9.8
66.08	4	0.2	20.9	6	0.03	58.1	54.1	106.1	262.4	54.1	54.1	74.1	42	9.8
66.58	5	0.1	21	6	0.01	58.1	54.1	114.2	266.4	54.1	54.1	70.1	46	9.8
67.08	5	0.1	21.1	6	0.02	58.1	54.1	142.2	266.4	54.1	54.1	70.1	46	9.8
67.58	6	0.3	21.1	5	0.02	58.1	54.1	122.2	266.4	54.1	54.1	70.1	42	9.8
68.08	5	0.1	21	7	0.02	58.1	54.1	118.2	270.4	54.1	54.1	70.1	46	9.8
68.58	7	0.2	21.1	4	0.02	58.1	54.1	146.2	270.4	54.1	54.1	70.1	46	9.8
69.08	6	0.2	21.2	5	0.02	58.1	54.1	138.2	274.4	54.1	54.1	70.1	46	9.8
69.58	6	0.2	21.1	7	0.02	58.1	54.1	134.2	274.4	54.1	54.1	70.1	46	9.8
70.08	4	0.2	21.1	7	0.02	58.1	54.1	114.2	274.4	54.1	54.1	70.1	46	9.8
70.58	5	0.3	21	6	0.02	58.1	54.1	110.2	278.4	54.1	54.1	70.1	46	9.8
71.08	3	0.2	21	4	0.03	58.1	42	110.2	278.4	54.1	54.1	70.1	46	9.8
71.58	3	0.3	21	5	0.03	58.1	54.1	106.1	282.4	54.1	54.1	70.1	46	9.8
72.08	3	0.4	21	7	0.02	58.1	54.1	106.1	282.4	54.1	54.1	70.1	46	9.6
72.58	3	0.3	21.1	5	0.02	58.1	54.1	110.2	282.4	54.1	54.1	70.1	46	9.8
73.08	5	0.3	21.1	4	0.02	58.1	54.1	122.2	286.4	54.1	54.1	70.1	46	9.8
73.58	4	0.3	21.1	5	0.03	58.1	54.1	130.2	286.4	54.1	54.1	66.1	46	9.6
74.08	8	0.2	21.2	5	0.02	58.1	54.1	142.2	290.4	54.1	54.1	66.1	46	9.8
74.58	6	0.1	21.2	6	0.02	58.1	50.1	146.2	286.4	54.1	54.1	66.1	46	9.8
75.08	6	0.1	21.2	7	0.03	58.1	50.1	142.2	290.4	54.1	54.1	66.1	46	9.6
75.58	5	0.2	21.1	7	0.03	58.1	50.1	122.2	290.4	54.1	54.1	66.1	46	9.8
76.08	4	0.2	21	4	0.02	58.1	54.1	106.1	290.4	54.1	54.1	66.1	46	9.6
76.58	7	0.2	21.1	5	0.03	58.1	50.1	142.2	294.5	54.1	54.1	66.1	42	9.6
77.08	6	0.3	21	4	0.02	58.1	50.1	114.2	294.5	54.1	54.1	66.1	46	9.4
77.58	6	0.2	21.1	7	0.01	58.1	50.1	134.2	294.5	54.1	54.1	66.1	46	9.6
78.08	6	0.2	21.1	6	0.01	58.1	50.1	122.2	298.5	54.1	54.1	66.1	46	9.8
78.58	7	0.3	21	7	0.02	58.1	50.1	102.1	298.5	54.1	54.1	66.1	46	9.6
79.08	2	0.2	21	7	0.03	58.1	50.1	102.1	298.5	54.1	54.1	66.1	46	9.6
79.58	4	0.2	21	5	0.02	58.1	50.1	102.1	302.5	54.1	54.1	66.1	46	9.6

Barrel Burning Test No. 4 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB
-19.73	5	0.1	21.7	6	0.02	46	46	0	46	42	50.1	42	38	14.2
-19.23	2	0	21.6	7	0.02	46	46	0	46	42	50.1	42	42	15
-18.73	2	0	21.6	8	0.04	46	46	0	46	42	46	42	38	15
-18.23	3	0	21.7	7	0.03	46	46	0	46	42	50.1	42	42	15
-17.73	4	0.1	21.7	5	0.03	46	46	0	46	42	46	42	38	15
-17.23	4	0	21.7	6	0.03	42	46	0	46	42	46	42	38	15
-16.73	4	-0.2	21.7	7	0.03	46	46	0	50.1	42	46	42	38	15
-16.23	6	0	21.6	7	0.02	46	46	0	50.1	42	50.1	42	42	15
-15.73	4	0	21.6	6	0.03	46	46	0	50.1	42	46	42	42	15
-15.23	2	0	21.6	5	0.02	46	46	0	46	42	46	42	42	15
-14.73	5	0	21.7	5	0.02	46	46	0	50.1	46	50.1	42	42	15
-14.23	6	-0.1	21.6	5	0	46	46	0	50.1	42	50.1	42	42	15
-13.73	3	0	21.6	7	0.02	46	46	0	50.1	42	50.1	42	42	15
-13.23	4	0	21.7	7	0.02	46	42	0	50.1	42	50.1	42	42	15
-12.73	4	0	21.6	7	0.02	46	46	0	50.1	42	50.1	42	38	15
-12.23	4	0	21.6	7	0.02	46	46	0	50.1	42	50.1	42	38	15
-11.73	4	-0.1	21.7	9	0.03	46	46	0	50.1	42	50.1	42	38	15
-11.23	3	-0.1	21.6	7	0.01	46	46	0	50.1	42	50.1	42	38	15
-10.73	5	0	21.7	8	0.04	46	46	0	50.1	42	46	42	38	15
-10.23	7	0.1	21.7	8	0.02	46	46	0	50.1	42	50.1	42	38	15
-9.73	3	0	21.6	6	0.02	42	46	0	50.1	42	50.1	42	38	15
-9.23	2	0	21.5	6	0.02	46	46	0	50.1	42	46	42	38	15
-8.73	2	0.2	21.6	7	0.02	46	46	0	50.1	42	46	42	42	15
-8.23	3	0	21.6	7	0.01	46	46	0	50.1	42	50.1	42	38	15
-7.73	3	0	21.6	8	0.02	46	46	0	50.1	42	46	42	38	15
-7.23	4	0.2	21.7	5	0.03	42	46	0	50.1	42	46	42	38	15
-6.73	4	0.1	21.6	5	0.01	42	46	0	50.1	42	46	42	38	15
-6.23	4	-0.1	21.7	7	0.03	42	46	0	46	42	46	42	38	15
-5.73	5	0.2	21.6	7	0.01	42	42	0	50.1	42	46	42	38	15
-5.23	4	-0.1	21.6	7	0.02	42	42	0	50.1	42	46	42	38	15
-4.73	3	0	21.5	7	0.01	42	42	0	50.1	42	46	42	38	15
-4.23	3	0.1	21.5	6	0.02	42	46	0	50.1	42	46	42	38	15
-3.73	3	0	21.5	7	0.02	42	42	0	50.1	42	46	46	38	15
-3.23	6	0	21.6	7	0.02	46	42	0	50.1	42	46	42	38	15
-2.73	4	0	21.6	7	0.01	42	42	0	50.1	42	46	42	38	14.8
-2.23	3	-0.1	21.6	7	0.02	42	42	0	50.1	42	46	42	38	14.8
-1.73	4	-0.2	21.6	8	0.02	42	42	0	50.1	42	46	46	38	14.8
-1.23	6	0	21.6	7	0.02	42	42	0	50.1	46	46	50.1	38	15
-0.73	3	0.1	21.5	7	0.02	50.1	42	0	50.1	50.1	46	70.1	38	14.4
-0.23	3	0.4	21.6	8	0.02	74.1	42	0	50.1	50.1	46	90.1	38	14.2
0.27	14	0.5	21.5	12	0.04	94.1	46	0	54.1	50.1	42	102.1	38	13.8
0.77	24	0.7	21.4	13	0.03	106.1	46	0	58.1	54.1	46	170.3	38	13.2
1.27	20	0.7	21.4	10	0.05	126.2	42	0	70.1	58.1	46	302.5	38	12.6
1.77	13	0.9	21.4	9	0.05	138.2	42	0	78.1	62.1	46	318.5	38	12
2.27	13	0.9	21.4	8	0.07	142.2	42	0	82.1	66.1	46	310.5	38	11.6
2.77	13	1.1	21.3	10	0.08	146.2	46	0	114.2	66.1	46	290.4	38	11.6
3.27	15	1.1	21.3	9	0.08	150.2	46	0	186.3	70.1	46	274.4	38	11.4
3.77	20	1.5	21.3	12	0.09	150.2	46	0	246.4	74.1	46	262.4	38	11.2
4.27	22	1.1	21.3	13	0.11	150.2	46	0	306.5	74.1	46	258.4	38	11.2
4.77	25	1.3	21.3	13	0.09	146.2	46	0	378.6	74.1	46	250.4	38	11.4
5.27	22	1.1	21.4	12	0.1	146.2	50.1	0	478.8	74.1	46	242.4	38	11.4
5.77	24	1	21.4	13	0.11	142.2	50.1	0	570.9	78.1	46	238.4	38	11.4
6.27	22	0.8	21.3	13	0.09	142.2	50.1	0	639	78.1	50.1	234.4	38	10.6
6.77	21	0.6	21.5	14	0.11	142.2	54.1	0	683.1	78.1	46	222.3	38	10.2
7.27	21	1	21.5	11	0.09	142.2	54.1	0	703.1	78.1	50.1	234.4	38	9.8
7.77	20	0.8	21.3	12	0.09	146.2	54.1	0	723.2	78.1	50.1	270.4	38	9.2
8.27	18	0.7	21.4	10	0.08	150.2	54.1	0	727.2	82.1	50.1	254.4	38	8.8
8.77	22	0.8	21.4	11	0.1	150.2	54.1	0	727.2	82.1	50.1	246.4	38	8.8
9.27	20	0.6	21.6	12	0.09	150.2	58.1	0	731.2	82.1	46	254.4	38	8.2
9.77	18	0.7	21.5	11	0.09	150.2	58.1	0	735.2	82.1	50.1	258.4	38	8
10.27	18	0.8	21.4	11	0.08	150.2	58.1	0	731.2	82.1	50.1	238.4	38	7.8
10.77	17	0.7	21.4	11	0.09	146.2	58.1	0	731.2	82.1	46	222.3	38	7.6
11.27	16	0.6	21.4	13	0.09	146.2	58.1	0	727.2	82.1	46	214.3	38	7.4
11.77	14	0.4	21.4	13	0.09	146.2	62.1	0	747.2	82.1	50.1	226.3	38	7.4
12.27	17	0.4	21.4	13	0.07	142.2	62.1	0	755.2	86.1	50.1	222.3	38	7.2
12.77	18	0.4	21.6	15	0.09	138.2	62.1	0	763.2	86.1	50.1	222.3	38	7
13.27	22	0.4	21.5	15	0.09	134.2	62.1	0	767.2	86.1	50.1	226.3	38	7
13.77	20	0.5	21.4	13	0.07	134.2	62.1	0	775.2	90.1	50.1	218.3	38	6.8
14.27	21	0.4	21.6	16	0.09	126.2	62.1	0	787.3	90.1	50.1	202.3	38	6.8
14.77	23	0.4	21.7	16	0.07	122.2	62.1	0	791.3	90.1	50.1	182.3	38	6.8

Barrel Burning Test No. 4 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB
15.27	26	0.4	21.7	16	0.08	118.2	62.1	0	787.3	90.1	50.1	162.2	38	6.8
15.77	27	0.2	21.6	21	0.08	114.2	62.1	0	783.3	90.1	50.1	150.2	38	6.6
16.27	27	0.4	21.5	18	0.07	106.1	62.1	0	771.2	86.1	46	150.2	38	6.6
16.77	27	0.2	21.5	18	0.08	102.1	62.1	0	767.2	86.1	46	142.2	38	6.6
17.27	31	0.2	21.7	17	0.07	98.1	62.1	0	759.2	86.1	46	134.2	38	6.6
17.77	25	0.1	21.6	17	0.07	98.1	62.1	0	751.2	78.1	46	126.2	38	6.4
18.27	24	0	21.6	15	0.07	94.1	62.1	0	739.2	74.1	50.1	122.2	38	6.4
18.77	23	0.3	21.7	14	0.06	90.1	62.1	0	723.2	74.1	50.1	118.2	38	6.6
19.27	24	0.2	21.6	16	0.07	90.1	66.1	0	711.1	70.1	50.1	114.2	38	6.4
19.77	23	0.2	21.5	14	0.06	86.1	62.1	0	679.1	70.1	50.1	114.2	38	6.4
20.27	22	0.2	21.5	12	0.05	86.1	62.1	0	643	70.1	50.1	110.2	38	6.4
20.77	24	0	21.4	14	0.06	82.1	62.1	0	611	70.1	50.1	106.1	38	6.4
21.27	23	0	21.5	12	0.05	78.1	62.1	0	586.9	66.1	50.1	102.1	38	6.6
21.77	22	0	21.5	12	0.05	78.1	62.1	0	558.9	66.1	50.1	98.1	38	6.6
22.27	20	0	21.5	13	0.07	78.1	62.1	0	530.8	66.1	50.1	94.1	38	6.6
22.77	21	0	21.6	13	0.07	74.1	62.1	0	498.8	66.1	50.1	94.1	38	6.8
23.27	20	0	21.6	11	0.04	70.1	58.1	0	458.7	62.1	50.1	90.1	38	6.6
23.77	18	-0.1	21.5	11	0.05	70.1	58.1	0	434.7	62.1	50.1	82.1	38	6.8
24.27	16	0	21.5	11	0.05	70.1	58.1	0	402.6	62.1	50.1	78.1	38	6.8
24.77	17	0.2	21.6	12	0.05	66.1	62.1	0	378.6	62.1	50.1	78.1	38	6.6
25.27	15	0	21.4	11	0.04	66.1	58.1	0	354.6	62.1	50.1	78.1	38	6.8
25.77	15	0	21.4	10	0.03	62.1	58.1	0	338.5	58.1	50.1	74.1	38	7
26.27	15	0.2	21.6	10	0.04	66.1	58.1	0	326.5	58.1	50.1	70.1	38	6.6
26.77	16	-0.1	21.6	10	0.03	62.1	58.1	0	310.5	58.1	50.1	70.1	38	7
27.27	16	0.1	21.6	9	0.03	62.1	58.1	0	290.4	58.1	50.1	70.1	42	7
27.77	13	0.2	21.5	9	0.04	62.1	58.1	0	282.4	58.1	50.1	70.1	38	6.8
28.27	13	-0.1	21.6	11	0.04	62.1	58.1	0	270.4	54.1	50.1	66.1	38	7
28.77	16	0	21.6	11	0.05	58.1	54.1	0	262.4	58.1	50.1	66.1	38	7
29.27	11	0	21.5	10	0.04	58.1	54.1	0	250.4	54.1	50.1	66.1	42	7
29.77	12	0	21.5	10	0.04	58.1	54.1	0	242.4	54.1	50.1	62.1	38	7
30.27	12	0.1	21.6	8	0.04	58.1	54.1	0	230.4	54.1	50.1	62.1	38	7
30.77	14	0.1	21.6	8	0.02	58.1	54.1	0	222.3	54.1	50.1	62.1	38	7
31.27	13	0.1	21.6	9	0.02	58.1	54.1	0	218.3	54.1	50.1	62.1	38	7
31.77	12	0	21.5	9	0.04	58.1	54.1	0	210.3	54.1	50.1	62.1	42	7
32.27	11	0.1	21.6	9	0.04	58.1	54.1	0	202.3	54.1	50.1	58.1	42	7
32.77	10	0	21.5	9	0.02	58.1	54.1	0	198.3	54.1	50.1	58.1	38	7
33.27	13	-0.1	21.6	9	0.04	54.1	54.1	0	190.3	54.1	50.1	58.1	38	7
33.77	12	0	21.7	8	0.04	54.1	54.1	0	186.3	54.1	50.1	58.1	38	7
34.27	12	0	21.6	8	0.04	54.1	54.1	0	182.3	50.1	50.1	54.1	38	7
34.77	9	0.1	21.5	9	0.03	54.1	54.1	0	174.3	50.1	50.1	54.1	38	7
35.27	10	0.3	21.6	9	0.02	54.1	50.1	0	174.3	50.1	50.1	54.1	38	7
35.77	11	0	21.6	10	0.03	54.1	50.1	0	170.3	50.1	50.1	54.1	38	7
36.27	11	0	21.7	8	0.04	54.1	50.1	0	166.2	50.1	50.1	54.1	38	7
36.77	11	0	21.6	7	0.04	54.1	50.1	0	162.2	50.1	50.1	54.1	38	7
37.27	11	0.1	21.6	7	0.02	54.1	50.1	0	158.2	50.1	50.1	54.1	38	7
37.77	11	0.1	21.7	9	0.04	50.1	50.1	0	154.2	50.1	50.1	54.1	38	7
38.27	9	0	21.6	10	0.05	50.1	50.1	0	150.2	50.1	46	54.1	38	7
38.77	8	0.2	21.6	7	0.03	54.1	50.1	0	142.2	50.1	50.1	54.1	38	7
39.27	8	-0.1	21.4	9	0.02	50.1	50.1	0	138.2	50.1	50.1	54.1	38	7
39.77	9	0.1	21.5	9	0.02	50.1	46	0	138.2	50.1	50.1	54.1	38	7
40.27	11	0	21.5	8	0.04	50.1	46	0	134.2	50.1	50.1	54.1	38	7
40.77	9	0.1	21.5	8	0.04	50.1	50.1	0	130.2	50.1	46	50.1	38	7
41.27	9	0	21.5	9	0.04	50.1	46	0	126.2	50.1	46	50.1	38	7
41.77	9	0	21.5	9	0.02	50.1	46	0	126.2	50.1	46	50.1	38	6.8
42.27	9	0.1	21.6	7	0.02	50.1	46	0	122.2	50.1	50.1	50.1	38	6.8
42.77	7	0	21.5	8	0.01	50.1	46	0	122.2	46	50.1	50.1	38	7
43.27	10	0	21.5	9	0.02	50.1	46	0	122.2	50.1	46	50.1	38	7
43.77	9	0	21.4	8	0.02	50.1	46	0	118.2	50.1	46	50.1	38	6.8
44.27	9	0.1	21.6	9	0.03	50.1	46	0	114.2	50.1	46	50.1	38	6.8
44.77	7	0	21.5	9	0.04	50.1	46	0	114.2	50.1	46	50.1	38	6.8
45.27	8	0	21.5	9	0.03	50.1	46	0	114.2	50.1	46	50.1	38	7
45.77	8	0	21.5	8	0.03	50.1	46	0	114.2	46	46	50.1	38	7
46.27	8	0.2	21.5	8	0.03	50.1	42	0	110.2	46	50.1	50.1	38	6.8
46.77	8	0	21.5	8	0.04	50.1	46	0	110.2	50.1	50.1	50.1	38	7
47.27	7	0	21.5	9	0.04	50.1	46	0	110.2	46	50.1	50.1	38	6.8
47.77	11	0	21.5	7	0.04	50.1	46	0	106.1	50.1	50.1	50.1	38	7
48.27	7	0	21.4	9	0.03	50.1	46	0	106.1	46	46	50.1	38	6.8
48.77	8	0	21.5	9	0.05	50.1	46	0	106.1	46	50.1	50.1	38	7
49.27	7	0	21.4	9	0.03	50.1	46	0	106.1	46	50.1	50.1	38	7
49.77	8	0.1	21.5	8	0.02	50.1	46	0	106.1	46	46	50.1	38	7

Barrel Burning Test No. 4 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB
50.27	8	-0.1	21.4	8	0.03	46	46	0	102.1	46	50.1	50.1	38	7
50.77	9	0	21.6	7	0.04	50.1	46	0	102.1	46	50.1	50.1	38	7
51.27	8	0.1	21.4	9	0.03	46	46	0	102.1	46	50.1	50.1	38	6.8
51.77	8	0	21.4	8	0.04	50.1	46	0	98.1	46	46	50.1	38	6.8
52.27	7	0	21.5	8	0.03	50.1	46	0	98.1	46	46	50.1	38	7
52.77	9	0	21.5	7	0.03	50.1	46	0	98.1	46	46	50.1	38	7
53.27	9	0.2	21.6	9	0.04	50.1	46	0	98.1	46	46	46	38	6.8
53.77	9	0	21.5	9	0.02	46	46	0	98.1	46	50.1	50.1	38	7
54.27	11	0.1	21.4	7	0.03	46	46	0	98.1	46	50.1	50.1	38	6.8
54.77	7	-0.1	21.4	8	0.04	46	46	0	94.1	46	46	46	38	6.8
55.27	8	0	21.5	9	0.04	46	42	0	94.1	46	46	50.1	38	6.8
55.77	10	0	21.6	9	0.03	46	42	0	94.1	46	46	50.1	38	6.8
56.27	8	0	21.6	8	0.04	46	46	0	94.1	46	46	46	38	7
56.77	9	0.2	21.5	8	0.03	46	46	0	94.1	46	46	50.1	38	7
57.27	7	0	21.4	9	0.04	46	46	0	90.1	46	46	46	38	6.8
57.77	8	0.2	21.4	8	0.02	46	42	0	94.1	46	46	50.1	38	6.8
58.27	8	0.2	21.3	8	0.04	46	42	0	94.1	46	46	46	38	6.8
58.77	6	0.1	21.4	8	0.02	46	42	0	94.1	46	46	46	38	6.8
59.27	9	0	21.4	8	0.04	46	42	0	94.1	46	46	46	38	6.8
59.77	8	-0.2	21.5	9	0.03	46	42	0	94.1	46	46	46	38	6.8
60.27	11	0.1	21.6	7	0.04	46	42	0	94.1	46	46	46	38	6.8
60.77	7	-0.1	21.5	9	0.05	46	46	0	90.1	46	46	46	38	7
61.27	7	0.1	21.5	8	0.04	46	46	0	90.1	46	46	46	38	6.8
61.77	7	0.2	21.5	9	0.04	46	46	0	94.1	46	46	46	38	6.8
62.27	7	0.1	21.3	7	0.12	46	46	0	94.1	46	46	46	38	6.8

Barrel Burning Test No. 5 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB
-19.847	6	0.2	23.1	8	0.02	42	42	0	42	42	42	38	34	20.4
-19.347	7	0.3	23.1	8	0.02	42	42	0	42	42	42	38	34	20.2
-18.847	7	0.3	23.1	8	0.03	42	42	0	42	42	46	38	34	20.2
-18.347	7	0.3	23.2	9	0.03	42	42	0	38	42	46	38	34	20.2
-17.847	8	0.2	23.1	8	0.02	42	42	0	42	42	46	38	34	20.2
-17.347	7	0.1	23.2	9	0.03	42	42	0	38	42	46	38	34	20.4
-16.847	5	0.5	23.2	7	0.03	42	42	0	38	42	46	38	34	20.2
-16.347	5	0.3	23.1	8	0.03	42	42	0	38	42	46	38	34	20.2
-15.847	7	0.3	23.2	7	0.02	42	42	0	38	42	46	38	34	20
-15.347	7	0.2	23.2	9	0.05	42	42	0	42	42	46	38	34	20.2
-14.847	7	0.2	23.2	7	0.03	42	42	0	42	42	46	38	38	20.2
-14.347	7	0.1	23.2	10	0.04	42	42	0	42	42	46	38	34	20.2
-13.847	8	0.2	23.3	9	0.04	42	42	0	42	42	46	42	38	20.2
-13.347	7	0.2	23.2	9	0.04	42	42	0	38	42	46	38	34	20.2
-12.847	6	0.2	23.1	9	0.04	42	42	0	38	42	46	38	34	20.2
-12.347	12	0.2	23	9	0.04	42	42	0	42	42	46	38	38	20.2
-11.847	9	0.2	23.3	9	0.05	42	42	0	42	42	46	38	38	20.2
-11.347	7	0.4	23.2	7	0.04	42	42	0	42	42	46	38	34	20.2
-10.847	5	0.2	23.2	7	0.04	42	42	0	42	42	46	38	34	20.2
-10.347	4	0.2	23.1	9	0.04	42	42	0	42	42	46	38	34	20
-9.8467	5	0.3	23.1	7	0.02	42	42	0	42	42	46	38	38	20.2
-9.3467	5	0.3	23.1	9	0.03	42	42	0	42	42	46	38	34	20.2
-8.8467	5	0.3	23.1	9	0.03	42	42	0	42	42	46	38	34	20.2
-8.3467	7	0.2	23.1	9	0.04	42	42	0	42	42	46	38	34	20
-7.8467	6	0.4	23	8	0.03	42	42	0	42	42	46	38	38	20.2
-7.3467	7	0.3	23.2	8	0.03	42	42	0	42	42	46	38	34	20.2
-6.8467	5	0.3	23.2	8	0.03	42	42	0	38	42	46	38	34	20.2
-6.3467	8	0.3	23	9	0.04	42	42	0	42	42	46	38	34	20.2
-5.8467	8	0.4	23.2	7	0.04	42	42	0	42	42	46	38	38	20.2
-5.3467	7	0.4	23.3	9	0.04	42	42	0	42	42	46	38	34	20.2
-4.8467	8	0.2	23.2	9	0.03	42	42	0	42	42	46	38	38	20.2
-4.3467	13	0.4	23.3	8	0.03	42	42	0	42	42	46	38	38	20.2
-3.8467	10	0.2	23.3	8	0.04	42	42	0	42	42	46	38	34	20.2
-3.3467	7	0.4	23.2	8	0.02	42	42	0	38	42	46	42	34	20.2
-2.8467	6	0.3	23.1	9	0.04	42	42	0	42	42	46	42	38	20.2
-2.3467	6	0.2	23.2	8	0.02	42	42	0	42	46	46	38	38	20.2
-1.8467	7	0.2	23.2	9	0.04	42	42	0	42	46	46	42	38	20
-1.3467	9	0.3	23.4	7	0.03	42	42	0	42	46	46	46	38	20
-0.8467	7	0.3	23.4	8	0.03	42	42	0	42	46	46	46	38	20
-0.3467	6	0.4	23.3	8	0.03	46	42	0	42	42	46	50.1	38	20
0.15333	8	0.7	23.3	11	0.03	54.1	42	0	46	46	46	90.1	38	19.4
0.65333	10	0.9	23.3	17	0.03	102.1	42	0	54.1	58.1	46	350.5	38	19
1.15333	32	1.5	23.1	13	0.04	138.2	42	0	66.1	50.1	46	522.8	38	19
1.65333	30	1.8	23.2	11	0.03	162.2	42	0	106.1	54.1	46	578.9	38	19
2.15333	21	2.1	23.1	11	0.04	174.3	42	0	214.3	58.1	46	578.9	38	19
2.65333	17	2.6	23.1	10	0.05	190.3	46	0	322.5	58.1	46	623	38	19.4
3.15333	14	2.8	22.9	11	0.07	202.3	46	0	386.6	58.1	46	627	38	19
3.65333	17	2.8	22.9	9	0.09	202.3	46	0	438.7	62.1	46	538.9	38	18.4
4.15333	15	2.2	22.9	10	0.12	194.3	46	0	470.7	62.1	46	530.8	38	18.4
4.65333	16	2.1	22.8	9	0.11	194.3	42	0	490.8	62.1	46	518.8	38	17.4
5.15333	15	1.9	22.8	9	0.13	190.3	50.1	0	502.8	62.1	46	478.8	38	16.6
5.65333	14	1.8	22.9	9	0.12	186.3	50.1	0	510.8	62.1	46	430.7	38	16.2
6.15333	15	1.7	23	11	0.14	182.3	50.1	0	514.8	62.1	46	382.6	38	16
6.65333	16	1.7	23	11	0.15	178.3	54.1	0	514.8	62.1	46	358.6	38	15.6
7.15333	16	1.6	23	11	0.15	174.3	54.1	0	518.8	62.1	46	330.5	38	15
7.65333	16	1.6	22.9	11	0.14	170.3	54.1	0	522.8	62.1	46	302.5	38	14.8
8.15333	16	1.6	22.9	10	0.13	170.3	58.1	0	526.8	62.1	46	306.5	38	14.6
8.65333	16	1.5	22.9	12	0.13	166.2	58.1	0	530.8	62.1	46	318.5	38	14.2
9.15333	15	1.5	22.9	12	0.11	158.2	58.1	0	534.9	62.1	46	294.5	38	14.2
9.65333	15	1.4	22.9	13	0.11	154.2	58.1	0	542.9	62.1	46	258.4	38	14
10.1533	17	1.3	22.9	15	0.11	150.2	58.1	0	546.9	62.1	46	250.4	38	13.8
10.6533	19	1.1	22.9	13	0.13	146.2	58.1	0	554.9	62.1	46	242.4	38	13.8
11.1533	18	1.2	23	15	0.11	142.2	58.1	0	562.9	62.1	46	222.3	38	13.6
11.6533	18	0.9	23	15	0.12	138.2	58.1	0	574.9	62.1	46	218.3	38	13.6
12.1533	22	0.9	23.2	15	0.11	134.2	58.1	0	590.9	62.1	46	214.3	38	13.4
12.6533	27	1.1	23.2	15	0.09	130.2	58.1	0	607	62.1	46	210.3	38	13.4
13.1533	23	1.2	23.1	15	0.09	130.2	58.1	0	631	58.1	46	206.3	38	13.4
13.6533	20	1.2	23.1	13	0.08	126.2	58.1	0	639	58.1	46	198.3	38	13.2
14.1533	21	1	23.3	12	0.09	122.2	62.1	0	639	58.1	46	190.3	38	13.2
14.6533	18	0.9	23.1	13	0.09	118.2	58.1	0	639	58.1	46	182.3	38	13

Barrel Burning Test No. 5 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB
15.1533	21	0.7	23.2	14	0.1	114.2	62.1	0	647	58.1	46	170.3	38	13.2
15.6533	32	0.9	23.2	12	0.09	110.2	58.1	0	643	58.1	46	154.2	38	13
16.1533	22	0.9	23	14	0.09	106.1	58.1	0	643	58.1	46	146.2	38	13
16.6533	20	0.8	23.2	14	0.08	102.1	58.1	0	643	58.1	46	134.2	38	13
17.1533	24	0.7	23.3	13	0.08	98.1	58.1	0	647	58.1	46	134.2	38	13
17.6533	20	0.7	23.2	13	0.08	98.1	58.1	0	651	54.1	46	130.2	38	13
18.1533	20	0.8	23.2	14	0.06	94.1	58.1	0	655	54.1	46	126.2	38	12.8
18.6533	19	0.6	23.1	15	0.08	94.1	58.1	0	659.1	54.1	46	126.2	38	12.8
19.1533	23	0.6	23.2	13	0.06	90.1	58.1	0	655	54.1	46	122.2	38	12.8
19.6533	24	0.7	23.3	13	0.07	90.1	58.1	0	651	54.1	46	122.2	38	12.6
20.1533	20	0.7	23.2	16	0.07	86.1	58.1	0	643	54.1	46	122.2	38	12.4
20.6533	23	0.7	23.1	15	0.05	86.1	58.1	0	643	54.1	46	114.2	38	12.6
21.1533	23	0.7	23.2	15	0.04	82.1	58.1	0	643	54.1	46	110.2	38	12.6
21.6533	22	0.6	23.1	17	0.05	82.1	58.1	0	639	54.1	46	110.2	38	12.4
22.1533	24	0.7	23.2	15	0.06	82.1	54.1	0	643	54.1	46	106.1	38	12.4
22.6533	25	0.7	23.2	15	0.06	78.1	54.1	0	643	54.1	46	102.1	38	12.4
23.1533	23	0.7	23.3	15	0.07	78.1	54.1	0	647	54.1	46	98.1	38	12.2
23.6533	22	0.7	23.2	13	0.04	78.1	54.1	0	647	50.1	46	94.1	38	12.2
24.1533	24	0.7	23.3	13	0.04	74.1	54.1	0	647	50.1	46	90.1	38	12.2
24.6533	22	0.7	23.3	13	0.05	74.1	54.1	0	647	50.1	46	90.1	38	12.2
25.1533	26	0.6	23.2	15	0.07	74.1	54.1	0	651	50.1	50.1	90.1	38	12.2
25.6533	31	0.6	23.4	14	0.07	74.1	54.1	0	647	50.1	46	90.1	38	12.2
26.1533	22	0.7	23.2	11	0.05	70.1	54.1	0	647	50.1	46	82.1	38	12.2
26.6533	20	0.6	23.4	14	0.04	70.1	54.1	0	643	50.1	46	78.1	38	12.2
27.1533	18	0.6	23.2	13	0.06	70.1	54.1	0	643	50.1	46	78.1	38	12.2
27.6533	16	0.7	23.3	12	0.04	70.1	54.1	0	643	50.1	50.1	78.1	38	12
28.1533	17	0.7	23.4	13	0.05	70.1	54.1	0	639	50.1	50.1	78.1	38	12
28.6533	17	0.6	23.4	13	0.06	66.1	54.1	0	643	50.1	50.1	74.1	38	12
29.1533	18	0.6	23.5	12	0.07	66.1	54.1	0	639	50.1	50.1	74.1	38	12.2
29.6533	16	0.7	23.3	11	0.06	66.1	54.1	0	639	50.1	50.1	74.1	38	12
30.1533	17	0.7	23.3	13	0.05	66.1	54.1	0	643	50.1	50.1	70.1	38	12
30.6533	18	0.7	23.4	12	0.06	66.1	54.1	0	643	50.1	50.1	70.1	38	12
31.1533	14	0.7	23.4	13	0.06	66.1	54.1	0	643	50.1	50.1	70.1	38	12
31.6533	17	0.6	23.3	11	0.04	62.1	54.1	0	643	50.1	50.1	66.1	38	12
32.1533	14	0.4	23.2	12	0.05	62.1	54.1	0	647	50.1	50.1	66.1	38	12
32.6533	17	0.4	23.3	11	0.05	62.1	50.1	0	647	50.1	50.1	62.1	38	12
33.1533	18	0.5	23.5	11	0.07	62.1	50.1	0	651	50.1	50.1	62.1	38	12
33.6533	15	0.5	23.4	12	0.05	62.1	54.1	0	651	50.1	50.1	62.1	42	12
34.1533	15	0.6	23.2	11	0.06	62.1	54.1	0	651	50.1	50.1	66.1	42	12
34.6533	16	0.7	23.3	11	0.04	58.1	54.1	0	655	50.1	50.1	62.1	42	12
35.1533	22	0.6	23.4	12	0.05	58.1	54.1	0	655	50.1	50.1	62.1	42	12
35.6533	17	0.7	23.5	12	0.05	58.1	50.1	0	659.1	50.1	50.1	62.1	42	12
36.1533	12	0.6	23.2	11	0.03	58.1	50.1	0	659.1	50.1	50.1	62.1	42	12
36.6533	13	0.5	23.3	11	0.03	58.1	50.1	0	663.1	50.1	50.1	62.1	42	12
37.1533	13	0.6	23.5	11	0.04	58.1	54.1	0	663.1	50.1	50.1	62.1	42	12
37.6533	14	0.7	23.3	12	0.04	58.1	50.1	0	667.1	50.1	50.1	58.1	42	11.8
38.1533	14	0.6	23.3	10	0.03	58.1	50.1	0	667.1	50.1	50.1	58.1	42	12
38.6533	15	0.7	23.4	11	0.02	58.1	50.1	0	671.1	50.1	50.1	58.1	38	12
39.1533	13	0.6	23.4	13	0.03	58.1	50.1	0	671.1	50.1	50.1	58.1	42	12
39.6533	12	0.7	23.3	11	0.02	54.1	50.1	0	675.1	50.1	50.1	58.1	38	12
40.1533	13	0.5	23.3	11	0.04	54.1	50.1	0	675.1	50.1	50.1	58.1	38	12
40.6533	14	0.5	23.4	11	0.03	54.1	50.1	0	679.1	50.1	50.1	58.1	38	11.8
41.1533	13	0.5	23.5	11	0.03	54.1	50.1	0	679.1	50.1	50.1	58.1	42	12
41.6533	12	0.7	23.4	11	0.04	54.1	50.1	0	679.1	50.1	50.1	58.1	42	11.8
42.1533	11	0.6	23.3	10	0.02	54.1	50.1	0	679.1	50.1	50.1	58.1	42	11.8
42.6533	15	0.5	23.3	10	0.04	54.1	50.1	0	679.1	50.1	50.1	58.1	38	11.8
43.1533	25	0.5	23.5	9	0.03	54.1	50.1	0	683.1	50.1	50.1	58.1	42	11.8
43.6533	11	0.6	23.5	9	0.03	54.1	50.1	0	679.1	50.1	50.1	58.1	38	11.8
44.1533	12	0.7	23.4	12	0.04	54.1	50.1	0	683.1	54.1	50.1	54.1	38	11.8
44.6533	11	0.6	23.3	11	0.03	54.1	50.1	0	683.1	50.1	50.1	58.1	42	11.8
45.1533	11	0.6	23.3	11	0.04	54.1	50.1	0	683.1	50.1	50.1	54.1	42	11.8
45.6533	9	0.7	23.3	9	0.03	54.1	50.1	0	687.1	50.1	50.1	54.1	42	11.8
46.1533	12	0.4	23.3	11	0.03	54.1	50.1	0	691.1	50.1	50.1	54.1	42	11.6
46.6533	13	0.5	23.4	10	0.03	54.1	50.1	0	691.1	50.1	50.1	54.1	42	11.6
47.1533	14	0.5	23.5	10	0.02	54.1	50.1	0	695.1	50.1	50.1	54.1	42	11.8
47.6533	10	0.7	23.4	9	0.03	54.1	50.1	0	695.1	50.1	50.1	54.1	42	11.6
48.1533	9	0.6	23.3	11	0.03	54.1	50.1	0	695.1	50.1	50.1	54.1	42	11.6
48.6533	11	0.7	23.4	11	0.03	54.1	50.1	0	699.1	50.1	50.1	54.1	42	11.6
49.1533	11	0.4	23.4	9	0.04	54.1	50.1	0	699.1	50.1	50.1	54.1	42	11.6
49.6533	14	0.5	23.5	11	0.04	54.1	50.1	0	695.1	50.1	50.1	54.1	42	11.6

Barrel Burning Test No. 5 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB
50.1533	11	0.6	23.5	9	0.04	54.1	50.1	0	695.1	50.1	50.1	54.1	42	11.6
50.6533	11	0.7	23.4	10	0.03	54.1	50.1	0	691.1	50.1	50.1	54.1	42	11.6
51.1533	10	0.7	23.4	9	0.04	54.1	46	0	691.1	50.1	50.1	54.1	42	11.6
51.6533	14	0.6	23.4	11	0.04	50.1	46	0	687.1	50.1	50.1	54.1	42	11.6
52.1533	11	0.5	23.4	10	0.02	54.1	46	0	683.1	50.1	50.1	54.1	42	11.4
52.6533	12	0.7	23.5	11	0.03	50.1	46	0	675.1	50.1	50.1	54.1	42	11.4
53.1533	13	0.6	23.5	12	0.05	54.1	50.1	0	667.1	50.1	50.1	54.1	42	11.4
53.6533	13	0.7	23.3	9	0.04	54.1	46	0	659.1	50.1	50.1	54.1	42	11.4
54.1533	23	0.7	23.4	11	0.02	54.1	50.1	0	655	50.1	50.1	54.1	42	11.6
54.6533	15	0.7	23.5	10	0.04	50.1	46	0	647	50.1	50.1	54.1	42	11.4
55.1533	15	0.8	23.3	11	0.02	50.1	46	0	643	50.1	50.1	54.1	42	11.4
55.6533	15	0.6	23.4	10	0.03	54.1	50.1	0	639	50.1	50.1	54.1	42	11.4
56.1533	14	0.4	23.5	11	0.04	54.1	46	0	635	50.1	50.1	54.1	42	11.4
56.6533	13	0.9	23.5	11	0.06	54.1	46	0	631	50.1	50.1	54.1	42	11.4
57.1533	13	0.7	23.4	11	0.04	50.1	46	0	627	50.1	50.1	54.1	42	11.4
57.6533	9	0.7	23.3	10	0.06	54.1	46	0	623	50.1	50.1	54.1	42	11.4
58.1533	12	0.6	23.4	10	0.04	54.1	46	0	623	50.1	50.1	54.1	42	11.4
58.6533	16	0.6	23.4	10	0.03	50.1	46	0	619	50.1	50.1	54.1	42	11.2
59.1533	26	0.6	23.5	9	0.03	50.1	46	0	619	50.1	50.1	54.1	42	11.2
59.6533	19	0.5	23.5	11	0.03	54.1	46	0	615	50.1	50.1	54.1	42	11.2
60.1533	12	0.7	23.6	11	0.03	50.1	46	0	611	50.1	50.1	54.1	42	11.2
60.6533	10	0.6	23.5	10	0.03	50.1	50.1	0	611	50.1	50.1	54.1	42	11.2
61.1533	13	0.8	23.4	12	0.04	50.1	46	0	607	50.1	50.1	54.1	42	11.2
61.6533	12	0.7	23.4	11	0.05	50.1	46	0	603	50.1	50.1	54.1	42	11.2
62.1533	10	0.8	23.3	10	0.04	50.1	46	0	603	50.1	50.1	54.1	42	11.4
62.6533	10	0.6	23.3	10	0.03	50.1	46	0	603	50.1	50.1	50.1	42	11.2
63.1533	11	0.7	23.3	10	0.03	50.1	46	0	603	50.1	54.1	54.1	42	11.2
63.6533	11	0.7	23.4	11	0.02	50.1	46	0	599	50.1	50.1	54.1	42	11.2
64.1533	10	0.7	23.4	10	0.03	50.1	46	0	599	50.1	50.1	54.1	42	11.2
64.6533	13	0.8	23.5	11	0.05	50.1	46	0	599	50.1	50.1	54.1	42	11.2
65.1533	11	0.8	23.3	9	0.03	50.1	46	0	594.9	50.1	50.1	54.1	42	11
65.6533	11	0.6	23.5	11	0.04	50.1	46	0	594.9	50.1	50.1	54.1	42	11.2
66.1533	11	0.7	23.4	10	0.04	50.1	46	0	590.9	50.1	50.1	54.1	42	11.2
66.6533	13	0.6	23.4	11	0.02	50.1	46	0	590.9	50.1	50.1	50.1	42	11
67.1533	12	0.7	23.4	11	0.04	54.1	46	0	590.9	50.1	50.1	54.1	42	11
67.6533	9	0.9	23.3	9	0.03	50.1	46	0	590.9	50.1	50.1	54.1	42	11
68.1533	11	0.7	23.5	11	0.03	50.1	46	0	590.9	50.1	50.1	54.1	42	11
68.6533	11	0.9	23.4	10	0.04	50.1	46	0	586.9	50.1	50.1	54.1	42	11
69.1533	21	0.7	23.4	10	0.02	50.1	46	0	586.9	50.1	50.1	50.1	42	10.8
69.6533	22	0.6	23.5	11	0.02	54.1	46	0	586.9	50.1	50.1	50.1	42	11
70.1533	20	0.7	23.4	9	0.04	54.1	46	0	582.9	50.1	50.1	50.1	42	10.8
70.6533	15	0.7	23.4	10	0.04	50.1	46	0	582.9	50.1	50.1	54.1	42	10.6
71.1533	12	0.7	23.5	9	0.03	50.1	46	0	582.9	50.1	50.1	50.1	42	11
71.6533	13	0.8	23.5	9	0.05	50.1	46	0	578.9	50.1	54.1	54.1	42	10.8
72.1533	11	0.8	23.4	11	0.04	54.1	46	0	578.9	50.1	54.1	54.1	42	10.8
72.6533	11	0.9	23.3	10	0.03	50.1	46	0	578.9	50.1	54.1	50.1	42	10.8
73.1533	11	0.8	23.3	10	0.03	50.1	46	0	578.9	50.1	54.1	54.1	42	10.8
73.6533	11	0.8	23.3	9	0.03	54.1	46	0	574.9	50.1	54.1	50.1	42	10.8
74.1533	10	0.7	23.4	9	0.02	54.1	46	0	574.9	50.1	54.1	54.1	42	10.8
74.6533	12	0.7	23.4	9	0.03	54.1	50.1	0	574.9	54.1	54.1	54.1	42	10.8
75.1533	13	0.6	23.3	9	0.03	50.1	46	0	574.9	50.1	54.1	54.1	42	10.8
75.6533	10	0.9	23.4	9	0.03	50.1	46	0	570.9	50.1	54.1	54.1	42	10.8
76.1533	17	0.9	23.5	11	0.06	54.1	46	0	570.9	50.1	50.1	54.1	42	10.8
76.6533	15	0.9	23.5	10	0.04	54.1	46	0	566.9	50.1	54.1	54.1	42	10.8
77.1533	13	0.8	23.4	11	0.04	54.1	46	0	566.9	50.1	54.1	54.1	42	10.8
77.6533	13	0.7	23.4	10	0.02	50.1	46	0	566.9	50.1	54.1	54.1	42	10.8
78.1533	14	0.6	23.4	10	0.03	50.1	46	0	562.9	50.1	54.1	54.1	42	10.8
78.6533	13	0.8	23.6	9	0.03	50.1	46	0	562.9	54.1	54.1	54.1	42	10.8
79.1533	9	0.8	23.4	9	0.04	50.1	46	0	562.9	50.1	54.1	54.1	42	10.8
79.6533	11	0.7	23.4	10	0.02	50.1	46	0	558.9	54.1	54.1	50.1	42	10.8
80.1533	13	0.7	23.5	10	0.03	54.1	46	0	558.9	54.1	54.1	54.1	42	10.8
80.6533	10	0.9	23.5	7	0.04	54.1	50.1	0	554.9	54.1	54.1	54.1	46	10.6
81.1533	11	0.9	23.4	10	0.03	54.1	46	0	558.9	54.1	54.1	54.1	42	10.8
81.6533	13	0.7	23.5	10	0.04	54.1	46	0	554.9	54.1	54.1	54.1	42	10.6
82.1533	17	0.7	23.5	10	0.04	54.1	46	0	554.9	54.1	54.1	54.1	42	10.6
82.6533	21	0.9	23.4	9	0.03	54.1	46	0	550.9	54.1	54.1	54.1	42	10.6
83.1533	23	0.8	23.4	9	0.04	54.1	46	0	550.9	50.1	54.1	54.1	42	10.6
83.6533	21	0.8	23.6	11	0.04	54.1	46	0	546.9	50.1	54.1	54.1	42	10.6
84.1533	11	0.9	23.5	10	0.05	54.1	50.1	0	546.9	50.1	54.1	54.1	42	10.6
84.6533	9	0.9	23.4	9	0.03	50.1	46	0	546.9	50.1	54.1	54.1	42	10.6

Barrel Burning Test No. 5 CEM Data

ET (MIN)	CO (PPM)	NOX (PPM)	O2 (%)	HC (PPM)	CO2 (%)	TEMP1 (C)	TEMP2 (C)	TEMP4 (C)	TEMP5 (C)	TEMP6 (C)	TEMP7 (C)	TEMP8 (C)	TEMP9 (C)	weight (LB
85.1533	14	0.8	23.5	9	0.04	54.1	46	0	542.9	54.1	54.1	54.1	42	10.6
85.6533	14	0.8	23.5	9	0.05	54.1	46	0	542.9	54.1	54.1	54.1	42	10.4
86.1533	12	0.9	23.4	9	0.05	54.1	46	0	542.9	50.1	54.1	54.1	42	10.6
86.6533	11	0.9	23.4	8	0.04	54.1	46	0	542.9	50.1	54.1	54.1	42	10.6
87.1533	13	0.7	23.5	9	0.04	50.1	46	0	542.9	54.1	54.1	54.1	42	10.6
87.6533	13	0.9	23.5	10	0.04	54.1	46	0	538.9	54.1	54.1	54.1	42	10.6
88.1533	11	1	23.4	9	0.04	50.1	50.1	0	538.9	54.1	54.1	54.1	42	10.4
88.6533	10	1	23.3	12	0.03	54.1	46	0	538.9	54.1	54.1	54.1	42	10.4
89.1533	10	1.1	23.3	9	0.04	54.1	46	0	538.9	54.1	54.1	54.1	46	10.4
89.6533	12	0.9	23.3	10	0.03	54.1	50.1	0	534.9	54.1	54.1	54.1	42	10.4
90.1533	10	0.8	23.4	9	0.02	54.1	46	0	530.8	54.1	54.1	54.1	42	10.4
90.6533	12	0.9	23.6	10	0.05	54.1	46	0	530.8	54.1	54.1	54.1	42	10.2
91.1533	14	0.9	23.6	10	0.03	54.1	50.1	0	530.8	54.1	54.1	54.1	42	10.4
91.6533	13	0.8	23.5	11	0.03	54.1	46	0	530.8	54.1	54.1	54.1	42	10.2
92.1533	13	0.7	23.5	10	0.04	54.1	50.1	0	526.8	54.1	54.1	54.1	42	10.4
92.6533	13	0.9	23.4	8	0.04	54.1	50.1	0	526.8	54.1	54.1	54.1	42	10.2
93.1533	13	0.9	23.5	11	0.04	54.1	50.1	0	526.8	54.1	54.1	54.1	42	10.2
93.6533	13	0.7	23.5	10	0.02	54.1	50.1	0	526.8	54.1	54.1	54.1	42	10.2
94.1533	15	0.9	23.6	12	0.06	54.1	50.1	0	526.8	54.1	54.1	54.1	42	10.2
94.6533	11	0.9	23.5	11	0.03	54.1	50.1	0	522.8	54.1	54.1	54.1	42	10.2
95.1533	14	1.4	23.4	11	0.04	54.1	50.1	0	522.8	54.1	54.1	54.1	42	10.2
95.6533	11	1	22.3	7	0.01	50.1	50.1	0	518.8	54.1	54.1	50.1	46	10.2

CEM CALIBRATION DATA SHEET

Date 8-28-95

Analyzer Type/Model O_2 / MSA M-802

Analyzer Working Range 20%

Analyzer Zero Control Setting (Initial/Final) 7.5 / 7.5

Analyzer Span Control Setting (Initial/Final) ____ / ____

	Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
1	ZERO	5	.40	0.0			
4	17.3	5	.40	17.3		15.3	
	20.9			20.9			
2	19.9	5	.40	19.6		19.2	
3	18.4	5	.40	18.1			

Reference Standards

1. Supplier AIR PRODUCTS — Tank # ____
   Tank Presssure 1100 PSI — Concentration ____
   Certified by ____ — Certification date ____
2. Supplier AIR PRODUCTS — Tank # ____
   Tank Presssure 1000 PSI — Concentration ____
   Certified by ____ — Certification date ____
3. Supplier AIR PRODUCTS — Tank # ____
   Tank Presssure 1500 PSI — Concentration ____
   Certified by ____ — Certification date ____
4. Supplier AIR PRODUCTS — Tank # ____
   Tank Presssure 500 PSI — Concentration ____
   Certified by ____ — Certification date ____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 8-28-95

Analyzer Type/Model CO_2 / BECKMAN 868

Analyzer Working Range 10%

Analyzer Zero Control Setting (Initial/Final) 8.9 / 8.9

Analyzer Span Control Setting (Initial/Final) ____ / ____

	Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
1	ZERO	5	0.40	0.00		-.02 to .02	
2	1.56%	5	0.40	1.56		1.68	
3	1.04%	5	0.40	1.00			
4	0.52%	5	0.40	0.49		.54	

Reference Standards

1. Supplier AIR PRODUCTS — Tank # ____
   Tank Presssure 1100 PSI — Concentration ____
   Certified by ____ — Certification date ____
2. Supplier AIR PRODUCTS — Tank # ____
   Tank Presssure 1000 PSI — Concentration ____
   Certified by ____ — Certification date ____
3. Supplier AIR PRODUCTS — Tank # ____
   Tank Presssure 1560 PSI — Concentration ____
   Certified by ____ — Certification date ____
4. Supplier AIR PRODUCTS — Tank # ____
   Tank Presssure 500 PSI — Concentration ____
   Certified by ____ — Certification date ____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 8-28-95

Analyzer Type/Model CO / BECKMAN 868

Analyzer Working Range 1000 PPM

Analyzer Zero Control Setting (Initial/Final) 9.12 / 9.12

Analyzer Span Control Setting (Initial/Final) _____ / _____

	Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
1	ZERO	5	0.40	0		10	
2	512ppm	5	0.40	513ppm		559	
3	275ppm	5	0.40	247		288	

Reference Standards

1. Supplier AIR PRODUCTS Tank # _____
   Tank Presssure 1100 PSI Concentration _____
   Certified by _____ Certification date _____
2. Supplier AIR PRODUCTS Tank # _____
   Tank Presssure 1900 PSI Concentration _____
   Certified by _____ Certification date _____
3. Supplier AIRCO ~~PRODUCTS~~ Tank # _____
   Tank Presssure 800 PSI Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 8-28-95

Analyzer Type/Model NO/NOx / TECO 10

Analyzer Working Range 100 ppm

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

	Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
1	ZERO	5	.45	0.0		1.2	
2	10ppm	5	.45	10.0		11.7	
3	5ppm	5	.45	4.9		4.1 ~~5.0~~	

Reference Standards

1. Supplier AIR PRODUCTS Tank # _____
   Tank Presssure 1100 PSI Concentration _____
   Certified by _____ Certification date _____
2. Supplier AIR PRODUCTS Tank # _____
   Tank Presssure 1800 PSI Concentration _____
   Certified by _____ Certification date _____
3. Supplier AIR PRODUCTS Tank # _____
   Tank Presssure 1500 PSI Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 8-28-95

Analyzer Type/Model THC / BECKMAN 402

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

	Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
1	ZERO	3	7	0		-27	
2	450 ppm	3	7	452		249	
3	90 ppm	3	7	71 ppm		28	
4	31 ppm	3	7	29 ppm		11	

Reference Standards

1. Supplier AIR PRODUCTS Tank # _____
   Tank Presssure 1100 PSI Concentration _____
   Certified by _____ Certification date _____
2. Supplier AIR PRODUCTS Tank # _____
   Tank Presssure 1700 PSI Concentration _____
   Certified by _____ Certification date _____
3. Supplier AIR PRODUCTS Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier AIR PRODUCTS Tank # _____
   Tank Presssure 1200 PSI Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 8-30-95

Analyzer Type/Model MSA O_2 / M80S

Analyzer Working Range 0-20%

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
~~19.3~~	~~5~~ PSI	~~0.5~~ L/MIN	~~19.3~~			
20.9			20.9		21.2	
18.4	5	0.5	18.4		17.3	
19.9	5	0.5	19.6		19.0	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 8-30-95

Analyzer Type/Model CO_2 / Beckman 868

Analyzer Working Range 0 - 10%

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
ZERO	5	0.5	0.00		0.00	
1.56%	5	0.5	1.56		1.59	
1.04	5	0.5	1.00		1.03	
0.52	5	0.5	0.49		0.49	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 8-30-95

Analyzer Type/Model CO / Beckman 868

Analyzer Working Range 0 - 1000

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
ZERO	5	0.5	0		12	
512	5	0.5	513		537	
275	5	0.5	256		271	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 8-30-95

Analyzer Type/Model NO_x / TECO 10

Analyzer Working Range 0-1000 ppm

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
ZERO	5	0.5	0.0		0.2	
10	5	0.5	10.0		9.3	
5	5	0.5	5.6		5.6	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 8-30-95

Analyzer Type/Model THC / TECO 51

Analyzer Working Range 0-1000 ppm

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
ZERO	9	1.0	2		2	
450	9	1.0	457		457	
90	9	1.0	93		88	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-1-95

Analyzer Type/Model O_2 / MSA 802

Analyzer Working Range 18.4 - 21.0 %

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Used MSA to check with MB [illegible]

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
18.4	5	0.5	17.2		17.2	
19.9	5	0.5	19.0		19.2	
21.0	5	0.5	21.0		21.0	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-1-95

Analyzer Type/Model CO_2 / BECKMAN 868

Analyzer Working Range 0 - 10 %

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
ZERO	5	0.5	0.00		-0.02	
1.56	5	0.5	1.56		1.59	
1.04	5	0.5	1.03		1.00	
.52	5	0.5	0.49		0.46	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-1-95

Analyzer Type/Model CO / BECKMAN 868

Analyzer Working Range 0 - 1000 ppm

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
ZERO	5	0.5	0		17	
512	5	0.5	513		554	
295	5	0.5	242		281	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-1-95

Analyzer Type/Model NO_x / TECO 10

Analyzer Working Range 0 - 100 ppm

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
ZERO	5	0.5	0.0		0.0	
10	5	0.5	10.5		9.5	
5	5	0.5	5.9		4.9	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-1-95

Analyzer Type/Model THC / TECO 51

Analyzer Working Range 0 - 1000 PPM

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
ZERO	9	1.0	0.1		-3.2	
450	9	1.0	450		432	
90	9	1.0	81		81	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-6-95

Analyzer Type/Model O_2 / NSA 802

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
18.1	5	.5	18.4		18.1	
19.9	5	.5	20.1		20.3	
21.0	5	.5	22.0		22.0	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-6-95

Analyzer Type/Model CO2 / Beckman 868

Analyzer Working Range 0-10%

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	5	0.5	0.00		0.00	
1.56	5	0.5	1.56		1.76	
1.01	5	0.5	.98		1.17	
.52	5	0.5	.42		.56	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-6-95

Analyzer Type/Model CO / Beckman 868

Analyzer Working Range 0-1000 ppm

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	5	0.5	~~0.0~~ 0		0	
512	5	0.5	512		513	
275	5	0.5	261		266	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-6-95

Analyzer Type/Model NOx / Teco 10

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	5	0-5	0.0		0.2	
10	5	0-5	10.0		10.7	
5	5	0-5	6.3		6.1	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-6-95

Analyzer Type/Model TECO / THC Model 51

Analyzer Working Range 0-1000 ppm

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	9	1.0	0		0	
450	9	1.0	464		437	
90	9	1.0	93		88	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9/8/95

Analyzer Type/Model O_2 / MSA

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
18.01	5	.5	17.7		17.7	
19.9	5	.5	19.6	~~19.6~~	19.6	
21.0	5	.5	21.3		20.2	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9/8/95

Analyzer Type/Model CO_2 / Beckman 868

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	5	.5	0	0	0	
1.56	5	.5	1.56	~~1.56~~	1.64	
1.04	5	.5	.98	~~1.03~~	1.03	
0.52	5	.5	.46		.49	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9/8/95

Analyzer Type/Model CO / Beckman 868

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	5	0.5	0	[illegible]	22	
512	5	.5	510	[illegible]	504	
275	5	.5	266		264	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9/8/95

Analyzer Type/Model NO / [illegible] 10

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	5	.5	0		0.2	
10	5	.5	10.5		10.3	
5	5	.5	5.6		5.9	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9/8/95 THC

Analyzer Type/Model Teco / Model 51

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	9	1.0	2	~~2~~	7	
~~450~~ 450	9	1	441	~~441~~	439	
90	9	1	88	~~88~~	90	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-12-95

Analyzer Type/Model O_2 / MSA

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentraion	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
18.1	5	.5	19.0		19.6	
19.9	5	.5	20.0		21.6	
21.0	5	.5	21.7		23.8	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9-12-95

Analyzer Type/Model EO_2 / Beckman 868

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	5	.5	0.0		0.00	
1.56	5	.5	~~1.56~~ 1.56		1.61	
1.04	5	.5	.98		1.00	
.52	5	.5	.44		.49	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9/12/95

Analyzer Type/Model CO / Beckman 868

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	5	.5	0		10	
512	5	.5	515		520	
275	5	.5	269		271	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9/12/05

Analyzer Type/Model NO / Teco 10

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	5	.5	0		0.5	
10	5	.5	10.3		10.7	
5	5	.5	5.9		6.6	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

CEM CALIBRATION DATA SHEET

Date 9/12/05

Analyzer Type/Model TECO / Model 51 THC

Analyzer Working Range _____

Analyzer Zero Control Setting (Initial/Final) _____ / _____

Analyzer Span Control Setting (Initial/Final) _____ / _____

Known Cylinder Concentration	Delivery P (psi)	Analyzer Flow Rate	Measured Concentration	% Deviation of Fullscale	Post-test Measured Concentration	Post-test % Deviation from known Concentrat.
0	9	1.0	2		5	
450	9	1	457 ~~448~~		449	
90	9	1	93		90	

Reference Standards

1. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
2. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
3. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____
4. Supplier _____ Tank # _____
   Tank Presssure _____ Concentration _____
   Certified by _____ Certification date _____

Figure 4-1. CEM calibration data sheet.

5lb batch of Non-Recycler WASTE prepared for estimation of moisture content of waste

TABLE 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER (%)	g	AVID RECYCLER (%)
PAPER			
Newspaper, books and office paper	32.8	743.87	3.3
Magazines and junk mail	11.1	251.80	--
Corrugated cardboard and craft paper	7.6	172.43	--
Paperboard, milk cartons and drink boxes	10.3	233.60	61.9
PLASTIC RESIN (all types may contain trace chlorine or plasticizers e.g., cadium			
PET #1 (bottle bill)	0.6	13.69	--
HDPE: #2, LDPE #4, and PP #5	6.6	149.56	10.4
PVC: #3	0.2	4.60	4.5
PS: #6	0.1	2.25	0.3
MIXED #7	0.1	2.27	0.3
FOOD WASTE	5.7	129.28	--
TEXTILE/LEATHER	3.7	83.41	--
WOOD (treated/untreated)	1.1	24.91	3.7
GLASS/CERAMICS			
Bottles/Jars (Bottle bill)	9.7	225.91	--
Ceramics (broken plates and cups)	0.4	9.01	6.9
METAL - FERROUS			
Iron - cans	7.3	164.63	4.0
NON-FERROUS			
Aluminum - cans (Bottle Bill), Aluminum foil, other Aluminum	1.7	38.83	1.0
Other Non-Iron (wire, copper pipe, batteries)	1.1	24.40	3.7
PERCENT TOTAL	100.0	2274.45 g	100.0
TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS	10.8 lb/day		3.3 lb/day

TEST PERFORMED 10/2/95 and 10/3/95
Total hours in 105°C : 12h
FINAL WEIGHT : 2009.85g

5lb batch of AVID RECYCLER WASTE prepared for estimation of moisture content of waste

TABLE 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER (%)	AVID RECYCLER (%)	
PAPER			
Newspaper, books and office paper	32.8	3.3	74.84
Magazines and junk mail	11.1	--	
Corrugated cardboard and craft paper	7.6	--	
Paperboard, milk cartons and drink boxes	10.3	61.9	1403.83
PLASTIC RESIN (all types may contain trace chlorine or plasticizers e.g., cadium			
PET #1 (bottle bill)	0.6	--	
HDPE: #2, LDPE #4, and PP #5	6.6	10.4	235.83
PVC: #3	0.2	4.5	102.22
PS: #6	0.1	0.3	6.86
MIXED #7	0.1	0.3	6.82
FOOD WASTE	5.7	--	
TEXTILE/LEATHER	3.7	--	
WOOD (treated/untreated)	1.1	3.7	84.64
GLASS/CERAMICS			
Bottles/Jars (Bottle bill)	9.7	--	
Ceramics (broken plates and cups)	0.4	6.9	154.66
METAL - FERROUS			
Iron - cans	7.3	4.0	90.81
NON-FERROUS			
Aluminum - cans (Bottle Bill), Aluminum foil, other Aluminum	1.7	1.0	22.76
Other Non-Iron (wire, copper pipe, batteries)	1.1	3.7	83.92
		TOTAL:	2267.19g
PERCENT TOTAL	100.0	100.0	
TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS	10.8 lb/day	3.3 lb/day	

TEST PERFORMED 10/3/95 and 10/4/95
TOTAL TIME IN 105°C : 12h
FINAL WEIGHT : 2091.81g

AVID RECYCLER BUTCH WASTE 25lb

PREPARED 8/30/95

TEST #1

~~Revision 3~~
~~August 1995~~
~~Page 3 of~~ 12

TABLE 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER (%)	AVID RECYCLER (%)	g
PAPER			
Newspaper, books and office paper	32.8	3.3	374.56
Magazines and junk mail	11.1	--	
Corrugated cardboard and craft paper	7.6	--	
Paperboard, milk cartons and drink boxes	10.3	61.9	7019.36
PLASTIC RESIN (all types may contain trace chlorine or plasticizers e.g., cadium			
PET #1 (bottle bill)	0.6	--	
HDPE: #2, LDPE #4, and PP #5	6.6	10.4	1179.99
PVC: #3	0.2	4.5	510.92
PS: #6	0.1	0.3	34.17
MIXED #7	0.1	0.3	34.19
FOOD WASTE	5.7	--	
TEXTILE/LEATHER	3.7	--	
WOOD (treated/untreated)	1.1	3.7	419.60
GLASS/CERAMICS			
Bottles/Jars (Bottle bill)	9.7	--	
Ceramics (broken plates and cups)	0.4	6.9	782.65
METAL - FERROUS			
Iron - cans	7.3	4.0	453.59
NON-FERROUS			
Aluminum - cans (Bottle Bill), Aluminum foil, other Aluminum	1.7	1.0	113.59
Other Non-Iron (wire, copper pipe, batteries)	1.1	3.7	419.46
		TOTAL:	11342.08g
PERCENT TOTAL	100.0	100.0	
TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS	10.8 lb/day	3.3 lb/day	

AVID RECYCLER BUTCH 25lb

PREPARED 8/1/95

TEST # 2

~~Revision 3~~
~~August 1995~~
~~Page 3 of~~ 12

TABLE 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER (%)	AVID RECYCLER (%)	
PAPER			
Newspaper, books and office paper	32.8	3.3	374.56
Magazines and junk mail	11.1	--	
Corrugated cardboard and craft paper	7.6	--	
Paperboard, milk cartons and drink boxes	10.3	61.9	7019.48
PLASTIC RESIN (all types may contain trace chlorine or plasticizers e.g., cadium			
PET #1 (bottle bill)	0.6	--	
HDPE: #2, LDPE #4, and PP #5	6.6	10.4	1179.58
PVC: #3	0.2	4.5	511.01
PS: #6	0.1	0.3	34.03
MIXED #7	0.1	0.3	34.07
FOOD WASTE	5.7	--	
TEXTILE/LEATHER	3.7	--	
WOOD (treated/untreated)	1.1	3.7	419.26
GLASS/CERAMICS			
Bottles/Jars (Bottle bill)	9.7	--	
Ceramics (broken plates and cups)	0.4	6.9	782.64
METAL - FERROUS			
Iron - cans	7.3	4.0	453.87
NON-FERROUS			
Aluminum - cans (Bottle Bill), Aluminum foil, other Aluminum	1.7	1.0	113.79
Other Non-Iron (wire, copper pipe, batteries)	1.1	3.7	419.75
		TOTAL:	11341.71g
PERCENT TOTAL	100.0	100.0	
TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS	10.8 lb/day	3.3 lb/day	

NON-RECYCLER BUTCH OF WASTE 15 lb = 6.804kg ~~Revision 3~~ ~~August 1995~~ ~~Page 3 of~~ 12

TEST #4

PREPARED 9/8/95 TABLE 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER (%)		AVID RECYCLER (%)
PAPER			
Newspaper, books and office paper	32.8	2231.71	3.3
Magazines and junk mail	11.1	755.21	--
Corrugated cardboard and craft paper	7.6	517.08	--
Paperboard, milk cartons and drink boxes	10.3	700.81	61.9
PLASTIC RESIN (all types may contain trace chlorine or plasticizers e.g., cadium			
PET #1 (bottle bill)	0.6	40.83	--
HDPE: #2, LDPE #4, and PP #5	6.6	449.11	10.4
PVC: #3	0.2	13.62	4.5
PS: #6	0.1	6.80	0.3
MIXED #7	0.1	6.80	0.3
FOOD WASTE	5.7	387.93 jk	--
TEXTILE/LEATHER	3.7	~~215.75~~ 251.75	--
WOOD (treated/untreated)	1.1	74.83	3.7
GLASS/CERAMICS			
Bottles/Jars (Bottle bill)	9.7	660.06	--
Ceramics (broken plates and cups)	0.4	27.35	6.9
METAL - FERROUS			
Iron - cans	7.3	496.63	4.0
NON-FERROUS			
Aluminum - cans (Bottle Bill), Aluminum foil, other Aluminum	1.7	115.67	1.0
Other Non-Iron (wire, copper pipe, batteries)	1.1	74.84	3.7
	~~TOTAL~~:	6811.03g	
PERCENT TOTAL	100.0		100.0
TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS	10.8 lb/day		3.3 lb/day

NON RECYCLER BUTCH OF WASTE 15 lb = 6.804 kg ~~Revision 3~~ ~~August 1995~~ ~~Page 3 of~~ 12

TEST #5

PREPARED 9/12/95 TABLE 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER (%)		AVID RECYCLER (%)
PAPER			
Newspaper, books and office paper	32.8	2231.59	3.3
Magazines and junk mail	11.1	755.17	--
Corrugated cardboard and craft paper	7.6	517.11	--
Paperboard, milk cartons and drink boxes	10.3	700.80	61.9
PLASTIC RESIN (all types may contain trace chlorine or plasticizers e.g., cadium			
PET #1 (bottle bill)	0.6	40.74	--
HDPE: #2, LDPE #4, and PP #5	6.6	449.05	10.4
PVC: #3	0.2	13.61	4.5
PS: #6	0.1	6.83	0.3
MIXED #7	0.1	6.81	0.3
FOOD WASTE	5.7	387.68	--
TEXTILE/LEATHER	3.7	251.73	--
WOOD (treated/untreated)	1.1	74.67	3.7
GLASS/CERAMICS			
Bottles/Jars (Bottle bill)	9.7	660.45	--
Ceramics (broken plates and cups)	0.4	27.30	6.9
METAL - FERROUS			
Iron - cans	7.3	496.43	4.0
NON-FERROUS			
Aluminum - cans (Bottle Bill), Aluminum foil, other Aluminum	1.7	115.41	1.0
Other Non-Iron (wire, copper pipe, batteries)	1.1	74.63	3.7
	TOTAL:	6810.01g	
PERCENT TOTAL	100.0		100.0
TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS	10.8 lb/day		3.3 lb/day

Calculations of weight of different kinds of waste in Non-Recycler batch 5 lb = 2.268 kg

TABLE 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER (%)	g		kg	AVID RECYCLER (%)
PAPER					
Newspaper, books and office paper	32.8	743.90		0.74390	3.3
Magazines and junk mail	11.1	251.75		0.25175	--
Corrugated cardboard and craft paper	7.6	172.37		0.17237	--
Paperboard, milk cartons and drink boxes	10.3	233.60		0.23360	61.9
PLASTIC RESIN (all types may contain trace chlorine or plasticizers e.g., cadium					
PET #1 (bottle bill)	0.6	13.61		0.01361	--
HDPE: #2, LDPE #4, and PP #5	6.6	149.69		0.14969	10.4
PVC: #3	0.2	4.54		0.00454	4.5
PS: #6	0.1	2.27		0.00227	0.3
MIXED #7	0.1	2.27		0.00227	0.3
FOOD WASTE	5.7	129.28		0.12928	--
TEXTILE/LEATHER	3.7	83.92		0.08392	--
WOOD (treated/untreated)	1.1	24.95		0.02495	3.7
GLASS/CERAMICS					
Bottles/Jars (Bottle bill)	9.7	220.00		0.22000	--
Ceramics (broken plates and cups)	0.4	9.07		0.00907	6.9
METAL - FERROUS					
Iron - cans	7.3	165.56		0.16556	4.0
NON-FERROUS					
Aluminum - cans (Bottle Bill), Aluminum foil, other Aluminum	1.7	38.56		0.03856	1.0
Other Non-Iron (wire, copper pipe, batteries)	1.1	24.95		0.02495	3.7
TOTAL:		2270.29g			
PERCENT TOTAL	100.0			2.270	100.0
TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS	10.8 lb/day				3.3 lb/day

Calculations of weight of different kind of waste in AVID RECYCLER batch. 5 lb = 2.268 kg

TABLE 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER (%)	AVID RECYCLER (%)	g	kg
PAPER				
Newspaper, books and office paper	32.8	3.3	74.84	0.07484
Magazines and junk mail	11.1	--		
Corrugated cardboard and craft paper	7.6	--		
Paperboard, milk cartons and drink boxes	10.3	61.9	1403.89	1.40389
PLASTIC RESIN (all types may contain trace chlorine or plasticizers e.g., cadium				
PET #1 (bottle bill)	0.6	--		
HDPE: #2, LDPE #4, and PP #5	6.6	10.4	235.87	0.23587
PVC: #3	0.2	4.5	102.06	0.10206
PS: #6	0.1	0.3	6.80	0.00680
MIXED #7	0.1	0.3	6.80	0.00680
FOOD WASTE	5.7	--		
TEXTILE/LEATHER	3.7	--		
WOOD (treated/untreated)	1.1	3.7	83.92	0.08392
GLASS/CERAMICS				
Bottles/Jars (Bottle bill)	9.7	--		
Ceramics (broken plates and cups)	0.4	6.9	156.49	0.15649
METAL - FERROUS				
Iron - cans	7.3	4.0	90.72	0.09072
NON-FERROUS				
Aluminum - cans (Bottle Bill), Aluminum foil, other Aluminum	1.7	1.0	22.68	0.02268
Other Non-Iron (wire, copper pipe, batteries)	1.1	3.7	83.92	0.08392
			TOTAL: 2267.99g	
PERCENT TOTAL	100.0	100.0		
TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS	10.8 lb/day	3.3 lb/day		

CALCULATION OF DIFFERENT KIND OF TRASH TO MAKE 25lb BUTCH OF WASTE

TABLE 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER (%)	g	AVID RECYCLER (%)	g
PAPER				
Newspaper, books and office paper	32.8	3719.52	3.3	374.22
Magazines and junk mail	11.1	1258.74	--	
Corrugated cardboard and craft paper	7.6	861.84	--	
Paperboard, milk cartons and drink boxes	10.3	1168.02	61.9	7019.46
PLASTIC RESIN (all types may contain trace chlorine or plasticizers e.g., cadium				
PET #1 (bottle bill)	0.6	68.04	--	
HDPE: #2, LDPE #4, and PP #5	6.6	748.44	10.4	1179.36
PVC: #3	0.2	22.68	4.5	510.30
PS: #6	0.1	11.34	0.3	34.02
MIXED #7	0.1	11.34	0.3	34.02
FOOD WASTE	5.7	646.33	--	
TEXTILE/LEATHER	3.7	419.58	--	
WOOD (treated/untreated)	1.1	124.74	3.7	419.58
GLASS/CERAMICS				
Bottles/Jars (Bottle bill)	9.7	1099.98	--	
Ceramics (broken plates and cups)	0.4	45.36	6.9	782.46
METAL - FERROUS				
Iron - cans	7.3	827.82	4.0	453.60
NON-FERROUS				
Aluminum - cans (Bottle Bill), Aluminum foil, other Aluminum	1.7	192.78	1.0	113.4
Other Non-Iron (wire, copper pipe, batteries)	1.1	124.74	3.7	419.58
PERCENT TOTAL	100.0		100.0	
TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS	10.8 lb/day		3.3 lb/day	

CALCULATIONS OF DIFFERENT KIND OF WASTE WEIGHT TO MAKE 15lb BUTCH

0.4536 · lb = kg
15lb = 6.804

Table 4-1. BURN MATERIAL COMPOSITION

	NON-RECYCLER g	NON-RECYCLER %	NON-RECYCLER kg	AVID RECYCLER %
PAPER				
① Newspaper, books and office paper	2231.71	32.8	2.23171	3.3
② Magazines and junk mail	755.24	11.1	0.75524	--
③ Corrugated cardboard and kraft paper	517.10	7.6	0.51710	--
④ Paperboard, milk cartons and drink boxes	700.81	10.3	0.70081	61.9
⑤ PLASTIC RESIN (all types may contain trace Cl or plasticizers e.g., Cd) PET #1 (bottle bill)	40.82	0.6	0.04082	--
⑥ HDPE: #2, LDPE #4 and PP #5	449.06	6.6	0.44906	10.4
⑦ PVC: #3	13.61	0.2	0.01361	4.5
⑧ PS: #6	6.80	0.1	0.00680	0.3
⑨ MIXED #7	6.80	0.1	0.00680	0.3
⑩ FOOD WASTE	387.83	5.7	0.38783	--
⑪ TEXTILE/LEATHER	251.75	3.7	0.25175	--
⑫ WOOD (treated/untreated)	74.84	1.1	0.07484	3.7
GLASS/CERAMICS				

		g		kg	
(13)	Bottles/Jars (Bottle bill)	659.99	9.7	0.65999	--
(14)	Ceramics (broken plates and cups)	27.22	0.4	0.02722	6.9
	METAL - Ferrous				
(15)	Fe - cans	496.69	7.3	0.49669	4.0
	NON-Ferrous				
(16)	Al - cans (Bottle Bill), Al foil, other Al	115.67	1.7	0.11567	1.0
(17)	Other Non-Fe (wire, copper pipe, batteries)	74.84	1.1	0.07484	3.7
	PERCENT TOTAL	6810.78	100.0		100.0
	TOTAL WEIGHT GENERATED PER HOUSEHOLD FOR DISPOSAL IN BURN BARRELS		10.8 lb/day		3.3 lb/day

Acurex Environmental
CORPORATION
A Gerghty & Miller Company
4915 Prospectus Drive
Durham, NC 27713
(919) 544-4535
FAX (919) 544-5690

Report To: Chris Lutes

Bill To: Acurex Environmental Corp.
P.O. Box 13109
Research Triangle Park, NC
27709

Chain of Custody Record

Page 1 of 2

PROJECT SITE	PO#
Household Waste Burn	CH07925E

SITE NAME: EPA ERC, Research Triangle Park, NC

COLLECTED BY (Signature): Matthew J. Par

ERO PROJECT # 8944.001

DATE REPORT DUE

VERBAL/FAX/HARDCOPY

FIELD SAMPLE ID	RUSH FACTOR	SAMPLE MATRIX	DATE/ TIME	NO. OF CONTAINERS	ANALYSES: HAP by M101A	REMARKS	LAB ID NO. (for lab use only)
1		4% KNO3 + 10% H2SO4		1	✓	M101A Impinger Catch	
2				1	✓		
3				1	✓		
4				1	✓		
5				1	✓		
3 Blank				1	✓		
						sample#1 Imp catch is already combined with HCl rinse	

REMARKS

RELINQUISHED BY: Matthew J. Par — DATE 10-6-95 — TIME 1500

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME

LAB USE ONLY

RECEIVED FOR LAB BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL #	CONDITION:
Bonny	9/6/95	1500							

REMARKS

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EPA/AEERL ONSITE LABORATORY SUPPORT CONTRACT
SAMPLE CHAIN OF CUSTODY RECORD

rev. 11/94

Facility of Origin: Hill / Open Burn — Facility of Destination: B-1 Lab

Project: Open Burn of Trash in Barrels

Samples Collected By: P. Kariher

Analyses Requested: VOCs; Aldehydes

OSL Project #: 8844.001

Request Results By: C. Lutes — Report Results To: C. Lutes

For Problems Contact (Name/Phone #): C. Lutes / P. Kariher

Field Sample ID	Sample Description:	Date and Time	VOCs	Aldehydes	Remarks:	Lab ID:
CAN #6	VOC Can	9/12/95	1		#807 on can	
CAN #67	VOC Can		1		#709 on can	
ALD #8	Aldehyde DNPH			1		

Comments:

Relinquished By (1): Matthew H. Kariher — Date/Time (1): 9/12/95 1330

Received By (1): Matthew — Date/Time (1): 9-12-95 14:35 — Relinquished By (2): — Date/Time (2): — Received By (2): — Date/Time (2):

Disposal Information (Include Date, Time, Custodian, and Comments):

EPA/AEERL ONSITE LABORATORY SUPPORT CONTRACT
SAMPLE CHAIN OF CUSTODY RECORD
rev. 11/94

Facility of Origin:	Facility of Destination:	Analyses Requested	OSL Project #:
Hill / EPA	B-1 / Acurex		8844.001
Project: Trash Burn			Request Results By: C. Lutes / Report Results To: C. Lutes
Samples Collected By: P. Kariher			For Problems Contact (Name/Phone #): C. Lutes / P. Kariher

Field Sample ID	Sample Description:	Date and Time	Aldehydes	VOCs	Remarks:	Lab ID:
Ald #7	Aldehyde DNPH		1			
Can #5	Summa Can			1	# 798	

Comments:	Relinquished By (1):	Date/Time (1):
	Peter H. Kariher	9/8/95 1515

Received By (1):	Date/Time (1):	Relinquished By (2):	Date/Time (2):	Received By (2):	Date/Time (2):
M Vorce	9/8/95 1540				

Disposal Information (Include Date, Time, Custodian, and Comments):

EPA/AEERL ONSITE LABORATORY SUPPORT CONTRACT
SAMPLE CHAIN OF CUSTODY RECORD
rev. 11/94

Facility of Origin:	Facility of Destination:	Analyses Requested	OSL Project #:
Hill	Acurex / Prep Lab		8844.001
Project: Open Burning of Household Waste			Request Results By: C. Lutes / Report Results To: C. Lutes
Samples Collected By: P. Kariher			For Problems Contact (Name/Phone #): C. Lutes / P. Kariher

Field Sample ID	Sample Description:	Date and Time	Aldehyde	VOC	Remarks:	Lab ID:
Ald #6	DNPH Cartridge	9/6/95 1625	1			
~~Can #3~~	Summa Can	"		1		
Can #4						
	→ Seal #755					

Comments:	Relinquished By (1):	Date/Time (1):
	P. Kariher	9/6/95 1624

Received By (1):	Date/Time (1):	Relinquished By (2):	Date/Time (2):	Received By (2):	Date/Time (2):

Disposal Information (Include Date, Time, Custodian, and Comments):

ACUREX Corporation
Environmental Systems Division

4915 Prospectus Drive
Durham, NC 27713
(919) 544-4535

Report To: C. Lutes

Bill To:

TAST - Fluid Recycle #2

Chain of Custody Record

Page ____ of ____

PROJECT SITE	PO#
SITE NAME ERC Hill	
COLLECTED BY (Signature)	

NO. OF CONTAINERS | ANALYSES: TO-14, TP-1

ERO PROJECT #
DATE REPORT DUE
VERBAL/FAX/HARDCOPY

FIELD SAMPLE ID	RUSH FACTOR	SAMPLE MATRIX	DATE/ TIME	REMARKS	LAB ID NO. (for lab use only)
Summa #5	None	Can		X	
Airshaft #5	None	Canister		X	

REMARKS

RELINQUISHED BY: DATE 9/1 TIME 5PM

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME

LAB USE ONLY

RECEIVED FOR LAB BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL #	CONDITION:

REMARKS

ACUREX Corporation
Environmental Systems Division

4915 Prospectus Drive
Durham, NC 27713
(919) 544-4535

Report To: C. Lutes

Bill To:

Chain of Custody Record

Page ____ of ____

PROJECT SITE	PO#
Fluid Recycle Test #1	5844.001
SITE NAME ERC Hill	
COLLECTED BY (Signature)	

NO. OF CONTAINERS | ANALYSES: TO-14, TP-1

ERO PROJECT #
DATE REPORT DUE
VERBAL/FAX/HARDCOPY

FIELD SAMPLE ID	RUSH FACTOR	SAMPLE MATRIX	DATE/ TIME	REMARKS	LAB ID NO. (for lab use only)
Summa #2	None	Can		X	
Airshaft Interface #4	None	Canister		X	Tall Fridge Top Shelf Left Side

REMARKS

RELINQUISHED BY: DATE 8/30 TIME 5:10 PM

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME

LAB USE ONLY

RECEIVED FOR LAB BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL #	CONDITION:

REMARKS

APPENDIX F: ACUREX RAW DATA

Acurex-RTP Laboratory Results - Raw VOC Analytical Data
EPA Method TO14/8240 Compounds
Hewlett Packard 5890 GC / 5971 MSD; 30m x 0.53u DB-624 fused silica capillary
Tekmar LSC-2000 w/Carbotrap/Carbosieve SIII.
PQL = Practical Quantitation Limit
N/D = Not Detected
J = Detected @< PQL
N/A = Not Applicable

Sample Type			Can	Can	Can	Can	Can
Test #			1	2	3	4	5
Master Index			3549	3553	3554	3555	3556
Sample ID			Avid Recycler	Avid Recycler	Hut Blank	Non Recycler	Non Recycler
Collection Date			1/31/95	2/1/95	2/2/95	2/3/95	2/15/95
Analysis Date			3/1/95	3/2/95	3/2/95	3/2/95	3/2/95
	MDL	PQL	NG/L	NG/L	NG/L	NG/L	NG/L
-			-	-	-	-	-
dichlorodifluoromethane	0.33	1.08	<148	<136	<22.2	<182	<117
dichlorotetrafluoroethane	0.61	2.01	<207	<190	<31.1	<256	<164
chloromethane	0.3	1	315	329	<21.7	251	111
vinyl chloride	0.22	1	<75.7	<69.6	<11.3	<93.2	<59.7
1,3-Butadiene	0.1	1	370	146	<9.90	186	141
bromomethane	0.11	1	<115	<105	<17.2	<141	<90.9
chloroethane	0.39	1.28	<78.4	<72.0	<11.7	<96.5	<61.8
trichlorofluoromethane	0.11	1	<166	<153	<24.9	<205	<131
Dichlorotrifluoroethane	0.1	1	<184	<169	<27.6	<227	<145
Trichlorotrifluoroethane	0.06	1	<227	<209	<34.0	<280	<179
1,1-dichloroethene	0.15	1	<117	<108	<17.5	<144	<92.8
Acetone	0.1	1	535	336	7.17	1284	505
Carbon Disulfide	0.1	1	<94.1	<86.4	<14.0	<115	<74.3
methylene chloride	0.49	1.62	<103	166	<15.4	<126	<81.3
3-Methylpentane	0.1	1	<104	<96.2	<15.6	<129	<82.7
1,1-dichloroethane	0.05	1	<119	<110	<17.9	<147	<94.6
Butyl Methyl Ether	0.1	1	<124	<114	<18.5	<152	<97.9
Cis-1,2-Dichloroethene	0.06	1	<117	<108	<17.6	<145	<93.0
2-Butanone	0.1	1	<88.5	<81.2	<13.2	56	91.5
Ethyl Acetate	0.1	1	<107	<98.4	<16.0	<132	<84.6
chloroform	0.33	1.09	<144	<133	<21.6	<178	<114
1,1,1-trichloroethane	0.07	1	<161	<148	<24.1	<199	<127
carbon tetrachloride	0.35	1.14	<186	<171	<27.9	<230	<147
benzene	0.32	1.07	2437	917	<14.1	1684	675
1,2-dichloroethane	0.09	1	<131	<120	<19.6	<162	<103
trichloroethene	0.08	1	<162	<148	<24.2	<199	<127
1,2-dichloropropane	0.11	1	<137	<126	<20.5	<168	<108
cis-1,3-dichloropropene	0.15	1	<136	<125	<20.4	<168	<108
Dimehtyl Disulfide	0.1	1	<114	<105	<17.1	<141	<90.4
4-Methyl-2-Pentanone	0.1	1	<121	<111	<18.2	<149	<96.1
Octane	0.1	1	<138	<127	<20.6	<170	<109

toluene	0.1	1	934	311	<16.7	596	311
trans-1,3-dichloropropene	0.19	1	<136	<125	<20.4	<168	<108
1,1,2-trichloroethane	0.06	1	<163	<150	<24.4	<201	<128
tetrachloroethene	0.05	1	<201	<184	<30.1	<248	<158
Butyl Acetate	0.1	1	<141	<129	<21.0	<173	<111
1,2-dibromoethane	0.07	1	<228	<209	<34.0	<280	<180
chlorobenzene	0.05	1	<136	<125	<20.4	<168	<107
Nonane	0.1	1	<154	<141	<23.0	<190	<121
ethyl benzene	0.09	1	315	123	<19.2	403	111
m,p-xylene	0.05	1	198	<118	<19.2	<158	<101
o-xylene	0.13	1	148	<118	<19.2	<158	<101
Styrene	0.07	1	1061	426	<18.9	1154	247
Pinene	0.1	1	<165	<151	<24.7	<203	<130
1,1,2,2-tetrachloroethane	0.06	1	<204	<187	<30.5	<251	<161
Decane	0.1	1	<172	<158	<25.7	<212	<135
4-Ethyltoluene	0.1	1	<146	<134	<21.8	<179	<115
1,3,5-Trimethylbenzene	0.11	1	<146	<134	<21.8	<179	<115
1,2,4-Trimethylbenzene	0.22	1	<146	<134	<21.8	<179	<115
Limonene	0.1	1	<165	<151	<24.7	<203	<130
1,3-Dichlorobenzene	0.05	1	<178	<164	<26.7	<220	<141
1,4-Dichlorobenzene	0.04	1	<89.6	<82.3	<13.4	<110	<70.7
Benzyl Chloride	0.1	1	<153	<141	<22.9	<189	<121
Undecane	0.1	1	<189	<174	<28.3	<233	<149
1,2-Dichlorobenzene	0.04	1	<178	<164	<26.7	<220	<141
Dodecane	0.1	1	<206	<189	<30.8	<254	<162
1,2,4-Trichlorobenzene	0.07	1	<131	<120	<19.6	<162	<103
Hexachlorobutadiene	0.04	1	<317	<291	<47.4	<390	<250
Naphthalene	0.1	1	343	129	<23.4	250	105

APPCD Organic Support Laboratory
Household Waste - Semivolatile Analysis

Project:	Household Wastes	Date Acquired:	8/30/96
Sample Id:	Trash #1	Date Sampled:	8/30/95
Sample Name:	Trash Semivol #1	Date Extracted:	9/10/95
MS Data File:	STRASH1B	Dilution factor:	none
Method:	SW846-Method 8270	Analyst:	Bill Preston
		QC reviewer:	Dennis Tabor

Comment:
Avid-Recycler Test #1

Presampling Surrogates	**Percent Recovery (%)**
d10-Anthracene	79.4

Post Sampling Surrogates	**Percent Recovery (%)**
2-Fluorophenol	15.9
d5-Phenol	47.5
d5-Nitrobenzene	34.9
2-Fluorobiphenyl	59.5
2,4,6-Tribromophenol	70.6
d14-Terphenyl	107.9

Target Analytes	**Total µg**
n-Nitrosomethylethylamine	ND
Methyl Methanesulfonate	ND
n-Nitrosodiethylamine	ND
Bis-(2-Chloroethyl) ether	ND
Ethyl Methanesulfonate	ND
Aniline	ND
Phenol	91.2
2-chlorophenol	1.1J
1,3-Dichlorobenzene	ND

Target Analytes	**Total µg**
1,4-Dichlorobenzene	ND
1,2-Dichlorobenzene	ND
Benzyl Alcohol	ND

Bis (2-Chloroisopropyl) ether	ND
2-Methylphenol	14.5
n-Nitrosopyrrolidine	ND
Acetophenone	4.9J
Hexachloroethane	ND
4-Methylphenol	25.9
n-Nitrosodi-n-propylamine	ND
Nitrobenzene	ND
1-Nitrosopiperidine	ND
Isophorone	ND
2,4-Dimethylphenol	10.8
Bis (2-chloroethoxy) methane	ND
2,4_Dichlorophenol	ND
1,2,4-Trichlorobenzene	ND
Napthalene	37.9
2-Nitrophenol	ND
2,6-Dichlorophenol	ND
Hexachloropropene	ND
4-Chloroaniline	ND
Hexachlorobutadiene	ND
n-Nitrosodi-n-butylamine	ND
4-Chloro-3-methyl-phenol	ND
2-Methylnapthalene	6.7J
Isosafrole	ND
1,2,4,5 Tetrachlorobenzene	ND
Hexachlorobutadiene	ND
2,4,6-Trichlorophenol	ND
2,4,5-Trichlorophenol	ND
2-Choronapthalene	ND
1,3 Dinitrobenzene	ND
2-Nitroaniline	ND
3-Nitroaniline	ND
Safrole	ND

Target Analytes

Acenapthylene	15.9
1,4-Napthoquinone	2.4J
Dimethylpthalate	ND
2,6-Dinitrotoluene	ND
Acenapthene	ND
1-Napthylamine	ND
2-Napthylamine	ND
4-Nitroaniline	ND
2,4-Dinitrophenol	ND
Dibenzofuran	3.6J

Pentachlorobenzene	ND
2,4-Dinitrophenol	ND
2,3,4,6-Tetrachlorophenol	ND
4-Nitrophenol	ND
Fluorene	4.1J
Diethyl pthalate	1.2J
4-Chlorophenyl phenyl ether	ND
2-Methyl-4,6-dinitrophenol	ND
5-Nitro-o-toluidine	ND
Diphenylamine	ND
Diallate	ND
1,3,5-Trinitrobenzene	ND
4-Bronophenyl phenyl ether	ND
Phenacetin	ND
Hexachlorobenzene	ND
4-Aminobiphenyl	ND
Dinoseb	ND
Pentachlorophenol	ND
Pentachloronitrobenzene	ND
Phenanthrene	19.3
Anthracene	3.8J
Di-n-butyl pthalate	3.8J
Isodrin	ND
Fluoranthene	8.0J
3,3'-Dimethylbenzidine	ND
Pyrene	10.6
Chlorobenzilate	ND
p-Dimethylaminoazobenzene	ND
2-Acetylaminofluorene	ND
Benzyl butyl pthalate	3.4J

Target Analytes

3,3'-Dichlorobenzidine	ND
Benzo (a) anthracene	6.7J
Chrysene	8.3J
di-n-octyl pthalate	ND
Benzo (b) fluoranthene	5.8J
7,12-Dimethylbenz (a) anthracene	ND
Benzo (k) fluoranthene	1.3J
Benzo (a) pyrene	4.0J
3-Methylcholanthrene	ND
Indeno (1,2,3-cd) pyrene	3.3J
Dibenz (a,h) anthracene	1.1J
Benzo (ghi) perylene	2.8J

Tentatively Identified Cmpds	**ret time (min)**	**Total µg**
Cyclotrisiloxane,hexamethyl-	6.47	17.1
Unknown	7.12	14.7

Acetamide, N,N-dimethyl -	8.36	15.3
Unknown	12.41	17.1
Hexanoic acid, 2-ethyl	17.16	16.6
Cyclopentasiloxane, decameth	17.39	36.5
Unknown	19.99	14.8
Unknown	26.67	35.0
Unknown Hydrocarbon	27.59	53.2
1,6Anhydor-.beta.Dglucopyran	28.09	25.5
Unknown	30.57	16.6
Phenol, 2,6-bis(1,1-dimethyleth	33.59	26.7
Unknown Hydrocarbon	43.83	19.1
Unknown	44.93	84.3
Unknown sustit-Hexanedioic A	45.39	107.1
Unknown Hydrocarbon	45.51	27.6
Unknown Hydrocarbon	45.59	23.8
Unknown	47.11	22.9
Unknown Hydrocarbon	53.03	18.5

NS = not spiked
j = detected below lowest calibration level

APPCD Organic Support Laboratory
Household Waste - Semivolatile Analysis

Project:	Household Wastes	Date Acquired:	8/30/96
Sample Id:	Trash #2	Date Sampled:	9/1/95
Sample Name:	Trash Semivol #2	Date Extracted:	9/12/95
MS Data File:	STRASH2B	Dilution factor:	5x
Method:	SW846-Method 8270	Analyst:	Bill Preston
		QC reviewer:	Dennis Tabor

Comment:
Avid Recycler Test #2

Presampling Surrogates	**Percent Recovery (%)**
d10-Anthracene	98.4

Post Sampling Surrogates	**Percent Recovery (%)**
2-Fluorophenol	68.5
d5-Phenol	95.2
d5-Nitrobenzene	94.4
2-Fluorobiphenyl	96.9
2,4,6-Tribromophenol	75.7
d14-Terphenyl	110.1

Target Analytes	**Total µg**
n-Nitrosomethylethylamine	ND
Methyl Methanesulfonate	ND
n-Nitrosodiethylamine	ND
Bis-(2-Chloroethyl) ether	ND
Ethyl Methanesulfonate	ND
Aniline	ND
Phenol	345.6
2-chlorophenol	4.3J
1,3-Dichlorobenzene	ND

Target Analytes	
1,4-Dichlorobenzene	ND
1,2-Dichlorobenzene	1.4J
Benzyl Alcohol	6.6J

Bis (2-Chloroisopropyl) ether	ND
2-Methylphenol	70.9
n-Nitrosopyrrolidine	ND
Acetophenone	17.9J
Hexachloroethane	ND
4-Methylphenol	122.5
n-Nitrosodi-n-propylamine	ND
Nitrobenzene	ND
1-Nitrosopiperidine	ND
Isophorone	ND
2,4-Dimethylphenol	18.5J
Bis (2-chloroethoxy) methane	ND
2,4_Dichlorophenol	ND
1,2,4-Trichlorobenzene	ND
Napthalene	229.0
2-Nitrophenol	ND
2,6-Dichlorophenol	ND
Hexachloropropene	ND
4-Chloroaniline	ND
Hexachlorobutadiene	ND
n-Nitrosodi-n-butylamine	ND
4-Chloro-3-methyl-phenol	ND
2-Methylnapthalene	50.8
Isosafrole	ND
1,2,4,5 Tetrachlorobenzene	ND
Hexachlorobutadiene	ND
2,4,6-Trichlorophenol	ND
2,4,5-Trichlorophenol	ND
2-Choronapthalene	ND
1,3 Dinitrobenzene	ND
2-Nitroaniline	ND
3-Nitroaniline	ND
Safrole	ND

Target Analytes

Acenapthylene	51.9
1,4-Napthoquinone	3.4J
Dimethylpthalate	ND
2,6-Dinitrotoluene	ND
Acenapthene	3.7J
1-Napthylamine	ND
2-Napthylamine	ND
4-Nitroaniline	ND
2,4-Dinitrophenol	ND
Dibenzofuran	12.7J

Pentachlorobenzene	ND
2,4-Dinitrophenol	ND
2,3,4,6-Tetrachlorophenol	ND
4-Nitrophenol	ND
Fluorene	19.7J
Diethyl pthalate	2.0J
4-Chlorophenyl phenyl ether	ND
2-Methyl-4,6-dinitrophenol	ND
5-Nitro-o-toluidine	ND
Diphenylamine	ND
Diallate	ND
1,3,5-Trinitrobenzene	ND
4-Bronophenyl phenyl ether	ND
Phenacetin	ND
Hexachlorobenzene	ND
4-Aminobiphenyl	ND
Dinoseb	ND
Pentachlorophenol	ND
Pentachloronitrobenzene	ND
Phenanthrene	51.2
Anthracene	11.1J
Di-n-butyl pthalate	9.0J
Isodrin	ND
Fluoranthene	9.6J
3,3'-Dimethylbenzidine	ND
Pyrene	8.5J
Chlorobenzilate	ND
p-Dimethylaminoazobenzene	ND
2-Acetylaminofluorene	ND
Benzyl butyl pthalate	3.3J

Target Analytes

3,3'-Dichlorobenzidine	ND
Benzo (a) anthracene	1.8J
Chrysene	1.7J
di-n-octyl pthalate	ND
Benzo (b) fluoranthene	1.5J
7,12-Dimethylbenz (a) anthracene	ND
Benzo (k) fluoranthene	ND
Benzo (a) pyrene	ND
3-Methylcholanthrene	ND
Indeno (1,2,3-cd) pyrene	ND
Dibenz (a,h) anthracene	ND
Benzo (ghi) perylene	ND

Tentatively Identified Cmpds	**ret time (min)**	**Total µg**
Cyclotrisiloxane, hexamethyl-	6.51	66.7
Unknown	7.12	66.6

Unknown	7.36	101.4
Ethylbenzene	8.09	167.0
Unknown	8.37	73.8
Xylene isomer(s)	8.42	91.8
Phenylethyne	8.66	57.7
Styrene	9.20	292.1
Benzaldehyde	11.75	116.0
Unknown	12.41	130.4
Unknown Hydrocarbon	12.74	70.2
Indene	14.53	98.3
Unknown Hydrocarbon	16.08	58.0
Cyclopentasiloxane, decameth	17.39	126.2
Benzoic Acid	18.68	58.2
Napthalene, 1-methyl-	22.77	64.5
Unknown	26.67	85.8
Unknown Substi Hexadioic Aci	45.37	170.1
Unknown Pthalate	50.43	67.1

NS = not spiked
j = detected below lowest calibration level

APPCD Organic Support Laboratory
Household Waste - Semivolatile Analysis

Project:	Household Wastes	Date Acquired:	8/30/96
Sample Id:	Trash #3	Date Sampled:	9/6/95
Sample Name:	Trash Semivol #3	Date Extracted:	9/12/95
MS Data File:	STRASH3B	Dilution factor:	none
Method:	SW846-Method 8270	Analyst:	Bill Preston
		QC reviewer:	Dennis Tabor

Comment:
Hut Blank

Presampling Surrogates	**Percent Recovery (%)**
d10-Anthracene	69.3

Post Sampling Surrogates	**Percent Recovery (%)**
2-Fluorophenol	7.5
d5-Phenol	12.6
d5-Nitrobenzene	11.1
2-Fluorobiphenyl	13.5
2,4,6-Tribromophenol	10.7
d14-Terphenyl	14.3

Target Analytes	**Total µg**
n-Nitrosomethylethylamine	ND
Methyl Methanesulfonate	ND
n-Nitrosodiethylamine	ND
Bis-(2-Chloroethyl) ether	ND
Ethyl Methanesulfonate	ND
Aniline	ND
Phenol	78.7
2-chlorophenol	ND
1,3-Dichlorobenzene	ND

Target Analytes	**Total µg**
1,4-Dichlorobenzene	ND
1,2-Dichlorobenzene	ND
Benzyl Alcohol	1.9J

Bis (2-Chloroisopropyl) ether	ND
2-Methylphenol	ND
n-Nitrosopyrrolidine	ND
Acetophenone	ND
Hexachloroethane	ND
4-Methylphenol	ND
n-Nitrosodi-n-propylamine	ND
Nitrobenzene	ND
1-Nitrosopiperidine	ND
Isophorone	ND
2,4-Dimethylphenol	ND
Bis (2-chloroethoxy) methane	ND
2,4_Dichlorophenol	ND
1,2,4-Trichlorobenzene	ND
Napthalene	1.0J
2-Nitrophenol	ND
2,6-Dichlorophenol	ND
Hexachloropropene	ND
4-Chloroaniline	ND
Hexachlorobutadiene	ND
n-Nitrosodi-n-butylamine	ND
4-Chloro-3-methyl-phenol	ND
2-Methylnapthalene	ND
Isosafrole	ND
1,2,4,5 Tetrachlorobenzene	ND
Hexachlorobutadiene	ND
2,4,6-Trichlorophenol	ND
2,4,5-Trichlorophenol	ND
2-Choronapthalene	ND
1,3 Dinitrobenzene	ND
2-Nitroaniline	ND
3-Nitroaniline	ND
Safrole	ND

Target Analytes

Acenapthylene	ND
1,4-Napthoquinone	ND
Dimethylpthalate	ND
2,6-Dinitrotoluene	ND
Acenapthene	ND
1-Napthylamine	ND
2-Napthylamine	ND
4-Nitroaniline	ND
2,4-Dinitrophenol	ND
Dibenzofuran	ND

Pentachlorobenzene	ND
2,4-Dinitrophenol	ND
2,3,4,6-Tetrachlorophenol	ND
4-Nitrophenol	ND
Fluorene	ND
Diethyl pthalate	3.6J
4-Chlorophenyl phenyl ether	ND
2-Methyl-4,6-dinitrophenol	ND
5-Nitro-o-toluidine	ND
Diphenylamine	ND
Diallate	ND
1,3,5-Trinitrobenzene	ND
4-Bronophenyl phenyl ether	ND
Phenacetin	ND
Hexachlorobenzene	ND
4-Aminobiphenyl	ND
Dinoseb	ND
Pentachlorophenol	ND
Pentachloronitrobenzene	ND
Phenanthrene	ND
Anthracene	ND
Di-n-butyl pthalate	2.8J
Isodrin	ND
Fluoranthene	ND
3,3'-Dimethylbenzidine	ND
Pyrene	ND
Chlorobenzilate	ND
p-Dimethylaminoazobenzene	ND
2-Acetylaminofluorene	ND
Benzyl butyl pthalate	1.5J

Target Analytes

3,3'-Dichlorobenzidine	ND
Benzo (a) anthracene	ND
Chrysene	ND
di-n-octyl pthalate	ND
Benzo (b) fluoranthene	ND
7,12-Dimethylbenz (a) anthracene	ND
Benzo (k) fluoranthene	ND
Benzo (a) pyrene	ND
3-Methylcholanthrene	ND
Indeno (1,2,3-cd) pyrene	ND
Dibenz (a,h) anthracene	ND
Benzo (ghi) perylene	ND

Tentatively Identified Cmpd	**ret time (min)**	**Total µg**
Acetamide, N,N-dimethyl	8.29	35.1

Xylene isomer(s)	8.44	13.0
Unknown	12.41	21.5
Unknown Hydrocarbon	13.04	9.7
Unknown	17.11	15.9
Cyclopentasiloxane,decameth	17.39	23.0
Cyclopentasiloxane,decameth	22.29	22.1
Unknown Hydrocarbon	25.03	12.1
Unknown Siloxane	26.67	11.1
Unknown Hydrocarbon	27.58	12.6
Unknown substituted amide	37.88	20.7
Unknown substituted amide	41.39	14.0
Unknown substituted amide	41.77	24.2
Unknown	43.84	14.6
Unknown	44.82	15.4
Unknown substituted amide	44.99	202.5
Unknown substit- Hexanedioi	45.42	167.1
Unknown Phthalate	50.44	63.4
Unknown Phthalate	51.27	69.5
Unknown	51.82	25.5

NS = not spiked
j = detected below lowest calibration level

APPCD Organic Support Laboratory
Household Waste - Semivolatile Analysis

Project:	Household Wastes	Date Acquired:	8/30/96
Sample Id:	Trash #4	Date Sampled:	9/12/95
Sample Name:	Trash Semivol #4	Date Extracted:	9/20/95
MS Data File:	STRASH4B	Dilution factor:	2X
Method:	SW846-Method 8270	Analyst:	Bill Preston
		QC reviewer:	Dennis Tabor

Comment:
Non Recycler Test #4

Presampling Surrogates	**Percent Recovery (%)**
d10-Anthracene	80.48

Post Sampling Surrogates	**Percent Recovery (%)**
2-Fluorophenol	1.1
d5-Phenol	6.9
d5-Nitrobenzene	4.4
2-Fluorobiphenyl	9.4
2,4,6-Tribromophenol	12.5
d14-Terphenyl	17.0

Target Analytes	**Total µg**
n-Nitrosomethylethylamine	ND
Methyl Methanesulfonate	ND
n-Nitrosodiethylamine	ND
Bis-(2-Chloroethyl) ether	ND
Ethyl Methanesulfonate	ND
Aniline	ND
Phenol	120.0
2-chlorophenol	ND
1,3-Dichlorobenzene	ND

Target Analytes	**Total µg**
1,4-Dichlorobenzene	ND
1,2-Dichlorobenzene	ND
Benzyl Alcohol	3.5J

Bis (2-Chloroisopropyl) ether	ND
2-Methylphenol	27.8
n-Nitrosopyrrolidine	ND
Acetophenone	2.8J
Hexachloroethane	ND
4-Methylphenol	47.5
n-Nitrosodi-n-propylamine	ND
Nitrobenzene	ND
1-Nitrosopiperidine	ND
Isophorone	ND
2,4-Dimethylphenol	14.0
Bis (2-chloroethoxy) methane	ND
2,4_Dichlorophenol	ND
1,2,4-Trichlorobenzene	ND
Napthalene	30.0
2-Nitrophenol	ND
2,6-Dichlorophenol	ND
Hexachloropropene	ND
4-Chloroaniline	ND
Hexachlorobutadiene	ND
n-Nitrosodi-n-butylamine	ND
4-Chloro-3-methyl-phenol	ND
2-Methylnapthalene	5.5J
Isosafrole	ND
1,2,4,5 Tetrachlorobenzene	ND
Hexachlorobutadiene	ND
2,4,6-Trichlorophenol	ND
2,4,5-Trichlorophenol	ND
2-Choronapthalene	ND
1,3 Dinitrobenzene	ND
2-Nitroaniline	ND
3-Nitroaniline	ND
Safrole	ND

Target Analytes

Acenapthylene	22.7
1,4-Napthoquinone	1.6J
Dimethylpthalate	ND
2,6-Dinitrotoluene	ND
Acenapthene	1.2J
1-Napthylamine	ND
2-Napthylamine	ND
4-Nitroaniline	ND
2,4-Dinitrophenol	ND
Dibenzofuran	4.3J

Pentachlorobenzene	ND
2,4-Dinitrophenol	ND
2,3,4,6-Tetrachlorophenol	ND
4-Nitrophenol	ND
Fluorene	5.8J
Diethyl pthalate	2.9J
4-Chlorophenyl phenyl ether	ND
2-Methyl-4,6-dinitrophenol	ND
5-Nitro-o-toluidine	ND
Diphenylamine	ND
Diallate	ND
1,3,5-Trinitrobenzene	ND
4-Bronophenyl phenyl ether	ND
Phenacetin	ND
Hexachlorobenzene	ND
4-Aminobiphenyl	ND
Dinoseb	ND
Pentachlorophenol	ND
Pentachloronitrobenzene	ND
Phenanthrene	21.1
Anthracene	4.4J
Di-n-butyl pthalate	2.8J
Isodrin	ND
Fluoranthene	6.7J
3,3'-Dimethylbenzidine	ND
Pyrene	7.0J
Chlorobenzilate	ND
p-Dimethylaminoazobenzene	ND
2-Acetylaminofluorene	ND
Benzyl butyl pthalate	3.0J

Target Analytes

3,3'-Dichlorobenzidine	ND
Benzo (a) anthracene	2.0J
Chrysene	2.5J
di-n-octyl pthalate	ND
Benzo (b) fluoranthene	2.5J
7,12-Dimethylbenz (a) anthracene	ND
Benzo (k) fluoranthene	ND
Benzo (a) pyrene	2.2J
3-Methylcholanthrene	ND
Indeno (1,2,3-cd) pyrene	1.5J
Dibenz (a,h) anthracene	ND
Benzo (ghi) perylene	1.6J

Tentatively Identified Cmpds	**ret time (min)**	**Total µg**
2-Furancarboxaldehyde,5meth	11.68	25.8
2Cyclopenten1one,2-hydroxy3	13.85	45.6

Unknown	16.18	57.6
Unknown	19.15	33.3
14:36-Dianhydro-alpha-d-gluc	19.97	44.4
Phenol, 4-ethyl-2-methoxy-	21.61	27.1
Butylated Hydroxytoluene	27.69	23.9
Unknown	27.96	45.9
Unknown	28.23	22.1
Unknown	28.68	39.6
Benzene, 1,1' -(1,3-propanedi	31.31	23.0
Hexadecanoic Acid	37.72	42.7
Oleic Acid	41.06	25.3
Unknown	44.93	179.4
Hexanedioic Acid,bis(2-ethylhe	45.38	215.3
Unknown	46.30	21.8
Unknown Pthalate	47.64	186.5
Unknown Pthalate	50.43	75.6
Unknown	51.81	38.5

NS = not spiked
j = detected below lowest calibration level

APPCD Organic Support Laboratory

Household Waste - Semivolatile Analysis

Project:	Household Wastes	Date Acquired:	8/30/96
Sample Id:	Trash #5	Date Sampled:	9/12/95
Sample Name:	Trash Semivol #5	Date Extracted:	9/20/95
MS Data File:	STRASH5B	Dilution factor:	2X
Method:	SW846-Method 8270	Analyst:	Bill Preston
		QC reviewer:	Dennis Tabor

Comment:
Non-Recycler Test #5

Presampling Surrogates	**Percent Recovery (%)**
d10-Anthracene	96.5

Post Sampling Surrogates	**Percent Recovery (%)**
2-Fluorophenol	51.2
d5-Phenol	83.0
d5-Nitrobenzene	74.6
2-Fluorobiphenyl	80.9
2,4,6-Tribromophenol	72.1
d14-Terphenyl	92.4

Target Analytes	**Total µg**
n-Nitrosomethylethylamine	ND
Methyl Methanesulfonate	ND
n-Nitrosodiethylamine	ND
Bis-(2-Chloroethyl) ether	ND
Ethyl Methanesulfonate	ND
Aniline	ND
Phenol	113.6
2-chlorophenol	1.7J
1,3-Dichlorobenzene	ND

Target Analytes	Total µg
1,4-Dichlorobenzene	ND
1,2-Dichlorobenzene	ND
Benzyl Alcohol	8.3J
Bis (2-Chloroisopropyl) ether	ND
2-Methylphenol	23.6
n-Nitrosopyrrolidine	ND
Acetophenone	8.8J
Hexachloroethane	ND
4-Methylphenol	76.8
n-Nitrosodi-n-propylamine	ND
Nitrobenzene	ND
1-Nitrosopiperidine	ND
Isophorone	41.1
2,4-Dimethylphenol	ND
Bis (2-chloroethoxy) methane	ND
2,4_Dichlorophenol	ND
1,2,4-Trichlorobenzene	ND
Napthalene	77.3
2-Nitrophenol	ND
2,6-Dichlorophenol	ND
Hexachloropropene	ND
4-Chloroaniline	ND
Hexachlorobutadiene	ND
n-Nitrosodi-n-butylamine	ND
4-Chloro-3-methyl-phenol	ND
2-Methylnapthalene	10.4J
Isosafrole	ND
1,2,4,5 Tetrachlorobenzene	ND
Hexachlorobutadiene	ND
2,4,6-Trichlorophenol	ND
2,4,5-Trichlorophenol	ND
2-Choronapthalene	ND
1,3 Dinitrobenzene	ND
2-Nitroaniline	ND
3-Nitroaniline	ND
Safrole	ND

Target Analytes

Acenapthylene	20.4
1,4-Napthoquinone	1.2J
Dimethylpthalate	ND
2,6-Dinitrotoluene	ND
Acenapthene	1.1J
1-Napthylamine	ND
2-Napthylamine	ND
4-Nitroaniline	ND
2,4-Dinitrophenol	ND
Dibenzofuran	3.8J
Pentachlorobenzene	ND
2,4-Dinitrophenol	ND
2,3,4,6-Tetrachlorophenol	ND
4-Nitrophenol	ND
Fluorene	5.1J
Diethyl pthalate	2.0J
4-Chlorophenyl phenyl ether	ND
2-Methyl-4,6-dinitrophenol	ND
5-Nitro-o-toluidine	ND
Diphenylamine	ND
Diallate	ND
1,3,5-Trinitrobenzene	ND
4-Bronophenyl phenyl ether	ND
Phenacetin	ND
Hexachlorobenzene	ND
4-Aminobiphenyl	ND
Dinoseb	ND
Pentachlorophenol	ND
Pentachloronitrobenzene	ND
Phenanthrene	16.8J
Anthracene	3.4J
Di-n-butyl pthalate	17.0J
Isodrin	ND
Fluoranthene	4.9J
3,3'-Dimethylbenzidine	ND
Pyrene	5.4J
Chlorobenzilate	ND
p-Dimethylaminoazobenzene	ND
2-Acetylaminofluorene	ND
Benzyl butyl pthalate	4.2J

Target Analytes

3,3'-Dichlorobenzidine	ND
Benzo (a) anthracene	1.5J
Chrysene	1.8J
di-n-octyl pthalate	ND
Benzo (b) fluoranthene	1.5J
7,12-Dimethylbenz (a) anthracene	ND
Benzo (k) fluoranthene	ND
Benzo (a) pyrene	1.3J
3-Methylcholanthrene	ND
Indeno (1,2,3-cd) pyrene	ND
Dibenz (a,h) anthracene	ND
Benzo (ghi) perylene	ND

Tentatively Identified Cmpd	**ret time (min)**	**Total µg**
Unknown	7.14	183.9
Unknown	8.36	87.3
2-Cyclopenten-1-one, 2-meth	9.64	57.8
2-Furancarboxaldehyde,5-me	11.70	69.4
Unknown	11.80	55.5
2Cyclopenten-1-one,2hydroxy	13.92	95.1
Unknown	16.22	65.5
Phenol,2-methoxy-4-methyl	19.17	72.7
Phenol, 4-ethyl-2-methoxy-	21.62	63.3
Hexadecanoic Acid,bis(2ethyl	45.36	57.6
Unknown Pthalate	50.35	70.7
Unknown Pthalate	50.44	110.7
Unknown Pthalate	50.81	55.5
Unknown Pthalate	50.91	58.0
Unknown Pthalate	51.19	55.5
Unknown Pthalate	51.81	53.1
Unknown Pthalate	51.92	70.1
Unknown Pthalate	52.29	56.5

NS = not spiked

j = detected below lowest calibration level

APPCD Organic Support Laboratory

Household Waste - Semivolatile Analysis

Project:	Household Wastes	Date Acquired:	8/30/96
Sample Id:	Trash #6	Date Sampled:	9/12/95
Sample Name:	Trash Semivol #6	Date Extracted:	9/20/95
MS Data File:	STRASH6B	Dilution factor:	none
Method:	SW846-Method 8270	Analyst:	Bill Preston
		QC reviewer:	Dennis Tabor

Comment:
Field Blank

Presampling Surrogates	**Percent Recovery (%)**
d10-Anthracene	96.4

Post Sampling Surrogates	**Percent Recovery (%)**
2-Fluorophenol	54.7
d5-Phenol	76.8
d5-Nitrobenzene	83.6
2-Fluorobiphenyl	83.5
2,4,6-Tribromophenol	70.2
d14-Terphenyl	94.0

Target Analytes	**Total µg**
n-Nitrosomethylethylamine	ND
Methyl Methanesulfonate	ND
n-Nitrosodiethylamine	ND
Bis-(2-Chloroethyl) ether	ND
Ethyl Methanesulfonate	ND
Aniline	ND
Phenol	10.2
2-chlorophenol	ND
1,3-Dichlorobenzene	ND

Target Analytes	Total µg
1,4-Dichlorobenzene	ND
1,2-Dichlorobenzene	ND
Benzyl Alcohol	2.3J
Bis (2-Chloroisopropyl) ether	ND
2-Methylphenol	ND
n-Nitrosopyrrolidine	ND
Acetophenone	ND
Hexachloroethane	ND
4-Methylphenol	ND
n-Nitrosodi-n-propylamine	ND
Nitrobenzene	ND
1-Nitrosopiperidine	ND
Isophorone	ND
2,4-Dimethylphenol	ND
Bis (2-chloroethoxy) methane	ND
2,4_Dichlorophenol	ND
1,2,4-Trichlorobenzene	ND
Napthalene	ND
2-Nitrophenol	ND
2,6-Dichlorophenol	ND
Hexachloropropene	ND
4-Chloroaniline	ND
Hexachlorobutadiene	ND
n-Nitrosodi-n-butylamine	ND
4-Chloro-3-methyl-phenol	ND
2-Methylnapthalene	ND
Isosafrole	ND
1,2,4,5 Tetrachlorobenzene	ND
Hexachlorobutadiene	ND
2,4,6-Trichlorophenol	ND
2,4,5-Trichlorophenol	ND
2-Choronapthalene	ND
1,3 Dinitrobenzene	ND
2-Nitroaniline	ND
3-Nitroaniline	ND
Safrole	ND

Target Analytes

Acenapthylene	ND
1,4-Napthoquinone	ND
Dimethylpthalate	ND
2,6-Dinitrotoluene	ND
Acenapthene	ND
1-Napthylamine	ND
2-Napthylamine	ND
4-Nitroaniline	ND
2,4-Dinitrophenol	ND
Dibenzofuran	ND
Pentachlorobenzene	ND
2,4-Dinitrophenol	ND
2,3,4,6-Tetrachlorophenol	ND
4-Nitrophenol	ND
Fluorene	ND
Diethyl pthalate	1.3J
4-Chlorophenyl phenyl ether	ND
2-Methyl-4,6-dinitrophenol	ND
5-Nitro-o-toluidine	ND
Diphenylamine	ND
Diallate	ND
1,3,5-Trinitrobenzene	ND
4-Bronophenyl phenyl ether	ND
Phenacetin	ND
Hexachlorobenzene	ND
4-Aminobiphenyl	ND
Dinoseb	ND
Pentachlorophenol	ND
Pentachloronitrobenzene	ND
Phenanthrene	ND
Anthracene	ND
Di-n-butyl pthalate	3.1J
Isodrin	ND
Fluoranthene	ND
3,3'-Dimethylbenzidine	ND
Pyrene	ND
Chlorobenzilate	ND
p-Dimethylaminoazobenzene	ND
2-Acetylaminofluorene	ND
Benzyl butyl pthalate	2.8J

Target Analytes

3,3'-Dichlorobenzidine	ND
Benzo (a) anthracene	ND
Chrysene	ND
di-n-octyl pthalate	ND
Benzo (b) fluoranthene	ND
7,12-Dimethylbenz (a) anthracene	ND
Benzo (k) fluoranthene	ND
Benzo (a) pyrene	ND
3-Methylcholanthrene	ND
Indeno (1,2,3-cd) pyrene	ND
Dibenz (a,h) anthracene	ND
Benzo (ghi) perylene	ND

Tentatively Identified Cmpd	**ret time (min)**	**Total µg**
Ethyl benzene	8.14	7.9
Xylene isomer(s)	8.45	8.6
Benzaldehyde	11.77	14.1
Cyclotetrasiloxane, octameth	12.41	13.0
Hexanoic acid, 2-ethyl -	17.12	17.9
Unknown Hydrocarbon	25.03	7.9
2,5 -Cyclohexadiene-1,4dion	26.67	8.8
Unknown Hydrocarbon	27.59	8.0
Butylated Hydroxytoluene	27.68	21.2
Phenol, 2,6-bis (1,1-dimethyl	33.58	11.8
Phosphonic acid, dioctadecyl	43.84	7.6
Unknown subst. Hexanedioic	45.39	129.9
(Carbethoxyethylidine) triphe	47.57	40.5
Unknown Phthalate	47.64	63.7
Unknown Phthalate	49.82	11.2
Unknown Phthalate	50.11	9.4
Unknown Phthalate	50.34	10.5
Unknown Phthalate	50.44	203.4
Unknown Phthalate	51.82	31.0

NS = not spiked

j = detected below lowest calibration level

ALDEHYDES AND KETONES

PQL = Practical Quantitation Limit
N/D = Not Detected
J = Detected @< PQL
N/A = Not Applicable
DL = Diluted Result
NR = Not Required
E = Estimated value

Test#	1	2	3	4	5
	Avid	Avid	Hut	Non	Non
	Recycler	Recycler	Blank	Recycler	Recycler
Sample ID	#4	#5	#6	#7	#8
Analysis Date	09/09/95	09/09/95	09/09/95	09/09/95	5\2\96
	µg	µg	µg	µg	µg
formaldehyde	2.6	0.75	<0.25	29.5	13.2
acetaldehyde	1.83	0.53	<0.25	27.8	13.9
acrolein	<0.25	<0.25	<0.25	2.56	<0.25
acetone	4.11	2.95	3.38	14.9	7.57
propionaldehyde	0.63	<0.25	<0.25	7.63	3.28
crotonaldehyde	<0.25	<0.25	<0.25	3.22	<0.25
butyraldehyde	0.43	<0.25	<0.25	<0.25	<0.25
benzaldehyde	2.06	0.38	<0.25	8.41	5.85
isovaleraldehyde	<0.25	<0.25	<0.25	0.98	<0.25
valeraldehyde	<0.25	<0.25	<0.25	<0.25	<0.25
o-tolualdehyde	<0.25	<0.25	<0.25	<0.25	<0.25
m-tolualdehyde	<0.25	<0.25	<0.25	<0.25	<0.25
p-tolualdehyde	1.4	<0.25	<0.25	<0.25	<0.25
hexaldehyde	<0.25	<0.25	<0.25	<0.25	<0.25
2,4-dimethylbenzaldehyde	<0.25	<0.25	<0.25	<0.25	<0.25

ESTIMATED EMISSIONS OF ALDEHYDES AND KETONE (g/Kg)

Test#	1	2	3	4	5
	Avid	Avid	Hut	Non	Non
	Recycler	Recycler	Blank	Recycler	Recycler
formaldehyde	0.0434	0.0112	NA	1.229	0.491
acetaldehyde	0.0305	0.0079	NA	1.1581	0.5171
acrolein	<0.0042	<0.0037	NA	0.1066	<0.0093
acetone	0.0686	0.0441	NA	0.6207	0.2816
propionaldehyde	0.0105	<0.0037	NA	0.3179	0.122
crotonaldehyde	<0.0042	<0.0037	NA	0.1341	<0.0093
butyraldehyde	0.0072	<0.0037	NA	<0.0104	<0.0093
benzaldehyde	0.0344	0.0057	NA	0.3504	0.2176
isovaleraldehyde	<0.0042	<0.0037	NA	0.0408	<0.0093
valeraldehyde	<0.0042	<0.0037	NA	<0.0104	<0.0093
o-tolualdehyde	<0.0042	<0.0037	NA	<0.0104	<0.0093
m-tolualdehyde	<0.0042	<0.0037	NA	<0.0104	<0.0093
p-tolualdehyde	0.0234	<0.0037	NA	<0.0104	<0.0093
hexaldehyde	<0.0042	<0.0037	NA	<0.0104	<0.0093
2,4-dimethylbenzaldehyde	<0.0042	<0.0037	NA	<0.0104	<0.0093

ESTIMATED HCl EMISSIONS (g/Kg)							
HCl data							
							Estimated
Test	Test Conditions	DATE	ug HCl	Mass burnned	Vm,std	HCl conc.	HCl Emissions
No.				Kg		mg/M3	g/kg
1	Avid Recycler	8/30/95	550	8.1	2.426	8.006	3.281
2	Avid Recycler	9/1/95	260	8.8	2.512	3.655	1.508
3	Hut Blank	9/6/95	4.7	0	2.615	0.063	NA
4	Non Recycler	9/8/95	22	2.6	1.691	0.459	0.4814
5	Non Recycler	9/12/95	6.3	3.9	2.7	0.082	0.08636
ESTIMATED HCN EMISSIONS (g/Kg)							
							Estimated
Test	Test Conditions	DATE	ug HCN	Mass burnned	Vm,std	HCN conc.	HCN Emissions
No.				Kg	CUFT	mg/M3	g/kg
1	Avid Recycler	8/30/95	33.7125	8.1	2.0483	0.5812	0.2382
2	Avid Recycler	9/1/95	24.7953	8.8	2.2362	0.3915	0.1615
3	Hut Blank	9/6/95	-0.6284	0	2.5447	-0.0087	na
4	Non Recycler	9/8/95	32.8109	2.6	1.6688	0.6943	0.7277
5	Non Recycler	9/12/95	14.9944	3.9	2.6648	0.1987	0.2083

PARTICULATE DATA									
				coarse rot	total rot	initial Pa	initial T	coarse rot	Tot rot
Test	Test Condi	DATE	RUN #	initial	initial	IN Hg	deg. C	final	final
No.									
1	Avid Recy	8/30/95	1	7	23	29.68	35	7	23
2	Avid Recy	9/1/95	2	7	23	29.36	31.7	7	23
3	Hut Blank	9/6/95	3	7	23	29.69	30	7	23
4	Non Recyc	9/8/95	4	7	23	29.47	26.1	7	23
5	Non Recyc	9/12/95	5	7	23	29.82	25	7	23
	final Pa	final T	Seas avg	Seas avg	coarse	Tare Wt	Final Wt	fine	Tare Wt
Test	IN Hg	deg. C	in Hg	deg. C	filter #	mg	mg	filter #	mg
No.									
1	29.68	35.2	29.68	35.1	4	0	3.62	3	0
2	29.36	31.7	29.36	31.7	6	0	3.01	5	0
3	29.69	29.4	29.69	29.7	7	0	0.03	8	0
4	29.47	28.9	29.47	27.5	10	0	3.15	9	0
5	29.82	28.9	29.82	26.95	12	0	4.25	11	0
	Final Wt	Run Time	equation	equation	equation	equation	initial Pa	initial T	final Pa
Test	mg	minutes	coarse m	coarse b	total m	total b	mm Hg	K	mm Hg
No.									
1	16.99	77	2.3675	0.10647	1.13214	-3.8465	753.872	308	753.872
2	9.57	79	2.3675	0.10647	1.13214	-3.8465	745.744	304.7	745.744
3	0.05	90	2.3675	0.10647	1.13214	-3.8465	754.126	303	754.126
4	16.21	60	2.3675	0.10647	1.13214	-3.8465	748.538	299.1	748.538
5	18.08	90	2.3675	0.10647	1.13214	-3.8465	757.428	298	757.428
	final T	Seas avg	Seas avg	SAMPLER			initial	final	coarse
Test	K	mm Hg	K	ID	DATE	RUN #	coarse Qa	coarse Qa	Qavg
No.									
1	308.2	753.872	308.1	1	30-Aug-9	1	1.84	1.84	1.84
2	304.7	745.744	304.7	2	1-Sep-95	2	1.84	1.84	1.84
3	302.4	754.126	302.7	3	6-Sep-95	3	1.83	1.83	1.83
4	301.9	748.538	300.5	4	8-Sep-95	4	1.82	1.82	1.82
5	301.9	757.428	299.95	5	12-Sep-9	5	1.81	1.81	1.81
	coarse	initial	final	total	total	fine	fine	fine(PM-2.5)	fine
Test	Qstd	total Qa	total Qa	Qavg	Qstd	Qavg	Qstd	Volume	Catch
No.								(m3, STP)	ug
1	1.77	16.38	16.39	16.39	15.72	14.54	13.95	1.074	16990
2	1.77	16.38	16.38	16.38	15.72	14.54	13.95	1.102	9570
3	1.79	16.27	16.26	16.27	15.89	14.44	14.11	1.269	50
4	1.78	16.24	16.3	16.27	15.89	14.45	14.11	0.847	16210
5	1.79	16.14	16.22	16.18	16.02	14.37	14.23	1.281	18080
	fine(PM-2	coarse	coarse(2.5	total(PM-1	total(PM-1	Concentrat	Concentrat	Estimated	Estimated
Test	Concentrat	Catch	Concentrat	Volume	Concentrat	PM 2.5	PM 10	Emis. PM 2.5	Emis. PM 10
No.	ug/m^3	ug	ug/m^3	(m3, STP)	ug/m^3	mg/m3	mg/m3	g/kg	g/kg
1	1.581e+4	3620	1209.67	1.21	17027	15.82	17.03	6.93	7.46
2	8682.579	3010	1445.58	1.242	10128	8.68	10.13	3.58	4.18
3	39.386	30	16.55	1.43	56	0.04	0.06	N/A	N/A
4	1.914e+4	3150	1157.02	0.953	20305	19.15	20.31	20.07	21.28
5	1.411e+4	4250	1368.62	1.442	15485	14.12	15.49	14.8	16.23

APPENDIX G. WCL&R RAW ANALYTICAL DATA

CHLOROBENZENES(SIM)

CHLOROBENZENES(SIM)										
Raw Data										
			Run 1				Run 2			
			Avid				Avid			
			Recycler				Recycler			
	RunName:		S1109J				S1109H			
	Acc.Num.:		9582042	detection	%		9582043	detection	%	
	Units:		pig	limit	recovery		pig	limit	recovery	
1,3	Dichlorobenzene		4091.515	522.697	80.99012		68961.05	459.3976	92.14957	
1,4	Dichlorobenzene		1714.85	356.6881	80.99012		25897.91	313.4927	92.14957	
1,2	Dichlorobenzene		13055.74	390.2794	80.99012		94790.55	343.016	92.14957	
1,3,5	Trichlorobenzene		522.4778	286.9338	72.70316		8395.963	253.0192	82.44824	
1,2,4	Trichlorobenzene		8675.252	397.7631	72.70316		72540.66	350.7488	82.44824	
1,2,3	Trichlorobenzene		12209.78	299.52	72.70316		86094.88	264.1177	82.44824	
1,2,3,5	Tetrachlorobenzene		2724.627	206.6413	84.59205		22182.83	183.4277	95.29755	
1,2,4,5	Tetrachlorobenzene		2795.489	146.0564	84.59205		11588.96	129.6487	95.29755	
1,2,3,4	Tetrachlorobenzene		10052.11	176.3292	84.59205		45910.47	156.5208	95.29755	
1,2,3,4,5	Pentachlorobenzene		9489.454	151.5241	85.66898		45681.51	134.7458	96.33631	
1,2,3,4,5,6	Hexachlorobenzene		8837.573	179.5857	77.47478		17595.26	160.111	86.8982	
TOT	Dichlorobenzene		16438.94	356.6881	80.99012		159588.8	313.4927	92.14957	
TOT	Trichlorobenzene		25614.15	397.7631	72.70316		198513.8	350.7488	82.44824	
TOT	Tetrachlorobenzene		13047.61	146.0564	84.59205		65296.43	129.6487	95.29755	
TOT	Pentachlorobenzene		9489.454	151.5241	85.66898		45681.51	134.7458	96.33631	
TOT	Hexachlorobenzene		8837.573	179.5857	77.47478		17595.26	160.111	86.8982	
Data Corrected by Dilution Factor (DF=10)										
			Run 1				Run 2			
			Avid				Avid			
			Recycler				Recycler			
	RunName:		S1109J				S1109H			
	Acc.Num.:		9582042	detection	%		9582043	detection	%	
	Units:		pig	limit	recovery		pig	limit	recovery	
1,3	Dichlorobenzene		40915.15	5226.97			689610.5	4593.976		
1,4	Dichlorobenzene		17148.5	3566.881			258979.1	3134.927		
1,2	Dichlorobenzene		130557.4	3902.794			947905.5	3430.16		
1,3,5	Trichlorobenzene		5224.778	2869.338			83959.63	2530.192		
1,2,4	Trichlorobenzene		86752.52	3977.631			725406.6	3507.488		
1,2,3	Trichlorobenzene		122097.8	2995.2			860948.8	2641.177		
1,2,3,5	Tetrachlorobenzene		27246.27	2066.413			221828.3	1834.277		
1,2,4,5	Tetrachlorobenzene		27954.89	1460.564			115889.6	1296.487		
1,2,3,4	Tetrachlorobenzene		100521.1	1763.292			459104.7	1565.208		
1,2,3,4,5	Pentachlorobenzene		94894.54	1515.241			456815.1	1347.458		
1,2,3,4,5,6	Hexachlorobenzene		88375.73	1795.857			175952.6	1601.11		
TOT	Dichlorobenzene		164389.4	3566.881			1595888	3134.927		
TOT	Trichlorobenzene		256141.5	3977.631			1985138	3507.488		
TOT	Tetrachlorobenzene		130476.1	1460.564			652964.3	1296.487		
TOT	Pentachlorobenzene		94894.54	1515.241			456815.1	1347.458		
TOT	Hexachlorobenzene		88375.73	1795.857			175952.6	1601.11		
NYS-DOH Analyses										
SIM Chlorobenzenes Estimated Emissions mg/Kg										
(taken from #'s corrected for dilution factor)		Run 1	Run 2	Run 3	Run 4	Run 5				from semi-v
		Avid	Avid	Hut	Non	Non	Field			
		Recycler	Recycler	Blank	Recycler	Recycler	Blank			Test #
	RunName:	S1109J	S1109H	S1109F	S1109I	S1109G	S1109E			1
	Acc.Num.:	9582042	9582043	9582044	9582045	9582046	9582047			2
	Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			3
1,3	Dichlorobenzene	0.016	0.2448	n/a	0.0076	0.0596	n/a			4
1,4	Dichlorobenzene	0.0067	0.0919	n/a	0.0032	0.0313	n/a			5
1,2	Dichlorobenzene	0.051	0.3365	n/a	0.1074	0.1616	n/a			
1,3,5	Trichlorobenzene	0.002	0.0298	n/a	<0.0077	0.0042	n/a			
1,2,4	Trichlorobenzene	0.0339	0.2575	n/a	0.0468	0.0519	n/a			
1,2,3	Trichlorobenzene	0.0477	0.3057	n/a	0.0457	0.0452	n/a			
1,2,3,5	Tetrachlorobenzene	0.0107	0.0788	n/a	0.0197	0.0117	n/a			
1,2,4,5	Tetrachlorobenzene	0.0109	0.0411	n/a	0.0277	0.0121	n/a			
1,2,3,4	Tetrachlorobenzene	0.0393	0.163	n/a	0.0686	0.0342	n/a			
1,2,3,4,5	Pentachlorobenzene	0.0371	0.1622	n/a	0.0727	0.0331	n/a			
1,2,3,4,5,6	Hexachlorobenzene	0.0345	0.0625	n/a	0.0309	0.0131	n/a			
TOT	Dichlorobenzene	0.0643	0.5666	n/a	0.1065	0.2196	n/a			
TOT	Trichlorobenzene	0.1001	0.7048	n/a	0.1074	0.1178	n/a			
TOT	Tetrachlorobenzene	0.051	0.2318	n/a	0.0985	0.0487	n/a			
TOT	Pentachlorobenzene	0.0371	0.1622	n/a	0.0727	0.0331	n/a			
TOT	Hexachlorobenzene	0.0345	0.0625	n/a	0.0309	0.0131	n/a			

Run 3				Run 4				Run 5					
Hut				Non				Non				Field	
Blank				Recycler				Recycler				Blank	
S1109F				S1109I				S1109G				S1109E	
9582044	detection	%		9582045	detection	%		9582046	detection	%		9582047	detection
pig	limit	recovery		pig	limit	recovery		pig	limit	recovery		pig	limit
0	505.2492	83.78694		618.9072	1180.67	35.85531		6609.231	485.7693	87.1469		0	436.5846
1646.161	344.7818	83.78694		259.3512	805.6887	35.85531		3470.189	331.4887	87.1469		0	297.9251
7098.595	377.2517	83.78694		8702.19	881.5646	35.85531		17928.3	362.7068	87.1469		7378.773	325.9823
0	271.6796	76.78528		0	624.085	33.42653		470.3578	266.0395	78.41315		0	240.6586
319.1828	376.6168	76.78528		3790.352	865.1401	33.42653		5758.157	368.7982	78.41315		318.4678	333.6139
213.3781	283.5966	76.78528		3702.182	651.46	33.42653		5013.621	277.7091	78.41315		259.907	251.2149
0	196.7343	88.85189		1595.473	486.2616	35.94816		1301.565	182.6475	95.70461		0	177.3234
447.5452	139.054	88.85189		2248.007	343.6951	35.94816		1344.071	129.0973	95.70461		603.9728	125.3342
1359.607	167.8755	88.85189		5563.909	414.9322	35.94816		3795.367	155.8551	95.70461		1760.061	151.312
0	145.9244	88.95647		5891.054	366.4252	35.42583		3676.073	135.291	95.94813		1506.002	128.1072
0	175.1753	79.42537		2503.031	427.2697	32.56342		1457.453	158.6534	87.69661		0	152.1533
8133.782	344.7818	83.78694		8634.888	805.6887	35.85531		24365.55	331.4887	87.1469		6743.684	297.9251
602.5493	376.6168	76.78528		8706.856	865.1401	33.42653		13068.29	368.7982	78.41315		663.6247	333.6139
1573.729	139.054	88.85189		7984.38	343.6951	35.94816		5407.796	129.0973	95.70461		2061.86	125.3342
0	145.9244	88.95647		5891.054	366.4252	35.42583		3676.073	135.291	95.94813		1506.002	128.1072
0	175.1753	79.42537		2503.031	427.2697	32.56342		1457.453	158.6534	87.69661		0	152.1533
Run 3				Run 4				Run 5					
Hut				Non				Non				Field	
Blank				Recycler				Recycler				Blank	
S1109F				S1109I				S1109G				S1109E	
9582044	detection	%		9582045	detection	%		9582046	detection	%		9582047	detection
pig	limit	recovery		pig	limit	recovery		pig	limit	recovery		pig	limit
0	5052.492			6189.072	11806.7			66092.31	4857.693			0	4365.846
16461.61	3447.818			2593.512	8056.887			34701.89	3314.887			0	2979.251
70985.95	3772.517			87021.9	8815.646			179283	3627.068			73787.73	3259.823
0	2716.796			0	6240.85			4703.578	2660.395			0	2406.586
3191.828	3766.168			37903.52	8651.401			57581.57	3687.982			3184.678	3336.139
2133.781	2835.966			37021.82	6514.6			50136.21	2777.091			2599.07	2512.149
0	1967.343			15954.73	4862.616			13015.65	1826.475			0	1773.234
4475.452	1390.54			22480.07	3436.951			13440.71	1290.973			6039.728	1253.342
13596.07	1678.755			55639.09	4149.322			37953.67	1558.551			17600.61	1513.12
0	1459.244			58910.54	3664.252			36760.73	1352.91			15060.02	1281.072
0	1751.753			25030.31	4272.697			14574.53	1586.534			0	1521.533
81337.82	3447.818			86348.88	8056.887			243655.5	3314.887			67436.84	2979.251
6025.493	3766.168			87068.56	8651.401			130682.9	3687.982			6636.247	3336.139
15737.29	1390.54			79843.8	3436.951			54077.96	1290.973			20618.6	1253.342
0	1459.244			58910.54	3664.252			36760.73	1352.91			15060.02	1281.072
0	1751.753			25030.31	4272.697			14574.53	1586.534			0	1521.533
ol worksheet													
Tm,1	Tm,f	Tm,avg	Pbar	dH	DGM,i	DGM,f	Vm	Run Time		Air into hut	Mass Burnned	Mass burnned	Vm,std
deg F	deg F	deg F	in Hg				ft3	min		M3	lb	Kg	cu ft std
93.0000	110.0000	101.5000	29.6800	N/A	657.996	698.142	40.146	72.0000		45949	17.6000	8.0	37.4330
88.0000	104.0000	96.0000	29.3600	N/A	698.305	742.578	44.273	79.0000		45949	19.3000	8.8	41.2400
86.0000	102.0000	94.0000	29.6900	N/A	742.676	792.023	49.347	60.0000		45949	N/A	N/A	46.6509
85.0000	96.0000	90.5000	29.4700	N/A	792.224	823.987	31.763	60.0000		45949	5.8000	2.6	29.9946
71.0000	93.0000	82.0000	29.8200	N/A	824.043	871.218	47.175	90.0000		45949	7.8000	3.5	45.7845

Semi-Volitile Data from State of NY												
Open Burn Project:Household Waste						From						
Target Compounds						State of		with qualifiers	J=(PQL), Quantified below method dection limit			
based on 1 mL of concentrated extract						NY		added				
Test#	1	2	3	4	5	Estimated	1	2	3	4	5	
	Avid	Avid	Hut	Non	Non	Method	Avid	Avid	Hut	Non	Non	
	Recycler	Recycler	Blank	Recycler	Recycler	Detection	Recycler	Recycler	Blank	Recycler	Recycler	
Sample ID	9582042	9582043	9582044	9582045	9582046	Limit	9582042	9582043	9582044	9582045	9582046	
Compound	ug/mL	ug/mL	ug/mL	ug/mL	ug/mL	ug	ug	ug	ug	ug	ug	
1,4-Dichlorobenzene-d4	20.0000	20.0000	20.0000	20.0000	20.0000							
Naphthalene-d8	20.0000	20.0000	20.0000	20.0000	20.0000	**NYS/DOH Analyses - Full Scan Semivolatiles**		Test 1	Test 2	Test 3	Test 4	Test 5
Acenaphthene-d10	20.0000	20.0000	20.0000	20.0000	20.0000	**Recovery Data**		Avid	Avid	Hut	Non	Non
Phenanthrene-d10	20.0000	20.0000	20.0000	20.0000	20.0000			Recycler	Recycler	Blank	Recycler	Recycler
Chrysene-d12	20.0000	20.0000	20.0000	20.0000	20.0000		Sample ID	9582042	9582043	9582044	9582045	9582046
Perylene-d12	20.0000	20.0000	20.0000	20.0000	20.0000	Spiking Level (ug)		Recovery %	Recovery %	Recovery %	Recovery %	Recovery %
2-Fluorophenol	26.7277	99.0462	16.3926	2.3746	72.1842	200.00	2-Fluorophenol	13.36	49.52	8.20	1.19	36.09
Phenol-d5	83.8489	144.5325	24.3492	13.5798	116.8968	200.00	Phenol-d5	41.92	72.27	12.17	6.79	58.45
Nitrobenzene-d5	33.2986	91.6981	10.7087	10.6336	64.5802	100.00	Nitrobenzene-d5	33.30	91.70	10.71	10.63	64.58
2-Fluorobiphenyl	60.9269	70.4072	12.4074	9.7996	57.1754	100.00	2-Fluorobiphenyl	60.93	70.41	12.41	9.80	57.18
2,4,6-Tribromophenol	204.2365	178.9856	28.8261	36.0669	166.4324	200.00	2,4,6-Tribromophenol	102.12	89.49	14.41	18.03	83.22
Terphenyl-d14	151.0016	145.4663	17.4938	21.4648	106.4828	100.00	Terphenyl-d14	151.00	145.47	17.49	21.46	106.48
Anthracene-d10	129.4000	107.5000	142.3000	123.8000	110.6000	200.00	Anthracene-d10	64.70	53.75	71.15	61.90	55.30
Pyridine	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	
N-Nitrosodimethylamine	0.0000	0.0000	0.0000	0.0000	0.0000	7.17	<7.17	<7.17	<7.17	<7.17	<7.17	
2-Picoline	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	
N-Nitrosomethylethylamine	0.0000	0.0000	0.0000	0.0000	0.0000	7.23	<7.23	<7.23	<7.23	<7.23	<7.23	
Methyl methanesulfonate	0.0000	0.0000	0.0000	0.0000	0.0000	6.64	<6.64	<6.64	<6.64	<6.64	<6.64	
N-Nitrosodiethylamine	0.0000	0.0000	0.0000	0.0000	0.0000	7.28	<7.28	<7.28	<7.28	<7.28	<7.28	
Ethyl methanesulfonate	0.0000	0.0000	0.0000	0.0000	0.0000	6.55	<6.55	<6.55	<6.55	<6.55	<6.55	
Aniline	0.0000	0.0000	0.0000	0.0000	0.0000	6.55	<6.55	<6.55	<6.55	<6.55	<6.55	
Phenol	117.6674	386.4342	111.9110	165.3744	116.7774	7.51	117.67	386.43	111.91	165.37	116.78	
bis(2-Chloroethyl)ether	0.0000	0.0000	0.0000	0.0000	0.0000	7.44	<7.44	<7.44	<7.44	<7.44	<7.44	
2-Chlorophenol	1.2079	4.0102	0.0000	0.6692	1.6640	7.19	1.2079J	4.0102J	<7.19	0.6692J	1.664J	
1,3-Dichlorobenzene	0.0496	0.7620	0.0000	0.0000	0.0638	2.91	0.0496J	0.762J	<2.91	<2.91	0.0638J	
1,4-Dichlorobenzene	0.0349	0.4344	0.0286	0.0000	0.0423	3.17	0.0349J	0.4344J	0.0286J	<3.17	0.0423J	
1,2-Dichlorobenzene	0.1589	1.3592	0.1179	0.0540	0.1765	3.20	0.1589J	1.3592J	0.1179J	0.054J	0.1765J	
Benzyl alcohol	1.8505	5.8344	1.7877	6.8248	11.5099	10.40	1.8505J	5.8344J	1.7877J	6.8248J	11.51	
2,2'-oxybis(1-Chloropropane)	0.0000	0.0000	0.0000	0.0000	0.0000	6.38	<6.38	<6.38	<6.38	<6.38	<6.38	
2-Methylphenol	12.6200	63.4859	1.0771	33.2521	46.5338	6.55	12.62	63.49	1.0771J	33.25	46.53	
Acetophenone	3.6276	17.7997	0.3810	3.2010	6.8051	7.17	3.6276J	17.80	0.381J	3.201J	6.8051J	
N-Nitrosopyrrolidine	0.0000	0.0000	0.0000	0.0000	0.0000	8.04	<8.04	<8.04	<8.04	<8.04	<8.04	
N-Nitrosomorpholine	0.0000	0.0000	0.0000	0.0000	0.0000	7.49	<7.49	<7.49	<7.49	<7.49	<7.49	
o-Toluidine	0.0000	0.0000	0.0000	0.0000	0.0000	5.09	<5.09	<5.09	<5.09	<5.09	<5.09	
Hexachloroethane	0.0000	0.0000	0.0000	0.0000	0.0000	2.27	<2.27	<2.27	<2.27	<2.27	<2.27	
N-Nitrosodi-n-propylamine	0.0000	0.0000	0.0000	0.0000	0.0000	7.85	<7.85	<7.85	<7.85	<7.85	<7.85	
3- or 4-Methylphenol	24.1866	110.7802	0.9615	53.5580	63.3458	6.02	24.19	110.78	0.9615J	53.56	63.35	
Nitrobenzene	0.0000	0.0000	0.0000	0.0000	0.0000	6.74	<6.74	<6.74	<6.74	<6.74	<6.74	
N-Nitrosopiperidine	0.0000	0.0000	0.0000	0.0000	0.0000	6.51	<6.51	<6.51	<6.51	<6.51	<6.51	
Isophorone	0.0000	0.0000	0.0000	0.0000	0.0000	6.58	<6.58	<6.58	<6.58	<6.58	<6.58	
2-Nitrophenol	0.0000	0.0000	0.0000	0.0000	0.0000	6.76	<6.76	<6.76	<6.76	<6.76	<6.76	
2,4-Dimethylphenol	9.8926	30.1847	0.0000	41.0315	52.5559	6.03	9.89	30.18	<6.03	41.03	52.56	
O,O,O-Triethylphosphorothioate	0.0000	0.0000	0.0000	0.0000	0.0000	5.26	<5.26	<5.26	<5.26	<5.26	<5.26	
bis(2-Chloroethoxy)methane	0.0000	0.0000	0.0000	0.0000	0.0000	6.50	<6.5	<6.5	<6.5	<6.5	<6.5	
Dimethylphenethylamine	0.0000	0.0000	0.0000	0.0000	0.0000	0.85	<0.85	<0.85	<0.85	<0.85	<0.85	
2,4-Dichlorophenol	0.0000	1.5533	0.0000	0.3325	0.0000	6.82	<6.82	1.5533J	<6.82	0.3325J	<6.82	
1,2,4-Trichlorobenzene	0.0000	0.9140	0.0000	0.0342	0.0000	2.15	<2.15	0.914J	<2.15	0.0342J	<2.15	
Naphthalene	32.7042	151.6709	0.7099	29.7230	52.0067	3.38	32.70	151.67	0.7099J	29.72	52.01	
4-Chloroaniline	0.0000	0.0000	0.0000	0.0000	0.0000	5.22	<5.22	<5.22	<5.22	<5.22	<5.22	
2,6-Dichlorophenol	0.0000	0.4976	0.0000	0.0000	0.0000	7.04	<7.04	0.4976J	<7.04	<7.04	<7.04	
Hexachloropropene	0.0000	0.0000	0.0000	0.0000	0.0000	1.46	<1.46	<1.46	<1.46	<1.46	<1.46	
Hexachlorobutadiene	0.0000	0.0000	0.0000	0.0000	0.0000	1.61	<1.61	<1.61	<1.61	<1.61	<1.61	
1,4-Phenylenediamine	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	
N-Nitroso-di-n-butylamine	0.0000	0.0000	0.0000	0.0000	0.0000	6.35	<6.35	<6.35	<6.35	<6.35	<6.35	
4-Chloro-3-methylphenol	0.0000	0.0000	0.0000	0.0000	0.0000	7.15	<7.15	<7.15	<7.15	<7.15	<7.15	
Safrole	0.0000	0.0000	0.0000	0.0000	0.0000	3.62	<3.62	<3.62	<3.62	<3.62	<3.62	
2-Methylnaphthalene	5.0713	46.1540	0.4048	5.5025	6.8528	2.94	5.07	46.15	0.4048J	5.50	6.85	
1,2,4,5-Tetrachlorobenzene	0.0901	0.4987	0.0000	0.0517	0.0000	2.89	0.0901J	0.4987J	<2.89	0.0517J	<2.89	
Hexachlorocyclopentadiene	0.0000	0.0000	0.0000	0.0000	0.0000	2.26	<2.26	<2.26	<2.26	<2.26	<2.26	
cis-Isosafrole	0.0000	0.0000	0.0000	0.0000	0.0000	4.45	<4.45	<4.45	<4.45	<4.45	<4.45	
2,4,6-Trichlorophenol	0.7175	1.3524	0.0000	0.0000	0.0000	6.57	0.7175J	1.3524J	<6.57	<6.57	<6.57	
2,4,5-Trichlorophenol	0.0000	0.0000	0.0000	0.0000	0.0000	7.35	<7.35	<7.35	<7.35	<7.35	<7.35	
trans-Isosafrole	0.0000	0.0000	0.0000	0.0000	0.0000	3.88	<3.88	<3.88	<3.88	<3.88	<3.88	
2-Chloronaphthalene	0.0000	0.0000	0.0000	0.0000	0.0000	3.43	<3.43	<3.43	<3.43	<3.43	<3.43	
2-Nitroaniline	0.0000	0.0000	0.0000	0.0000	0.0000	6.56	<6.56	<6.56	<6.56	<6.56	<6.56	
1,4-Naphthoquinone	0.0000	0.0000	0.0000	0.0000	0.0000	9.87	<9.87	<9.87	<9.87	<9.87	<9.87	
1,3-Dinitrobenzene	0.0000	0.0000	0.0000	0.0000	0.0000	6.27	<6.27	<6.27	<6.27	<6.27	<6.27	
Dimethylphthalate	0.0000	0.0000	0.4241	0.0000	0.0000	6.53	<6.53	<6.53	0.4241J	<6.53	<6.53	
Acenaphthylene	11.5636	34.7210	0.0945	21.2562	12.4391	3.79	11.56	34.72	0.0945J	21.26	12.44	
2,6-Dinitrotoluene	0.0000	0.0000	0.0000	0.0000	0.0000	6.56	<6.56	<6.56	<6.56	<6.56	<6.56	
3-Nitroaniline	0.0000	0.0000	0.0000	0.0000	0.0000	5.83	<5.83	<5.83	<5.83	<5.83	<5.83	
Acenaphthene	0.6419	2.3812	0.0842	1.0813	0.7494	3.75	0.6419J	2.3812J	0.0842J	1.0813J	0.7494J	
2,4-Dinitrophenol	0.0000	0.0000	0.0000	0.0000	0.0000	6.31	<6.31	<6.31	<6.31	<6.31	<6.31	
Dibenzofuran	3.3212	10.8492	0.1520	5.3377	3.0459	3.82	3.3212J	10.85	0.152J	5.34	3.0459J	
Pentachlorobenzene	0.1628	0.8310	0.0000	0.1031	0.0000	3.45	0.1628J	0.831J	<3.45	0.1031J	<3.45	
4-Nitrophenol	0.0000	0.0000	0.0000	0.0000	0.0000	7.59	<7.59	<7.59	<7.59	<7.59	<7.59	
2,4-Dinitrotoluene	0.0000	0.0000	0.0000	0.0000	0.0000	6.21	<6.21	<6.21	<6.21	<6.21	<6.21	
1-Naphthylamine	0.0000	0.0000	0.0000	0.0000	0.0000	3.25	<3.25	<3.25	<3.25	<3.25	<3.25	
2-Naphthylamine	0.0000	0.0000	0.0000	0.0000	0.0000	3.20	<3.2	<3.2	<3.2	<3.2	<3.2	
2,3,4,6-Tetrachlorophenol	0.0000	0.0000	0.0000	0.0000	0.0000	6.59	<6.59	<6.59	<6.59	<6.59	<6.59	
Fluorene	3.0264	12.3976	0.1157	5.8660	3.4486	4.11	3.0264J	12.40	0.1157J	5.87	3.4486J	
Diethylphthalate	0.0000	0.9648	2.6214	2.9346	1.5881	6.96	<6.96	0.9648J	2.6214J	2.9346J	1.5881J	
4-Chlorophenyl-phenylether	0.0000	0.0000	0.0000	0.0000	0.0000	3.70	<3.7	<3.7	<3.7	<3.7	<3.7	
Thionazin	0.0000	0.0000	0.0000	0.0000	0.0000	6.05	<6.05	<6.05	<6.05	<6.05	<6.05	
5-Nitro-o-toluidine	0.0000	0.0000	0.0000	0.0000	0.0000	6.37	<6.37	<6.37	<6.37	<6.37	<6.37	
4-Nitroaniline	0.0000	0.0000	0.0000	0.0000	0.0000	6.04	<6.04	<6.04	<6.04	<6.04	<6.04	
4,6-Dinitro-2-methylphenol	0.0000	0.0000	0.0000	0.0000	0.0000	6.39	<6.39	<6.39	<6.39	<6.39	<6.39	
Diphenylamine	0.0000	0.0000	0.0000	0.0000	0.0000	5.85	<5.85	<5.85	<5.85	<5.85	<5.85	
N-Nitrosodiphenylamine	0.0000	0.0000	0.0000	0.0000	0.0000	5.83	<5.83	<5.83	<5.83	<5.83	<5.83	
Sulfotep	0.0000	0.0000	0.0000	0.0000	0.0000	5.37	<5.37	<5.37	<5.37	<5.37	<5.37	
Diallate-A	0.0000	0.0000	0.0000	0.0000	0.0000	4.51	<4.51	<4.51	<4.51	<4.51	<4.51	
Phorate	0.0000	0.0000	0.0000	0.0000	0.0000	5.06	<5.06	<5.06	<5.06	<5.06	<5.06	
1,3,5-Trinitrobenzene	0.0000	0.0000	0.0000	0.0000	0.0000	5.63	<5.63	<5.63	<5.63	<5.63	<5.63	
4-Bromophenyl-phenylether	0.0000	0.0000	0.0000	0.0000	0.0000	4.27	<4.27	<4.27	<4.27	<4.27	<4.27	
alpha-BHC	0.0000	0.0000	0.0000	0.0000	0.0000	5.46	<5.46	<5.46	<5.46	<5.46	<5.46	
Phenacetin	0.0000	0.0000	0.0000	0.0000	0.0000	6.73	<6.73	<6.73	<6.73	<6.73	<6.73	
Diallate-B	0.0000	0.0000	0.0000	0.0000	0.0000	4.72	<4.72	<4.72	<4.72	<4.72	<4.72	
Hexachlorobenzene	0.1047	0.0000	0.0000	0.0000	0.0000	4.53	0.1047J	<4.53	<4.53	<4.53	<4.53	
Dimethoate	0.0000	0.0000	0.0000	0.0000	0.0000	8.79	<8.79	<8.79	<8.79	<8.79	<8.79	
4-Aminobiphenyl	0.0000	0.0000	0.0000	0.0000	0.0000	3.00	<3	<3	<3	<3	<3	
beta-BHC	0.0000	0.0000	0.0000	0.0000	0.0000	5.88	<5.88	<5.88	<5.88	<5.88	<5.88	
Pentachlorophenol	0.0000	0.0000	0.0000	0.0000	0.0000	5.54	<5.54	<5.54	<5.54	<5.54	<5.54	
gamma-BHC	0.0000	0.0000	0.0000	0.0000	0.0000	5.63	<5.63	<5.63	<5.63	<5.63	<5.63	
Pentachloronitrobenzene	0.0000	0.1187	0.0000	0.0000	0.0000	4.81	<4.81	0.1187J	<4.81	<4.81	<4.81	
Pronamide	0.0000	0.0000	0.0000	0.0000	0.0000	5.37	<5.37	<5.37	<5.37	<5.37	<5.37	
Phenanthrene	16.5083	38.0583	0.6340	21.8692	11.7638	4.88	16.51	38.06	0.634J	21.87	11.76	
Anthracene	2.4772	5.2767	0.0743	2.5286	1.4895	4.72	2.4772J	5.28	0.0743J	2.5286J	1.4895J	
Disulfoton	0.0000	0.0000	0.0000	0.0000	0.0000	3.57	<3.57	<3.57	<3.57	<3.57	<3.57	
delta-BHC	0.0000	0.0000	0.0000	0.0000	0.0000	5.44	<5.44	<5.44	<5.44	<5.44	<5.44	
Dinoseb	0.0000	0.0000	0.0000	0.0000	0.0000	5.69	<5.69	<5.69	<5.69	<5.69	<5.69	
Methyl parathion	0.0000	0.0000	0.0000	0.0000	0.0000	6.58	<6.58	<6.58	<6.58	<6.58	<6.58	
Heptachlor	0.0000	0.0000	0.0000	0.0000	0.0000	4.97	<4.97	<4.97	<4.97	<4.97	<4.97	
Di-n-butylphthalate	2.4567	4.4322	1.8799	2.0803	9.6373	5.55	2.4567J	4.4322J	1.8799J	2.0803J	9.64	
4-Nitroquinoline-1-oxide	0.0000	0.0000	0.0000	0.0000	0.0000	2.59	<2.59	<2.59	<2.59	<2.59	<2.59	
Aldrin	0.0000	0.0000	0.0000	0.0000	0.0000	4.57	<4.57	<4.57	<4.57	<4.57	<4.57	
Parathion	0.0000	0.0000	0.0000	0.0000	0.0000	5.51	<5.51	<5.51	<5.51	<5.51	<5.51	
Methapyrilene	0.0000	0.0000	0.0000	0.0000	0.0000	1.49	<1.49	<1.49	<1.49	<1.49	<1.49	
Isodrin	0.0000	0.0000	0.0000	0.0000	0.0000	4.44	<4.44	<4.44	<4.44	<4.44	<4.44	

Heptachlor epoxide	0.0000	0.0000	0.0000	0.0000	0.0000	4.74	<4.74	<4.74	<4.74	<4.74	<4.74	
Fluoranthene	6.5459	5.2115	0.1258	5.3090	2.8527	5.13	6.55	5.21	0.1258J	5.31	2.8527J	
Benzidine	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	
Pyrene	9.9898	7.4224	0.1652	8.6265	4.3810	5.39	9.99	7.42	0.1652J	8.63	4.381J	
Endosulfan I	0.0000	0.0000	0.0000	0.0000	0.0000	5.80	<5.8	<5.8	<5.8	<5.8	<5.8	
4,4'-DDE	0.0000	0.0000	0.0000	0.0000	0.0000	5.28	<5.28	<5.28	<5.28	<5.28	<5.28	
Dieldrin	0.0000	0.0000	0.0000	0.0000	0.0000	5.36	<5.36	<5.36	<5.36	<5.36	<5.36	
Methyl yellow	0.0000	0.0000	0.0000	0.0000	0.0000	5.77	<5.77	<5.77	<5.77	<5.77	<5.77	
Endrin	0.0000	0.0000	0.0000	0.0000	0.0000	6.73	<6.73	<6.73	<6.73	<6.73	<6.73	
Chlorobenzilate	0.0000	0.0000	0.0000	0.0000	0.0000	6.52	<6.52	<6.52	<6.52	<6.52	<6.52	
Endosulfan II	0.0000	0.0000	0.0000	0.0000	0.0000	5.68	<5.68	<5.68	<5.68	<5.68	<5.68	
4,4'-DDD	0.0000	0.0000	0.0000	0.0000	0.0000	5.44	<5.44	<5.44	<5.44	<5.44	<5.44	
Famphur	0.0000	0.0000	0.0000	0.0000	0.0000	28.20	<28.2	<28.2	<28.2	<28.2	<28.2	
3,3'-Dimethylbenzidine	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	
Butylbenzylphthalate	5.6901	4.0777	6.2523	6.9170	5.2321	7.88	5.6901J	4.0777J	6.2523J	6.917J	5.2321J	
Endrin aldehyde	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	
Endosulfan sulfate	0.0000	0.0000	0.0000	0.0000	0.0000	6.52	<6.52	<6.52	<6.52	<6.52	<6.52	
4,4'-DDT	0.0000	0.0000	0.0000	0.0000	0.0000	5.31	<5.31	<5.31	<5.31	<5.31	<5.31	
Kepone	0.0000	0.0000	0.0000	0.0000	0.0000	11.00	<11	<11	<11	<11	<11	
2-Acetylaminofluorene	0.0000	0.0000	0.0000	0.0000	0.0000	7.12	<7.12	<7.12	<7.12	<7.12	<7.12	
Endrin ketone	0.0000	0.0000	0.0000	0.0000	0.0000	5.81	<5.81	<5.81	<5.81	<5.81	<5.81	
Benzo(a)anthracene	3.9072	0.7484	0.0000	1.6356	0.7352	5.12	3.9072J	0.7484J	<5.12	1.6356J	0.7352J	
3,3'-Dichlorobenzidine	0.0000	0.0000	0.0000	0.0000	0.0000	2.92	<2.92	<2.92	<2.92	<2.92	<2.92	
Methoxychlor	0.0000	0.0000	0.0000	0.0000	0.0000	5.60	<5.6	<5.6	<5.6	<5.6	<5.6	
Chrysene	7.6990	1.3807	0.0000	2.7224	1.3436	5.25	7.70	1.3807J	<5.25	2.7224J	1.3436J	
bis(2-Ethylhexyl)phthalate	34.1738	19.1719	54.8326	113.0258	22.9886	12.10	34.17	19.17	54.83	113.03	22.99	
Mirex	0.0000	0.0000	0.0000	0.0000	0.0000	5.07	<5.07	<5.07	<5.07	<5.07	<5.07	
Di-n-octylphthalate	7.1786	12.8934	24.8594	22.4392	72.9549	5.49	7.18	12.89	24.86	22.44	72.95	
Benzo(b)fluoranthene	1.7317	0.5286	0.0000	1.2836	0.7378	4.86	1.7317J	0.5286J	<4.86	1.2836J	0.7378J	
7,12-Dimethylbenz(a)anthracene	0.0000	0.0000	0.0000	0.0000	0.0000	1.43	<1.43	<1.43	<1.43	<1.43	<1.43	
Benzo(k)fluoranthene	1.7906	0.5026	0.0000	1.0918	0.6624	5.81	1.7906J	0.5026J	<5.81	1.0918J	0.6624J	
Benzo(a)pyrene	2.5251	0.4198	0.0000	1.5911	0.6670	4.88	2.5251J	0.4198J	<4.88	1.5911J	0.667J	
3-Methylcholanthrene	0.0000	0.0000	0.0000	0.0000	0.0000	3.17	<3.17	<3.17	<3.17	<3.17	<3.17	
Indeno(1,2,3-cd)pyrene	1.2808	0.4524	0.0000	0.8981	0.4513	5.13	1.2808J	0.4524J	<5.13	0.8981J	0.4513J	
Dibenzo(a,h)anthracene	0.1653	0.0889	0.0000	0.2514	0.0819	5.32	0.1653J	0.0889J	<5.32	0.2514J	0.0819J	
Benzo(g,h,i)perylene	2.0717	0.7317	0.0000	1.6709	0.8193	5.37	2.0717J	0.7317J	<5.37	1.6709J	0.8193J	
OCTANE	0.0000	0.4451	0.1071	0.0000	0.5478		0.00					
NONANE	0.0000	0.7458	0.1116	0.0000	0.1743		0.00					
DECANE	0.0000	0.8704	0.5329	0.0267	0.3781		0.00					
UNDECANE	0.0669	0.9199	0.3676	0.0000	0.3958		0.07					
DODECANE	0.1521	0.7962	0.1748	0.0000	0.5955		0.15					
TETRADECANE	0.3553	1.0224	0.5727	0.2909	0.6428		0.36					
HEXADECANE	0.4001	0.8816	0.3660	0.4655	0.9331		0.40					
OCTADECANE	0.3719	0.6094	0.1478	0.2895	0.3953		0.37					
EICOSANE	1.1518	1.0865	0.1354	0.5232	0.0000		1.15					
TETRACOSANE	3.1517	12.0254	0.0000	0.0000	2.7989		3.15					
OCTACOSANE	10.9847	0.0000	6.8212	0.0000	19.9270		10.98					
DOTRIACONTANE	6.4273	2.3595	0.1732	1.3951	0.3464		6.43					
HEXATRIACONTANE	0.0000	0.0000	0.0000	0.0000	0.0000		0.00					
TETRACONTANE	0.0000	0.0000	0.0000	0.0000	0.0000		0.00					
NYS DOH Analyses - Semivolatiles												
Estimated Emissions g/Kg	J=(PQL), Quantified below method dection limit											
	0.0000= no recovery of this compound under conditions of extraction									Tm,1	Tm,f	Tm,avg
Test#	1	2	3	4	5				Test #	deg F	deg F	deg F
	Avid	Avid	Hut	Non	Non				1	93.0000	110.0000	101.5000
	Recycler	Recycler	Blank	Recycler	Recycler				2	88.0000	104.0000	96.0000
Sample ID	9582042	9582043	9582044	9582045	9582046				3	86.0000	102.0000	94.0000
Compound	g/Kg	g/Kg	g/Kg	g/Kg	g/Kg				4	85.0000	96.0000	90.5000
Pyridine	0.0000	0.0000	n/a	0.0000	0.0000				5	71.0000	93.0000	82.0000
N-Nitrosodimethylamine	<0.0028	<0.0025	n/a	<0.0088	<0.0065							
2-Picoline	0.0000	0.0000	n/a	0.0000	0.0000							
N-Nitrosomethylethylamine	<0.0028	<0.0026	n/a	<0.0089	<0.0065							
Methyl methanesulfonate	<0.0026	<0.0024	n/a	<0.0082	<0.006							
N-Nitrosodiethylamine	<0.0028	<0.0026	n/a	<0.009	<0.0066							
Ethyl methanesulfonate	<0.0026	<0.0023	n/a	<0.0081	<0.0059							
Aniline	<0.0026	<0.0023	n/a	<0.0081	<0.0059							
Phenol	0.0460	0.1372	n/a	0.2040	0.1053							
bis(2-Chloroethyl)ether	<0.0029	<0.0026	n/a	<0.0092	<0.0067							
2-Chlorophenol	0.000472J	0.001424J	n/a	0.000826J	0.0015J							
1,3-Dichlorobenzene	0.000019J	0.000271J	n/a	<0.0036	0.000058J							
1,4-Dichlorobenzene	0.000014J	0.000154J	n/a	<0.0039	0.000038J							
1,2-Dichlorobenzene	0.000062J	0.000483J	n/a	0.000067J	0.000159J							
Benzyl alcohol	0.000723J	0.002071J	n/a	0.008419J	0.0104							
2,2'-oxybis(1-Chloropropane)	<0.0025	<0.0023	n/a	<0.0079	<0.0058							
2-Methylphenol	0.0049	0.0225	n/a	0.0410	0.0419							
Acetophenone	0.001418J	0.0063	n/a	0.003949J	0.006134J							
N-Nitrosopyrrolidine	<0.0031	<0.0029	n/a	<0.0099	<0.0072							
N-Nitrosomorpholine	<0.0029	<0.0027	n/a	<0.0092	<0.0068							
o-Toluidine	<0.002	<0.0018	n/a	<0.0063	<0.0046							
Hexachloroethane	<0.0009	<0.0008	n/a	<0.0028	<0.002							
N-Nitrosodi-n-propylamine	<0.0031	<0.0028	n/a	<0.0097	<0.0071							
3- or 4-Methylphenol	0.0095	0.0393	n/a	0.0661	0.0571							
Nitrobenzene	<0.0026	<0.0024	n/a	<0.0083	<0.0061							
N-Nitrosopiperidine	<0.0025	<0.0023	n/a	<0.008	<0.0059							
Isophorone	<0.0026	<0.0023	n/a	<0.0081	<0.0059							
2-Nitrophenol	<0.0026	<0.0024	n/a	<0.0083	<0.0061							
2,4-Dimethylphenol	0.0039	0.0107	n/a	0.0506	0.0474							
O,O,O-Triethylphosphorothioate	<0.0021	<0.0019	n/a	<0.0065	<0.0047							
bis(2-Chloroethoxy)methane	<0.0025	<0.0023	n/a	<0.008	<0.0059							
Dimethylphenethylamine	<0.0003	<0.0003	n/a	<0.001	<0.0008							
2,4-Dichlorophenol	<0.0027	0.000551J	n/a	0.00041J	<0.0061							
1,2,4-Trichlorobenzene	<0.0008	0.000325J	n/a	0.000042J	<0.0019							
Naphthalene	0.0128	0.0538	n/a	0.0367	0.0469							
4-Chloroaniline	<0.002	<0.0019	n/a	<0.0064	<0.0047							
2,6-Dichlorophenol	<0.0028	0.000177J	n/a	<0.0087	<0.0063							
Hexachloropropene	<0.0006	<0.0005	n/a	<0.0018	<0.0013							
Hexachlorobutadiene	<0.0006	<0.0006	n/a	<0.002	<0.0015							
1,4-Phenylenediamine	0.0000	0.0000	n/a	0.0000	0.0000							
N-Nitroso-di-n-butylamine	<0.0025	<0.0023	n/a	<0.0078	<0.0057							
4-Chloro-3-methylphenol	<0.0028	<0.0025	n/a	<0.0088	<0.0064							
Safrole	<0.0014	<0.0013	n/a	<0.0045	<0.0033							
2-Methylnaphthalene	0.0020	0.0164	n/a	0.0068	0.0062							
1,2,4,5-Tetrachlorobenzene	0.000035J	0.000177J	n/a	0.000064J	<0.0026							
Hexachlorocyclopentadiene	<0.0009	<0.0008	n/a	<0.0028	<0.002							
cis-Isosafrole	<0.0017	<0.0016	n/a	<0.0055	<0.004							
2,4,6-Trichlorophenol	0.00028J	0.00048J	n/a	<0.0081	<0.0059							
2,4,5-Trichlorophenol	<0.0029	<0.0026	n/a	<0.0091	<0.0066							
trans-Isosafrole	<0.0015	<0.0014	n/a	<0.0048	<0.0035							
2-Chloronaphthalene	<0.0013	<0.0012	n/a	<0.0042	<0.0031							
2-Nitroaniline	<0.0026	<0.0023	n/a	<0.0081	<0.0059							
1,4-Naphthoquinone	<0.0039	<0.0035	n/a	<0.0122	<0.0089							
1,3-Dinitrobenzene	<0.0025	<0.0022	n/a	<0.0077	<0.0057							
Dimethylphthalate	<0.0026	<0.0023	n/a	<0.0081	<0.0059							
Acenaphthylene	0.0045	0.0123	n/a	0.0262	0.0112							
2,6-Dinitrotoluene	<0.0026	<0.0023	n/a	<0.0081	<0.0059							
3-Nitroaniline	<0.0023	<0.0021	n/a	<0.0072	<0.0053							
Acenaphthene	0.000251J	0.000845J	n/a	0.001334J	0.000676J							
2,4-Dinitrophenol	<0.0025	<0.0022	n/a	<0.0078	<0.0057							
Dibenzofuran	0.001298J	0.0039	n/a	0.0066	0.002746J							
Pentachlorobenzene	0.000064J	0.000295J	n/a	0.000127J	<0.0031							
4-Nitrophenol	<0.003	<0.0027	n/a	<0.0094	<0.0068							
2,4-Dinitrotoluene	<0.0024	<0.0022	n/a	<0.0077	<0.0056							
1-Naphthylamine	<0.0013	<0.0012	n/a	<0.004	<0.0029							
2-Naphthylamine	<0.0013	<0.0011	n/a	<0.0039	<0.0029							
2,3,4,6-Tetrachlorophenol	<0.0026	<0.0023	n/a	<0.0081	<0.0059							
Fluorene	0.001183J	0.0044	n/a	0.0072	0.003109J							

Diethylphthalate	<0.0027	0.000343J	n/a	0.00362J	0.001432J							
4-Chlorophenyl-phenylether	<0.0014	<0.0013	n/a	<0.0046	<0.0033							
Thionazin	<0.0024	<0.0021	n/a	<0.0075	<0.0055							
5-Nitro-o-toluidine	<0.0025	<0.0023	n/a	<0.0079	<0.0057							
4-Nitroaniline	<0.0024	<0.0021	n/a	<0.0075	<0.0054							
4,6-Dinitro-2-methylphenol	<0.0025	<0.0023	n/a	<0.0079	<0.0058							
Diphenylamine	<0.0023	<0.0021	n/a	<0.0072	<0.0053							
N-Nitrosodiphenylamine	<0.0023	<0.0021	n/a	<0.0072	<0.0053							
Sulfotep	<0.0021	<0.0019	n/a	<0.0066	<0.0048							
Diallate-A	<0.0018	<0.0016	n/a	<0.0056	<0.0041							
Phorate	<0.002	<0.0018	n/a	<0.0062	<0.0046							
1,3,5-Trinitrobenzene	<0.0022	<0.002	n/a	<0.0069	<0.0051							
4-Bromophenyl-phenylether	<0.0017	<0.0015	n/a	<0.0053	<0.0038							
alpha-BHC	<0.0021	<0.0019	n/a	<0.0067	<0.0049							
Phenacetin	<0.0026	<0.0024	n/a	<0.0083	<0.0061							
Diallate-B	<0.0018	<0.0017	n/a	<0.0058	<0.0043							
Hexachlorobenzene	0.000041J	<0.0016	n/a	<0.0056	<0.0041							
Dimethoate	<0.0034	<0.0031	n/a	<0.0108	<0.0079							
4-Aminobiphenyl	<0.0012	<0.0011	n/a	<0.0037	<0.0027							
beta-BHC	<0.0023	<0.0021	n/a	<0.0073	<0.0053							
Pentachlorophenol	<0.0022	<0.002	n/a	<0.0068	<0.005							
gamma-BHC	<0.0022	<0.002	n/a	<0.0069	<0.0051							
Pentachloronitrobenzene	<0.0019	0.000042J	n/a	<0.0059	<0.0043							
Pronamide	<0.0021	<0.0019	n/a	<0.0066	<0.0048							
Phenanthrene	0.0065	0.0135	n/a	0.0270	0.0106							
Anthracene	0.000968J	0.0019	n/a	0.003119J	0.001343J							
Disulfoton	<0.0014	<0.0013	n/a	<0.0044	<0.0032							
delta-BHC	<0.0021	<0.0019	n/a	<0.0067	<0.0049							
Dinoseb	<0.0022	<0.002	n/a	<0.007	<0.0051							
Methyl parathion	<0.0026	<0.0023	n/a	<0.0081	<0.0059							
Heptachlor	<0.0019	<0.0018	n/a	<0.0061	<0.0045							
Di-n-butylphthalate	0.00096J	0.001574J	n/a	0.002566J	0.0087							
4-Nitroquinoline-1-oxide	<0.001	<0.0009	n/a	<0.0032	<0.0023							
Aldrin	<0.0018	<0.0016	n/a	<0.0056	<0.0041							
Parathion	<0.0022	<0.002	n/a	<0.0068	<0.005							
Methapyrilene	<0.0006	<0.0005	n/a	<0.0018	<0.0013							
Isodrin	<0.0017	<0.0016	n/a	<0.0055	<0.004							
Heptachlor epoxide	<0.0019	<0.0017	n/a	<0.0058	<0.0043							
Fluoranthene	0.0026	0.0019	n/a	0.0065	0.002572J							
Benzidine	0.0000	0.0000	n/a	0.0000	0.0000							
Pyrene	0.0039	0.0026	n/a	0.0106	0.003949J							
Endosulfan I	<0.0023	<0.0021	n/a	<0.0072	<0.0052							
4,4'-DDE	<0.0021	<0.0019	n/a	<0.0065	<0.0048							
Dieldrin	<0.0021	<0.0019	n/a	<0.0066	<0.0048							
Methyl yellow	<0.0023	<0.002	n/a	<0.0071	<0.0052							
Endrin	<0.0026	<0.0024	n/a	<0.0083	<0.0061							
Chlorobenzilate	<0.0025	<0.0023	n/a	<0.008	<0.0059							
Endosulfan II	<0.0022	<0.002	n/a	<0.007	<0.0051							
4,4'-DDD	<0.0021	<0.0019	n/a	<0.0067	<0.0049							
Famphur	<0.011	<0.01	n/a	<0.0348	<0.0254							
3,3'-Dimethylbenzidine	0.0000	0.0000	n/a	0.0000	0.0000							
Butylbenzylphthalate	0.002224J	0.001448J	n/a	0.008533J	0.004716J							
Endrin aldehyde	0.0000	0.0000	n/a	0.0000	0.0000							
Endosulfan sulfate	<0.0025	<0.0023	n/a	<0.008	<0.0059							
4,4'-DDT	<0.0021	<0.0019	n/a	<0.0066	<0.0048							
Kepone	<0.0043	<0.0039	n/a	<0.0136	<0.0099							
2-Acetylaminofluorene	<0.0028	<0.0025	n/a	<0.0088	<0.0064							
Endrin ketone	<0.0023	<0.0021	n/a	<0.0072	<0.0052							
Benzo(a)anthracene	0.001527J	0.000266J	n/a	0.002018J	0.000663J							
3,3'-Dichlorobenzidine	<0.0011	<0.001	n/a	<0.0036	<0.0026							
Methoxychlor	<0.0022	<0.002	n/a	<0.0069	<0.005							
Chrysene	0.0030	0.00049J	n/a	0.003358J	0.001211J							
bis(2-Ethylhexyl)phthalate	0.0134	0.0068	n/a	0.1394	0.0207							
Mirex	<0.002	<0.0018	n/a	<0.0063	<0.0046							
Di-n-octylphthalate	0.0028	0.0046	n/a	0.0277	0.0658							
Benzo(b)fluoranthene	0.000677J	0.000188J	n/a	0.001584J	0.000665J							
7,12-Dimethylbenz(a)anthracene	<0.0006	<0.0005	n/a	<0.0018	<0.0013							
Benzo(k)fluoranthene	0.0007J	0.000178J	n/a	0.001347J	0.000597J							
Benzo(a)pyrene	0.000987J	0.000149J	n/a	0.001963J	0.000601J							
3-Methylcholanthrene	<0.0012	<0.0011	n/a	<0.0039	<0.0029							
Indeno(1,2,3-cd)pyrene	0.000501J	0.000161J	n/a	0.001108J	0.000407J							
Dibenzo(a,h)anthracene	0.000065J	0.000032J	n/a	0.00031J	0.000074J							
Benzo(g,h,i)perylene	0.00081J	0.00026J	n/a	0.002061J	0.000739J							
		0J	n/a	0J	0J							
OCTANE	0.0000	0.000158J	n/a	0J	0.000494J							
NONANE	0.0000	0.000265J	n/a	0J	0.000157J							
DECANE	0.0000	0.000309J	n/a	0.000033J	0.000341J							
UNDECANE	0.0000	0.000327J	n/a	0J	0.000357J							
DODECANE	0.0001	0.000283J	n/a	0J	0.000537J							
TETRADECANE	0.0001	0.000363J	n/a	0.000359J	0.000579J							
HEXADECANE	0.0002	0.000313J	n/a	0.000574J	0.000841J							
OCTADECANE	0.0001	0.000216J	n/a	0.000357J	0.000356J							
EICOSANE	0.0005	0.000386J	n/a	0.000645J	0J							
TETRACOSANE	0.0012	0.004269J	n/a	0J	0.002523J							
OCTACOSANE	0.0043	0J	n/a	0J	0.017963J							
DOTRIACONTANE	0.0025	0.000838J	n/a	0.001721J	0.000312J							
HEXATRIACONTANE	0.0000	0J	n/a	0J	0J							
TETRACONTANE	0.0000	0J	n/a	0J	0J							

PAH's(SIM)									
Raw Data									
		Run 1				Run 2			
		Avid				Avid			
		Recycler				Recycler			
RunName:		S1115E				S1115C			
Acc.Num.:		9582042	detection	%		9582043	detection	%	
Units:		PG	limit	recovery		PG	limit	recovery	
Naphthalene		103039	10.86434	182.2631		179284.3	11.01419	179.7833	
Acenaphthylene		69235.87	10.19921	102.3762		113907.5	12.12625	86.10712	
Acenaphthene		6125.239	17.03119	93.2366		21950.55	17.89212	88.75028	
Fluorene		37749.99	13.39614	86.51323		89677.34	13.98332	82.88044	
Phenanthrene		72597.59	8.332902	83.45888		108517.2	10.21779	68.06311	
Anthracene		15516.37	5.634816	124.0761		26298.6	6.398817	109.2617	
Fluoranthene		38168.81	5.980981	79.06458		41195.95	7.572286	62.44929	
Pyrene		42709.07	5.74234	79.85149		38780.1	7.27887	62.99527	
Benzo(a)anthracene		29049.77	4.96437	87.72358		12095.87	7.346935	59.27538	
Chrysene		42109	5.81791	75.36241		13080.26	7.086832	61.86851	
Benzo(b)fluoranthene		41441.33	5.542581	75.62285		15229	6.831847	61.35175	
Benzo(k)fluoranthene		13326.17	5.668317	73.48492		3488.019	6.715067	62.03003	
Benzo(a)pyrene		28737.18	5.579842	86.93133		6717.77	6.558836	73.95567	
Indeno(123cd)pyrene		26582.8	5.651843	70.77049		8396.619	6.000705	66.65612	
Dibenzo(ah)anthracene		9707.446	5.209414	72.90847		1901.785	5.825322	65.1999	
Benzo(ghi)perylene		25267.07	5.911573	64.94457		7916.835	5.654373	67.8987	
Data Corrected by Dilution Factor (DF=100)									
		Run 1				Run 2			
		Avid				Avid			
		Recycler				Recycler			
RunName:		S1115E				S1115C			
Acc.Num.:		9582042	detection	%		9582043	detection	%	
Units:		PG	limit	recovery		PG	limit	recovery	
Naphthalene		10303900	1086.434			17928430	1101.419		
Acenaphthylene		6923587	1019.921			11390750	1212.625		
Acenaphthene		612523.9	1703.119			2195055	1789.212		
Fluorene		3774999	1339.614			8967734	1398.332		
Phenanthrene		7259759	833.2902			10851720	1021.779		
Anthracene		1551637	563.4816			2629860	639.8817		
Fluoranthene		3816881	598.0981			4119595	757.2286		
Pyrene		4270907	574.234			3878010	727.887		
Benzo(a)anthracene		2904977	496.437			1209587	734.6935		
Chrysene		4210900	581.791			1308026	708.6832		
Benzo(b)fluoranthene		4144133	554.2581			1522900	683.1847		
Benzo(k)fluoranthene		1332617	566.8317			348801.9	671.5067		
Benzo(a)pyrene		2873718	557.9842			671777	655.8836		
Indeno(123cd)pyrene		2658280	565.1843			839661.9	600.0705		
Dibenzo(ah)anthracene		970744.6	520.9414			190178.5	582.5322		
Benzo(ghi)perylene		2526707	591.1573			791683.5	565.4373		
NYS DOH Analyses - SIM PAHs									
Estimated PAH Emissions mg/Kg									
(taken from #'s corrected by dilution factor)									
	Run 1	Run 2	Run 3	Run 4	Run 5				Tm,1
	Avid	Avid	Hut	Avid	Non			Test #	deg F
	Recycler	Recycler	Blank	Recycler	Recycler			1	93.0000
RunName:	S1115E	S1115C	S1115A	S1115D	S1115B			2	88.0000
Acc.Num.:	9582042	9582043	9582044	9582045	9582046			3	86.0000
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			4	85.0000
Naphthalene	4.0279	6.3651	n/a	18.9598	16.1032			5	71.0000
Acenaphthylene	2.7065	4.0440	n/a	13.6424	8.9577				
Acenaphthene	0.2394	0.7793	n/a	0.9578	0.5780				
Fluorene	1.4757	3.1838	n/a	4.7756	2.5360				
Phenanthrene	2.8379	3.8527	n/a	8.9946	5.6546				
Anthracene	0.6066	0.9337	n/a	2.3724	1.2910				
Fluoranthene	1.4921	1.4626	n/a	5.1917	2.9436				
Pyrene	1.6695	1.3768	n/a	6.1419	3.5157				
Benzo(a)anthracene	1.1356	0.4294	n/a	3.1364	1.3425				
Chrysene	1.6461	0.4644	n/a	3.5588	1.5136				
Benzo(b)fluoranthene	1.6200	0.5407	n/a	3.7585	1.5016				
Benzo(k)fluoranthene	0.5209	0.1238	n/a	1.6424	0.4085				
Benzo(a)pyrene	1.1234	0.2385	n/a	3.1275	1.1167				
Indeno(123cd)pyrene	1.0391	0.2981	n/a	2.7997	0.9547				
Dibenzo(ah)anthracene	0.3795	0.0675	n/a	0.4861	0.1595				
Benzo(ghi)perylene	0.9877	0.2811	n/a	2.8148	1.1340				

Run 3				Run 4				Run 5				
Hut				Avid				Non				
Blank				Recycler				Recycler				
S1115A				S1115D				S1115B				
9582044	detection	%		9582045	detection	%		9582046	detection	%		
PG	limit	recovery		PG	limit	recovery		PG	limit	recovery		
8132.516	14.19539	139.4938		153689	15.04103	131.6511		178637	12.94158	153.0082		
1158.149	10.78083	96.85303		110585.8	11.4754	90.99087		99369.93	11.43486	91.31342		
670.1941	17.68765	89.77621		7763.678	11.20832	141.6743		6411.987	12.00363	132.2876		
2081.133	13.94055	83.13468		38710.82	8.961942	129.3183		28132.17	8.859126	130.8192		
7357.299	8.842547	78.6487		72910.56	7.553902	92.06563		62728.27	7.274786	95.59795		
335.6656	5.81766	120.1765		19230.88	5.064929	138.0367		14320.92	5.223923	133.8354		
1566.539	6.401401	73.87193		42083.73	6.982581	67.72336		32654.52	6.655731	71.04911		
1148.146	4.836822	94.80076		49786.78	7.510361	61.05357		39000.41	6.808775	67.34461		
117.3241	6.043521	72.05939		25423.57	7.080887	61.50251		14893.17	6.767602	64.34959		
173.4325	6.156858	71.21357		28847.89	7.381904	59.39549		16791.04	6.525594	67.18956		
58.24945	5.982893	70.05737		30466.48	6.996623	59.90688		16657.49	6.374431	65.75423		
16.05725	5.639664	73.85826		13313.24	6.787716	61.36613		4531.346	6.244509	66.70433		
26.36956	5.689225	85.25995		25351.24	6.670903	72.71326		12388.18	6.273292	77.32193		
46.29071	5.063799	78.98887		22694.28	6.412132	62.37921		10591	5.879669	68.02828		
0	4.953957	76.66808		3940.652	6.172674	61.53093		1769.718	5.665074	67.04421		
267.2384	4.661927	82.3532		22817.06	6.221316	61.71115		12580.29	5.496382	69.85042		
Run 3				Run 4				Run 5				
Hut				Avid				Non				
Blank				Recycler				Recycler				
S1115A				S1115D				S1115B				
9582044	detection	%		9582045	detection	%		9582046	detection	%		
PG	limit	recovery		PG	limit	recovery		PG	limit	recovery		
813251.6	1419.539			15368900	1504.103			17863700	1294.158			
115814.9	1078.083			11058580	1147.54			9936993	1143.486			
67019.41	1768.765			776367.8	1120.832			641198.7	1200.363			
208113.3	1394.055			3871082	896.1942			2813217	885.9126			
735729.9	884.2547			7291056	755.3902			6272827	727.4786			
33566.56	581.766			1923088	506.4929			1432092	522.3923			
156653.9	640.1401			4208373	698.2581			3265452	665.5731			
114814.6	483.6822			4978678	751.0361			3900041	680.8775			
11732.41	604.3521			2542357	708.0887			1489317	676.7602			
17343.25	615.6858			2884789	738.1904			1679104	652.5594			
5824.945	598.2893			3046648	699.6623			1665749	637.4431			
1605.725	563.9664			1331324	678.7716			453134.6	624.4509			
2636.956	568.9225			2535124	667.0903			1238818	627.3292			
4629.071	506.3799			2269428	641.2132			1059100	587.9669			
0	495.3957			394065.2	617.2674			176971.8	566.5074			
26723.84	466.1927			2281706	622.1316			1258029	549.6382			
Tm,f	Tm,avg	Pbar	dH	DGM,i	DGM,f	Vm	Run Time		Air into hut	Mass Burnnec	Mass burnne	Vm,std
deg F	deg F	in Hg				ft3	min		M3	lb	Kg	cu ft std
110.0000	101.5000	29.6800	N/A	657.996	698.142	40.146	72.0000		45949	17.6000	8.0	37.4330
104.0000	96.0000	29.3600	N/A	698.305	742.578	44.273	79.0000		45949	19.3000	8.8	41.2400
102.0000	94.0000	29.6900	N/A	742.676	792.023	49.347	60.0000		45949	N/A	N/A	46.6509
96.0000	90.5000	29.4700	N/A	792.224	823.987	31.763	60.0000		45949	5.8000	2.6	29.9946
93.0000	82.0000	29.8200	N/A	824.043	871.218	47.175	90.0000		45949	7.8000	3.5	45.7845

DIOXINS											
Raw Data											
			Run 1				Run 2				Run 3
			Avid				Avid				Hut
			Recycler				Recycler				Blank
	RunName:		S1204				S1201A				S1201
	Acc.Num.:		9582048	detection	%		9582049	detection	%		9582050
	Units:		PG	limit	recovery		PG	limit	recovery		PG
2,3,7,8	TCDD		0	2307.871	7.670365		0	1283.692	11.91897		0
1,2,3,7,8	PCDD		3414.446	2445.703	6.788609		0	1346.589	10.65667		0
1,2,3,4,7,8	HXCDD		391.6941	468.2535	44.43986		0	350.2469	51.35129		0
1,2,3,6,7,8	HXCDD		3566.193	2777.409	6.955112		0	1688.189	9.889966		0
1,2,3,7,8,9	HXCDD		2084.12	2559.716	6.955112		0	1555.869	9.889966		0
1,2,3,4,6,7,8	HPCDD		38698.84	4784.308	4.980959		2065.381	2637.106	7.810458		0
1,2,3,4,6,7,8,9	OCDD		29142.65	5724.797	4.980959		1299.12	3155.502	7.810458		35015.9
2,3,7,8	TCDF		5504.335	2448.438	6.496259		534.6296	1421.509	9.671072		0
1,2,3,7,8	PCDF		8917.685	1725.859	8.579017		0	1054.168	12.13961		0
2,3,4,7,8	PCDF		3321.813	364.2099	44.39325		488.3684	268.6294	52.02199		0
1,2,3,4,7,8	HXCDF		3108.832	251.3142	47.19235		291.2861	189.9857	53.95598		0
1,2,3,6,7,8	HXCDF		17017.1	1615.537	7.275937		1523.427	994.274	10.21813		0
2,3,4,6,7,8	HXCDF		23836.05	1914.281	7.275937		2564.092	1178.135	10.21813		0
1,2,3,7,8,9	HXCDF		5995.368	1785.186	7.275937		706.3438	1098.684	10.21813		0
1,2,3,4,6,7,8	HPCDF		111125	2787.295	5.574284		4081.925	1452.435	9.245856		0
1,2,3,4,7,8,9	HPCDF		1137.84	448.4982	37.13958		87.64438	313.3514	45.94498		0
1,2,3,4,6,7,8,9	OCDF		28960.3	5154.729	4.980959		1366.656	2841.281	7.810458		0
TOT	TCDD		35799.7	2307.871	7.670365		4996.772	1283.692	11.91897		0
TOT	PCDD		48285.76	2445.703	6.788609		2124.783	1346.589	10.65667		0
TOT	HXCDD		24956.48	2991.917	6.955112		1018.401	1818.573	9.889966		0
TOT	HPCDD		85738.63	4784.308	4.980959		4145.003	2637.106	7.810458		0
TOT	OCDD		29142.65	5724.797	4.980959		1299.12	3155.502	7.810458		35015.9
TOT	TCDF		400407.6	2448.438	6.496259		60885.94	1421.509	9.671072		0
TOT	PCDF		252083.6	1725.859	8.579017		28717.97	1054.168	12.13961		0
TOT	HXCDF		197873.3	1630.046	7.275937		15113.06	1003.203	10.21813		0
TOT	HPCDF		145879.5	2787.295	5.574284		5732.617	1452.435	9.245856		0
TOT	OCDF		28960.3	5154.729	4.980959		1366.656	2841.281	7.810458		0
Dioxins Estimated Emissions mg/Kg											
		Run 1	Run 2	Run 3	Run 4	Run 5					
		Avid	Avid	Hut	Non	Non					
		Recycler	Recycler	Blank	Recycler	Recycler					
	RunName:	S1204	S1201A	S1201	S1201B	S1204A					
	Acc.Num.:	9582048	9582049	9582050	9582051	9582052					
	Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
2,3,7,8	TCDD	<0.0009	<0.0005	n/a	<0.0003	<0.0003					
1,2,3,7,8	PCDD	0.0013	<0.0005	n/a	<0.0003	<0.0003					
1,2,3,4,7,8	HXCDD	0.0002	<0.0001	n/a	<0.0004	<0.0003					
1,2,3,6,7,8	HXCDD	0.0014	<0.0006	n/a	<0.0006	<0.0005					
1,2,3,7,8,9	HXCDD	0.0008	<0.0006	n/a	<0.0005	<0.0004					
1,2,3,4,6,7,8	HPCDD	0.0153	0.0008	n/a	<0.0006	<0.0005					
1,2,3,4,6,7,8,9	OCDD	0.0115	0.0005	n/a	0.0448	0.0317					
2,3,7,8	TCDF	0.0022	0.0002	n/a	0.0001	<0.0003					
1,2,3,7,8	PCDF	0.0035	<0.0004	n/a	0.0001	<0.0002					
2,3,4,7,8	PCDF	0.0013	0.0002	n/a	0.0002	<0.0003					
1,2,3,4,7,8	HXCDF	0.0012	0.0001	n/a	0.0001	0.0001					
1,2,3,6,7,8	HXCDF	0.0067	0.0006	n/a	0.0002	<0.0003					
2,3,4,6,7,8	HXCDF	0.0094	0.0009	n/a	0.0001	<0.0003					
1,2,3,7,8,9	HXCDF	0.0024	0.0003	n/a	<0.0004	<0.0003					
1,2,3,4,6,7,8	HPCDF	0.0439	0.0015	n/a	0.0002	0.0034					
1,2,3,4,7,8,9	HPCDF	0.0004	0.0000	n/a	<0.0005	<0.0003					
1,2,3,4,6,7,8,9	OCDF	0.0114	0.0005	n/a	<0.0007	<0.0006					
TOT	TCDD	0.0141	0.0018	n/a	<0.0003	<0.0003					
TOT	PCDD	0.0191	0.0008	n/a	<0.0003	<0.0003					
TOT	HXCDD	0.0099	0.0004	n/a	<0.0006	<0.0005					
TOT	HPCDD	0.0338	0.0015	n/a	<0.0006	<0.0005					
TOT	OCDD	0.0115	0.0005	n/a	0.0448	0.0317					
TOT	TCDF	0.1580	0.0224	n/a	0.0038	0.0007					
TOT	PCDF	0.0995	0.0106	n/a	0.0024	<0.0002					
TOT	HXCDF	0.0781	0.0056	n/a	0.0011	0.0005					
TOT	HPCDF	0.0576	0.0021	n/a	0.0002	0.0034					
TOT	OCDF	0.0114	0.0005	n/a	<0.0007	<0.0006					

			Run 4				Run 5					
			Non				Non					
			Recycler				Recycler					
			S1201B				S1204A					
detection	%		9582051	detection	%		9582052	detection	%			
limit	recovery		PG	limit	recovery		PG	limit	recovery			
547.8298	32.93007		0	247.3892	79.76701		0	290.2659	58.95879			
524.1453	32.28075		0	255.5139	72.43469		0	300.8679	53.34893			
326.2867	64.99279		0	343.4269	67.54543		0	355.1034	56.65209			
721.6475	27.27908		0	452.0172	47.63932		0	518.0936	36.04564			
665.0846	27.27908		0	416.588	47.63932		0	477.4853	36.04564			
914.0431	26.56907		0	509.4293	52.14645		0	596.4506	38.62555			
1093.724	26.56907		36206.25	609.5718	52.14645		35320.14	713.6996	38.62555			
564.0241	28.73859		81.4449	235.3899	75.32534		0	288.8616	53.23284			
416.0442	36.2672		90.38368	209.4154	78.81535		0	247.0053	57.95001			
279.8903	58.86966		189.4431	273.0515	66.0086		0	282.8823	55.25605			
161.2787	74.94148		94.15799	168.9539	78.25227		83.76806	192.9251	59.43153			
429.0861	27.91722		137.1508	274.7962	47.68387		0	310.7979	36.56324			
508.4325	27.91722		109.5357	325.6114	47.68387		0	368.2706	36.56324			
474.1448	27.91722		0	303.6528	47.68387		0	343.4352	36.56324			
589.3259	26.86749		200.8506	320.8476	53.9821		3798.874	3756.798	3.998261			
292.0344	58.12655		0	364.1525	50.9907		0	379.0972	42.47801			
984.812	26.56907		0	548.8713	52.14645		0	642.6303	38.62555			
547.8298	32.93007		0	247.3892	79.76701		0	290.2659	58.95879			
524.1453	32.28075		0	255.5139	72.43469		0	300.8679	53.34893			
777.3826	27.27908		0	486.9279	47.63932		0	558.1075	36.04564			
914.0431	26.56907		0	509.4293	52.14645		0	596.4506	38.62555			
1093.724	26.56907		36206.25	609.5718	52.14645		35320.14	713.6996	38.62555			
564.0241	28.73859		3053.077	235.3899	75.32534		781.3995	288.8616	53.23284			
416.0442	36.2672		1926.789	209.4154	78.81535		0	247.0053	57.95001			
432.9395	27.91722		890.4613	277.2641	47.68387		609.0528	313.5891	36.56324			
589.3259	26.86749		200.8506	320.8476	53.9821		3798.874	3756.798	3.998261			
984.812	26.56907		0	548.8713	52.14645		0	642.6303	38.62555			

Estimated PCB Emissions										
Raw Data	Run 1		Run 2		Run 3		Run 4		Run 5	
	Avid		Avid		Hut		Non		Non	
	Recycler		Recycler		Blank		Recycler		Recycler	
	9582048		9582049		9582050		9582051		9582052	
COMPOUND	ng		ng		ng		ng		ng	
BZ-1 (2-CHLOROBIPHENYL)	47.0000		21.0000		2.0000	LT	33.0000		150.0000	
BZ-2 (3-CHLOROBIPHENYL)	580.0000	SU	2.0000	LT	2.0000	LT	2.0000		2.0000	LT
BZ-3 (4-CHLOROBIPHENYL)	2.0000	LT	76.0000	SU	2.0000	LT	68.0000	SU	160.0000	
BZ-10, BZ-4	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
2,4,5,6-TETRACHLORO-m-XYLENE (Surrogate)	0.4000	LT	0.4000	LT	0.4000	LT	0.8000		3.0000	
BZ-7, BZ-9	31.0000		33.0000		0.4000	LT	52.0000		110.0000	
BZ-6 (2,3'-DICHLOROBIPHENYL)	12.0000		22.0000		0.4000	LT	0.4000	LT	43.0000	
BZ-8, BZ-5	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
HEXACHLOROBENZENE	330.0000		65.0000		0.4000	LT	0.4000	LT	50.0000	
BZ-19 (2,2',6-TRICHLOROBIPHENYL)	INTERFER		0.4000	LT	INTERFER		0.4000	LT	13.0000	
BZ-12 (3,4-DICHLOROBIPHENYL)(Surrogate)	INTERFER		INTERFER		INTERFER		0.4000	LT	17.0000	
BZ-18 (2,2',5-TRICHLOROBIPHENYL)	54.0000		INTERFER		0.4000	LT	60.0000		81.0000	
BZ-15, BZ-17	18.0000		26.0000		0.4000	LT	32.0000		43.0000	
BZ-24, BZ-27	68.0000		23.0000		0.4000	LT	17.0000		0.4000	LT
BZ-16, BZ-32	11.0000		26.0000		0.4000	LT	28.0000		50.0000	
BZ-29 (2,4,5-TRICHLOROBIPHENYL)	5.6000		0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-26 (2,3',5-TRICHLOROBIPHENYL)	17.0000		12.0000		0.4000	LT	15.0000		36.0000	
BZ-25 (2,3',4-TRICHLOROBIPHENYL)	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-31 (2,4',5-TRICHLOROBIPHENYL)	33.0000		41.3000		1.6000		62.0000		72.0000	
BZ-28 (2,4,4'-TRICHLOROBIPHENYL)	11.0000		16.0000		0.4000	LT	0.4000	LT	48.0000	
BZ-20, BZ-33, BZ-53	35.0000		33.0000		0.4000	LT	30.0000		66.0000	
BZ-51 (2,2',4,6'-TETRACHLOROBIPHENYL)	11.0000		7.9000		0.4000	LT	0.4000	LT	0.4000	LT
BZ-22 (2,3,4'-TRICHLOROBIPHENYL)	19.0000		15.0000		0.4000	LT	24.0000		60.0000	
BZ-45 (2,2',3,6-TETRACHLOROBIPHENYL)	64.0000		INTERFER		INTERFER		76.0000		160.0000	
BZ-46 (2,2',3,6'-TETRACHLOROBIPHENYL)	12.0000		INTERFER		INTERFER		INTERFER		24.0000	
BZ-39 (3,4',5-TRICHLOROBIPHENYL)	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-52 (2,2',5,5'-TETRACHLOROBIPHENYL)	50.0000		31.0000		1.0000		28.0000		87.0000	
BZ-49 (2,2',4,5'-TETRACHLOROBIPHENYL)	0.4000	LT	0.4000	LT	1.2000		0.4000	LT	0.4000	LT
BZ-47 (2,2',4,4'-TETRACHLOROBIPHENYL)	340.0000		INTERFER		0.4000	LT	0.4000	LT	INTERFER	
BZ-48 (2,2',4,5-TETRACHLOROBIPHENYL)	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	INTERFER	
BZ-44 (2,2',3,5'-TETRACHLOROBIPHENYL)	16.0000		14.0000		INTERFER		9.0000		23.0000	
BZ-37, BZ-42, BZ-59	INTERFER		0.4000	LT	0.4000	LT	31.0000		INTERFER	
BZ-41, BZ-64	24.0000		10.0000		0.4000	LT	0.4000	LT	54.0000	
BZ-40 (2,2',3,3'TETRACHLOROBIPHENYL)	2.2000		1.4000		0.4000	LT	2.4000		3.9000	
BZ-67 (2,3',4,5-TETRACHLOROBIPHENYL)	0.4000	LT	1.3000		0.4000	LT	8.0000		0.4000	LT
BZ-63, OCS	13.0000		0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-74 (2,4,4',5-TETRACHLOROBIPHENYL)	9.3000		5.0000		0.4000	LT	2.5000		9.8000	
BZ-70 (2,3',4',5-TETRACHLOROBIPHENYL)	10.0000		9.2000		0.9000		5.4000		11.0000	
BZ-66, BZ-95	12.0000		10.0000		1.6000	SU	11.0000		23.0000	
BZ-91 (2,2',3,4',6-PENTACHLOROBIPHENYL)	8.0000		4.0000		0.4000	LT	8.6000		4.6000	
BZ-56, BZ-60	11.0000		7.4000		1.5000		5.1000		8.1000	
BZ-92 (2,2',3,5,5'-PENTACHLOROBIPHENYL)	4.0000		2.4000		0.4000	LT	1.7000		3.5000	
BZ-84 (2,2',3,3',6-PENTACHLOROBIPHENYL)	3.2000		2.5000		0.4000	LT	3.9000		9.3000	
BZ-90, BZ-101	6.0000		4.8000		0.8000		4.2000		12.0000	
BZ-99 (2,2',4,4',5-PENTACHLOROBIPHENYL)	21.0000		17.0000		0.4000	LT	16.0000		21.0000	
BZ-119 (2,3',4,4',6-PENTACHLOROBIPHENYL)	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-83 (2,2',3,3',5-PENTACHLOROBIPHENYL)	10.0000		8.0000		0.4000	LT	4.4000		2.1000	
BZ-97 (2,2',3',4,5-PENTACHLOROBIPHENYL)	7.2000		3.5000		0.4000	LT	2.1000		6.2000	
BZ-87, BZ-115	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-85, 4,4'-DDE	11.0000		5.0000		1.1000		5.4000		11.0000	
BZ-136	3.1000		1.3000		0.4000	LT	0.4000	LT	3.2000	
BZ-77, BZ-110	14.0000		10.0000		1.0000		7.5000		17.0000	
BZ-82 (2,2',3,3',4-PENTACHLOROBIPHENYL)	0.4000	LT	5.6000		0.4000	LT	0.4000	LT	7.3000	
BZ-151 (2,2',3,5,5',6-HEXACHLOROBIPHENYL	16.0000		12.0000		0.4000	LT	8.2000		20.0000	
BZ-135	18.0000		2.1000		0.4000	LT	4.0000		5.0000	
BZ-107 (2,3,3',4',5-PENTACHLOROBIPHENYL)	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-123, BZ-149	39.0000		22.0000		0.7000		15.0000		32.0000	
BZ-118	21.0000		11.0000		0.7000		6.7000		16.0000	
BZ-134	11.0000		0.4000	LT	0.4000	LT	0.4000	LT	7.3000	
BZ-122 (2',3,3',4,5-PENTACHLOROBIPHENYL)	4.3000		0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-146	6.4000		3.4000		0.4000	LT	2.4000		4.0000	
BZ-153	10.0000		2.9000		INTERFER		INTERFER		12.0000	
BZ-132, BZ-105	15.3000		3.5000		0.7000		4.8000		5.5000	
BZ-141 (2,2',3,4,5,5'-HEXACHLOROBIPHENYL	7.4000		4.0000		0.4000	LT	2.6000		4.4000	
BZ-179	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	1.8000	
BZ-137	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	
BZ-130, BZ-176	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-138	12.0000		5.7000		0.4000	LT	6.0000		8.9000	
BZ-158	3.0000		0.4000	LT	0.4000	LT	0.4000	LT	1.4000	
BZ-129	0.4000	LT	1.1000		0.4000	LT	0.4000	LT	0.4000	LT
BZ-178	12.0000		0.7000		0.4000	LT	0.4000	LT	5.1000	
BZ-175		NR		NR		NR		NR		NR
BZ-187	11.0000		0.4000	LT	0.4000	LT	0.4000	LT	20.0000	
BZ-183	0.4000	LT	9.9000		0.4000	LT	7.2000		6.6000	
BZ-128	5.7000		2.5000		0.4000	LT	2.6000		0.4000	LT
BZ-167	5.3000		1.5000		0.4000	LT	0.4000	LT	4.3000	

BZ-185	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	2.7000	
BZ-174	6.5000		4.5000		INTERFER		2.1000		7.8000	
BZ-177	5.8000		1.9000		0.4000	LT	1.2000		7.7000	
BZ-171, BZ-202	INTERFER		INTERFER		INTERFER		INTERFER		34.0000	
BZ-156	6.8000		0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-173, BZ-157, IUPAC-201	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-172	4.5000		0.4000	LT	0.4000	LT	1.7000		0.4000	LT
BZ-197	2.9000		1.2000		0.4000	LT	0.4000	LT	0.4000	LT
BZ-180	31.0000		0.4000	LT	1.0000		14.0000		0.4000	LT
BZ-193	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT
BZ-191	5.0000		1.8000		0.4000	LT	0.4000	LT	0.4000	LT
IUPAC-200	0.4000	LT	0.4000	LT	0.4000	LT	0.4000	LT	3.1000	
MIREX	INTERFER		INTERFER		INTERFER		INTERFER		INTERFER	
BZ-170, BZ-190	0.4000	LT	8.0000		0.4000	LT	0.4000	LT	11.0000	
IUPAC-199	5.9000		2.0000		0.4000	LT	0.7000		1.4000	
BZ-203, BZ-196	9.7000		0.4000	LT	0.4000	LT	1.2000		2.5000	
BZ-189	11.0000		0.4000	LT	0.4000	LT	0.4000	LT	3.8000	
BZ-195	7.8000		1.1000		0.4000	LT	0.4000	LT	2.4000	
BZ-194	INTERFER		INTERFER		0.4000	LT	2.3000		0.4000	LT
BZ-206	INTERFER		0.4000	LT	0.4000	LT	0.4000	LT	INTERFER	
BZ-209 (DECACHLOROBIPHENYL)(Surrogate)	3.7000		2.7000		0.4000	LT	1.0000		0.4000	LT
BZ-14 (3,5-DICHLOROBIPHENYL)	464.0000		450.0000		400.0000		470.0000	EE	520.0000	
BZ-65 (2,3,5,6-TETRACHLOROBIPHENYL)	905.0000		950.0000		790.0000		1000.0000		830.0000	
BZ-166, BZ-175	1090.0000		1150.0000		1130.0000		1040.0000		1140.0000	
Estimated emissions mg/Kg										
	Run 1		Run 2		Run 3		Run 4		Run 5	
	Avid		Avid		Hut		Non		Non	
	Recycler		Recycler		Blank		Recycler		Recycler	
	9582048		9582049		9582050		9582051		9582052	
COMPOUND	mg/kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
BZ-1 (2-CHLOROBIPHENYL)	0.0185		0.0077		n/a		0.0408		0.1344	
BZ-2 (3-CHLOROBIPHENYL)	0.2288	SU	0.0007	LT	n/a		0.0025		0.0018	LT
BZ-3 (4-CHLOROBIPHENYL)	0.0008	LT	0.0280	SU	n/a		0.0841	SU	0.1434	
BZ-10, BZ-4	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
2,4,5,6-TETRACHLORO-m-XYLENE (Surrogate)	0.0002	LT	0.0001	LT	n/a		0.0010		0.0027	
BZ-7, BZ-9	0.0122		0.0121		n/a		0.0643		0.0986	
BZ-6 (2,3'-DICHLOROBIPHENYL)	0.0047		0.0081		n/a		0.0005	LT	0.0385	
BZ-8, BZ-5	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
HEXACHLOROBENZENE	0.1302		0.0239		n/a		0.0005	LT	0.0448	
BZ-19 (2,2',6-TRICHLOROBIPHENYL)	interfer		0.0001	LT	n/a		0.0005	LT	0.0117	
BZ-12 (3,4-DICHLOROBIPHENYL)(Surrogate)	interfer		interfer		n/a		0.0005	LT	0.0152	
BZ-18 (2,2',5-TRICHLOROBIPHENYL)	0.0213		interfer		n/a		0.0742		0.0726	
BZ-15, BZ-17	0.0071		0.0096		n/a		0.0396		0.0385	
BZ-24, BZ-27	0.0268		0.0085		n/a		0.0210		0.0004	LT
BZ-16, BZ-32	0.0043		0.0096		n/a		0.0346		0.0448	
BZ-29 (2,4,5-TRICHLOROBIPHENYL)	0.0022		0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-26 (2,3',5-TRICHLOROBIPHENYL)	0.0067		0.0044		n/a		0.0186		0.0323	
BZ-25 (2,3',4-TRICHLOROBIPHENYL)	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-31 (2,4',5-TRICHLOROBIPHENYL)	0.0130		0.0152		n/a		0.0767		0.0645	
BZ-28 (2,4,4'-TRICHLOROBIPHENYL)	0.0043		0.0059		n/a		0.0005	LT	0.0430	
BZ-20, BZ-33, BZ-53	0.0138		0.0121		n/a		0.0371		0.0592	
BZ-51 (2,2',4,6'-TETRACHLOROBIPHENYL)	0.0043		0.0029		n/a		0.0005	LT	0.0004	LT
BZ-22 (2,3,4'-TRICHLOROBIPHENYL)	0.0075		0.0055		n/a		0.0297		0.0538	
BZ-45 (2,2',3,6-TETRACHLOROBIPHENYL)	0.0253		interfer		n/a		0.0940		0.1434	
BZ-46 (2,2',3,6'-TETRACHLOROBIPHENYL)	0.0047		interfer		n/a		interfer		0.0215	
BZ-39 (3,4',5-TRICHLOROBIPHENYL)	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-52 (2,2',5,5'-TETRACHLOROBIPHENYL)	0.0197		0.0114		n/a		0.0346		0.0780	
BZ-49 (2,2',4,5'-TETRACHLOROBIPHENYL)	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-47 (2,2',4,4'-TETRACHLOROBIPHENYL)	0.1342		interfer		n/a		0.0005	LT	interfer	
BZ-48 (2,2',4,5-TETRACHLOROBIPHENYL)	0.0002	LT	0.0001	LT	n/a		0.0005	LT	interfer	
BZ-44 (2,2',3,5'-TETRACHLOROBIPHENYL)	0.0063		0.0052		n/a		0.0111		0.0206	
BZ-37, BZ-42, BZ-59	interfer		0.0001	LT	n/a		0.0383		interfer	
BZ-41, BZ-64	0.0095		0.0037		n/a		0.0005	LT	0.0484	
BZ-40 (2,2',3,3'TETRACHLOROBIPHENYL)	0.0009		0.0005		n/a		0.0030		0.0035	
BZ-67 (2,3',4,5-TETRACHLOROBIPHENYL)	0.0002	LT	0.0005		n/a		0.0099		0.0004	LT
BZ-63, OCS	0.0051		0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-74 (2,4,4',5-TETRACHLOROBIPHENYL)	0.0037		0.0018		n/a		0.0031		0.0088	
BZ-70 (2,3',4',5-TETRACHLOROBIPHENYL)	0.0039		0.0034		n/a		0.0067		0.0099	
BZ-66, BZ-95	0.0047		0.0037		n/a		0.0136		0.0206	
BZ-91 (2,2',3,4',6-PENTACHLOROBIPHENYL)	0.0032		0.0015		n/a		0.0106		0.0041	
BZ-56, BZ-60	0.0043		0.0027		n/a		0.0063		0.0073	
BZ-92 (2,2',3,5,5'-PENTACHLOROBIPHENYL)	0.0016		0.0009		n/a		0.0021		0.0031	
BZ-84 (2,2',3,3',6-PENTACHLOROBIPHENYL)	0.0013		0.0009		n/a		0.0048		0.0083	
BZ-90, BZ-101	0.0024		0.0018		n/a		0.0052		0.0108	
BZ-99 (2,2',4,4',5-PENTACHLOROBIPHENYL)	0.0083		0.0063		n/a		0.0198		0.0188	
BZ-119 (2,3',4,4',6-PENTACHLOROBIPHENYL)	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-83 (2,2',3,3',5-PENTACHLOROBIPHENYL)	0.0039		0.0029		n/a		0.0054		0.0019	
BZ-97 (2,2',3',4,5-PENTACHLOROBIPHENYL)	0.0028		0.0013		n/a		0.0026		0.0056	
BZ-87, BZ-115	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-85, 4,4'-DDE	0.0043		0.0018		n/a		0.0067		0.0099	
BZ-136	0.0012		0.0005		n/a		0.0005	LT	0.0029	
BZ-77, BZ-110	0.0055		0.0037		n/a		0.0093		0.0152	
BZ-82 (2,2',3,3',4-PENTACHLOROBIPHENYL)	0.0002	LT	0.0021		n/a		0.0005	LT	0.0065	

Estimated emissions mg/Kg										
	Run 1		Run 2		Run 3		Run 4		Run 5	
	Avid		Avid		Hut		Non		Non	
	Recycler		Recycler		Blank		Recycler		Recycler	
	9582048		9582049		9582050		9582051		9582052	
COMPOUND	mg/kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
BZ-151 (2,2',3,5,5',6-HEXACHLOROBIPHENYL	0.0063		0.0044		n/a		0.0101		0.0179	
BZ-135	0.0071		0.0008		n/a		0.0049		0.0045	
BZ-107 (2,3,3',4',5-PENTACHLOROBIPHENYL)	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-123, BZ-149	0.0154		0.0081		n/a		0.0186		0.0287	
BZ-118	0.0083		0.0040		n/a		0.0083		0.0143	
BZ-134	0.0043		0.0001	LT	n/a		0.0005	LT	0.0065	
BZ-122 (2',3,3',4,5-PENTACHLOROBIPHENYL)	0.0017		0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-146	0.0025		0.0013		n/a		0.0030		0.0036	
BZ-153	0.0039		0.0011		n/a		interfer		0.0108	
BZ-132, BZ-105	0.0060		0.0013		n/a		0.0059		0.0049	
BZ-141 (2,2',3,4,5,5'-HEXACHLOROBIPHENYL	0.0029		0.0015		n/a		0.0032		0.0039	
BZ-179	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0016	
BZ-137	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	
BZ-130, BZ-176	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-138	0.0047		0.0021		n/a		0.0074		0.0080	
BZ-158	0.0012		0.0001	LT	n/a		0.0005	LT	0.0013	
BZ-129	0.0002	LT	0.0004		n/a		0.0005	LT	0.0004	LT
BZ-178	0.0047		0.0003		n/a		0.0005	LT	0.0046	
BZ-175	interfer	NR	interfer	NR	n/a		interfer	NR	interfer	NR
BZ-187	0.0043		0.0001	LT	n/a		0.0005	LT	0.0179	
BZ-183	0.0002	LT	0.0036		n/a		0.0089		0.0059	
BZ-128	0.0022		0.0009		n/a		0.0032		0.0004	LT
BZ-167	0.0021		0.0006		n/a		0.0005	LT	0.0039	
BZ-185	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0024	
BZ-174	0.0026		0.0017		n/a		0.0026		0.0070	
BZ-177	0.0023		0.0007		n/a		0.0015		0.0069	
BZ-171, BZ-202	interfer		interfer		n/a		interfer		0.0305	
BZ-156	0.0027		0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-173, BZ-157, IUPAC-201	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-172	0.0018		0.0001	LT	n/a		0.0021		0.0004	LT
BZ-197	0.0011		0.0004		n/a		0.0005	LT	0.0004	LT
BZ-180	0.0122		0.0001	LT	n/a		0.0173		0.0004	LT
BZ-193	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0004	LT
BZ-191	0.0020		0.0007		n/a		0.0005	LT	0.0004	LT
IUPAC-200	0.0002	LT	0.0001	LT	n/a		0.0005	LT	0.0028	
MIREX	interfer		interfer		n/a		interfer		interfer	
BZ-170, BZ-190	0.0002	LT	0.0029		n/a		0.0005	LT	0.0099	
IUPAC-199	0.0023		0.0007		n/a		0.0009		0.0013	
BZ-203, BZ-196	0.0038		0.0001	LT	n/a		0.0015		0.0022	
BZ-189	0.0043		0.0001	LT	n/a		0.0005	LT	0.0034	
BZ-195	0.0031		0.0004		n/a		0.0005	LT	0.0022	
BZ-194	interfer		interfer		n/a		0.0028		0.0004	LT
BZ-206	interfer		0.0001	LT	n/a		0.0005	LT	interfer	
BZ-209 (DECACHLOROBIPHENYL)(Surrogate)	0.0015		0.0010		n/a		0.0012		0.0004	LT
BZ-14 (3,5-DICHLOROBIPHENYL)	0.1831		0.1656		n/a		0.5812	EE	0.4660	
BZ-65 (2,3,5,6-TETRACHLOROBIPHENYL)	0.3571		0.3495		n/a		1.2367		0.7439	
BZ-166, BZ-175	0.4301		0.4231		n/a		1.2862		1.0217	
su - suspicious result, analyst suggested poor confirmation										
lt - less than										
nr - not required for analysis										
ee - estimated result										
interfer - peak interference, could not quantify										

Metals							
Metals Quantities in Sample Media (filter blank or reagent blank as appropriate subtracted from all sam							
	Run 1	Run 2	Run 3	Run 4	Run 5	Filter	
	Avid Recycler	Avid Recycler	Hut Blank	non-Recycler	non-Recycler	Blank	
metal	total ug	total ug	total ug	total ug	total ug	total ug	metal
	on filter	on filter	on filter	on filter	on filter	on filter	
Cu	40.20	17.00	0.26	1.90	0.44	0.64	Cu
Ni	1.30	<0.20	<1.24	<0.20	<0.20	1.20	Ni
Zn	50.60	7.00	<8.2	<0.80	<0.80	8.20	Zn
Pb	0.96	7.30	<0.36	0.66	0.16	0.36	Pb
Mg	8.20	<0.20	<8.8	2.80	<2.0	8.80	Mg
Al	588.00	6.80	<8.2	2.20	6.00	8.20	Al
Se	<1.00	<1.00	<1.00	<1.00	<1.00	<1	Se
Ba	<0.10	<0.10	0.64	1.09	0.65	0.20	Ba
Be	<0.04	<0.04	<0.04	<0.04	<0.04	<.04	Be
Ag	0.07	<.04	<.04	0.06	<.04	<.04	Ag
Cd	0.17	0.18	0.02	0.21	0.04	<.02	Cd
As	2.00	5.50	<0.02	3.80	0.19	<.02	As
Cr	0.54	0.54	0.32	<0.20	0.20	0.82	Cr
Hg	<0.04	<0.04	<0.02	<0.04	0.11	<.04	Hg
n/a= not analyzed							
*no data because of broken sample							
Total of Particulate Phase Metals: Filter and HNO_3 Rinse							
Note: Where two values, one a nondetect and one a detect were totaled, the absolute values were totaled and a less then sign was applied if the non							
	Run 1	Run 2	Run 3	Run 4	Run 5	Filter and	
total	Avid Recycler	Avid Recycler	Hut Blank	non-Recycler	non-Recycler	Reagent Blank	
metal*	total ug	total ug	total ug	total ug	total ug	total ug	
Cu	41.10	18.10	0.38	1.90	0.78	1.54	
Ni	2.20	0.55	<1.35	<0.20	0.34	2.10	
Zn	51.70	9.00	<10.05	<0.80	0.10	9.30	
Pb	1.12	7.52	<0.47	0.66	0.30	0.52	
Mg	8.95	<0.7	<10.7	2.80	<2.5	9.55	
Al	588.50	7.30	<21.95	2.20	6.50	22.00	
Se	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	
Ba	0.28	0.24	0.71	1.09	0.79	0.38	
Be	<0.05	<0.05	<0.05	<0.04	<0.05	<.05	
Ag	0.08	<0.05	<0.05	0.06	<0.05	<.05	
Cd	0.37	0.22	0.04	0.21	0.05	<.026	
As	2.04	5.84	0.03	3.80	0.21	<.028	
Cr	0.65	0.61	0.34	<0.20	0.24	0.93	
Hg	<0.04	<0.04	<0.02	<0.04	0.11	<.04	
*total metal = solid metal + nitric rinse, where numbers less than detection limits were added at detection limit							
Note when adding a less then quantity and an actual detected value from two fractions result reported withoug a less t							
	Filter blank has been subtracted from all samples including hut blank.						
	EQUATIONS USED:						
	Total ug/sample (filter)=(ug/l sample-ug/l blank)*0.05 l (0.1 l for Hg)*4 (1/4 filter digested)						
	Total ug/sample (HNO3 or HCl)=(ug/l sample-ug/l reagent blank)*0.05l (0.1 l for Hg)						

Total Particulate Metals Concentration in Facility Air

mg/M3

	Run 1	Run 2	Run 3	Run 4	Run 5
metal	Avid Recycler	Avid Recycler	Hut Blank	non-Recycler	non-Recycler
conc.	mg/M3	mg/M3	mg/M3	mg/M3	mg/M3
Cu	0.000030	0.014982	0.000269	0.002043	0.000541
Ni	0.000002	0.000455	<0.000143	<0.000215	0.000236
Zn	0.000038	0.007450	<0.000573	<0.00086	0.000069
Pb	0.000001	0.006225	<0	0.000710	0.000208
Mg	0.000007	<0.002069	<0.00179	0.003010	<0.001734
Al	0.000434	0.006042	<0	0.002365	0.004507
Se	<0.001151	<0.001035	<0.000895	<0.001344	<0.000867
Ba	0.000000	0.000199	0.000508	0.001172	0.000548
Be	<0.000046	<0.000041	<0.000036	<0.000054	<0.000035
Ag	0.000000	<0.000041	<0.000036	0.000065	<0.000035
Cd	0.000000	0.000182	0.000029	0.000226	0.000035
As	0.000002	0.004834	0.000021	0.004085	0.000146
Cr	0.000000	0.000505	0.000240	<0.000215	0.000166
Hg	<0.000037	<0.000033	<0.000029	<0.000043	0.000076

Total Estimated Particulate Phase Metals Emissions

	Run 1	Run 2	Run 3	Run 4	Run 5
	Avid Recycler	Avid Recycler	Hut Blank	non-Recycler	non-Recycler
	8/30/95	9/1/95	9/6/95	9/8/95	9/12/95
metal	g/Kg	g/Kg	g/Kg	g/Kg	g/Kg
Cu	0.015015	0.006176	n/a	0.002164	0.000573
Ni	0.000804	0.000188	n/a	<0.000228	0.000250
Zn	0.018888	0.003071	n/a	<0.000911	0.000073
Pb	0.000409	0.002566	n/a	0.000752	0.000220
Mg	0.003270	<0.000853	n/a	0.003189	<0.001837
Al	0.215000	0.002491	n/a	0.002506	0.004776
Se	<0.000457	<0.000426	n/a	<0.001424	<0.000918
Ba	0.000102	0.000082	n/a	0.001242	0.000580
Be	<0.000018	<0.000017	n/a	<0.000057	<0.000037
Ag	0.000029	<0.000017	n/a	0.000068	<0.000037
Cd	0.000135	0.000075	n/a	0.000239	0.000037
As	0.000745	0.001993	n/a	0.004329	0.000154
Cr	0.000237	0.000208	n/a	<0.000228	0.000176
Hg	<0.000015	<0.000014	n/a	<0.000046	0.000081

ples, including hut blank - Nitric rinse not done yet and check JJ numbers)						
Run 1	Run 2	Run 3	Run 4*	Run 5	Reagent	
Avid Recycler	Avid Recycler	Hut Blank	non-Recycler	non-Recycler	Blank	
total ug	total ug	total ug	total ug	total ug	total ug	
HNO_3 Rinse	HNO_3 Rinse	HNO_3 Rinse	HNO_3 Rinse	HNO_3 Rinse	HNO_3 Rinse	
0.90	1.10	0.12	n/a	0.34	0.080	
0.90	0.35	0.11	n/a	0.14	0.135	
1.10	2.00	<1.85	n/a	0.20	1.850	
0.16	0.22	0.11	n/a	0.14	0.039	
0.75	<0.50	<1.9	n/a	<0.50	1.900	
<0.50	<0.50	<13.75	n/a	<0.50	13.750	
<0.25	<0.25	<0.25	n/a	<0.25	<.25	
0.18	0.14	<0.07	n/a	0.14	0.070	
<0.01	<0.01	<0.01	n/a	<0.01	<.01	
<0.01	<0.01	<0.01	n/a	<0.01	<.01	
0.20	0.04	0.02	n/a	0.01	0.006	
0.04	0.34	0.01	n/a	0.02	0.008	
0.11	0.07	0.02	n/a	0.04	0.120	
n/a	n/a	n/a	n/a	n/a	n/a	
detect had a greater absolute value.						
detection limits						
0.20						
0.80						
2.50						
1.25						
0.05						
0.05						
0.20						
0.04						
hen sign.						

from mercury sheet						
Vm,std	Air into hut	Run Time	Mass burnned	Test	Test Conditions	DATE
ft3	CUFT/MIN	min	Kg	No.		
38.38	1622.5	70	8.1	1	Avid Recycler	34941.0
42.69	1622.5	79	8.8	2	Avid Recycler	34943.0
49.34	1622.5	90	0.0	3	Hut Blank	34948.0
32.87	1622.5	60	2.6	4	Non Recycler	34950.0
50.96	1622.5	90	3.9	5	Non Recycler	34954.0

ESTIMATED GASEOUS MERCURY EMISSIONS (g/Kg)

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Mercury							
ESTIMATED GASEOUS MERCURY EMISSIONS (g/Kg)							
				TLI Data	NYS DOH data	Total	
				Impinger	HCl	Vapor Phase	
Test	Test Conditions	DATE	RUN #	Catch	Rinse	Catch	Mass burnned
No.				ug Hg	ug Hg	< ug Hg	Kg
1	Avid Recycler	8/30/95	1	<4.00	comb.	4.0000	8.1
2	Avid Recycler	9/1/95	2	<4.00	<.1	4.1000	8.8
3	Hut Blank	9/6/95	3	<4.00	<.1	4.1000	0.0
4	Non Recycler	9/8/95	4	<4.00	0.3200	4.3200	2.6
5	Non Recycler	9/12/95	5	<4.00	<.1	4.1000	3.9
	Media Blank			<4	<.1	4.1000	na
na = not applicable							
comb = combined with impinger catch for analysis							
	Tm,1	Tm,f	Tm,avg	Pbar			dH
Test #	deg F	deg F	deg F	in Hg			
1	92.0000	96.0000	94.0000	29.6800			0.8500
2	87.0000	97.5000	92.2500	29.3600			0.8500
3	84.0000	96.0000	90.0000	29.6900			0.8500
4	83.5000	93.0000	88.2500	29.4700			0.8500
5	73.5000	87.5000	80.5000	29.8200			0.8500
moisture from r2 10ml collected							

ESTIMATED GASEOUS MERCURY EMISSIONS (g/Kg)

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		Estimated						
Vm,std	Hg conc.	Hg emissions						
ft3	ug/M3	< g/kg						
38.3753	3.6819	1.430E-03						
42.6854	3.3929	1.354E-03						
49.3420	2.9351	na						
32.8684	4.6426	4.758E-03						
50.9606	2.8419	2.989E-03						
na	na	na						
					Impinger			
Yd	DGM,i	DGM,f	Vm	Run Time	Hg conc.	Hg det. limit	Air into hut	Mass Burnned
			ft3	min	mg/ft3	ug	CUFT/MIN	lb
1.0293	34.2940	73.6620	39.3680	70.0000	0.0001	4.00	1622.5000	18.0000
1.0293	77.2320	121.3580	44.1260	79.0000	0.0001	4.00	1622.5000	20.2000
1.0293	121.7320	171.9680	50.2360	90.0000	0.0001	4.00	1622.5000	N/A
1.0293	172.1690	205.7750	33.6060	60.0000	0.0001	4.00	1622.5000	7.0000
1.0293	205.9160	256.6820	50.7660	90.0000	0.0001	4.00	1622.5000	9.0000

Raw Ash Data

PCDD/PCDF, PCB, CB Method blank for ash

2,3,7,8-TETRACHLORODIBENZODIOXIN	19	PG/G	LT
1,2,3,7,8-PENTACHLORODIBENZODIOXIN	19	PG/G	LT
1,2,3,4,7,8-HEXACHLORODIBENZODIOXIN	24	PG/G	LT
1,2,3,6,7,8-HEXACHLORODIBENZODIOXIN	21	PG/G	LT
1,2,3,7,8,9-HEXACHLORODIBENZODIOXIN	20	PG/G	LT
1,2,3,4,6,7,8-HEPTACHLORODIBENZODIOXIN	29	PG/G	LT
OCTACHLORODIBENZODIOXIN	53	PG/G	LT
2,3,7,8-TETRACHLORODIBENZOFURAN	17	PG/G	LT
1,2,3,7,8-PENTACHLORODIBENZOFURAN	14	PG/G	LT
2,3,4,7,8-PENTACHLORODIBENZOFURAN	18	PG/G	LT
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	15	PG/G	LT
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	15	PG/G	LT
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	18	PG/G	LT
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	17	PG/G	LT
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	19	PG/G	LT
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	22	PG/G	LT
OCTACHLORODIBENZOFURAN	32	PG/G	LT
TOTAL TETRACHLORODIBENZODIOXINS	19	PG/G	LT
TOTAL PENTACHLORODIBENZODIOXINS	19	PG/G	LT
TOTAL HEXACHLORODIBENZODIOXINS	21	PG/G	LT
TOTAL HEPTACHLORODIBENZODIOXINS	29	PG/G	LT
TOTAL TETRACHLORODIBENZOFURANS	43	PG/G	
TOTAL PENTACHLORODIBENZOFURANS	14	PG/G	LT
TOTAL HEXACHLORODIBENZOFURANS	15	PG/G	LT
TOTAL HEPTACHLORODIBENZOFURANS	19	PG/G	LT
BZ-1 (2-CHLOROBIPHENYL)	2.5	NG/G	LT
BZ-2 (3-CHLOROBIPHENYL)	2.5	NG/G	LT
BZ-3 (4-CHLOROBIPHENYL)	2.5	NG/G	LT
BZ-10, BZ-4	0.5	NG/G	LT
2,4,5,6-TETRACHLORO-m-XYLENE (Surrogate)	152	NG/G	
BZ-7, BZ-9	0.5	NG/G	LT
BZ-6 (2,3'-DICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-8, BZ-5	0.5	NG/G	LT
HEXACHLOROBENZENE	0.5	NG/G	LT
BZ-19 (2,2',6-TRICHLOROBIPHENYL)	INTERFER	NG/G	
BZ-12 (3,4-DICHLOROBIPHENYL)(Surrogate)	0.5	NG/G	LT
BZ-18 (2,2',5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-15, BZ-17	0.5	NG/G	LT
BZ-24, BZ-27	0.5	NG/G	LT
BZ-16, BZ-32	0.5	NG/G	LT
BZ-29 (2,4,5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-26 (2,3',5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-25 (2,3',4-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-31 (2,4',5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-28 (2,4,4'-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-20, BZ-33, BZ-53	0.5	NG/G	LT
BZ-51 (2,2',4,6'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-22 (2,3,4'-TRICHLOROBIPHENYL)	0.5	NG/G	LT

Raw Ash Data

BZ-45 (2,2',3,6-TETRACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-46 (2,2',3,6'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-39 (3,4',5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-52 (2,2',5,5'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-49 (2,2',4,5'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-47 (2,2',4,4'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-48 (2,2',4,5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-44 (2,2',3,5'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-37, BZ-42, BZ-59	0.5	NG/G	LT
BZ-41, BZ-64	0.5	NG/G	LT
BZ-40 (2,2',3,3'TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-67 (2,3',4,5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-63, OCS	0.5	NG/G	LT
BZ-74 (2,4,4',5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-70 (2,3',4',5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-66, BZ-95	0.5	NG/G	LT
BZ-91 (2,2',3,4',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-56, BZ-60	0.5	NG/G	LT
BZ-92 (2,2',3,5,5'-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-84 (2,2',3,3',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-90, BZ-101	0.5	NG/G	LT
BZ-99 (2,2',4,4',5-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-119 (2,3',4,4',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-83 (2,2',3,3',5-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-97 (2,2',3',4,5-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-87, BZ-115	0.8	NG/G	
BZ-85, 4,4'-DDE	0.5	NG/G	LT
BZ-136	0.5	NG/G	LT
BZ-77, BZ-110	0.5	NG/G	LT
BZ-82 (2,2',3,3',4-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-151 (2,2',3,5,5',6-HEXACHLOROBIPHENYL	0.5	NG/G	LT
BZ-135	0.5	NG/G	LT
BZ-107 (2,3,3',4',5-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-123, BZ-149	0.5	NG/G	LT
BZ-118	0.5	NG/G	LT
BZ-134	0.5	NG/G	LT
BZ-122 (2',3,3',4,5-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-146	0.5	NG/G	LT
BZ-153	0.5	NG/G	LT
BZ-132, BZ-105	0.5	NG/G	LT
BZ-141 (2,2',3,4,5,5'-HEXACHLOROBIPHENYL	0.5	NG/G	LT
BZ-179	0.5	NG/G	LT
BZ-137	0.5	NG/G	LT
BZ-130, BZ-176	0.5	NG/G	LT
BZ-138	0.5	NG/G	LT
BZ-158	0.5	NG/G	LT
BZ-129	0.5	NG/G	LT
BZ-178	0.5	NG/G	LT
BZ-175	0.5	NG/G	LT

Raw Ash Data

BZ-187	0.5	NG/G	LT
BZ-183	0.5	NG/G	LT
BZ-128	0.5	NG/G	LT
BZ-167	0.5	NG/G	LT
BZ-185	0.5	NG/G	LT
BZ-174	0.5	NG/G	LT
BZ-177	0.5	NG/G	LT
BZ-171, BZ-202	0.5	NG/G	LT
BZ-156	0.5	NG/G	LT
BZ-173, BZ-157, IUPAC-201	0.5	NG/G	LT
BZ-172	0.5	NG/G	LT
BZ-197	0.5	NG/G	LT
BZ-180	0.5	NG/G	LT
BZ-193	0.5	NG/G	LT
BZ-191	0.5	NG/G	LT
IUPAC-200	0.5	NG/G	LT
MIREX	0.5	NG/G	LT
BZ-170, BZ-190	0.5	NG/G	LT
IUPAC-199	0.5	NG/G	LT
BZ-203, BZ-196	0.5	NG/G	LT
BZ-189	0.5	NG/G	LT
BZ-195	0.5	NG/G	PL
BZ-194	0.5	NG/G	PL
BZ-206	2	NG/G	
BZ-209 (DECACHLOROBIPHENYL)(Surrogate)	154	NG/G	
BZ-14 (3,5-DICHLOROBIPHENYL)	36	NG/G	
BZ-65 (2,3,5,6-TETRACHLOROBIPHENYL)	41	NG/G	
BZ-166, BZ-175	48	NG/G	

Raw Ash Data

SVOC method blank for ash

ACENAPHTHENE	330	µG/KG	LT
ACENAPHTHYLENE	330	µG/KG	LT
ACETOPHENONE	330	µG/KG	LT
2-ACETYLAMINOFLUORENE	660	µG/KG	LT
ALDRIN	330	µG/KG	LT
4-AMINOBIPHENYL	660	µG/KG	LT
ANTHRACENE	330	µG/KG	LT
AROCLOR 1016	6600	µG/KG	LT
AROCLOR 1221	6600	µG/KG	LT
AROCLOR 1232	6600	µG/KG	LT
AROCLOR 1242	6600	µG/KG	LT
AROCLOR 1248	6600	µG/KG	LT
AROCLOR 1254	6600	µG/KG	LT
AROCLOR 1260	6600	µG/KG	LT
BENZO(a)ANTHRACENE	330	µG/KG	LT
BENZO(b)FLUORANTHENE	330	µG/KG	LT
BENZO(k)FLUORANTHENE	330	µG/KG	LT
BENZO(ghi)PERYLENE	3	µG/KG	J
BENZO(a)PYRENE	330	µG/KG	LT
BENZYL ALCOHOL	330	µG/KG	LT
HCH,ALPHA	2	µG/KG	LT
HCH,BETA	2	µG/KG	LT
HCH,DELTA	2	µG/KG	LT
HCH,GAMMA (LINDANE)	2	µG/KG	LT
4-BROMOPHENYL PHENYL ETHER	330	µG/KG	LT
BUTYL BENZYL PHTHALATE	330	µG/KG	LT
CHLORDANE, GAMMA ISOMER	1600	µG/KG	LT
4-CHLOROANILINE	330	µG/KG	LT
CHLOROBENZILATE	330	µG/KG	LT
BIS(2-CHLOROETHOXY)METHANE	330	µG/KG	LT
BIS(2-CHLOROETHYL)ETHER	330	µG/KG	LT
BIS(2-CHLOROISOPROPYL)ETHER	330	µG/KG	LT
4-CHLORO-3-METHYLPHENOL	330	µG/KG	LT
2-CHLORONAPHTHALENE	330	µG/KG	LT
2-CHLOROPHENOL	330	µG/KG	LT
4-CHLOROPHENYL PHENYL ETHER	330	µG/KG	LT
CHRYSENE	330	µG/KG	LT
4,4'-DDD	330	µG/KG	LT
4,4'-DDE	330	µG/KG	LT
4,4'-DDT	3	µG/KG	LT
DIALLATE	330	µG/KG	LT
DIBENZOFURAN	330	µG/KG	LT
DIBENZ(A,H)ANTHRACENE	2	µG/KG	J
DI-N-BUTYL PHTHALATE	2	µG/KG	J
1,2-DICHLOROBENZENE	330	µG/KG	LT
1,3-DICHLOROBENZENE	330	µG/KG	LT
1,4-DICHLOROBENZENE	330	µG/KG	LT
3,3'-DICHLOROBENZIDINE	330	µG/KG	LT

Raw Ash Data

2,4-DICHLOROPHENOL	330	µG/KG	LT
2,6-DICHLOROPHENOL	330	µG/KG	LT
DIELDRIN	3	µG/KG	LT
DIETHYLPHTHALATE	330	µG/KG	LT
DIMETHOATE	660	µG/KG	LT
DIMETHYLPHTHALATE	330	µG/KG	LT
P-DIMETHYLAMINO-AZOBENZENE	660	µG/KG	LT
3,3'-DIMETHYLBENZIDINE	330	µG/KG	LT
7,12-DIMETHYLBENZ(A)ANTHRACENE	330	µG/KG	LT
2,4-DIMETHYLPHENOL	330	µG/KG	LT
1,3-DINITROBENZENE	330	µG/KG	LT
2-METHYL-4,6-DINITROPHENOL	1600	µG/KG	LT
2,4-DINITROPHENOL	1600	µG/KG	LT
2,4-DINITROTOLUENE	330	µG/KG	LT
2,6-DINITROTOLUENE	330	µG/KG	LT
DIPHENYLAMINE	660	µG/KG	LT
DISULFOTON (Di-Syston)	330	µG/KG	LT
ENDOSULFAN I	660	µG/KG	LT
ENDOSULFAN II	330	µG/KG	LT
ENDOSULFAN SULFATE	330	µG/KG	LT
ENDRIN	330	µG/KG	LT
ENDRIN ALDEHYDE	330	µG/KG	LT
ETHYL METHANESULFONATE	660	µG/KG	LT
BIS(2-ETHYLHEXYL)PHTHALATE	14	µG/KG	J
FAMPHUR	660	µG/KG	LT
FLUORANTHENE	330	µG/KG	LT
FLUORENE	330	µG/KG	LT
HEPTACHLOR	330	µG/KG	LT
HEPTACHLOR EPOXIDE	330	µG/KG	LT
HEXACHLOROBENZENE	330	µG/KG	LT
HEXACHLOROBUTADIENE (C-46)	330	µG/KG	LT
HEXACHLOROCYCLOPENTADIENE (C-56)	330	µG/KG	LT
HEXACHLOROETHANE	330	µG/KG	LT
HEXACHLOROPROPENE	330	µG/KG	LT
INDENO(1,2,3-cd)PYRENE	2	µG/KG	J
ISODRIN	660	µG/KG	LT
ISOPHORONE	330	µG/KG	LT
ISOSAFROLE	330	µG/KG	LT
KEPONE	660	µG/KG	LT
METHAPYRILENE	3300	µG/KG	LT
METHOXYCHLOR	330	µG/KG	LT
METHYL METHANESULFONATE	330	µG/KG	LT
METHYL PARATHION	330	µG/KG	LT
3-METHYLCHOLANTHRENE	330	µG/KG	LT
2-METHYLNAPHTHALENE	330	µG/KG	LT
2-METHYL PHENOL	330	µG/KG	LT
3- OR 4-METHYLPHENOL	330	µG/KG	LT
NAPHTHALENE	330	µG/KG	LT
1,4-NAPHTHOQUINONE	330	µG/KG	LT

Raw Ash Data

1-NAPHTHYLAMINE	330	µG/KG	LT
2-NAPHTHYLAMINE	330	µG/KG	LT
2-NITROANILINE	1600	µG/KG	LT
3-NITROANILINE	1600	µG/KG	LT
4-NITROANILINE	660	µG/KG	LT
NITROBENZENE	330	µG/KG	LT
2-NITROPHENOL	330	µG/KG	LT
4-NITROPHENOL	1600	µG/KG	LT
N-NITROSODIETHYLAMINE	9900	µG/KG	LT
N-NITROSOSDIMETHYLAMINE	66	µG/KG	LT
N-NITROSODIPHENYLAMINE	160	µG/KG	LT
N-NITROSODI-N-BUTYLAMINE	330	µG/KG	LT
N-NITROSOMETHYL-ETHYLAMINE	330	µG/KG	LT
N-NITROSOPIPERIDINE	6600	µG/KG	LT
N-NITROSO-DI-N-PROPYLAMINE	330	µG/KG	LT
N-NITROSOPYRROLIDINE	330	µG/KG	LT
5-NITRO-O-TOLUIDINE	330	µG/KG	LT
DI-N-OCTYL PHTHALATE	330	µG/KG	LT
PARATHION, ETHYL	330	µG/KG	LT
PENTACHLOROBENZENE	330	µG/KG	LT
PENTACHLORONITROBENZENE	330	µG/KG	LT
PENTACHLOROPHENOL	1600	µG/KG	LT
PHENACETIN	660	µG/KG	LT
PHENANTHRENE	330	µG/KG	LT
PHENOL	330	µG/KG	LT
P-PHENYLENEDIAMINE	330	µG/KG	LT
PHORATE	330	µG/KG	LT
PRONAMIDE	330	µG/KG	LT
PYRENE	330	µG/KG	LT
SAFROLE	330	µG/KG	LT
1,2,4,5-TETRACHLOROBENZENE	330	µG/KG	LT
2,3,4,6-TETRACHLOROPHENOL	330	µG/KG	LT
THIONAZIN	330	µG/KG	LT
O-TOLUIDINE	330	µG/KG	LT
TOXAPHENE	66	µG/KG	LT
1,2,4-TRICHLOROBENZENE	330	µG/KG	LT
2,4,5-TRICHLOROPHENOL	820	µG/KG	LT
2,4,6-TRICHLOROPHENOL	330	µG/KG	LT
PYRIDINE	3300	µG/KG	LT
ALPHA-PICOLINE	3300	µG/KG	LT
ANILINE	330	µG/KG	LT
BENZIDINE	1600	µG/KG	LT
ENDRIN KETONE	33	µG/KG	LT
1,3,5-TRINITROBENZENE	330	µG/KG	LT
4-NITROQUINOLINE 1-OXIDE	1200	µG/KG	LT
CHLORDANE, ALPHA ISOMER	1600	µG/KG	LT

Raw Ash Data

Composite Ash for Avid Recycler

2,3,7,8-TETRACHLORODIBENZODIOXIN	31	PG/G	
1,2,3,7,8-PENTACHLORODIBENZODIOXIN	230	PG/G	
1,2,3,4,7,8-HEXACHLORODIBENZODIOXIN	270	PG/G	
1,2,3,6,7,8-HEXACHLORODIBENZODIOXIN	420	PG/G	
1,2,3,7,8,9-HEXACHLORODIBENZODIOXIN	300	PG/G	
1,2,3,4,6,7,8-HEPTACHLORODIBENZODIOXIN	4000	PG/G	
OCTACHLORODIBENZODIOXIN	9600	PG/G	
2,3,7,8-TETRACHLORODIBENZOFURAN	830	PG/G	
1,2,3,7,8-PENTACHLORODIBENZOFURAN	1000	PG/G	
2,3,4,7,8-PENTACHLORODIBENZOFURAN	2500	PG/G	
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	2300	PG/G	
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	2100	PG/G	
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	2900	PG/G	
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	810	PG/G	
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	12000	PG/G	
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	1400	PG/G	
OCTACHLORODIBENZOFURAN	8200	PG/G	
TOTAL TETRACHLORODIBENZODIOXINS	2500	PG/G	
TOTAL PENTACHLORODIBENZODIOXINS	4100	PG/G	
TOTAL HEXACHLORODIBENZODIOXINS	5600	PG/G	
TOTAL HEPTACHLORODIBENZODIOXINS	7600	PG/G	
TOTAL TETRACHLORODIBENZOFURANS	25000	PG/G	
TOTAL PENTACHLORODIBENZOFURANS	21000	PG/G	
TOTAL HEXACHLORODIBENZOFURANS	19000	PG/G	
TOTAL HEPTACHLORODIBENZOFURANS	17000	PG/G	
BZ-1 (2-CHLOROBIPHENYL)	2.5	NG/G	LT
BZ-2 (3-CHLOROBIPHENYL)	43	NG/G	SU
BZ-3 (4-CHLOROBIPHENYL)	2.5	NG/G	LT
BZ-10, BZ-4	0.5	NG/G	LT
2,4,5,6-TETRACHLORO-m-XYLENE (Surrogate)	132	NG/G	
BZ-7, BZ-9	2.1	NG/G	
BZ-6 (2,3'-DICHLOROBIPHENYL)	3.7	NG/G	
BZ-8, BZ-5	5.4	NG/G	
HEXACHLOROBENZENE	135	NG/G	
BZ-19 (2,2',6-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-12 (3,4-DICHLOROBIPHENYL)(Surrogate)	6.6	NG/G	
BZ-18 (2,2',5-TRICHLOROBIPHENYL)	32	NG/G	
BZ-15, BZ-17	0.5	NG/G	LT
BZ-24, BZ-27	12	NG/G	
BZ-16, BZ-32	0.5	NG/G	LT
BZ-29 (2,4,5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-26 (2,3',5-TRICHLOROBIPHENYL)	0.8	NG/G	
BZ-25 (2,3',4-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-31 (2,4',5-TRICHLOROBIPHENYL)	1.5	NG/G	
BZ-28 (2,4,4'-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-20, BZ-33, BZ-53	2.2	NG/G	
BZ-51 (2,2',4,6'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT

Raw Ash Data

BZ-22 (2,3,4'-TRICHLOROBIPHENYL)		0.5	NG/G	
BZ-45 (2,2',3,6-TETRACHLOROBIPHENYL)		5.3	NG/G	
BZ-46 (2,2',3,6'-TETRACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-39 (3,4',5-TRICHLOROBIPHENYL)		0.5	NG/G	LT
BZ-52 (2,2',5,5'-TETRACHLOROBIPHENYL)		3.1	NG/G	
BZ-49 (2,2',4,5'-TETRACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-47 (2,2',4,4'-TETRACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-48 (2,2',4,5-TETRACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-44 (2,2',3,5'-TETRACHLOROBIPHENYL)		2.6	NG/G	
BZ-37, BZ-42, BZ-59		1.8	NG/G	
BZ-41, BZ-64		1.8	NG/G	
BZ-40 (2,2',3,3'TETRACHLOROBIPHENYL)	INTERFER		NG/G	
BZ-67 (2,3',4,5-TETRACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-63, OCS		1.8	NG/G	
BZ-74 (2,4,4',5-TETRACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-70 (2,3',4',5-TETRACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-66, BZ-95		1	NG/G	
BZ-91 (2,2',3,4',6-PENTACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-56, BZ-60		1.6	NG/G	
BZ-92 (2,2',3,5,5'-PENTACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-84 (2,2',3,3',6-PENTACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-90, BZ-101		0.5	NG/G	PL
BZ-99 (2,2',4,4',5-PENTACHLOROBIPHENYL)		3.4	NG/G	
BZ-119 (2,3',4,4',6-PENTACHLOROBIPHENYL)		0.5	NG/G	LT
BZ-83 (2,2',3,3',5-PENTACHLOROBIPHENYL)		0.4	NG/G	
BZ-97 (2,2',3',4,5-PENTACHLOROBIPHENYL)		2.2	NG/G	
BZ-87, BZ-115		1.5	NG/G	
BZ-85, 4,4'-DDE		0.5	NG/G	PL
BZ-136		0.5	NG/G	LT
BZ-77, BZ-110		1.2	NG/G	
BZ-82 (2,2',3,3',4-PENTACHLOROBIPHENYL)		1.1	NG/G	
BZ-151 (2,2',3,5,5',6-HEXACHLOROBIPHENYL		0.5	NG/G	LT
BZ-135		0.5	NG/G	LT
BZ-107 (2,3,3',4',5-PENTACHLOROBIPHENYL)		0.5	NG/G	PL
BZ-123, BZ-149		0.5	NG/G	PL
BZ-118		0.7	NG/G	
BZ-134		0.5	NG/G	LT
BZ-122 (2',3,3',4,5-PENTACHLOROBIPHENYL)		0.5	NG/G	PL
BZ-146		0.5	NG/G	LT
BZ-153		0.5	NG/G	LT
BZ-132, BZ-105		3.4	NG/G	
BZ-141 (2,2',3,4,5,5'-HEXACHLOROBIPHENYL		1.2	NG/G	
BZ-179		0.5	NG/G	LT
BZ-137		0.5	NG/G	LT
BZ-130, BZ-176		0.5	NG/G	LT
BZ-138		0.5	NG/G	LT
BZ-158		0.5	NG/G	LT
BZ-129		0.5	NG/G	LT
BZ-178		1.7	NG/G	

Raw Ash Data

BZ-175	41	NG/G	
BZ-187	0.5	NG/G	LT
BZ-183	1.8	NG/G	
BZ-128	0.5	NG/G	LT
BZ-167	0.5	NG/G	PL
BZ-185	0.5	NG/G	LT
BZ-174	0.5	NG/G	LT
BZ-177	0.5	NG/G	LT
BZ-171, BZ-202	0.5	NG/G	LT
BZ-156	0.7	NG/G	
BZ-173, BZ-157, IUPAC-201	0.9	NG/G	
BZ-172	0.5	NG/G	LT
BZ-197	0.5	NG/G	LT
BZ-180	0.5	NG/G	LT
BZ-193	0.5	NG/G	LT
BZ-191	0.5	NG/G	LT
IUPAC-200	0.5	NG/G	LT
MIREX	0.5	NG/G	LT
BZ-170, BZ-190	2.5	NG/G	
IUPAC-199	0.5	NG/G	LT
BZ-203, BZ-196	1.6	NG/G	
BZ-189	0.6	NG/G	
BZ-195	1.1	NG/G	
BZ-194	1.4	NG/G	
BZ-206	2.8	NG/G	
BZ-209 (DECACHLOROBIPHENYL)(Surrogate)	131	NG/G	
PICES (Surrogates)		NG/G	
BZ-14 (3,5-DICHLOROBIPHENYL)	38	NG/G	
BZ-65 (2,3,5,6-TETRACHLOROBIPHENYL)	42	NG/G	
BZ-166, BZ-175	41	NG/G	
SOLIDS, DRY		PERCENT	NR
ACENAPHTHENE	5000	µG/KG	LT
ACENAPHTHYLENE	5000	µG/KG	LT
ACETOPHENONE	480	µG/KG	J
2-ACETYLAMINOFLUORENE	9900	µG/KG	LT
ALDRIN	5000	µG/KG	LT
4-AMINOBIPHENYL	9900	µG/KG	LT
ANTHRACENE	5000	µG/KG	LT
AROCLOR 1016	99000	µG/KG	LT
AROCLOR 1221	99000	µG/KG	LT
AROCLOR 1232	99000	µG/KG	LT
AROCLOR 1242	99000	µG/KG	LT
AROCLOR 1248	99000	µG/KG	LT
AROCLOR 1254	99000	µG/KG	LT
AROCLOR 1260	99000	µG/KG	LT
BENZO(a)ANTHRACENE	62	µG/KG	J
BENZO(b)FLUORANTHENE	78	µG/KG	J
BENZO(k)FLUORANTHENE	110	µG/KG	J
BENZO(ghi)PERYLENE	120	µG/KG	BJ

Raw Ash Data

BENZO(a)PYRENE	78	µG/KG	J
BENZYL ALCOHOL	5000	µG/KG	LT
HCH,ALPHA	26	µG/KG	LT
HCH,BETA	26	µG/KG	LT
HCH,DELTA	26	µG/KG	LT
HCH,GAMMA (LINDANE)	26	µG/KG	LT
4-BROMOPHENYL PHENYL ETHER	5000	µG/KG	LT
BUTYL BENZYL PHTHALATE	110	µG/KG	J
CHLORDANE, GAMMA ISOMER	24000	µG/KG	LT
4-CHLOROANILINE	5000	µG/KG	LT
CHLOROBENZILATE	5000	µG/KG	LT
BIS(2-CHLOROETHOXY)METHANE	5000	µG/KG	LT
BIS(2-CHLOROETHYL)ETHER	5000	µG/KG	LT
BIS(2-CHLOROISOPROPYL)ETHER	5000	µG/KG	LT
4-CHLORO-3-METHYLPHENOL	5000	µG/KG	LT
2-CHLORONAPHTHALENE	5000	µG/KG	LT
2-CHLOROPHENOL	5000	µG/KG	LT
4-CHLOROPHENYL PHENYL ETHER	5000	µG/KG	LT
CHRYSENE	76	µG/KG	J
4,4'-DDD	5000	µG/KG	LT
4,4'-DDE	5000	µG/KG	LT
4,4'-DDT	50	µG/KG	LT
DIALLATE	5000	µG/KG	LT
DIBENZOFURAN	170	µG/KG	J
DIBENZ(A,H)ANTHRACENE	120	µG/KG	BJ
DI-N-BUTYL PHTHALATE	160	µG/KG	BJ
1,2-DICHLOROBENZENE	190	µG/KG	J
1,3-DICHLOROBENZENE	88	µG/KG	J
1,4-DICHLOROBENZENE	54	µG/KG	J
3,3'-DICHLOROBENZIDINE	5000	µG/KG	LT
2,4-DICHLOROPHENOL	92	µG/KG	J
2,6-DICHLOROPHENOL	5000	µG/KG	LT
DIELDRIN	50	µG/KG	LT
DIETHYLPHTHALATE	110	µG/KG	J
DIMETHOATE	9900	µG/KG	LT
DIMETHYLPHTHALATE	5000	µG/KG	LT
P-DIMETHYLAMINO-AZOBENZENE	9900	µG/KG	LT
3,3'-DIMETHYLBENZIDINE	5000	µG/KG	LT
7,12-DIMETHYLBENZ(A)ANTHRACENE	5000	µG/KG	LT
2,4-DIMETHYLPHENOL	5000	µG/KG	LT
1,3-DINITROBENZENE	5000	µG/KG	LT
2-METHYL-4,6-DINITROPHENOL	25000	µG/KG	LT
2,4-DINITROPHENOL	25000	µG/KG	LT
2,4-DINITROTOLUENE	5000	µG/KG	LT
2,6-DINITROTOLUENE	5000	µG/KG	LT
DIPHENYLAMINE	9900	µG/KG	LT
DISULFOTON (Di-Syston)	5000	µG/KG	LT
ENDOSULFAN I	9900	µG/KG	LT
ENDOSULFAN II	5000	µG/KG	LT

Raw Ash Data

ENDOSULFAN SULFATE	5000	µG/KG	LT
ENDRIN	5000	µG/KG	LT
ENDRIN ALDEHYDE	5000	µG/KG	LT
ETHYL METHANESULFONATE	9900	µG/KG	LT
BIS(2-ETHYLHEXYL)PHTHALATE	360	µG/KG	BJ
FAMPHUR	9900	µG/KG	LT
FLUORANTHENE	68	µG/KG	J
FLUORENE	78	µG/KG	J
HEPTACHLOR	5000	µG/KG	LT
HEPTACHLOR EPOXIDE	5000	µG/KG	LT
HEXACHLOROBENZENE	170	µG/KG	J
HEXACHLOROBUTADIENE (C-46)	5000	µG/KG	LT
HEXACHLOROCYCLOPENTADIENE (C-56)	5000	µG/KG	LT
HEXACHLOROETHANE	5000	µG/KG	LT
HEXACHLOROPROPENE	5000	µG/KG	LT
INDENO(1,2,3-cd)PYRENE	140	µG/KG	BJ
ISODRIN	9900	µG/KG	LT
ISOPHORONE	5000	µG/KG	LT
ISOSAFROLE	5000	µG/KG	LT
KEPONE	9900	µG/KG	LT
METHAPYRILENE	50000	µG/KG	LT
METHOXYCHLOR	5000	µG/KG	LT
METHYL METHANESULFONATE	5000	µG/KG	LT
METHYL PARATHION	5000	µG/KG	LT
3-METHYLCHOLANTHRENE	5000	µG/KG	LT
2-METHYLNAPHTHALENE	160	µG/KG	J
2-METHYL PHENOL	120	µG/KG	J
3- OR 4-METHYLPHENOL	5000	µG/KG	LT
NAPHTHALENE	650	µG/KG	J
1,4-NAPHTHOQUINONE	5000	µG/KG	LT
1-NAPHTHYLAMINE	5000	µG/KG	LT
2-NAPHTHYLAMINE	5000	µG/KG	LT
2-NITROANILINE	25000	µG/KG	LT
3-NITROANILINE	25000	µG/KG	LT
4-NITROANILINE	9900	µG/KG	LT
NITROBENZENE	5000	µG/KG	LT
2-NITROPHENOL	5000	µG/KG	LT
4-NITROPHENOL	25000	µG/KG	LT
N-NITROSODIETHYLAMINE	660	µG/KG	LT
N-NITROSOSDIMETHYLAMINE	990	µG/KG	LT
N-NITROSODIPHENYLAMINE	2500	µG/KG	LT
N-NITROSODI-N-BUTYLAMINE	5000	µG/KG	LT
N-NITROSOMETHYL-ETHYLAMINE	5000	µG/KG	LT
N-NITROSOPIPERIDINE	99000	µG/KG	LT
N-NITROSO-DI-N-PROPYLAMINE	5000	µG/KG	LT
N-NITROSOPYRROLIDINE	5000	µG/KG	LT
5-NITRO-O-TOLUIDINE	5000	µG/KG	LT
DI-N-OCTYL PHTHALATE	55	µG/KG	J
PARATHION, ETHYL	5000	µG/KG	LT

Raw Ash Data

PENTACHLOROBENZENE	290	µG/KG	J
PENTACHLORONITROBENZENE	5000	µG/KG	LT
PENTACHLOROPHENOL	25000	µG/KG	LT
PHENACETIN	9900	µG/KG	LT
PHENANTHRENE	290	µG/KG	J
PHENOL	5000	µG/KG	LT
P-PHENYLENEDIAMINE	5000	µG/KG	LT
PHORATE	5000	µG/KG	LT
PRONAMIDE	5000	µG/KG	LT
PYRENE	76	µG/KG	J
SAFROLE	5000	µG/KG	LT
1,2,4,5-TETRACHLOROBENZENE	140	µG/KG	J
2,3,4,6-TETRACHLOROPHENOL	5000	µG/KG	LT
THIONAZIN	5000	µG/KG	LT
O-TOLUIDINE	5000	µG/KG	LT
TOXAPHENE	990	µG/KG	LT
1,2,4-TRICHLOROBENZENE	120	µG/KG	J
2,4,5-TRICHLOROPHENOL	54	µG/KG	J
2,4,6-TRICHLOROPHENOL	170	µG/KG	J
SOLIDS, DRY	93	PERCENT	
ARSENIC IN DRY SOLIDS	310	MG/KG	
SELENIUM IN DRY SOLIDS	1	MG/KG	LT
MERCURY IN DRY SOLIDS	0.11	MG/KG	LT
BERYLLIUM IN DRY SOLIDS	1	MG/KG	
SILVER IN DRY SOLIDS	25	MG/KG	
BARIUM IN DRY SOLIDS	187	MG/KG	
CADMIUM IN DRY SOLIDS	3	MG/KG	LT
COBALT IN DRY SOLIDS	12	MG/KG	
CHROMIUM IN DRY SOLIDS	286	MG/KG	
COPPER IN DRY SOLIDS	3780	MG/KG	
IRON IN DRY SOLIDS	4390	MG/KG	
MANGANESE IN DRY SOLIDS	525	MG/KG	
NICKEL IN DRY SOLIDS	18	MG/KG	
STRONTIUM IN DRY SOLIDS	104	MG/KG	
TITANIUM IN DRY SOLIDS	716	MG/KG	
VANADIUM IN DRY SOLIDS	35	MG/KG	
ZINC IN DRY SOLIDS	10900	MG/KG	
MOLYBDENUM IN DRY SOLIDS	17	MG/KG	LT
LEAD IN DRY SOLIDS	168	MG/KG	
ANTIMONY IN DRY SOLIDS		MG/KG	NR
TIN IN DRY SOLIDS	226	MG/KG	
THALLIUM IN DRY SOLIDS		MG/KG	NR
ALUMINUM IN DRY SOLIDS	92900	MG/KG	
CALCIUM IN DRY SOLIDS	97400	MG/KG	
POTASSIUM IN DRY SOLIDS	5050	MG/KG	
MAGNESIUM IN DRY SOLIDS	2860	MG/KG	
SODIUM IN DRY SOLIDS	5400	MG/KG	
PYRIDINE	870	µG/KG	J
ALPHA-PICOLINE	190	µG/KG	J

Raw Ash Data

ANILINE	5000	µG/KG	LT
BENZIDINE	24000	µG/KG	LT
ENDRIN KETONE	500	µG/KG	LT
1,3,5-TRINITROBENZENE	5000	µG/KG	LT
4-NITROQUINOLINE 1-OXIDE	18000	µG/KG	LT
CHLORDANE, ALPHA ISOMER	24000	µG/KG	LT

Raw Ash Data

Composite Ash for Non-recycler

2,3,7,8-TETRACHLORODIBENZODIOXIN	9	PG/G	
1,2,3,7,8-PENTACHLORODIBENZODIOXIN	53	PG/G	
1,2,3,4,7,8-HEXACHLORODIBENZODIOXIN	44	PG/G	
1,2,3,6,7,8-HEXACHLORODIBENZODIOXIN	74	PG/G	
1,2,3,7,8,9-HEXACHLORODIBENZODIOXIN	56	PG/G	
1,2,3,4,6,7,8-HEPTACHLORODIBENZODIOXIN	630	PG/G	
OCTACHLORODIBENZODIOXIN	690	PG/G	
2,3,7,8-TETRACHLORODIBENZOFURAN	220	PG/G	
1,2,3,7,8-PENTACHLORODIBENZOFURAN	270	PG/G	
2,3,4,7,8-PENTACHLORODIBENZOFURAN	690	PG/G	
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	480	PG/G	
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	490	PG/G	
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	670	PG/G	
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	150	PG/G	
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	2100	PG/G	
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	170	PG/G	
OCTACHLORODIBENZOFURAN	560	PG/G	
TOTAL TETRACHLORODIBENZODIOXINS	490	PG/G	
TOTAL PENTACHLORODIBENZODIOXINS	740	PG/G	
TOTAL HEXACHLORODIBENZODIOXINS	1300	PG/G	
TOTAL HEPTACHLORODIBENZODIOXINS	1300	PG/G	
TOTAL TETRACHLORODIBENZOFURANS	8200	PG/G	
TOTAL PENTACHLORODIBENZOFURANS	6600	PG/G	
TOTAL HEXACHLORODIBENZOFURANS	4600	PG/G	
TOTAL HEPTACHLORODIBENZOFURANS	2900	PG/G	
BZ-1 (2-CHLOROBIPHENYL)	4.9	NG/G	
BZ-2 (3-CHLOROBIPHENYL)	42	NG/G	SU
BZ-3 (4-CHLOROBIPHENYL)	22	NG/G	SU
BZ-10, BZ-4	0.5	NG/G	LT
2,4,5,6-TETRACHLORO-m-XYLENE (Surrogate)	161	NG/G	
BZ-7, BZ-9	2.1	NG/G	
BZ-6 (2,3'-DICHLOROBIPHENYL)	4.7	NG/G	
BZ-8, BZ-5	3.8	NG/G	
HEXACHLOROBENZENE	18	NG/G	
BZ-19 (2,2',6-TRICHLOROBIPHENYL)	5.6	NG/G	
BZ-12 (3,4-DICHLOROBIPHENYL)(Surrogate)	7.4	NG/G	
BZ-18 (2,2',5-TRICHLOROBIPHENYL)	6.3	NG/G	
BZ-15, BZ-17	0.5	NG/G	LT
BZ-24, BZ-27	0.5	NG/G	LT
BZ-16, BZ-32	0.5	NG/G	LT
BZ-29 (2,4,5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-26 (2,3',5-TRICHLOROBIPHENYL)	0.8	NG/G	
BZ-25 (2,3',4-TRICHLOROBIPHENYL)	0.7	NG/G	
BZ-31 (2,4',5-TRICHLOROBIPHENYL)	0.9	NG/G	
BZ-28 (2,4,4'-TRICHLOROBIPHENYL)	0.5	NG/G	
BZ-20, BZ-33, BZ-53	0.9	NG/G	
BZ-51 (2,2',4,6'-TETRACHLOROBIPHENYL)	1.5	NG/G	
BZ-22 (2,3,4'-TRICHLOROBIPHENYL)	0.5	NG/G	PL

Raw Ash Data

BZ-45 (2,2',3,6-TETRACHLOROBIPHENYL)	1.3	NG/G	
BZ-46 (2,2',3,6'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-39 (3,4',5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-52 (2,2',5,5'-TETRACHLOROBIPHENYL)	1.8	NG/G	
BZ-49 (2,2',4,5'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-47 (2,2',4,4'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-48 (2,2',4,5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-44 (2,2',3,5'-TETRACHLOROBIPHENYL)	1.2	NG/G	
BZ-37, BZ-42, BZ-59	1.7	NG/G	
BZ-41, BZ-64	0.5	NG/G	LT
BZ-40 (2,2',3,3'TETRACHLOROBIPHENYL)	17	NG/G	
BZ-67 (2,3',4,5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-63, OCS	0.5	NG/G	LT
BZ-74 (2,4,4',5-TETRACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-70 (2,3',4',5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-66, BZ-95	0.8	NG/G	
BZ-91 (2,2',3,4',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-56, BZ-60	2.1	NG/G	
BZ-92 (2,2',3,5,5'-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-84 (2,2',3,3',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-90, BZ-101	0.5	NG/G	LT
BZ-99 (2,2',4,4',5-PENTACHLOROBIPHENYL)	1.3	NG/G	
BZ-119 (2,3',4,4',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-83 (2,2',3,3',5-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-97 (2,2',3',4,5-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-87, BZ-115	1.9	NG/G	
BZ-85, 4,4'-DDE	0.5	NG/G	PL
BZ-136	0.5	NG/G	LT
BZ-77, BZ-110	1	NG/G	
BZ-82 (2,2',3,3',4-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-151 (2,2',3,5,5',6-HEXACHLOROBIPHENYL	0.5	NG/G	LT
BZ-135	0.5	NG/G	LT
BZ-107 (2,3,3',4',5-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-123, BZ-149	0.5	NG/G	PL
BZ-118	0.5	NG/G	PL
BZ-134	0.5	NG/G	LT
BZ-122 (2',3,3',4,5-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-146	0.5	NG/G	LT
BZ-153	0.5	NG/G	LT
BZ-132, BZ-105	3.5	NG/G	
BZ-141 (2,2',3,4,5,5'-HEXACHLOROBIPHENYL	0.5	NG/G	LT
BZ-179	0.5	NG/G	LT
BZ-137	0.5	NG/G	LT
BZ-130, BZ-176	0.5	NG/G	LT
BZ-138	0.5	NG/G	
BZ-158	0.5	NG/G	LT
BZ-129	0.5	NG/G	LT
BZ-178	0.7	NG/G	
BZ-175	47	NG/G	

Raw Ash Data

BZ-187	0.5	NG/G	LT
BZ-183	1.8	NG/G	
BZ-128	0.5	NG/G	LT
BZ-167	0.5	NG/G	PL
BZ-185	0.5	NG/G	LT
BZ-174	0.5	NG/G	LT
BZ-177	0.5	NG/G	LT
BZ-171, BZ-202	0.5	NG/G	LT
BZ-156	0.5	NG/G	LT
BZ-173, BZ-157, IUPAC-201	0.5	NG/G	PL
BZ-172	0.5	NG/G	PL
BZ-197	0.5	NG/G	LT
BZ-180	1.1	NG/G	
BZ-193	0.5	NG/G	LT
BZ-191	0.5	NG/G	LT
IUPAC-200	0.5	NG/G	LT
MIREX	0.5	NG/G	LT
BZ-170, BZ-190	0.5	NG/G	PL
IUPAC-199	0.5	NG/G	LT
BZ-203, BZ-196	0.5	NG/G	LT
BZ-189	0.5	NG/G	LT
BZ-195	0.6	NG/G	
BZ-194	0.6	NG/G	
BZ-206	3.4	NG/G	
BZ-209 (DECACHLOROBIPHENYL)(Surrogate)	144	NG/G	
PICES (Surrogates)		NG/G	
BZ-14 (3,5-DICHLOROBIPHENYL)	40	NG/G	
BZ-65 (2,3,5,6-TETRACHLOROBIPHENYL)	47	NG/G	
BZ-166, BZ-175	47	NG/G	
SOLIDS, DRY		PERCENT	NR
ACENAPHTHENE	5000	µG/KG	LT
ACENAPHTHYLENE	61	µG/KG	J
ACETOPHENONE	1400	µG/KG	J
2-ACETYLAMINOFLUORENE	9900	µG/KG	LT
ALDRIN	5000	µG/KG	LT
4-AMINOBIPHENYL	9900	µG/KG	LT
ANTHRACENE	80	µG/KG	J
AROCLOR 1016	99000	µG/KG	LT
AROCLOR 1221	99000	µG/KG	LT
AROCLOR 1232	99000	µG/KG	LT
AROCLOR 1242	99000	µG/KG	LT
AROCLOR 1248	99000	µG/KG	LT
AROCLOR 1254	99000	µG/KG	LT
AROCLOR 1260	99000	µG/KG	LT
BENZO(a)ANTHRACENE	94	µG/KG	J
BENZO(b)FLUORANTHENE	5000	µG/KG	LT
BENZO(k)FLUORANTHENE	5000	µG/KG	LT
BENZO(ghi)PERYLENE	160	µG/KG	BJ
BENZO(a)PYRENE	5000	µG/KG	LT

Raw Ash Data

BENZYL ALCOHOL	5000	µG/KG	LT
HCH,ALPHA	26	µG/KG	LT
HCH,BETA	26	µG/KG	LT
HCH,DELTA	26	µG/KG	LT
HCH,GAMMA (LINDANE)	26	µG/KG	LT
4-BROMOPHENYL PHENYL ETHER	5000	µG/KG	LT
BUTYL BENZYL PHTHALATE	5000	µG/KG	LT
CHLORDANE, GAMMA ISOMER	24000	µG/KG	LT
4-CHLOROANILINE	5000	µG/KG	LT
CHLOROBENZILATE	5000	µG/KG	LT
BIS(2-CHLOROETHOXY)METHANE	5000	µG/KG	LT
BIS(2-CHLOROETHYL)ETHER	5000	µG/KG	LT
BIS(2-CHLOROISOPROPYL)ETHER	5000	µG/KG	LT
4-CHLORO-3-METHYLPHENOL	5000	µG/KG	LT
2-CHLORONAPHTHALENE	5000	µG/KG	LT
2-CHLOROPHENOL	5000	µG/KG	LT
4-CHLOROPHENYL PHENYL ETHER	5000	µG/KG	LT
CHRYSENE	220	µG/KG	J
4,4'-DDD	5000	µG/KG	LT
4,4'-DDE	5000	µG/KG	LT
4,4'-DDT	50	µG/KG	LT
DIALLATE	5000	µG/KG	LT
DIBENZOFURAN	350	µG/KG	J
DIBENZ(A,H)ANTHRACENE	150	µG/KG	BJ
DI-N-BUTYL PHTHALATE	130	µG/KG	BJ
1,2-DICHLOROBENZENE	5000	µG/KG	LT
1,3-DICHLOROBENZENE	5000	µG/KG	LT
1,4-DICHLOROBENZENE	5000	µG/KG	LT
3,3'-DICHLOROBENZIDINE	5000	µG/KG	LT
2,4-DICHLOROPHENOL	5000	µG/KG	LT
2,6-DICHLOROPHENOL	5000	µG/KG	LT
DIELDRIN	50	µG/KG	LT
DIETHYLPHTHALATE	5000	µG/KG	LT
DIMETHOATE	9900	µG/KG	LT
DIMETHYLPHTHALATE	5000	µG/KG	LT
P-DIMETHYLAMINO-AZOBENZENE	9900	µG/KG	LT
3,3'-DIMETHYLBENZIDINE	5000	µG/KG	LT
7,12-DIMETHYLBENZ(A)ANTHRACENE	5000	µG/KG	LT
2,4-DIMETHYLPHENOL	5000	µG/KG	LT
1,3-DINITROBENZENE	5000	µG/KG	LT
2-METHYL-4,6-DINITROPHENOL	25000	µG/KG	LT
2,4-DINITROPHENOL	25000	µG/KG	LT
2,4-DINITROTOLUENE	5000	µG/KG	LT
2,6-DINITROTOLUENE	1100	µG/KG	J
DIPHENYLAMINE	9900	µG/KG	LT
DISULFOTON (Di-Syston)	5000	µG/KG	LT
ENDOSULFAN I	9900	µG/KG	LT
ENDOSULFAN II	5000	µG/KG	LT
ENDOSULFAN SULFATE	5000	µG/KG	LT

Raw Ash Data

ENDRIN	5000	µG/KG	LT
ENDRIN ALDEHYDE	5000	µG/KG	LT
ETHYL METHANESULFONATE	9900	µG/KG	LT
BIS(2-ETHYLHEXYL)PHTHALATE	310	µG/KG	BJ
FAMPHUR	9900	µG/KG	LT
FLUORANTHENE	170	µG/KG	J
FLUORENE	120	µG/KG	J
HEPTACHLOR	5000	µG/KG	LT
HEPTACHLOR EPOXIDE	5000	µG/KG	LT
HEXACHLOROBENZENE	5000	µG/KG	LT
HEXACHLOROBUTADIENE (C-46)	5000	µG/KG	LT
HEXACHLOROCYCLOPENTADIENE (C-56)	5000	µG/KG	LT
HEXACHLOROETHANE	5000	µG/KG	LT
HEXACHLOROPROPENE	5000	µG/KG	LT
INDENO(1,2,3-cd)PYRENE	120	µG/KG	BJ
ISODRIN	9900	µG/KG	LT
ISOPHORONE	5000	µG/KG	LT
ISOSAFROLE	5000	µG/KG	LT
KEPONE	9900	µG/KG	LT
METHAPYRILENE	50000	µG/KG	LT
METHOXYCHLOR	5000	µG/KG	LT
METHYL METHANESULFONATE	5000	µG/KG	LT
METHYL PARATHION	5000	µG/KG	LT
3-METHYLCHOLANTHRENE	5000	µG/KG	LT
2-METHYLNAPHTHALENE	400	µG/KG	J
2-METHYL PHENOL	670	µG/KG	J
3- OR 4-METHYLPHENOL	5000	µG/KG	LT
NAPHTHALENE	2400	µG/KG	J
1,4-NAPHTHOQUINONE	5000	µG/KG	LT
1-NAPHTHYLAMINE	5000	µG/KG	LT
2-NAPHTHYLAMINE	5000	µG/KG	LT
2-NITROANILINE	25000	µG/KG	LT
3-NITROANILINE	25000	µG/KG	LT
4-NITROANILINE	9900	µG/KG	LT
NITROBENZENE	5000	µG/KG	LT
2-NITROPHENOL	5000	µG/KG	LT
4-NITROPHENOL	25000	µG/KG	LT
N-NITROSODIETHYLAMINE	9900	µG/KG	LT
N-NITROSOSDIMETHYLAMINE	990	µG/KG	LT
N-NITROSODIPHENYLAMINE	2500	µG/KG	LT
N-NITROSODI-N-BUTYLAMINE	5000	µG/KG	LT
N-NITROSOMETHYL-ETHYLAMINE	5000	µG/KG	LT
N-NITROSOPIPERIDINE	99000	µG/KG	LT
N-NITROSO-DI-N-PROPYLAMINE	5000	µG/KG	LT
N-NITROSOPYRROLIDINE	5000	µG/KG	LT
5-NITRO-O-TOLUIDINE	5000	µG/KG	LT
DI-N-OCTYL PHTHALATE	5000	µG/KG	LT
PARATHION, ETHYL	5000	µG/KG	LT
PENTACHLOROBENZENE	5000	µG/KG	LT

Raw Ash Data

PENTACHLORONITROBENZENE	5000	µG/KG	LT
PENTACHLOROPHENOL	25000	µG/KG	LT
PHENACETIN	9900	µG/KG	LT
PHENANTHRENE	810	µG/KG	J
PHENOL	5000	µG/KG	LT
P-PHENYLENEDIAMINE	5000	µG/KG	LT
PHORATE	5000	µG/KG	LT
PRONAMIDE	5000	µG/KG	LT
PYRENE	180	µG/KG	J
SAFROLE	5000	µG/KG	LT
1,2,4,5-TETRACHLOROBENZENE	5000	µG/KG	LT
2,3,4,6-TETRACHLOROPHENOL	5000	µG/KG	LT
THIONAZIN	5000	µG/KG	LT
O-TOLUIDINE	5000	µG/KG	LT
TOXAPHENE	990	µG/KG	LT
1,2,4-TRICHLOROBENZENE	5000	µG/KG	LT
2,4,5-TRICHLOROPHENOL	38	µG/KG	J
2,4,6-TRICHLOROPHENOL	5000	µG/KG	LT
SOLIDS, DRY	99	PERCENT	
ARSENIC IN DRY SOLIDS	69	MG/KG	
SELENIUM IN DRY SOLIDS	1	MG/KG	LT
MERCURY IN DRY SOLIDS	0.1	MG/KG	LT
BERYLLIUM IN DRY SOLIDS	0.8	MG/KG	
SILVER IN DRY SOLIDS	8	MG/KG	LT
BARIUM IN DRY SOLIDS	119	MG/KG	
CADMIUM IN DRY SOLIDS	2	MG/KG	LT
COBALT IN DRY SOLIDS	5	MG/KG	
CHROMIUM IN DRY SOLIDS	92	MG/KG	
COPPER IN DRY SOLIDS	343	MG/KG	
IRON IN DRY SOLIDS	3560	MG/KG	
MANGANESE IN DRY SOLIDS	152	MG/KG	
NICKEL IN DRY SOLIDS	13	MG/KG	
STRONTIUM IN DRY SOLIDS	117	MG/KG	
TITANIUM IN DRY SOLIDS	1740	MG/KG	
VANADIUM IN DRY SOLIDS	32	MG/KG	
ZINC IN DRY SOLIDS	721	MG/KG	
MOLYBDENUM IN DRY SOLIDS	16	MG/KG	LT
LEAD IN DRY SOLIDS	32	MG/KG	
ANTIMONY IN DRY SOLIDS		MG/KG	NR
TIN IN DRY SOLIDS	104	MG/KG	
THALLIUM IN DRY SOLIDS		MG/KG	NR
ALUMINUM IN DRY SOLIDS	82400	MG/KG	
CALCIUM IN DRY SOLIDS	139000	MG/KG	
POTASSIUM IN DRY SOLIDS	3110	MG/KG	
MAGNESIUM IN DRY SOLIDS	2530	MG/KG	
SODIUM IN DRY SOLIDS	3450	MG/KG	
PYRIDINE	600	µG/KG	J
ALPHA-PICOLINE	160	µG/KG	J
ANILINE	5000	µG/KG	LT

Raw Ash Data

BENZIDINE	24000	µG/KG	LT
ENDRIN KETONE	500	µG/KG	LT
1,3,5-TRINITROBENZENE	5000	µG/KG	LT
4-NITROQUINOLINE 1-OXIDE	18000	µG/KG	LT
CHLORDANE, ALPHA ISOMER	24000	µG/KG	LT

Raw Ash Data

Metals from Avid Recycler

SOLIDS, DRY	92	PERCENT	
ARSENIC IN DRY SOLIDS	320	MG/KG	
SELENIUM IN DRY SOLIDS	1	MG/KG	LT
MERCURY IN DRY SOLIDS	0.1	MG/KG	LT
BERYLLIUM IN DRY SOLIDS	0.9	MG/KG	
SILVER IN DRY SOLIDS	9	MG/KG	LT
BARIUM IN DRY SOLIDS	185	MG/KG	
CADMIUM IN DRY SOLIDS	3	MG/KG	LT
COBALT IN DRY SOLIDS	11	MG/KG	
CHROMIUM IN DRY SOLIDS	300	MG/KG	
COPPER IN DRY SOLIDS	4910	MG/KG	
IRON IN DRY SOLIDS	4390	MG/KG	
MANGANESE IN DRY SOLIDS	541	MG/KG	
NICKEL IN DRY SOLIDS	22	MG/KG	
STRONTIUM IN DRY SOLIDS	102	MG/KG	
TITANIUM IN DRY SOLIDS	820	MG/KG	
VANADIUM IN DRY SOLIDS	37	MG/KG	
ZINC IN DRY SOLIDS	11500	MG/KG	
MOLYBDENUM IN DRY SOLIDS	17	MG/KG	LT
LEAD IN DRY SOLIDS	164	MG/KG	
ANTIMONY IN DRY SOLIDS		MG/KG	NR
TIN IN DRY SOLIDS	228	MG/KG	
THALLIUM IN DRY SOLIDS		MG/KG	NR
ALUMINUM IN DRY SOLIDS	101000	MG/KG	
CALCIUM IN DRY SOLIDS	94600	MG/KG	
POTASSIUM IN DRY SOLIDS	5000	MG/KG	
MAGNESIUM IN DRY SOLIDS	2870	MG/KG	
SODIUM IN DRY SOLIDS	5410	MG/KG	

Raw Ash Data

Matrix Spike of Non-Recycler

2,3,7,8-TETRACHLORODIBENZODIOXIN	820	PG/G	
1,2,3,7,8-PENTACHLORODIBENZODIOXIN	1200	PG/G	
1,2,3,4,7,8-HEXACHLORODIBENZODIOXIN	780	PG/G	
1,2,3,6,7,8-HEXACHLORODIBENZODIOXIN	780	PG/G	
1,2,3,7,8,9-HEXACHLORODIBENZODIOXIN	890	PG/G	
1,2,3,4,6,7,8-HEPTACHLORODIBENZODIOXIN	1500	PG/G	
OCTACHLORODIBENZODIOXIN	1600	PG/G	
2,3,7,8-TETRACHLORODIBENZOFURAN	970	PG/G	
1,2,3,7,8-PENTACHLORODIBENZOFURAN	510	PG/G	
2,3,4,7,8-PENTACHLORODIBENZOFURAN	1300	PG/G	
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	1300	PG/G	
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	1400	PG/G	
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	1600	PG/G	
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	950	PG/G	
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	3000	PG/G	
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	1200	PG/G	
OCTACHLORODIBENZOFURAN	2000	PG/G	
TOTAL TETRACHLORODIBENZODIOXINS	1200	PG/G	
TOTAL PENTACHLORODIBENZODIOXINS	1800	PG/G	
TOTAL HEXACHLORODIBENZODIOXINS	3500	PG/G	
TOTAL HEPTACHLORODIBENZODIOXINS	2200	PG/G	
TOTAL TETRACHLORODIBENZOFURANS	7000	PG/G	
TOTAL PENTACHLORODIBENZOFURANS	6600	PG/G	
TOTAL HEXACHLORODIBENZOFURANS	7600	PG/G	
TOTAL HEPTACHLORODIBENZOFURANS	4600	PG/G	
BZ-1 (2-CHLOROBIPHENYL)	45	NG/G	*
BZ-2 (3-CHLOROBIPHENYL)	38	NG/G	SU
BZ-3 (4-CHLOROBIPHENYL)	19	NG/G	SU
BZ-10, BZ-4	0.5	NG/G	LT
2,4,5,6-TETRACHLORO-m-XYLENE (Surrogate)	129	NG/G	
BZ-7, BZ-9	0.9	NG/G	
BZ-6 (2,3'-DICHLOROBIPHENYL)	1.7	NG/G	
BZ-8, BZ-5	2.7	NG/G	
HEXACHLOROBENZENE	14	NG/G	
BZ-19 (2,2',6-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-12 (3,4-DICHLOROBIPHENYL)(Surrogate)	1.7	NG/G	
BZ-18 (2,2',5-TRICHLOROBIPHENYL)	3.9	NG/G	
BZ-15, BZ-17	2.5	NG/G	INT*
BZ-24, BZ-27	0.5	NG/G	LT
BZ-16, BZ-32	0.5	NG/G	LT
BZ-29 (2,4,5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-26 (2,3',5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-25 (2,3',4-TRICHLOROBIPHENYL)	0.7	NG/G	
BZ-31 (2,4',5-TRICHLOROBIPHENYL)	0.8	NG/G	
BZ-28 (2,4,4'-TRICHLOROBIPHENYL)	0.5	NG/G	PL
BZ-20, BZ-33, BZ-53	2	NG/G	
BZ-51 (2,2',4,6'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT

Raw Ash Data

BZ-22 (2,3,4'-TRICHLOROBIPHENYL)	8.6	NG/G	*
BZ-45 (2,2',3,6-TETRACHLOROBIPHENYL)	3.8	NG/G	
BZ-46 (2,2',3,6'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-39 (3,4',5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-52 (2,2',5,5'-TETRACHLOROBIPHENYL)	1.4	NG/G	
BZ-49 (2,2',4,5'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-47 (2,2',4,4'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-48 (2,2',4,5-TETRACHLOROBIPHENYL)	13	NG/G	
BZ-44 (2,2',3,5'-TETRACHLOROBIPHENYL)	1	NG/G	
BZ-37, BZ-42, BZ-59	1.1	NG/G	
BZ-41, BZ-64	0.5	NG/G	LT
BZ-40 (2,2',3,3'TETRACHLOROBIPHENYL)	15	NG/G	
BZ-67 (2,3',4,5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-63, OCS	12	NG/G	EE*
BZ-74 (2,4,4',5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-70 (2,3',4',5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-66, BZ-95	0.6	NG/G	
BZ-91 (2,2',3,4',6-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-56, BZ-60	1.8	NG/G	
BZ-92 (2,2',3,5,5'-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-84 (2,2',3,3',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-90, BZ-101	0.5	NG/G	PL
BZ-99 (2,2',4,4',5-PENTACHLOROBIPHENYL)	1	NG/G	
BZ-119 (2,3',4,4',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-83 (2,2',3,3',5-PENTACHLOROBIPHENYL)	7.3	NG/G	*
BZ-97 (2,2',3',4,5-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-87, BZ-115	1.6	NG/G	
BZ-85, 4,4'-DDE	0.5	NG/G	
BZ-136	0.5	NG/G	LT
BZ-77, BZ-110	0.8	NG/G	
BZ-82 (2,2',3,3',4-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-151 (2,2',3,5,5',6-HEXACHLOROBIPHENYL	0.5	NG/G	LT
BZ-135	0.5	NG/G	LT
BZ-107 (2,3,3',4',5-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-123, BZ-149	0.5	NG/G	PL
BZ-118	8.3	NG/G	*
BZ-134	0.5	NG/G	LT
BZ-122 (2',3,3',4,5-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-146	0.5	NG/G	LT
BZ-153	0.5	NG/G	LT
BZ-132, BZ-105	1	NG/G	
BZ-141 (2,2',3,4,5,5'-HEXACHLOROBIPHENYL	0.5	NG/G	PL
BZ-179	0.5	NG/G	LT
BZ-137	0.5	NG/G	LT
BZ-130, BZ-176	0.5	NG/G	PL
BZ-138	0.5	NG/G	PL
BZ-158	0.5	NG/G	LT
BZ-129	8.4	NG/G	*
BZ-178	0.5	NG/G	LT

Raw Ash Data

BZ-175	39	NG/G	
BZ-187	0.5	NG/G	LT
BZ-183	1.7	NG/G	
BZ-128	0.5	NG/G	LT
BZ-167	0.5	NG/G	PL
BZ-185	0.5	NG/G	LT
BZ-174	0.5	NG/G	LT
BZ-177	0.5	NG/G	LT
BZ-171, BZ-202	0.5	NG/G	LT
BZ-156	0.5	NG/G	PL
BZ-173, BZ-157, IUPAC-201	0.5	NG/G	LT
BZ-172	8.6	NG/G	*
BZ-197	0.5	NG/G	PL
BZ-180	1.2	NG/G	
BZ-193	0.5	NG/G	LT
BZ-191	0.5	NG/G	LT
IUPAC-200	0.5	NG/G	LT
MIREX	0.5	NG/G	LT
BZ-170, BZ-190	0.7	NG/G	
IUPAC-199	0.5	NG/G	PL
BZ-203, BZ-196	0.5	NG/G	LT
BZ-189	0.5	NG/G	PL
BZ-195	0.7	NG/G	
BZ-194	1.1	NG/G	
BZ-206	11	NG/G	*
BZ-209 (DECACHLOROBIPHENYL)(Surrogate)	128	NG/G	
PICES (Surrogates)		NG/G	
BZ-14 (3,5-DICHLOROBIPHENYL)	33	NG/G	
BZ-65 (2,3,5,6-TETRACHLOROBIPHENYL)	32	NG/G	
BZ-166, BZ-175	39	NG/G	
SOLIDS, DRY		PERCENT	NR
ACENAPHTHENE	13000	µG/KG	
ACENAPHTHYLENE	91	µG/KG	J
ACETOPHENONE	1200	µG/KG	J
2-ACETYLAMINOFLUORENE	9900	µG/KG	LT
ALDRIN	5000	µG/KG	LT
4-AMINOBIPHENYL	9900	µG/KG	LT
ANTHRACENE	110	µG/KG	J
AROCLOR 1016	99000	µG/KG	LT
AROCLOR 1221	99000	µG/KG	LT
AROCLOR 1232	99000	µG/KG	LT
AROCLOR 1242	99000	µG/KG	LT
AROCLOR 1248	99000	µG/KG	LT
AROCLOR 1254	99000	µG/KG	LT
AROCLOR 1260	99000	µG/KG	LT
BENZO(a)ANTHRACENE	100	µG/KG	J
BENZO(b)FLUORANTHENE	5000	µG/KG	LT
BENZO(k)FLUORANTHENE	5000	µG/KG	LT
BENZO(ghi)PERYLENE	5000	µG/KG	LT

Raw Ash Data

BENZO(a)PYRENE	5000	µG/KG	LT
BENZYL ALCOHOL	5000	µG/KG	LT
HCH,ALPHA	26	µG/KG	LT
HCH,BETA	26	µG/KG	LT
HCH,DELTA	26	µG/KG	LT
HCH,GAMMA (LINDANE)	26	µG/KG	LT
4-BROMOPHENYL PHENYL ETHER	5000	µG/KG	LT
BUTYL BENZYL PHTHALATE	5000	µG/KG	LT
CHLORDANE, GAMMA ISOMER	24000	µG/KG	LT
4-CHLOROANILINE	5000	µG/KG	LT
CHLOROBENZILATE	5000	µG/KG	LT
BIS(2-CHLOROETHOXY)METHANE	5000	µG/KG	LT
BIS(2-CHLOROETHYL)ETHER	5000	µG/KG	LT
BIS(2-CHLOROISOPROPYL)ETHER	5000	µG/KG	LT
4-CHLORO-3-METHYLPHENOL	23000	µG/KG	
2-CHLORONAPHTHALENE	5000	µG/KG	LT
2-CHLOROPHENOL	17000	µG/KG	
4-CHLOROPHENYL PHENYL ETHER	5000	µG/KG	LT
CHRYSENE	240	µG/KG	J
4,4'-DDD	5000	µG/KG	LT
4,4'-DDE	5000	µG/KG	LT
4,4'-DDT	50	µG/KG	LT
DIALLATE	5000	µG/KG	LT
DIBENZOFURAN	350	µG/KG	J
DIBENZ(A,H)ANTHRACENE	5000	µG/KG	LT
DI-N-BUTYL PHTHALATE	5000	µG/KG	LT
1,2-DICHLOROBENZENE	5000	µG/KG	LT
1,3-DICHLOROBENZENE	5000	µG/KG	LT
1,4-DICHLOROBENZENE	10000	µG/KG	
3,3'-DICHLOROBENZIDINE	5000	µG/KG	LT
2,4-DICHLOROPHENOL	5000	µG/KG	LT
2,6-DICHLOROPHENOL	5000	µG/KG	LT
DIELDRIN	50	µG/KG	LT
DIETHYLPHTHALATE	5000	µG/KG	LT
DIMETHOATE	9900	µG/KG	LT
DIMETHYLPHTHALATE	5000	µG/KG	LT
P-DIMETHYLAMINO-AZOBENZENE	9900	µG/KG	LT
3,3'-DIMETHYLBENZIDINE	5000	µG/KG	LT
7,12-DIMETHYLBENZ(A)ANTHRACENE	5000	µG/KG	LT
2,4-DIMETHYLPHENOL	5000	µG/KG	LT
1,3-DINITROBENZENE	5000	µG/KG	LT
2-METHYL-4,6-DINITROPHENOL	25000	µG/KG	LT
2,4-DINITROPHENOL	25000	µG/KG	LT
2,4-DINITROTOLUENE	9100	µG/KG	
2,6-DINITROTOLUENE	5000	µG/KG	LT
DIPHENYLAMINE	9900	µG/KG	LT
DISULFOTON (Di-Syston)	5000	µG/KG	LT
ENDOSULFAN I	9900	µG/KG	LT
ENDOSULFAN II	5000	µG/KG	LT

Raw Ash Data

ENDOSULFAN SULFATE	5000	µG/KG	LT
ENDRIN	5000	µG/KG	LT
ENDRIN ALDEHYDE	5000	µG/KG	LT
ETHYL METHANESULFONATE	9900	µG/KG	LT
BIS(2-ETHYLHEXYL)PHTHALATE	1000	µG/KG	BJ
FAMPHUR	9900	µG/KG	LT
FLUORANTHENE	230	µG/KG	J
FLUORENE	170	µG/KG	J
HEPTACHLOR	5000	µG/KG	LT
HEPTACHLOR EPOXIDE	5000	µG/KG	LT
HEXACHLOROBENZENE	5000	µG/KG	LT
HEXACHLOROBUTADIENE (C-46)	5000	µG/KG	LT
HEXACHLOROCYCLOPENTADIENE (C-56)	5000	µG/KG	LT
HEXACHLOROETHANE	5000	µG/KG	LT
HEXACHLOROPROPENE	5000	µG/KG	LT
INDENO(1,2,3-cd)PYRENE	5000	µG/KG	LT
ISODRIN	9900	µG/KG	LT
ISOPHORONE	5000	µG/KG	LT
ISOSAFROLE	5000	µG/KG	LT
KEPONE	9900	µG/KG	LT
METHAPYRILENE	50000	µG/KG	LT
METHOXYCHLOR	5000	µG/KG	LT
METHYL METHANESULFONATE	5000	µG/KG	LT
METHYL PARATHION	5000	µG/KG	LT
3-METHYLCHOLANTHRENE	5000	µG/KG	LT
2-METHYLNAPHTHALENE	530	µG/KG	J
2-METHYL PHENOL	620	µG/KG	J
3- OR 4-METHYLPHENOL	5000	µG/KG	LT
NAPHTHALENE	2000	µG/KG	J
1,4-NAPHTHOQUINONE	5000	µG/KG	LT
1-NAPHTHYLAMINE	5000	µG/KG	LT
2-NAPHTHYLAMINE	5000	µG/KG	LT
2-NITROANILINE	25000	µG/KG	LT
3-NITROANILINE	25000	µG/KG	LT
4-NITROANILINE	9900	µG/KG	LT
NITROBENZENE	5000	µG/KG	LT
2-NITROPHENOL	5000	µG/KG	LT
4-NITROPHENOL	23000	µG/KG	J
N-NITROSODIETHYLAMINE	9900	µG/KG	LT
N-NITROSOSDIMETHYLAMINE	990	µG/KG	LT
N-NITROSODIPHENYLAMINE	2500	µG/KG	LT
N-NITROSODI-N-BUTYLAMINE	5000	µG/KG	LT
N-NITROSOMETHYL-ETHYLAMINE	5000	µG/KG	LT
N-NITROSOPIPERIDINE	99000	µG/KG	LT
N-NITROSO-DI-N-PROPYLAMINE	16000	µG/KG	
N-NITROSOPYRROLIDINE	5000	µG/KG	LT
5-NITRO-O-TOLUIDINE	5000	µG/KG	LT
DI-N-OCTYL PHTHALATE	5000	µG/KG	LT
PARATHION, ETHYL	5000	µG/KG	LT

Raw Ash Data

PENTACHLOROBENZENE	5000	µG/KG	LT
PENTACHLORONITROBENZENE	5000	µG/KG	LT
PENTACHLOROPHENOL	25000	µG/KG	
PHENACETIN	9900	µG/KG	LT
PHENANTHRENE	1100	µG/KG	J
PHENOL	20000	µG/KG	
P-PHENYLENEDIAMINE	5000	µG/KG	LT
PHORATE	5000	µG/KG	LT
PRONAMIDE	5000	µG/KG	LT
PYRENE	15000	µG/KG	
SAFROLE	5000	µG/KG	LT
1,2,4,5-TETRACHLOROBENZENE	5000	µG/KG	LT
2,3,4,6-TETRACHLOROPHENOL	5000	µG/KG	LT
THIONAZIN	5000	µG/KG	LT
O-TOLUIDINE	5000	µG/KG	LT
TOXAPHENE	990	µG/KG	LT
1,2,4-TRICHLOROBENZENE	13000	µG/KG	
2,4,5-TRICHLOROPHENOL	12000	µG/KG	LT
2,4,6-TRICHLOROPHENOL	31	µG/KG	J
SOLIDS, DRY		PERCENT	NR
ARSENIC IN DRY SOLIDS	69	MG/KG	
SELENIUM IN DRY SOLIDS	1.2	MG/KG	
MERCURY IN DRY SOLIDS	0.1	MG/KG	
BERYLLIUM IN DRY SOLIDS	10.4	MG/KG	
SILVER IN DRY SOLIDS	8	MG/KG	
BARIUM IN DRY SOLIDS	499	MG/KG	
CADMIUM IN DRY SOLIDS	10	MG/KG	
COBALT IN DRY SOLIDS	97	MG/KG	
CHROMIUM IN DRY SOLIDS	123	MG/KG	
COPPER IN DRY SOLIDS	388	MG/KG	
IRON IN DRY SOLIDS	3820	MG/KG	
MANGANESE IN DRY SOLIDS	246	MG/KG	
NICKEL IN DRY SOLIDS	109	MG/KG	
STRONTIUM IN DRY SOLIDS	115	MG/KG	
TITANIUM IN DRY SOLIDS	1930	MG/KG	
VANADIUM IN DRY SOLIDS	125	MG/KG	
ZINC IN DRY SOLIDS	859	MG/KG	
MOLYBDENUM IN DRY SOLIDS	16	MG/KG	LT
LEAD IN DRY SOLIDS	128	MG/KG	
ANTIMONY IN DRY SOLIDS		MG/KG	NR
TIN IN DRY SOLIDS	103	MG/KG	
THALLIUM IN DRY SOLIDS		MG/KG	NR
ALUMINUM IN DRY SOLIDS	87300	MG/KG	
CALCIUM IN DRY SOLIDS	147000	MG/KG	
POTASSIUM IN DRY SOLIDS	3230	MG/KG	
MAGNESIUM IN DRY SOLIDS	2530	MG/KG	
SODIUM IN DRY SOLIDS	2970	MG/KG	
PYRIDINE	660	µG/KG	J
ALPHA-PICOLINE	150	µG/KG	J

Raw Ash Data

ANILINE	5000 µG/KG	LT
BENZIDINE	24000 µG/KG	LT
ENDRIN KETONE	500 µG/KG	LT
1,3,5-TRINITROBENZENE	5000 µG/KG	LT
4-NITROQUINOLINE 1-OXIDE	18000 µG/KG	LT
CHLORDANE, ALPHA ISOMER	24000 µG/KG	LT

* - matrix spike of 10 ng/g

Raw Ash Data

Matrix Spike Duplicate of Non-Recycler

2,3,7,8-TETRACHLORODIBENZODIOXIN	790	PG/G	
1,2,3,7,8-PENTACHLORODIBENZODIOXIN	1200	PG/G	
1,2,3,4,7,8-HEXACHLORODIBENZODIOXIN	770	PG/G	
1,2,3,6,7,8-HEXACHLORODIBENZODIOXIN	750	PG/G	
1,2,3,7,8,9-HEXACHLORODIBENZODIOXIN	860	PG/G	
1,2,3,4,6,7,8-HEPTACHLORODIBENZODIOXIN	1400	PG/G	
OCTACHLORODIBENZODIOXIN	1500	PG/G	
2,3,7,8-TETRACHLORODIBENZOFURAN	950	PG/G	
1,2,3,7,8-PENTACHLORODIBENZOFURAN	450	PG/G	
2,3,4,7,8-PENTACHLORODIBENZOFURAN	1100	PG/G	
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	1200	PG/G	
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	1300	PG/G	
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	1400	PG/G	
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	880	PG/G	
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	2300	PG/G	
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	1000	PG/G	
OCTACHLORODIBENZOFURAN	1700	PG/G	
TOTAL TETRACHLORODIBENZODIOXINS	1200	PG/G	
TOTAL PENTACHLORODIBENZODIOXINS	1700	PG/G	
TOTAL HEXACHLORODIBENZODIOXINS	3300	PG/G	
TOTAL HEPTACHLORODIBENZODIOXINS	2000	PG/G	
TOTAL TETRACHLORODIBENZOFURANS	6300	PG/G	
TOTAL PENTACHLORODIBENZOFURANS	5400	PG/G	
TOTAL HEXACHLORODIBENZOFURANS	6400	PG/G	
TOTAL HEPTACHLORODIBENZOFURANS	3600	PG/G	
BZ-1 (2-CHLOROBIPHENYL)	42	NG/G	*
BZ-2 (3-CHLOROBIPHENYL)	37	NG/G	SU
BZ-3 (4-CHLOROBIPHENYL)	21	NG/G	SU
BZ-10, BZ-4	0.5	NG/G	LT
2,4,5,6-TETRACHLORO-m-XYLENE (Surrogate)	146	NG/G	
BZ-7, BZ-9	1.3	NG/G	
BZ-6 (2,3'-DICHLOROBIPHENYL)	4.1	NG/G	
BZ-8, BZ-5	3.5	NG/G	
HEXACHLOROBENZENE	11	NG/G	
BZ-19 (2,2',6-TRICHLOROBIPHENYL)	4.3	NG/G	
BZ-12 (3,4-DICHLOROBIPHENYL)(Surrogate)	3.8	NG/G	
BZ-18 (2,2',5-TRICHLOROBIPHENYL)	3.8	NG/G	
BZ-15, BZ-17	43	NG/G	INT*
BZ-24, BZ-27	0.5	NG/G	LT
BZ-16, BZ-32	0.5	NG/G	LT
BZ-29 (2,4,5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-26 (2,3',5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-25 (2,3',4-TRICHLOROBIPHENYL)	0.8	NG/G	
BZ-31 (2,4',5-TRICHLOROBIPHENYL)	1.6	NG/G	
BZ-28 (2,4,4'-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-20, BZ-33, BZ-53	2.1	NG/G	
BZ-51 (2,2',4,6'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-22 (2,3,4'-TRICHLOROBIPHENYL)	9.4	NG/G	*

Raw Ash Data

BZ-45 (2,2',3,6-TETRACHLOROBIPHENYL)	1	NG/G	
BZ-46 (2,2',3,6'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-39 (3,4',5-TRICHLOROBIPHENYL)	0.5	NG/G	LT
BZ-52 (2,2',5,5'-TETRACHLOROBIPHENYL)	1.3	NG/G	
BZ-49 (2,2',4,5'-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-47 (2,2',4,4'-TETRACHLOROBIPHENYL)	0.9	NG/G	
BZ-48 (2,2',4,5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-44 (2,2',3,5'-TETRACHLOROBIPHENYL)	0.9	NG/G	
BZ-37, BZ-42, BZ-59	1.2	NG/G	
BZ-41, BZ-64	0.5	NG/G	LT
BZ-40 (2,2',3,3'TETRACHLOROBIPHENYL)	9.7	NG/G	
BZ-67 (2,3',4,5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-63, OCS	9.4	NG/G	*
BZ-74 (2,4,4',5-TETRACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-70 (2,3',4',5-TETRACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-66, BZ-95	0.8	NG/G	
BZ-91 (2,2',3,4',6-PENTACHLOROBIPHENYL)	0.5	NG/G	
BZ-56, BZ-60	1.9	NG/G	
BZ-92 (2,2',3,5,5'-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-84 (2,2',3,3',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-90, BZ-101	0.5	NG/G	PL
BZ-99 (2,2',4,4',5-PENTACHLOROBIPHENYL)	1	NG/G	
BZ-119 (2,3',4,4',6-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-83 (2,2',3,3',5-PENTACHLOROBIPHENYL)	8.3	NG/G	*
BZ-97 (2,2',3',4,5-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-87, BZ-115	1.9	NG/G	
BZ-85, 4,4'-DDE	0.5	NG/G	PL
BZ-136	0.5	NG/G	LT
BZ-77, BZ-110	0.8	NG/G	
BZ-82 (2,2',3,3',4-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-151 (2,2',3,5,5',6-HEXACHLOROBIPHENYL	0.5	NG/G	LT
BZ-135	0.5	NG/G	LT
BZ-107 (2,3,3',4',5-PENTACHLOROBIPHENYL)	0.5	NG/G	LT
BZ-123, BZ-149	0.5	NG/G	LT
BZ-118	9.1	NG/G	*
BZ-134	0.5	NG/G	LT
BZ-122 (2',3,3',4,5-PENTACHLOROBIPHENYL)	0.5	NG/G	PL
BZ-146	0.5	NG/G	LT
BZ-153	0.5	NG/G	LT
BZ-132, BZ-105	0.9	NG/G	
BZ-141 (2,2',3,4,5,5'-HEXACHLOROBIPHENYL	0.5	NG/G	LT
BZ-179	0.5	NG/G	LT
BZ-137	0.5	NG/G	LT
BZ-130, BZ-176	0.5	NG/G	PL
BZ-138	0.5	NG/G	PL
BZ-158	0.5	NG/G	LT
BZ-129	9.3	NG/G	*
BZ-178	0.5	NG/G	LT
BZ-175	45	NG/G	

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BZ-187	0.5	NG/G	LT
BZ-183	0.5	NG/G	LT
BZ-128	0.5	NG/G	LT
BZ-167	0.5	NG/G	PL
BZ-185	0.5	NG/G	LT
BZ-174	0.5	NG/G	LT
BZ-177	0.5	NG/G	LT
BZ-171, BZ-202	0.5	NG/G	LT
BZ-156	0.5	NG/G	LT
BZ-173, BZ-157, IUPAC-201	0.5	NG/G	LT
BZ-172	9.3	NG/G	*
BZ-197	0.5	NG/G	PL
BZ-180	1.1	NG/G	
BZ-193	0.5	NG/G	LT
BZ-191	0.5	NG/G	LT
IUPAC-200	0.5	NG/G	LT
MIREX	0.5	NG/G	LT
BZ-170, BZ-190	0.5	NG/G	PL
IUPAC-199	0.5	NG/G	LT
BZ-203, BZ-196	0.5	NG/G	LT
BZ-189	0.5	NG/G	PL
BZ-195	0.7	NG/G	
BZ-194	0.8	NG/G	
BZ-206	11	NG/G	*
BZ-209 (DECACHLOROBIPHENYL)(Surrogate)	141	NG/G	
PICES (Surrogates)		NG/G	
BZ-14 (3,5-DICHLOROBIPHENYL)	36	NG/G	
BZ-65 (2,3,5,6-TETRACHLOROBIPHENYL)	40	NG/G	
BZ-166, BZ-175	45	NG/G	
SOLIDS, DRY		PERCENT	NR
ACENAPHTHENE	5000	µG/KG	LT
ACENAPHTHYLENE	5000	µG/KG	LT
ACETOPHENONE	5000	µG/KG	LT
2-ACETYLAMINOFLUORENE	9900	µG/KG	LT
ALDRIN	5000	µG/KG	LT
4-AMINOBIPHENYL	9900	µG/KG	LT
ANTHRACENE	110	µG/KG	J
AROCLOR 1016	99000	µG/KG	LT
AROCLOR 1221	99000	µG/KG	LT
AROCLOR 1232	99000	µG/KG	LT
AROCLOR 1242	99000	µG/KG	LT
AROCLOR 1248	99000	µG/KG	LT
AROCLOR 1254	99000	µG/KG	LT
AROCLOR 1260	99000	µG/KG	LT
BENZO(a)ANTHRACENE	100	µG/KG	J
BENZO(b)FLUORANTHENE	5000	µG/KG	LT
BENZO(k)FLUORANTHENE	5000	µG/KG	LT
BENZO(ghi)PERYLENE	5000	µG/KG	LT
BENZO(a)PYRENE	5000	µG/KG	LT

Raw Ash Data

BENZYL ALCOHOL	5000	µG/KG	LT
HCH,ALPHA	26	µG/KG	LT
HCH,BETA	26	µG/KG	LT
HCH,DELTA	26	µG/KG	LT
HCH,GAMMA (LINDANE)	26	µG/KG	LT
4-BROMOPHENYL PHENYL ETHER	5000	µG/KG	LT
BUTYL BENZYL PHTHALATE	5000	µG/KG	LT
CHLORDANE, GAMMA ISOMER	24000	µG/KG	LT
4-CHLOROANILINE	5000	µG/KG	LT
CHLOROBENZILATE	5000	µG/KG	LT
BIS(2-CHLOROETHOXY)METHANE	5000	µG/KG	LT
BIS(2-CHLOROETHYL)ETHER	5000	µG/KG	LT
BIS(2-CHLOROISOPROPYL)ETHER	5000	µG/KG	LT
4-CHLORO-3-METHYLPHENOL	5000	µG/KG	LT
2-CHLORONAPHTHALENE	5000	µG/KG	LT
2-CHLOROPHENOL	5000	µG/KG	LT
4-CHLOROPHENYL PHENYL ETHER	5000	µG/KG	LT
CHRYSENE	240	µG/KG	J
4,4'-DDD	5000	µG/KG	LT
4,4'-DDE	5000	µG/KG	LT
4,4'-DDT	50	µG/KG	LT
DIALLATE	5000	µG/KG	LT
DIBENZOFURAN	5000	µG/KG	LT
DIBENZ(A,H)ANTHRACENE	5000	µG/KG	LT
DI-N-BUTYL PHTHALATE	5000	µG/KG	LT
1,2-DICHLOROBENZENE	5000	µG/KG	LT
1,3-DICHLOROBENZENE	5000	µG/KG	LT
1,4-DICHLOROBENZENE	5000	µG/KG	LT
3,3'-DICHLOROBENZIDINE	5000	µG/KG	LT
2,4-DICHLOROPHENOL	5000	µG/KG	LT
2,6-DICHLOROPHENOL	5000	µG/KG	LT
DIELDRIN	50	µG/KG	LT
DIETHYLPHTHALATE	5000	µG/KG	LT
DIMETHOATE	9900	µG/KG	LT
DIMETHYLPHTHALATE	5000	µG/KG	LT
P-DIMETHYLAMINO-AZOBENZENE	9900	µG/KG	LT
3,3'-DIMETHYLBENZIDINE	5000	µG/KG	LT
7,12-DIMETHYLBENZ(A)ANTHRACENE	5000	µG/KG	LT
2,4-DIMETHYLPHENOL	5000	µG/KG	LT
1,3-DINITROBENZENE	5000	µG/KG	LT
2-METHYL-4,6-DINITROPHENOL	25000	µG/KG	LT
2,4-DINITROPHENOL	25000	µG/KG	LT
2,4-DINITROTOLUENE	5000	µG/KG	LT
2,6-DINITROTOLUENE	5000	µG/KG	LT
DIPHENYLAMINE	9900	µG/KG	LT
DISULFOTON (Di-Syston)	5000	µG/KG	LT
ENDOSULFAN I	9900	µG/KG	LT
ENDOSULFAN II	5000	µG/KG	LT
ENDOSULFAN SULFATE	5000	µG/KG	LT

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ENDRIN	5000	µG/KG	LT
ENDRIN ALDEHYDE	5000	µG/KG	LT
ETHYL METHANESULFONATE	9900	µG/KG	LT
BIS(2-ETHYLHEXYL)PHTHALATE	1000	µG/KG	BJ
FAMPHUR	9900	µG/KG	LT
FLUORANTHENE	230	µG/KG	J
FLUORENE	5000	µG/KG	LT
HEPTACHLOR	5000	µG/KG	LT
HEPTACHLOR EPOXIDE	5000	µG/KG	LT
HEXACHLOROBENZENE	5000	µG/KG	LT
HEXACHLOROBUTADIENE (C-46)	5000	µG/KG	LT
HEXACHLOROCYCLOPENTADIENE (C-56)	5000	µG/KG	LT
HEXACHLOROETHANE	5000	µG/KG	LT
HEXACHLOROPROPENE	5000	µG/KG	LT
INDENO(1,2,3-cd)PYRENE	5000	µG/KG	LT
ISODRIN	9900	µG/KG	LT
ISOPHORONE	5000	µG/KG	LT
ISOSAFROLE	5000	µG/KG	LT
KEPONE	9900	µG/KG	LT
METHAPYRILENE	50000	µG/KG	LT
METHOXYCHLOR	5000	µG/KG	LT
METHYL METHANESULFONATE	5000	µG/KG	LT
METHYL PARATHION	5000	µG/KG	LT
3-METHYLCHOLANTHRENE	5000	µG/KG	LT
2-METHYLNAPHTHALENE	5000	µG/KG	LT
2-METHYL PHENOL	5000	µG/KG	LT
3- OR 4-METHYLPHENOL	5000	µG/KG	LT
NAPHTHALENE	5000	µG/KG	LT
1,4-NAPHTHOQUINONE	5000	µG/KG	LT
1-NAPHTHYLAMINE	5000	µG/KG	LT
2-NAPHTHYLAMINE	5000	µG/KG	LT
2-NITROANILINE	25000	µG/KG	LT
3-NITROANILINE	25000	µG/KG	LT
4-NITROANILINE	9900	µG/KG	LT
NITROBENZENE	5000	µG/KG	LT
2-NITROPHENOL	5000	µG/KG	LT
4-NITROPHENOL	25000	µG/KG	LT
N-NITROSODIETHYLAMINE	9900	µG/KG	LT
N-NITROSOSDIMETHYLAMINE	990	µG/KG	LT
N-NITROSODIPHENYLAMINE	2500	µG/KG	LT
N-NITROSODI-N-BUTYLAMINE	5000	µG/KG	LT
N-NITROSOMETHYL-ETHYLAMINE	5000	µG/KG	LT
N-NITROSOPIPERIDINE	99000	µG/KG	LT
N-NITROSO-DI-N-PROPYLAMINE	5000	µG/KG	LT
N-NITROSOPYRROLIDINE	5000	µG/KG	LT
5-NITRO-O-TOLUIDINE	5000	µG/KG	LT
DI-N-OCTYL PHTHALATE	5000	µG/KG	LT
PARATHION, ETHYL	5000	µG/KG	LT
PENTACHLOROBENZENE	5000	µG/KG	LT

Raw Ash Data

PENTACHLORONITROBENZENE	5000	µG/KG	LT
PENTACHLOROPHENOL	25000	µG/KG	
PHENACETIN	9900	µG/KG	LT
PHENANTHRENE	1100	µG/KG	J
PHENOL	5000	µG/KG	LT
P-PHENYLENEDIAMINE	5000	µG/KG	LT
PHORATE	5000	µG/KG	LT
PRONAMIDE	5000	µG/KG	LT
PYRENE	15000	µG/KG	
SAFROLE	5000	µG/KG	LT
1,2,4,5-TETRACHLOROBENZENE	5000	µG/KG	LT
2,3,4,6-TETRACHLOROPHENOL	5000	µG/KG	LT
THIONAZIN	5000	µG/KG	LT
O-TOLUIDINE	5000	µG/KG	LT
TOXAPHENE	990	µG/KG	LT
1,2,4-TRICHLOROBENZENE	5000	µG/KG	LT
2,4,5-TRICHLOROPHENOL	12000	µG/KG	LT
2,4,6-TRICHLOROPHENOL	5000	µG/KG	LT
PYRIDINE	50000	µG/KG	LT
ALPHA-PICOLINE	50000	µG/KG	LT
ANILINE	5000	µG/KG	LT
BENZIDINE	24000	µG/KG	LT
ENDRIN KETONE	500	µG/KG	LT
1,3,5-TRINITROBENZENE	5000	µG/KG	LT
4-NITROQUINOLINE 1-OXIDE	18000	µG/KG	LT
CHLORDANE, ALPHA ISOMER	24000	µG/KG	LT

* - matrix spike of 10 ng/g

Raw Ash Data

Synthetic QC for Metals

SOLIDS, DRY		PERCENT	NR
ARSENIC IN DRY SOLIDS	130	MG/KG	
SELENIUM IN DRY SOLIDS	160	MG/KG	
MERCURY IN DRY SOLIDS	5.41	MG/KG	
BERYLLIUM IN DRY SOLIDS	77	MG/KG	
SILVER IN DRY SOLIDS	78	MG/KG	
BARIUM IN DRY SOLIDS	184	MG/KG	
CADMIUM IN DRY SOLIDS	117	MG/KG	
COBALT IN DRY SOLIDS	83	MG/KG	
CHROMIUM IN DRY SOLIDS	88	MG/KG	
COPPER IN DRY SOLIDS	86	MG/KG	
IRON IN DRY SOLIDS	6160	MG/KG	
MANGANESE IN DRY SOLIDS	218	MG/KG	
NICKEL IN DRY SOLIDS	127	MG/KG	
STRONTIUM IN DRY SOLIDS	40	MG/KG	LT
TITANIUM IN DRY SOLIDS	173	MG/KG	
VANADIUM IN DRY SOLIDS	61	MG/KG	
ZINC IN DRY SOLIDS	131	MG/KG	
MOLYBDENUM IN DRY SOLIDS	77	MG/KG	

TECHNICAL REPORT DATA
Please read Instructions on the reverse before completing)

1. REPORT NO.	2.	3. RECIPIENT'S ACCESSION NO.
EPA/600/R-97-134b		

4. TITLE AND SUBTITLE	5. REPORT DATE
Evaluation of Emissions from the Open Burning of Household Waste in Barrels, Volume 2. Appendices A-G	November 1997
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7. AUTHOR(S)	8.PERFORMING ORGANIZATION REPORT NO.
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15. SUPPLEMENTARY NOTES
APPCD project officer is Paul M. Lemieux, Mail Drop 65, 919/541-0962. Volume 1 is the basic technical report.

16. ABSTRACT

The report gives results of a detailed emissions characterization study, undertaken to examine, characterize, and quantify emissions from the simulated burning of household waste material in barrels. The study evaluated two waste streams: that of an avid recycler, who removed most of the recyclable content from the waste stream prior to combustion; and that of a non-recycler, who combusts the entire stream of household waste. Estimated emissions were developed in units of mass emitted per mass of waste burned. Continuous gas samples were analyzed for oxygen, carbon dioxide, carbon monoxide, nitric oxide, and total hydrocarbons. Gas-phase samples were collected using SUMMA canisters and analyzed by gas chromatography/mass spectroscopy (GC/MS) for volatile organic compounds (VOCs). Extractive samples from the combined particulate- and gas-phase were analyzed for semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), chlorobenzenes (CBs), polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (PCDDs/PCDFs), aldehydes and ketones, hydrogen chloride (HCl), hydrogen cyanide (HCN), and metals. Emissions of particulate matter (PM) with aerodynamic diameters of 10 micrometers or less (PM10) and of 2.5 micrometers or less (PM2.5) were also measured.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS		b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Pollution	Emission	Pollution Prevention	13B
Combustion	Circulation	Stationary Sources	21B
Garbage		Household Wastes	
Wastes		Recycling	14G
Sewage			
Refuse			

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