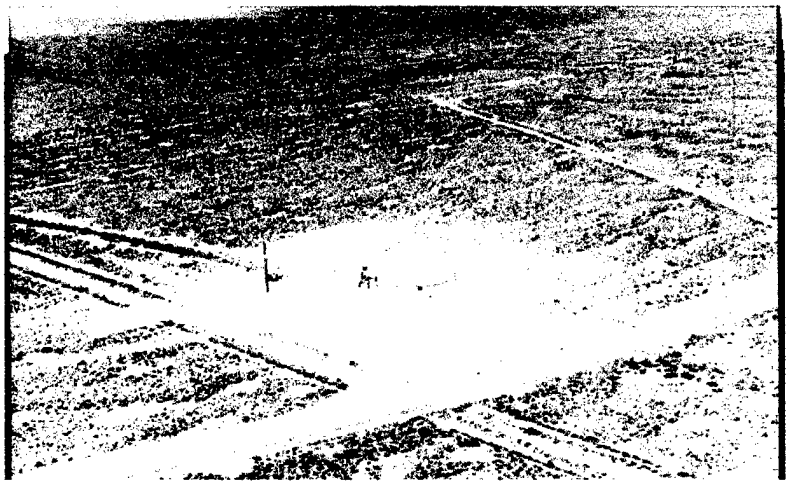
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Sampling Results for AEC Phase I Training Ordnance Emission Characterization

Volume II—Summary Report,
Appendix II-A—Emission Factor Spreadsheets,
Appendix II-B—Dilution Correction Factor Data,
Appendix II-C—TSP/PM_{10} Data Results,
Appendix II-D—Metals Data Results,
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Appendix II-H—Dioxin/Furan Data Results,
Appendix II-I—CEM Data Results,
Appendix II-J—Field Data Sheets and Calibration Data, and
Appendix II-K—Letters of Instruction

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March 1999



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U.S. Army
Dugway Proving Ground
Dugway, Utah

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SAMPLING RESULTS FOR AEC PHASE I TRAINING ORDNANCE EMISSION CHARACTERIZATION

VOLUME II—SUMMARY REPORT,
APPENDIX II-A—EMISSION FACTOR SPREADSHEETS,
APPENDIX II-B—DILUTION CORRECTION FACTOR DATA,
APPENDIX II-C—TSP/PM_{10} DATA RESULTS,
APPENDIX II-D—METALS DATA RESULTS,
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APPENDIX II-K—LETTERS OF INSTRUCTION

Prepared for:
U.S. Army
Dugway Proving Ground
Dugway, Utah

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Oak Ridge, Tennessee 37830
Doc #F9806181.MW97

March 1999

APPENDIX II-A. EMISSION FACTOR SPREADSHEETS

SIMULATOR BOOBY TRAP FLASH M117

TABLE A-1. AEC MUNITION ITEM INPUT DATA SHEET (28 MARCH 1998)
Munition Item: Booby Trap Flash
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	708.9	851.3	NA	NA	NA	NA	780.07
PM_{10}	310.4	199.9	NA	NA	NA	NA	255.16
Metals	708.9	851.3	NA	NA	NA	NA	780.07
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	83.8	73.2	NA	NA	NA	NA	78.51
HCl/Cl_2	25.6	26.7	NA	NA	NA	NA	26.16
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	100.5	82.0	NA	NA	NA	NA	91.23
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	41.5	38.0	NA	NA	NA	NA	39.75
HCl/Cl_2 (NaOH)	41.0	41.0	NA	NA	NA	NA	41.00

Sample Weight Gain:	Run No. 1		Run No. 2		Run No. 3		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.6549	0.6869	NA	NA	NA	NA	0.6709
PM_{10}	0.3199	0.3557	NA	NA	NA	NA	0.3378

Dilution Correction Factors:	Run No. 1	Run No. 2	Run No. 3	Average
TSP	0.8281	NA	NA	0.8281
PM_{10}	0.9259	NA	NA	0.9259
Metals	0.8281	NA	NA	0.8281
VOCs	0.9153	NA	NA	0.9153
SVOCs	0.8281	NA	NA	0.8281
HCl/Cl_2	0.8281	NA	NA	0.8281
Energetics	NA	NA	NA	NA
Dioxin/Furan	0.8281	NA	NA	0.8281
Residue	NA	NA	NA	NA
CEM	0.8281	NA	NA	0.8281

	Run No. 1	Run No. 2	Run No. 3	Average
Initial Plume Volume (m^3)	1026.43	NA	NA	1026.43
Net Explosive Weight (g)	101.29	NA	NA	101.29

TABLE A-2. AEC BACKGROUND INPUT DATA SHEET (28 MARCH 1998)
Munition Item: Booby Trap Flash
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	BT - Background		Reagent Blank		Field Blank		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	1497.2	NA	NA	NA	NA	NA	1497.20
PM_{10}	987.9	NA	NA	NA	NA	NA	987.90
Metals	1497.2	NA	NA	NA	NA	NA	1497.20
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	119.6	NA	NA	NA	NA	NA	119.60
HCl/Cl_2	28.2	NA	NA	NA	NA	NA	28.16
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	150.2	NA	NA	NA	NA	NA	150.20
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	BT - Background		Reagent Blank		Field Blank		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	NA	NA	107.2	NA	45.3	NA	NA
HCl/Cl_2 (NaOH)	NA	NA	92.0	NA	41.5	NA	NA
HCl/Cl_2 (H_2O)	NA	NA	100.0	NA	NA	NA	NA

Sample Weight Gain:	BT - Background		Reagent Blank		Field Blank		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.0035	NA	-0.0026	NA	-0.0037	NA	0.0035
PM_{10}	0.0032	NA	-0.0002	NA	-0.0029	NA	0.0032

TABLE A-3. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS DATA EVALUATION FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate									
TSP	3.056E+01	3.056E+01	8.255E-02	ND	ND	370.19	10.00	A	A
PM_{10}	3.639E+01	3.639E+01	1.144E-01	ND	ND	318.16	10.00	A	A
Hydrogen Chloride (HCl)/Chlorine (Cl_2)									
HCl	ND	ND	ND	6.221E-02	8.165E-04	ND	ND	F	F
Cl_2	4.167E-02	4.167E-02	2.508E-03	1.890E-03	1.985E-04	16.61	209.94	A	A
Dioxin/Furan									
Dioxin TEQ (a)	4.983E-10	4.983E-10	1.246E-10	ND	ND	4.00	10.00	C	A
Continuous Emissions Monitoring (CEM) System									
Carbon Monoxide (CO)	7.180E-01	7.180E-01	1.403E-01	ND	ND	5.12	10.00	B	A
Nitrogen Oxide (NOx)	4.954E-01	4.954E-01	1.860E-02	ND	ND	26.63	10.00	A	A
HCl	-4.968E-02	-4.968E-02	-3.951E-02	ND	ND	1.26	10.00	D	A
Carbon Dioxide (CO_2)	7.081E+02	7.081E+02	7.099E+02	ND	ND	1.00	10.00	F	A
Sulfur Dioxide (SO_2)	4.233E+00	4.233E+00	1.598E-03	ND	ND	2649.26	10.00	A	A
Particulate-phase Metals									
Aluminum	8.785E-02	8.785E-02	NA (b)	2.011E-03	1.995E-03	NA (b)	44.03	NA (b)	A
Antimony	8.363E+00	8.363E+00	NA (b)	1.415E-04	1.406E-04	NA (b)	59473.27	NA (b)	A
Arsenic	1.668E-02	1.668E-02	NA (b)	9.446E-05	9.355E-05	NA (b)	178.30	NA (b)	A
Barium	1.406E-03	1.406E-03	NA (b)	9.051E-06	8.990E-06	NA (b)	156.40	NA (b)	A
Beryllium	ND	ND	NA (b)	4.465E-05	4.434E-05	NA (b)	ND	NA (b)	F
Cadmium	6.546E-05	6.546E-05	NA (b)	1.181E-05	1.172E-05	NA (b)	5.58	NA (b)	B
Chromium	1.415E-03	1.415E-03	NA (b)	2.360E-05	2.342E-05	NA (b)	60.41	NA (b)	A
Cobalt	8.600E-05	8.600E-05	NA (b)	2.278E-05	2.263E-05	NA (b)	3.80	NA (b)	C
Copper	1.458E-02	1.458E-02	NA (b)	1.027E-04	1.021E-04	NA (b)	142.90	NA (b)	A
Lead	2.167E-02	2.167E-02	NA (b)	9.355E-05	9.294E-05	NA (b)	233.20	NA (b)	A
Magnesium	1.819E+00	1.819E+00	NA (b)	1.798E-04	1.786E-04	NA (b)	10187.48	NA (b)	A
Manganese	3.955E-03	3.955E-03	NA (b)	8.565E-06	8.504E-06	NA (b)	465.01	NA (b)	A
Nickel	2.455E-04	2.455E-04	NA (b)	4.890E-05	4.860E-05	NA (b)	5.05	NA (b)	B
Phosphorus	2.264E-01	2.264E-01	NA (b)	2.263E-04	2.245E-04	NA (b)	1008.55	NA (b)	A
Selenium	1.798E-04	1.798E-04	NA (b)	8.565E-05	8.504E-05	NA (b)	2.11	NA (b)	C
Silver	3.543E-04	3.543E-04	NA (b)	3.493E-05	3.462E-05	NA (b)	10.23	NA (b)	A
Thallium	ND	ND	NA (b)	1.349E-04	1.336E-04	NA (b)	ND	NA (b)	F
Zinc	9.399E-03	9.399E-03	NA (b)	1.254E-04	1.245E-04	NA (b)	75.47	NA (b)	A
Mercury	ND	ND	NA (b)	0.000E+00	0.000E+00	NA (b)	ND	NA (b)	F

a
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD
b
Insufficient material to analyze

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-4. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 1 DATA FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (a), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate											
TSP	-	-	3.056E+01	8.255E-02	3.048E+01	0.8281	3.681E+01	36,248	8.329E-02	29	2.872E-03
PM_{10}	-	-	3.639E+01	1.144E-01	3.628E+01	0.9259	3.918E+01	36,248	8.867E-02	29	3.058E-03
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Cl_2 (b)	71	14.128	4.167E-02	2.508E-03	3.916E-02	0.8281	4.729E-02	36,248	1.070E-04	29	3.690E-06
Dioxin/Furan											
Dioxin TEQ (c)	-	-	4.983E-10	1.246E-10	3.737E-10	0.8281	4.513E-10	36,248	1.021E-12	29	3.522E-14
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	616.384	7.180E-01	1.403E-01	5.777E-01	0.8281	6.976E-01	36,248	1.579E-03	29	5.444E-05
Nitrogen Oxide (NOx)	46	258.861	4.954E-01	1.860E-02	4.768E-01	0.8281	5.757E-01	36,248	1.303E-03	29	4.492E-05
HCl (b)	36	-33.171	-4.968E-02	-3.951E-02	-1.017E-02	0.8281	ND	36,248	ND	29	ND
Carbon Dioxide (CO_2)	44	386835.400	7.081E+02	7.099E+02	-1.813E+00	0.8281	ND	36,248	ND	29	ND
Sulfur Dioxide (SO_2)	64	1589.753	4.233E+00	1.598E-03	4.231E+00	0.8281	5.109E+00	36,248	1.156E-02	29	3.987E-04
Particulate-phase Metals											
Aluminum	27	78.218	8.785E-02	NA (d)	8.785E-02	0.8281	1.061E-01	36,248	2.401E-04	29	8.279E-06
Antimony	122	1647.894	8.363E+00	NA (d)	8.363E+00	0.8281	1.010E+01	36,248	2.285E-02	29	7.881E-04
Arsenic	75	5.346	1.668E-02	NA (d)	1.668E-02	0.8281	2.014E-02	36,248	4.558E-05	29	1.572E-06
Barium	137	0.247	1.406E-03	NA (d)	1.406E-03	0.8281	1.698E-03	36,248	3.842E-06	29	1.325E-07
Beryllium	9	ND	ND	NA (d)	ND	0.8281	ND	36,248	ND	29	ND
Cadmium	112	0.014	6.546E-05	NA (d)	6.546E-05	0.8281	7.905E-05	36,248	1.789E-07	29	6.169E-09
Chromium	52	0.654	1.415E-03	NA (d)	1.415E-03	0.8281	1.708E-03	36,248	3.866E-06	29	1.333E-07
Cobalt	59	0.035	8.600E-05	NA (d)	8.600E-05	0.8281	1.038E-04	36,248	2.350E-07	29	8.103E-09
Copper	64	5.477	1.458E-02	NA (d)	1.458E-02	0.8281	1.761E-02	36,248	3.985E-05	29	1.374E-06
Lead	207	2.517	2.167E-02	NA (d)	2.167E-02	0.8281	2.617E-02	36,248	5.923E-05	29	2.042E-06
Magnesium	24	1822.297	1.819E+00	NA (d)	1.819E+00	0.8281	2.197E+00	36,248	4.972E-03	29	1.714E-04
Manganese	55	1.728	3.955E-03	NA (d)	3.955E-03	0.8281	4.775E-03	36,248	1.081E-05	29	3.726E-07
Nickel	59	0.100	2.455E-04	NA (d)	2.455E-04	0.8281	2.964E-04	36,248	6.708E-07	29	2.313E-08
Phosphorus	31	175.537	2.264E-01	NA (d)	2.264E-01	0.8281	2.734E-01	36,248	6.186E-04	29	2.133E-05
Selenium	79	0.055	1.798E-04	NA (d)	1.798E-04	0.8281	2.171E-04	36,248	4.913E-07	29	1.694E-08
Silver	108	0.079	3.543E-04	NA (d)	3.543E-04	0.8281	4.278E-04	36,248	9.682E-07	29	3.339E-08
Thallium	204	ND	ND	NA (d)	ND	0.8281	ND	36,248	ND	29	ND
Zinc	65	3.476	9.399E-03	NA (d)	9.399E-03	0.8281	1.135E-02	36,248	2.568E-05	29	8.856E-07
Mercury	201	ND	ND	NA (d)	ND	0.8281	ND	36,248	ND	29	ND

a
Estimated from tracer data as presented in Volume IV.
b
HCl/Cl_2 levels were too low to be reliably measured.
c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.
d
Insufficient material to analyze.

TABLE A-5. AEC - VOC DATA EVALUATION FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Total Nonmethane Hydrocarbons (TNMHC)									
TNMHC	9.070E-02	9.070E-02	4.600E-02	1.000E-04	1.000E-04	1.97	907.00	D	A
Volatile Organic Compounds (VOCs)									
Ethane	3.300E-03	3.300E-03	6.500E-03	1.000E-04	1.000E-04	0.51	33.00	F	A
Ethylene	8.250E-03	8.250E-03	2.600E-03	1.000E-04	1.000E-04	3.17	82.50	C	A
Acetylene	1.255E-02	1.255E-02	3.200E-03	1.000E-04	1.000E-04	3.92	125.50	C	A
Propane	1.300E-03	1.300E-03	2.600E-03	1.000E-04	1.000E-04	0.50	13.00	F	A
Propene	2.100E-03	2.100E-03	3.100E-03	1.000E-04	1.000E-04	0.68	21.00	F	A
i-Butane	2.500E-04	2.500E-04	4.000E-04	1.000E-04	1.000E-04	0.63	2.50	F	C
i-Butene	2.000E-04	2.000E-04	8.000E-04	1.000E-04	1.000E-04	0.25	2.00	F	C
1-Butene	4.500E-04	4.500E-04	1.300E-03	1.000E-04	1.000E-04	0.35	4.50	F	C
1,3-Butadiene	9.000E-04	9.000E-04	2.000E-04	1.000E-04	1.000E-04	4.50	9.00	C	B
n-Butane	4.000E-04	4.000E-04	1.100E-03	1.000E-04	1.000E-04	0.36	4.00	F	C
trans-2-Butene	1.200E-03	1.200E-03	2.000E-04	1.000E-04	1.000E-04	6.00	12.00	B	A
2,2-Dimethylpropane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Butene	1.000E-04	1.000E-04	2.000E-04	1.000E-04	1.000E-04	0.50	1.00	F	D
3-Methyl-1-butene	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
i-Pentane	9.000E-04	9.000E-04	5.000E-04	1.000E-04	1.000E-04	1.80	9.00	D	B
1-Pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-1-butene	ND	ND	3.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
n-Pentane	8.000E-04	8.000E-04	5.000E-04	1.000E-04	1.000E-04	1.60	8.00	D	B
Isoprene	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
trans-2-Pentene	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-butene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylbutane	1.000E-04	1.000E-04	4.000E-04	1.000E-04	1.000E-04	0.25	1.00	F	D
Cyclopentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
4-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Cyclopentane	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2,3-Dimethylbutane	6.000E-04	6.000E-04	1.000E-04	1.000E-04	1.000E-04	6.00	6.00	B	B
cis-4-Methyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylpentane	1.150E-03	1.150E-03	3.000E-04	1.000E-04	1.000E-04	3.83	11.50	C	A
3-Methylpentane	8.500E-04	8.500E-04	1.000E-04	1.000E-04	1.000E-04	8.50	8.50	B	B
2-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
1-Hexene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Hexane	1.200E-03	1.200E-03	2.000E-04	1.000E-04	1.000E-04	6.00	12.00	B	A
trans-2-Hexene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Hexene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclopentane	5.000E-04	5.000E-04	2.000E-04	1.000E-04	1.000E-04	2.50	5.00	C	B
2,4-Dimethylpentane	1.250E-03	1.250E-03	1.000E-04	1.000E-04	1.000E-04	12.50	12.50	A	A

TABLE A-5. AEC - VOC DATA EVALUATION FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Benzene	4.750E-03	4.750E-03	7.000E-04	1.000E-04	1.000E-04	6.79	47.50	B	A
Cyclohexane	3.000E-04	3.000E-04	4.000E-04	1.000E-04	1.000E-04	0.75	3.00	F	C
2-Methylhexane	4.000E-04	4.000E-04	1.000E-04	1.000E-04	1.000E-04	4.00	4.00	C	C
2,3-Dimethylpentane	2.300E-03	2.300E-03	2.000E-04	1.000E-04	1.000E-04	11.50	23.00	A	A
3-Methylhexane	5.500E-04	5.500E-04	4.000E-04	1.000E-04	1.000E-04	1.38	5.50	D	B
2,2,4-Trimethylpentane	4.450E-03	4.450E-03	5.000E-04	1.000E-04	1.000E-04	8.90	44.50	B	A
n-Heptane	4.000E-04	4.000E-04	2.000E-04	1.000E-04	1.000E-04	2.00	4.00	C	C
2,4,4-Trimethyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclohexane	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
2,4,4-Trimethyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,5-Dimethylhexane	3.000E-04	3.000E-04	ND	1.000E-04	1.000E-04	10.00	3.00	A	C
2,4-Dimethylhexane	4.500E-04	4.500E-04	ND	1.000E-04	1.000E-04	10.00	4.50	A	C
2,3,4-Trimethylpentane	9.000E-04	9.000E-04	1.000E-04	1.000E-04	1.000E-04	9.00	9.00	B	B
Toluene	3.000E-03	3.000E-03	8.000E-04	1.000E-04	1.000E-04	3.75	30.00	C	A
2,3-Dimethylhexane	4.000E-04	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
2-Methylheptane	2.500E-04	2.500E-04	ND	1.000E-04	1.000E-04	10.00	2.50	A	C
3-Ethylhexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylheptane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2,4-Trimethylhexane	3.000E-04	3.000E-04	ND	1.000E-04	1.000E-04	10.00	3.00	A	C
n-Octane	1.500E-04	1.500E-04	1.000E-04	1.000E-04	1.000E-04	1.50	1.50	D	D
Ethylcyclohexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Ethylbenzene	4.000E-04	4.000E-04	2.000E-04	1.000E-04	1.000E-04	2.00	4.00	C	C
m-Xylene & p-Xylene	9.000E-04	9.000E-04	4.000E-04	1.000E-04	1.000E-04	2.25	9.00	C	B
Styrene	7.000E-04	7.000E-04	ND	1.000E-04	1.000E-04	10.00	7.00	A	B
o-Xylene	4.000E-04	4.000E-04	2.000E-04	1.000E-04	1.000E-04	2.00	4.00	C	C
n-Nonane	5.000E-04	5.000E-04	ND	1.000E-04	1.000E-04	10.00	5.00	A	B
i-Propylbenzene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Propylbenzene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
p-Ethyltoluene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
m-Ethyltoluene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
1,3,5-Trimethylbenzene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
o-Ethyltoluene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
1,2,4-Trimethylbenzene & sec-Butylbenzene	3.000E-04	3.000E-04	1.000E-04	1.000E-04	1.000E-04	3.00	3.00	C	C
n-Decane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
alpha-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
beta-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
delta 3-Carene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
d-Limonene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
MTBE	1.100E-03	1.100E-03	4.000E-04	1.000E-04	1.000E-04	2.75	11.00	C	A
ETBE	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Dichlorodifluoromethane	1.520E-03	1.520E-03	3.698E-04	4.992E-04	4.992E-04	4.11	3.05	C	C
Methylchloride	ND	ND	ND	2.080E-04	2.080E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Dichlorotetrafluoroethane	ND	ND	ND	7.114E-04	7.114E-04	ND	ND	F	F
Chloroethene	1.492E-04	1.492E-04	ND	2.621E-04	2.621E-04	10.00	0.57	A	F
1,3-Butadiene	9.154E-04	9.154E-04	2.034E-04	2.246E-04	2.246E-04	4.50	4.08	C	C
Methylbromide	ND	ND	ND	3.952E-04	3.952E-04	ND	ND	F	F
Ethylchloride	ND	ND	ND	2.683E-04	2.683E-04	ND	ND	F	F
Trichloromonofluoromethane	2.482E-03	2.482E-03	ND	5.699E-04	5.699E-04	10.00	4.36	A	C
Vinylidenechloride	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Methylenechloride	5.830E-03	5.830E-03	4.948E-04	3.536E-04	3.536E-04	11.78	16.49	A	A
Allylchloride	ND	ND	ND	3.182E-04	3.182E-04	ND	ND	F	F
1,1,2-Trichloro-1,2,2-trifluoroethane	8.615E-04	8.615E-04	8.561E-04	7.821E-04	7.821E-04	1.01	1.10	D	D
1,1-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
1,2-Dichloroethene	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Chloroform	ND	ND	ND	4.950E-04	4.950E-04	ND	ND	F	F
1,2-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
Methylchloroform	3.770E-04	3.770E-04	3.374E-04	5.533E-04	5.533E-04	1.12	0.68	D	F
Benzene	4.831E-03	4.831E-03	7.120E-04	3.245E-04	3.245E-04	6.79	14.89	B	A
Carbontetrachloride	7.722E-04	7.722E-04	6.288E-04	6.406E-04	6.406E-04	1.23	1.21	D	D
1,2-Dichloropropane	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Trichloroethylene	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
cis 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
trans 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
1,1,2-Trichloroethane	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
Toluene	3.051E-03	3.051E-03	8.137E-04	3.827E-04	3.827E-04	3.75	7.97	C	B
1,2-Dibromoethane	ND	ND	ND	7.821E-04	7.821E-04	ND	ND	F	F
Perchloroethylene	ND	ND	ND	6.906E-04	6.906E-04	ND	ND	F	F
Chlorobenzene	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Ethylbenzene	6.141E-04	6.141E-04	ND	6.656E-04	6.656E-04	10.00	0.92	A	F
m&p-Xylene	8.197E-04	8.197E-04	3.658E-04	4.410E-04	4.410E-04	2.24	1.86	C	D
Styrene	3.721E-04	3.721E-04	ND	4.326E-04	4.326E-04	10.00	0.86	A	F
1,1,2,2-Tetrachloroethane	ND	ND	ND	6.989E-04	6.989E-04	ND	ND	F	F
o-Xylene	4.068E-04	4.068E-04	ND	4.410E-04	4.410E-04	10.00	0.92	A	F
p-Ethyltoluene	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
1,3,5-Trimethylbenzene	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
1,2,4-Trimethylbenzene	3.255E-04	3.255E-04	ND	4.992E-04	4.992E-04	10.00	0.65	A	F
Benzylchloride	ND	ND	ND	5.283E-04	5.283E-04	ND	ND	F	F
m-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
p-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
o-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	7.530E-04	7.530E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	1.086E-03	1.086E-03	ND	ND	F	F
Phenylacetylene	2.424E-04	2.424E-04	ND	4.243E-04	4.243E-04	10.00	0.57	A	F
Indane	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2,3-Dihydro-1-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2,3-Dihydro-4-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F
Naphthalene	7.156E-04	7.156E-04	ND	5.325E-04	5.325E-04	10.00	1.34	A	D
2-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
1-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
Cyanogen	ND	ND	ND	2.163E-04	2.163E-04	ND	ND	F	F
Methylnitrite	6.177E-04	6.177E-04	ND	2.538E-04	2.538E-04	10.00	2.43	A	C
Acetonitrile	3.440E-04	3.440E-04	ND	1.706E-04	1.706E-04	10.00	2.02	A	C
Acrylonitrile	2.985E-04	2.985E-04	ND	2.205E-04	2.205E-04	10.00	1.35	A	D
Nitromethane	6.873E-04	6.873E-04	ND	2.538E-04	2.538E-04	10.00	2.71	A	C
Propanenitrile	ND	ND	ND	2.288E-04	2.288E-04	ND	ND	F	F
2-Methylpropanenitrile	ND	ND	ND	2.870E-04	2.870E-04	ND	ND	F	F
Pentanenitrile	ND	ND	ND	3.453E-04	3.453E-04	ND	ND	F	F
Hexanenitrile	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Benzonitrile	2.302E-04	2.302E-04	ND	4.285E-04	4.285E-04	10.00	0.54	A	F
2-Nitrophenol	ND	ND	ND	5.782E-04	5.782E-04	ND	ND	F	F
Acrolein	1.874E-03	1.874E-03	ND	2.330E-04	2.330E-04	10.00	8.05	A	B
Acetone	6.650E-03	6.650E-03	5.352E-03	2.330E-04	2.330E-04	1.24	28.55	D	A
1-Hydroxy-2-propanone	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
Furan	1.779E-04	1.779E-04	ND	2.829E-04	2.829E-04	10.00	0.63	A	F
2-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
2-Methylpropanal	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
1-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
Methacrolein	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
Methyl-vinyl Ketone	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
MTBE	1.034E-03	1.034E-03	1.839E-04	3.661E-04	3.661E-04	5.62	2.83	B	C
2,3-Butanedione	ND	ND	ND	3.578E-04	3.578E-04	ND	ND	F	F
Butanal	3.928E-04	3.928E-04	3.210E-04	2.995E-04	2.995E-04	1.22	1.31	D	D
2-Butanone	1.568E-03	1.568E-03	8.692E-04	2.995E-04	2.995E-04	1.80	5.23	D	B
2-Methyl-1,3-dioxolane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2-Methylfuran	ND	ND	ND	3.411E-04	3.411E-04	ND	ND	F	F
Tetrahydrofuran	ND	ND	ND	2.995E-04	2.995E-04	ND	ND	F	F
trans-2-Butenal	3.977E-04	3.977E-04	ND	2.912E-04	2.912E-04	10.00	1.37	A	D
Acetic Acid	2.832E-03	2.832E-03	8.137E-04	2.496E-04	2.496E-04	3.48	11.34	C	A
1-Butanol	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
2-Pentanone	2.989E-04	2.989E-04	2.374E-04	3.578E-04	3.578E-04	1.26	0.84	D	F
Pentanal	1.645E-03	1.645E-03	1.306E-03	3.578E-04	3.578E-04	1.26	4.60	D	C
1,4-Dioxane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
Methyl Methacrylate	ND	ND	ND	4.160E-04	4.160E-04	ND	ND	F	F
Cyclopentanone	ND	ND	ND	3.494E-04	3.494E-04	ND	ND	F	F
Hexanal	1.330E-03	1.330E-03	9.985E-04	4.160E-04	4.160E-04	1.33	3.20	D	C
2-Furaldehyde	1.307E-03	1.307E-03	4.095E-04	3.994E-04	3.994E-04	3.19	3.27	C	C
Cyclohexanone	2.235E-04	2.235E-04	ND	4.077E-04	4.077E-04	10.00	0.55	A	F
Heptanal	1.293E-03	1.293E-03	8.661E-04	4.742E-04	4.742E-04	1.49	2.73	D	C

TABLE A-5. AEC - VOC DATA EVALUATION FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2-Butoxyethanol	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
Benzaldehyde	2.277E-03	2.277E-03	1.153E-03	4.410E-04	4.410E-04	1.98	5.16	D	B
6-Methyl-5-hepten-2-one	ND	ND	ND	5.242E-04	5.242E-04	ND	ND	F	F
Octanal	3.105E-03	3.105E-03	2.207E-03	5.325E-04	5.325E-04	1.41	5.83	D	B
Benzofuran	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2-Ethyl-1-hexanol	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
Acetophonone	3.716E-04	3.716E-04	ND	4.992E-04	4.992E-04	10.00	0.74	A	F
Nonanal	4.906E-03	4.906E-03	2.870E-03	5.907E-04	5.907E-04	1.71	8.30	D	B
Decanal	4.607E-03	4.607E-03	3.192E-03	6.490E-04	6.490E-04	1.44	7.10	D	B
Carbonyl Sulfide	3.974E-04	3.974E-04	2.525E-04	2.496E-04	2.496E-04	1.57	1.59	D	D
Carbon Disulfide	3.460E-02	3.460E-02	1.143E-03	3.162E-04	3.162E-04	30.28	109.44	A	A
Thiophene	4.147E-04	4.147E-04	ND	3.494E-04	3.494E-04	10.00	1.19	A	D
Dimethyldisulfide	ND	ND	ND	3.910E-04	3.910E-04	ND	ND	F	F

a
Compounds in bold represent duplicate values.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	9.070E-02	4.600E-02	4.470E-02	0.9153	4.884E-02	36,248	1.105E-04	29	3.811E-06
Volatile Organic Compounds (VOCs)											
Ethane	30	2.644	3.300E-03	6.500E-03	-3.200E-03	0.9153	ND	36,248	ND	29	ND
Ethylene	28	7.083	8.250E-03	2.600E-03	5.650E-03	0.9153	6.173E-03	36,248	1.397E-05	29	4.817E-07
Acetylene	26	11.603	1.255E-02	3.200E-03	9.350E-03	0.9153	1.022E-02	36,248	2.312E-05	29	7.971E-07
Propane	44	0.710	1.300E-03	2.600E-03	-1.300E-03	0.9153	ND	36,248	ND	29	ND
Propene	42	1.202	2.100E-03	3.100E-03	-1.000E-03	0.9153	ND	36,248	ND	29	ND
i-Butane	58	0.104	2.500E-04	4.000E-04	-1.500E-04	0.9153	ND	36,248	ND	29	ND
i-Butene	56	0.086	2.000E-04	8.000E-04	-6.000E-04	0.9153	ND	36,248	ND	29	ND
1-Butene	56	0.193	4.500E-04	1.300E-03	-8.500E-04	0.9153	ND	36,248	ND	29	ND
1,3-Butadiene	54	0.401	9.000E-04	2.000E-04	7.000E-04	0.9153	7.648E-04	36,248	1.731E-06	29	5.968E-08
n-Butane	58	0.166	4.000E-04	1.100E-03	-7.000E-04	0.9153	ND	36,248	ND	29	ND
trans-2-Butene	56	0.515	1.200E-03	2.000E-04	1.000E-03	0.9153	1.093E-03	36,248	2.472E-06	29	8.525E-08
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
cis-2-Butene	56	0.043	1.000E-04	2.000E-04	-1.000E-04	0.9153	ND	36,248	ND	29	ND
3-Methyl-1-butene	70	ND	ND	1.000E-04	ND	0.9153	ND	36,248	ND	29	ND
i-Pentane	72	0.300	9.000E-04	5.000E-04	4.000E-04	0.9153	4.370E-04	36,248	9.889E-07	29	3.410E-08
1-Pentene	70	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2-Methyl-1-butene	70	ND	ND	3.000E-04	ND	0.9153	ND	36,248	ND	29	ND
n-Pentane	72	0.267	8.000E-04	5.000E-04	3.000E-04	0.9153	3.278E-04	36,248	7.417E-07	29	2.558E-08
Isoprene	68	ND	ND	1.000E-04	ND	0.9153	ND	36,248	ND	29	ND
trans-2-Pentene	70	ND	ND	1.000E-04	ND	0.9153	ND	36,248	ND	29	ND
cis-2-Pentene	70	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2-Methyl-2-butene	70	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2,2-Dimethylbutane	86	0.028	1.000E-04	4.000E-04	-3.000E-04	0.9153	ND	36,248	ND	29	ND
Cyclopentene	68	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Cyclopentane	70	ND	ND	1.000E-04	ND	0.9153	ND	36,248	ND	29	ND
2,3-Dimethylbutane	86	0.168	6.000E-04	1.000E-04	5.000E-04	0.9153	5.463E-04	36,248	1.236E-06	29	4.263E-08
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2-Methylpentane	86	0.321	1.150E-03	3.000E-04	8.500E-04	0.9153	9.287E-04	36,248	2.101E-06	29	7.246E-08
3-Methylpentane	86	0.238	8.500E-04	1.000E-04	7.500E-04	0.9153	8.194E-04	36,248	1.854E-06	29	6.394E-08
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1-Hexene	84	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
n-Hexane	86	0.335	1.200E-03	2.000E-04	1.000E-03	0.9153	1.093E-03	36,248	2.472E-06	29	8.525E-08
trans-2-Hexene	84	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
cis-2-Hexene	84	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Methylcyclopentane	84	0.143	5.000E-04	2.000E-04	3.000E-04	0.9153	3.278E-04	36,248	7.417E-07	29	2.558E-08
2,4-Dimethylpentane	100	0.300	1.250E-03	1.000E-04	1.150E-03	0.9153	1.256E-03	36,248	2.843E-06	29	9.804E-08
Benzene	78	1.464	4.750E-03	7.000E-04	4.050E-03	0.9153	4.425E-03	36,248	1.001E-05	29	3.453E-07
Cyclohexane	84	0.086	3.000E-04	4.000E-04	-1.000E-04	0.9153	ND	36,248	ND	29	ND
2-Methylhexane	100	0.096	4.000E-04	1.000E-04	3.000E-04	0.9153	3.278E-04	36,248	7.417E-07	29	2.558E-08
2,3-Dimethylpentane	100	0.553	2.300E-03	2.000E-04	2.100E-03	0.9153	2.294E-03	36,248	5.192E-06	29	1.790E-07
3-Methylhexane	100	0.132	5.500E-04	4.000E-04	1.500E-04	0.9153	1.639E-04	36,248	3.708E-07	29	1.279E-08
2,2,4-Trimethylpentane	114	0.938	4.450E-03	5.000E-04	3.950E-03	0.9153	4.316E-03	36,248	9.766E-06	29	3.367E-07

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
n-Heptane	100	0.096	4.000E-04	2.000E-04	2.000E-04	0.9153	2.185E-04	36,248	4.945E-07	29	1.705E-08
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Methylcyclohexane	98	0.049	2.000E-04	1.000E-04	1.000E-04	0.9153	1.093E-04	36,248	2.472E-07	29	8.525E-09
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2,5-Dimethylhexane	114	0.063	3.000E-04	ND	3.000E-04	0.9153	3.278E-04	36,248	7.417E-07	29	2.558E-08
2,4-Dimethylhexane	114	0.095	4.500E-04	ND	4.500E-04	0.9153	4.916E-04	36,248	1.113E-06	29	3.836E-08
2,3,4-Trimethylpentane	114	0.190	9.000E-04	1.000E-04	8.000E-04	0.9153	8.740E-04	36,248	1.978E-06	29	6.820E-08
Toluene	92	0.784	3.000E-03	8.000E-04	2.200E-03	0.9153	2.404E-03	36,248	5.439E-06	29	1.876E-07
2,3-Dimethylhexane	114	0.084	4.000E-04	ND	4.000E-04	0.9153	4.370E-04	36,248	9.889E-07	29	3.410E-08
2-Methylheptane	111	0.054	2.500E-04	ND	2.500E-04	0.9153	2.731E-04	36,248	6.181E-07	29	2.131E-08
3-Ethylhexane	114	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2,2,4-Trimethylhexane	128	0.056	3.000E-04	ND	3.000E-04	0.9153	3.278E-04	36,248	7.417E-07	29	2.558E-08
n-Octane	114	0.032	1.500E-04	1.000E-04	5.000E-05	0.9153	5.463E-05	36,248	1.236E-07	29	4.263E-09
Ethylcyclohexane	112	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Ethylbenzene	160	0.060	4.000E-04	2.000E-04	2.000E-04	0.9153	2.185E-04	36,248	4.945E-07	29	1.705E-08
m-Xylene & p-Xylene	106	0.204	9.000E-04	4.000E-04	5.000E-04	0.9153	5.463E-04	36,248	1.236E-06	29	4.263E-08
Styrene	104	0.162	7.000E-04	ND	7.000E-04	0.9153	7.648E-04	36,248	1.731E-06	29	5.968E-08
o-Xylene	106	0.091	4.000E-04	2.000E-04	2.000E-04	0.9153	2.185E-04	36,248	4.945E-07	29	1.705E-08
n-Nonane	128	0.094	5.000E-04	ND	5.000E-04	0.9153	5.463E-04	36,248	1.236E-06	29	4.263E-08
i-Propylbenzene	120	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
n-Propylbenzene	120	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
p-Ethyltoluene	120	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
m-Ethyltoluene	120	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1,3,5-Trimethylbenzene	120	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
o-Ethyltoluene	120	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.060	3.000E-04	1.000E-04	2.000E-04	0.9153	2.185E-04	36,248	4.945E-07	29	1.705E-08
n-Decane	142	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
alpha-Pinene	136	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
beta-Pinene	136	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
delta 3-Carene	136	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
d-Limonene	136	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
MTBE	88	0.300	1.100E-03	4.000E-04	7.000E-04	0.9153	7.648E-04	36,248	1.731E-06	29	5.968E-08
ETBE	102	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Dichlorodifluoromethane	120	0.305	1.520E-03	3.698E-04	1.150E-03	0.9153	1.257E-03	36,248	2.844E-06	29	9.807E-08
Methylchloride	50	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Chloroethene	63	0.057	1.492E-04	ND	1.492E-04	0.9153	1.630E-04	36,248	3.688E-07	29	1.272E-08
1,3-Butadiene	54	0.408	9.154E-04	2.034E-04	7.120E-04	0.9153	7.779E-04	36,248	1.760E-06	29	6.070E-08
Methylbromide	95	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Trichloromonofluoromethane	137	0.436	2.482E-03	ND	2.482E-03	0.9153	2.712E-03	36,248	6.137E-06	29	2.116E-07
Vinylidenechloride	97	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Methylenechloride	85	1.649	5.830E-03	4.948E-04	5.335E-03	0.9153	5.829E-03	36,248	1.319E-05	29	4.548E-07
Allylchloride	76.5	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.110	8.615E-04	8.561E-04	5.384E-06	0.9153	5.882E-06	36,248	1.331E-08	29	4.590E-10
1,1-Dichloroethane	99	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1,2-Dichloroethene	97	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Chloroform	119	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
1,2-Dichloroethane	99	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Methylchloroform	133	0.068	3.770E-04	3.374E-04	3.957E-05	0.9153	4.323E-05	36,248	9.784E-08	29	3.374E-09
Benzene	78	1.489	4.831E-03	7.120E-04	4.119E-03	0.9153	4.501E-03	36,248	1.018E-05	29	3.512E-07
Carbontetrachloride	154	0.121	7.722E-04	6.288E-04	1.434E-04	0.9153	1.567E-04	36,248	3.546E-07	29	1.223E-08
1,2-Dichloropropane	113	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Trichloroethylene	133	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Toluene	92	0.797	3.051E-03	8.137E-04	2.238E-03	0.9153	2.445E-03	36,248	5.532E-06	29	1.908E-07
1,2-Dibromoethane	188	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Perchloroethylene	166	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Chlorobenzene	113	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Ethylbenzene	160	0.092	6.141E-04	ND	6.141E-04	0.9153	6.709E-04	36,248	1.518E-06	29	5.235E-08
m&p-Xylene	106	0.186	8.197E-04	3.658E-04	4.539E-04	0.9153	4.959E-04	36,248	1.122E-06	29	3.870E-08
Styrene	104	0.086	3.721E-04	ND	3.721E-04	0.9153	4.066E-04	36,248	9.200E-07	29	3.172E-08
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
o-Xylene	106	0.092	4.068E-04	ND	4.068E-04	0.9153	4.445E-04	36,248	1.006E-06	29	3.468E-08
p-Ethyltoluene	120	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1,3,5-Trimethylbenzene	120	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1,2,4-Trimethylbenzene	120	0.065	3.255E-04	ND	3.255E-04	0.9153	3.556E-04	36,248	8.047E-07	29	2.775E-08
Benzylchloride	127	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Phenylacetylene	102	0.057	2.424E-04	ND	2.424E-04	0.9153	2.648E-04	36,248	5.993E-07	29	2.066E-08
Indane	118	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2,3-Dihydro-1-methyl-1H-indene	132	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2,3-Dihydro-4-methyl-1H-indene	132	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Naphthalene	128	0.134	7.156E-04	ND	7.156E-04	0.9153	7.818E-04	36,248	1.769E-06	29	6.101E-08
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1-Methylnaphthalene	142	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Cyanogen	52	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Methylnitrite	61	0.243	6.177E-04	ND	6.177E-04	0.9153	6.749E-04	36,248	1.527E-06	29	5.266E-08
Acetonitrile	41	0.202	3.440E-04	ND	3.440E-04	0.9153	3.758E-04	36,248	8.504E-07	29	2.932E-08
Acrylonitrile	53	0.135	2.985E-04	ND	2.985E-04	0.9153	3.261E-04	36,248	7.379E-07	29	2.545E-08
Nitromethane	61	0.271	6.873E-04	ND	6.873E-04	0.9153	7.509E-04	36,248	1.699E-06	29	5.859E-08
Propanenitrile	55	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Pentanenitrile	83	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Hexanenitrile	97	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Benzonitrile	103	0.054	2.302E-04	ND	2.302E-04	0.9153	2.516E-04	36,248	5.692E-07	29	1.963E-08
2-Nitrophenol	139	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Acrolein	56	0.805	1.874E-03	ND	1.874E-03	0.9153	2.048E-03	36,248	4.634E-06	29	1.598E-07
Acetone	56	2.855	6.650E-03	5.352E-03	1.298E-03	0.9153	1.418E-03	36,248	3.209E-06	29	1.107E-07
1-Hydroxy-2-propanone	74	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Furan	68	0.063	1.779E-04	ND	1.779E-04	0.9153	1.944E-04	36,248	4.399E-07	29	1.517E-08
2-Propanol	60	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2-Methylpropanal	74	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
1-Propanol	60	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Methacrolein	70	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Methyl-vinyl Ketone	70	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
MTBE	88	0.283	1.034E-03	1.839E-04	8.503E-04	0.9153	9.290E-04	36,248	2.102E-06	29	7.249E-08
2,3-Butanedione	86	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Butanal	72	0.131	3.928E-04	3.210E-04	7.179E-05	0.9153	7.843E-05	36,248	1.775E-07	29	6.120E-09
2-Butanone	72	0.523	1.568E-03	8.692E-04	6.984E-04	0.9153	7.630E-04	36,248	1.727E-06	29	5.954E-08
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2-Methylfuran	82	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
trans-2-Butenal	70	0.137	3.977E-04	ND	3.977E-04	0.9153	4.345E-04	36,248	9.832E-07	29	3.391E-08
Acetic Acid	60	1.134	2.832E-03	8.137E-04	2.018E-03	0.9153	2.205E-03	36,248	4.989E-06	29	1.720E-07
1-Butanol	74	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2-Pentanone	86	0.084	2.989E-04	2.374E-04	6.151E-05	0.9153	6.720E-05	36,248	1.521E-07	29	5.244E-09
Pentanal	86	0.460	1.645E-03	1.306E-03	3.395E-04	0.9153	3.709E-04	36,248	8.393E-07	29	2.894E-08
1,4-Dioxane	88	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Cyclopentanone	84	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Hexanal	100	0.320	1.330E-03	9.985E-04	3.311E-04	0.9153	3.617E-04	36,248	8.185E-07	29	2.822E-08
2-Furaldehyde	96	0.327	1.307E-03	4.095E-04	8.976E-04	0.9153	9.806E-04	36,248	2.219E-06	29	7.652E-08
Cyclohexanone	98	0.055	2.235E-04	ND	2.235E-04	0.9153	2.442E-04	36,248	5.526E-07	29	1.906E-08
Heptanal	114	0.273	1.293E-03	8.661E-04	4.274E-04	0.9153	4.669E-04	36,248	1.057E-06	29	3.643E-08
2-Butoxyethanol	118	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Benzaldehyde	106	0.516	2.277E-03	1.153E-03	1.124E-03	0.9153	1.228E-03	36,248	2.780E-06	29	9.586E-08
6-Methyl-5-hepten-2-one	126	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Octanal	128	0.583	3.105E-03	2.207E-03	8.986E-04	0.9153	9.818E-04	36,248	2.222E-06	29	7.661E-08
Benzofuran	118	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND
Acetophonone	120	0.074	3.716E-04	ND	3.716E-04	0.9153	4.060E-04	36,248	9.187E-07	29	3.168E-08
Nonanal	142	0.830	4.906E-03	2.870E-03	2.036E-03	0.9153	2.224E-03	36,248	5.033E-06	29	1.735E-07
Decanal	156	0.710	4.607E-03	3.192E-03	1.415E-03	0.9153	1.546E-03	36,248	3.499E-06	29	1.206E-07
Carbonyl Sulfide	60	0.159	3.974E-04	2.525E-04	1.449E-04	0.9153	1.583E-04	36,248	3.582E-07	29	1.235E-08
Carbon Disulfide	76	10.944	3.460E-02	1.143E-03	3.346E-02	0.9153	3.656E-02	36,248	8.272E-05	29	2.852E-06
Thiophene	84	0.119	4.147E-04	ND	4.147E-04	0.9153	4.531E-04	36,248	1.025E-06	29	3.535E-08
Dimethyldisulfide	94	ND	ND	ND	ND	0.9153	ND	36,248	ND	29	ND

a
Compounds in bold represent duplicate values.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-7. AEC - SVOC DATA EVALUATION FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate/Vapor-phase SVOCs									
N-Nitrosodimethylamine	ND	ND	ND	1.565E-04	1.565E-04	ND	ND	F	F
Pyridine	ND	ND	ND	4.588E-04	4.588E-04	ND	ND	F	F
2-Picoline	ND	ND	ND	4.768E-04	4.768E-04	ND	ND	F	F
Methyl methanesulfonate	ND	ND	ND	1.804E-04	1.804E-04	ND	ND	F	F
N-Nitrosomethylethylamine	ND	ND	ND	3.581E-04	3.581E-04	ND	ND	F	F
N-Nitrosodiethylamine	ND	ND	ND	3.824E-04	3.824E-04	ND	ND	F	F
Ethyl methanesulfonate	ND	ND	ND	1.759E-04	1.759E-04	ND	ND	F	F
Phenol	ND	ND	ND	1.125E-04	1.125E-04	ND	ND	F	F
Aniline	ND	ND	ND	1.795E-04	1.795E-04	ND	ND	F	F
bis(2-Chloroethyl)ether	ND	ND	ND	1.403E-04	1.403E-04	ND	ND	F	F
Pentachloroethane	ND	ND	ND	3.243E-04	3.243E-04	ND	ND	F	F
2-Chlorophenol	ND	ND	ND	7.152E-05	7.152E-05	ND	ND	F	F
1,3-Dichlorobenzene	ND	ND	ND	1.381E-04	1.381E-04	ND	ND	F	F
1,4-Dichlorobenzene	ND	ND	ND	2.771E-04	2.771E-04	ND	ND	F	F
Benzyl alcohol	ND	ND	ND	3.135E-04	3.135E-04	ND	ND	F	F
2-Methylphenol	ND	ND	ND	2.524E-04	2.524E-04	ND	ND	F	F
1,2-Dichlorobenzene	ND	ND	ND	2.006E-04	2.006E-04	ND	ND	F	F
bis(2-Chloroisopropyl)ether	ND	ND	ND	1.691E-04	1.691E-04	ND	ND	F	F
o-Toluidine	ND	ND	ND	1.781E-04	1.781E-04	ND	ND	F	F
4-Methylphenol/3-Methylphenol	ND	ND	ND	2.132E-04	2.132E-04	ND	ND	F	F
N-Nitroso-di-n-propylamine	ND	ND	ND	1.264E-04	1.264E-04	ND	ND	F	F
Acetophenone	3.623E-04	3.623E-04	2.808E-04	1.327E-04	1.327E-04	1.29	2.73	D	C
N-Nitrosomorpholine	ND	ND	ND	4.044E-04	4.044E-04	ND	ND	F	F
N-Nitrosopyrrolidine	ND	ND	ND	5.353E-04	5.353E-04	ND	ND	F	F
Hexachloroethane	ND	ND	ND	2.222E-04	2.222E-04	ND	ND	F	F
Nitrobenzene	ND	ND	ND	4.008E-04	4.008E-04	ND	ND	F	F
N-Nitrosopiperidine	ND	ND	ND	3.279E-04	3.279E-04	ND	ND	F	F
Isophorone	ND	ND	ND	9.627E-05	9.627E-05	ND	ND	F	F
2,4-Dimethylphenol	ND	ND	ND	1.516E-04	1.516E-04	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	2.411E-04	2.411E-04	ND	ND	F	F
bis(2-Chloroethoxy)methane	ND	ND	ND	1.759E-04	1.759E-04	ND	ND	F	F
Benzoic acid	ND	ND	ND	1.646E-02	1.646E-02	ND	ND	F	F
2,4-Dichlorophenol	ND	ND	ND	2.204E-04	2.204E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	1.588E-04	1.588E-04	ND	ND	F	F
Naphthalene	3.006E-04	3.006E-04	ND	2.011E-04	2.011E-04	10.00	1.49	A	D
p-Chloroaniline	ND	ND	ND	1.448E-04	1.448E-04	ND	ND	F	F
2,6-Dichlorophenol	ND	ND	ND	1.547E-04	1.547E-04	ND	ND	F	F
Hexachloropropene	ND	ND	ND	2.542E-04	2.542E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	2.294E-04	2.294E-04	ND	ND	F	F
Dimethylphenethylamine	ND	ND	ND	9.177E-03	9.177E-03	ND	ND	F	F
N-Nitroso-di-n-butylamine	ND	ND	ND	1.682E-04	1.682E-04	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
4-Chloro-3-methylphenol	ND	ND	ND	2.551E-04	2.551E-04	ND	ND	F	F
Safrole	ND	ND	ND	3.198E-04	3.198E-04	ND	ND	F	F
2-Methylnaphthalene	ND	ND	ND	1.615E-04	1.615E-04	ND	ND	F	F
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	2.456E-04	2.456E-04	ND	ND	F	F
Hexachlorocyclopentadiene	ND	ND	ND	4.993E-03	4.993E-03	ND	ND	F	F
2,4,6-Trichlorophenol	ND	ND	ND	2.838E-04	2.838E-04	ND	ND	F	F
2,4,5-Trichlorophenol	ND	ND	ND	2.411E-04	2.411E-04	ND	ND	F	F
Isosafrole	ND	ND	ND	4.858E-04	4.858E-04	ND	ND	F	F
2-Chloronaphthalene	ND	ND	ND	2.537E-04	2.537E-04	ND	ND	F	F
2-Nitroaniline	ND	ND	ND	1.610E-04	1.610E-04	ND	ND	F	F
1,4-Naphthoquinone	ND	ND	ND	4.498E-04	4.498E-04	ND	ND	F	F
Dimethylphthalate	ND	ND	ND	1.309E-04	1.309E-04	ND	ND	F	F
1,3-Dinitrobenzene	ND	ND	ND	3.765E-04	3.765E-04	ND	ND	F	F
2,6-Dinitrotoluene	ND	ND	ND	3.167E-04	3.167E-04	ND	ND	F	F
Acenaphthylene	ND	ND	ND	1.471E-04	1.471E-04	ND	ND	F	F
3-Nitroaniline	ND	ND	ND	3.963E-04	3.963E-04	ND	ND	F	F
4-Nitrophenol	ND	ND	ND	1.381E-02	1.381E-02	ND	ND	F	F
2,4-Dinitrophenol	ND	ND	ND	1.417E-02	1.417E-02	ND	ND	F	F
Acenaphthene	ND	ND	ND	1.619E-04	1.619E-04	ND	ND	F	F
2,4-Dinitrotoluene	ND	ND	ND	2.002E-04	2.002E-04	ND	ND	F	F
Dibenzofuran	ND	ND	ND	1.098E-04	1.098E-04	ND	ND	F	F
Pentachlorobenzene	ND	ND	ND	3.032E-04	3.032E-04	ND	ND	F	F
1-Naphthylamine	ND	ND	ND	7.917E-04	7.917E-04	ND	ND	F	F
2-Naphthylamine	ND	ND	ND	7.017E-04	7.017E-04	ND	ND	F	F
2,3,4,6-Tetrachlorophenol	ND	ND	ND	3.212E-04	3.212E-04	ND	ND	F	F
Diethylphthalate	2.532E-04	2.532E-04	4.340E-04	1.170E-04	1.170E-04	0.58	2.17	F	C
4-Chlorophenylphenyl ether	ND	ND	ND	1.273E-04	1.273E-04	ND	ND	F	F
Fluorene	ND	ND	ND	1.529E-04	1.529E-04	ND	ND	F	F
5-Nitro-o-toluidine	ND	ND	ND	1.633E-04	1.633E-04	ND	ND	F	F
4-Nitroaniline	ND	ND	ND	3.486E-04	3.486E-04	ND	ND	F	F
4,6-Dinitro-2-methylphenol	ND	ND	ND	1.224E-02	1.224E-02	ND	ND	F	F
Diphenylamine/N-NitrosoDPA	ND	ND	ND	1.655E-04	1.655E-04	ND	ND	F	F
sym-Trinitrobenzene	ND	ND	ND	5.623E-04	5.623E-04	ND	ND	F	F
Diallate	ND	ND	ND	2.137E-04	2.137E-04	ND	ND	F	F
Phenacetin	ND	ND	ND	1.008E-04	1.008E-04	ND	ND	F	F
4-Bromophenylphenyl ether	ND	ND	ND	3.099E-04	3.099E-04	ND	ND	F	F
Hexachlorobenzene	ND	ND	ND	1.669E-04	1.669E-04	ND	ND	F	F
4-Aminobiphenyl	ND	ND	ND	9.312E-04	9.312E-04	ND	ND	F	F
Pronamide	ND	ND	ND	1.156E-04	1.156E-04	ND	ND	F	F
Pentachlorophenol	ND	ND	ND	1.296E-02	1.296E-02	ND	ND	F	F
Pentachloronitrobenzene	ND	ND	ND	6.028E-04	6.028E-04	ND	ND	F	F
Phenanthrene	ND	ND	ND	2.744E-04	2.744E-04	ND	ND	F	F
Anthracene	ND	ND	ND	1.646E-04	1.646E-04	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Carbazole	ND	ND	ND	1.102E-04	1.102E-04	ND	ND	F	F
Di-n-butylphthalate	1.436E-03	1.436E-03	7.766E-04	7.647E-05	7.647E-05	1.85	18.78	D	A
4-Nitroquinoline-1-oxide	ND	ND	ND	1.012E-02	1.012E-02	ND	ND	F	F
Methapyrilene	ND	ND	ND	9.312E-03	9.312E-03	ND	ND	F	F
Fluoranthene	ND	ND	ND	1.624E-04	1.624E-04	ND	ND	F	F
Benzidine	ND	ND	ND	6.028E-03	6.028E-03	ND	ND	F	F
Pyrene	ND	ND	ND	2.231E-04	2.231E-04	ND	ND	F	F
p-Dimethylaminoazobenzene	ND	ND	ND	1.655E-04	1.655E-04	ND	ND	F	F
Chlorobenzilate	ND	ND	ND	2.303E-04	2.303E-04	ND	ND	F	F
Kepone	ND	ND	ND	8.457E-03	8.457E-03	ND	ND	F	F
Butylbenzylphthalate	3.242E-04	3.242E-04	ND	9.222E-05	9.222E-05	10.00	3.52	A	C
3,3'-Dimethylbenzidine	ND	ND	ND	8.907E-04	8.907E-04	ND	ND	F	F
2-Acetylaminofluorene	ND	ND	ND	1.403E-04	1.403E-04	ND	ND	F	F
bis(2-Ethylhexyl)phthalate	ND	ND	ND	5.488E-04	5.488E-04	ND	ND	F	F
3,3'-Dichlorobenzidine	ND	ND	ND	1.507E-04	1.507E-04	ND	ND	F	F
Benz(a)anthracene	ND	ND	ND	2.033E-04	2.033E-04	ND	ND	F	F
Chrysene	ND	ND	ND	2.195E-04	2.195E-04	ND	ND	F	F
Di-n-octylphthalate	ND	ND	ND	1.403E-04	1.403E-04	ND	ND	F	F
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	2.074E-04	2.074E-04	ND	ND	F	F
Benzo(b)fluoranthene (a)	ND	ND	ND	1.251E-04	1.251E-04	ND	ND	F	F
Benzo(k)fluoranthene (a)	ND	ND	ND	2.614E-04	2.614E-04	ND	ND	F	F
Benz(a)pyrene	ND	ND	ND	1.480E-04	1.480E-04	ND	ND	F	F
3-Methylcholanthrene	ND	ND	ND	5.263E-04	5.263E-04	ND	ND	F	F
Indeno(1,2,3-cd)pyrene	ND	ND	ND	9.851E-05	9.851E-05	ND	ND	F	F
Dibenz(a,h)anthracene	ND	ND	ND	1.107E-04	1.107E-04	ND	ND	F	F
Benzo(g,h,i)perylene	ND	ND	ND	1.062E-04	1.062E-04	ND	ND	F	F

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Pyridine	79	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2-Picoline	93	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Phenol	94	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Aniline	93	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Pentachloroethane	202	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2-Methylphenol	108	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
o-Toluidine	107	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Acetophenone	120	0.073	3.623E-04	2.808E-04	8.153E-05	0.8281	9.845E-05	36,248	2.228E-07	29	7.682E-09
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Hexachloroethane	237	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Nitrobenzene	123	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Isophorone	138	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Benzoic acid	122	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Naphthalene	128	0.056	3.006E-04	ND	3.006E-04	0.8281	3.630E-04	36,248	8.214E-07	29	2.832E-08
p-Chloroaniline	128	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Hexachloropropene	249	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Safrole	162	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2-Methylnaphthalene	142	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Isosafrole	162	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Acenaphthylene	152	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Acenaphthene	154	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Dibenzofuran	168	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Diethylphthalate	222	0.027	2.532E-04	4.340E-04	-1.808E-04	0.8281	ND	36,248	ND	29	ND
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Fluorene	166	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Diallate	270	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Phenacetin	179	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Pronamide	228	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Phenanthrene	178	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Anthracene	178	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Carbazole	167	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Di-n-butylphthalate	278	0.124	1.436E-03	7.766E-04	6.595E-04	0.8281	7.963E-04	36,248	1.802E-06	29	6.214E-08
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Methapyrilene	261	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Fluoranthene	202	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Benzidine	184	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Pyrene	202	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Kepone	491	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Butylbenzylphthalate	312	0.025	3.242E-04	ND	3.242E-04	0.8281	3.915E-04	36,248	8.859E-07	29	3.055E-08
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR BOOBY TRAP FLASH TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
bis(2-Ethylhexyl)phthalate	391	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Chrysene	228	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.8281	ND	36,248	ND	29	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

SIMULATOR FLASH ARTILLERY M110

TABLE A-1. AEC MUNITION ITEM INPUT DATA SHEET (28 MARCH 1998)
Munition Item: Simulator Flash Artillery
Created by: Radian International LLC

No. of Runs = 2

Sample Volumes:	Run No. 1		Run No. 2		Composite Run		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	893.7	1059.8	972.0	1176.4	NA	NA	1025.46
PM_{10}	302.9	192.3	625.3	611.8	NA	NA	433.07
Metals	893.7	1059.8	972.0	1176.4	NA	NA	1025.46
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	107.9	87.6	110.5	94.4	NA	182.0	100.09
HCl/Cl_2	29.4	23.7	28.9	23.4	NA	NA	26.35
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	119.6	128.2	112.5	140.5	NA	268.7	125.21
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	Run No. 1		Run No. 2		Composite Run		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	44.0	38.0	45.0	48.5	NA	NA	43.88
HCl/Cl_2 (NaOH)	49.0	37.0	41.0	36.0	NA	NA	40.75

Sample Weight Gain:	Run No. 1		Run No. 2		Composite Run		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.5860	0.5801	0.4906	0.4712	NA	NA	0.5320
PM_{10}	0.2466	0.2688	0.3003	0.3362	NA	NA	0.2880

Dilution Correction Factors:	Run No. 1	Run No. 2	Composite Run	Average
TSP	0.7887	0.8469	NA	0.8178
PM_{10}	0.9219	0.8942	NA	0.9081
Metals	0.7887	0.8469	NA	0.8178
VOCs	0.9071	0.9290	NA	0.9181
SVOCs	0.7887	0.8469	0.8178	0.8178
HCl/Cl_2	0.7887	0.8469	NA	0.8178
Energetics	NA	NA	NA	NA
Dioxin/Furan	0.7887	0.8469	NA	0.8178
Residue	NA	NA	NA	NA
CEM	0.7887	0.8469	NA	0.8178

	Run No. 1	Run No. 2	Composite Run	Average
Initial Plume Volume (m^3)	960.17	976.90	968.54	968.54
Net Explosive Weight (g)	85.05	85.05	85.05	85.05

TABLE A-2. AEC BACKGROUND INPUT DATA SHEET (28 MARCH 1998)
Munition Item: Simulator Flash Artillery
Created by: Radian International LLC

No. of Runs = 2

Sample Volumes:	FA - Background		Reagent Blank		Field Blank		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	1321.8	NA	NA	NA	NA	NA	1321.80
PM_{10}	984.8	NA	NA	NA	NA	NA	984.75
Metals	1321.8	NA	NA	NA	NA	NA	1321.80
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	113.5	NA	NA	NA	NA	NA	113.48
HCl/Cl_2	28.6	NA	NA	NA	NA	NA	28.64
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	153.8	NA	NA	NA	NA	NA	153.82
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	FA - Background		Reagent Blank		Field Blank		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	43.5	NA	107.2	NA	45.3	NA	75.35
HCl/Cl_2 (NaOH)	41.0	NA	92.0	NA	41.5	NA	66.50
HCl/Cl_2 (H_2O)	NA	NA	100.0	NA	NA	NA	100.00

Sample Weight Gain:	FA - Background		Reagent Blank		Field Blank		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	-0.0001	NA	-0.0026	NA	-0.0037	NA	-0.0014
PM_{10}	0.0005	NA	-0.0002	NA	-0.0029	NA	0.0002

TABLE A-3. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS DATA EVALUATION FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate											
TSP	2.124E+01	1.754E+01	ND	1.939E+01	-2.672E-03	ND	ND	7258.91	10.00	A	A
PM_{10}	2.875E+01	3.501E+01	ND	3.188E+01	1.793E-02	ND	ND	1778.07	10.00	A	A
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl	7.503E-02	3.086E-02	ND	5.294E-02	ND	6.700E-02	8.120E-03	10.00	6.52	A	B
Cl_2	2.545E-02	2.007E-02	ND	2.276E-02	3.231E-03	1.997E-03	1.461E-03	7.05	15.58	B	A
Dioxin/Furan											
Dioxin TEQ (a)	6.229E-10	6.054E-11	ND	3.417E-10	1.371E-10	ND	ND	2.49	10.00	C	A
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	2.957E+00	2.091E+00	ND	2.524E+00	1.385E-01	ND	ND	18.23	10.00	A	A
Nitrogen Oxide (NOx)	6.600E-01	8.150E-01	ND	7.375E-01	4.064E-02	ND	ND	18.15	10.00	A	A
HCl	-1.058E-01	-1.533E-01	ND	-1.295E-01	-4.682E-02	ND	ND	2.77	10.00	C	A
Carbon Dioxide (CO_2)	7.426E+02	8.026E+02	ND	7.726E+02	6.822E+02	ND	ND	1.13	10.00	D	A
Sulfur Dioxide (SO_2)	5.675E-02	5.433E-02	ND	5.554E-02	1.833E-04	ND	ND	303.02	10.00	A	A
Particulate-phase Metals											
Aluminum	1.052E-01	1.100E-01	ND	1.076E-01	NA (b)	1.486E-03	1.052E-03	NA (b)	102.32	NA (b)	A
Antimony	2.108E-02	9.225E-03	ND	1.515E-02	NA (b)	1.048E-04	7.420E-05	NA (b)	204.21	NA (b)	A
Arsenic	ND	ND	ND	ND	NA (b)	6.980E-05	4.928E-05	NA (b)	ND	NA (b)	F
Barium	1.228E+00	1.108E+00	ND	1.168E+00	NA (b)	6.687E-06	4.727E-06	NA (b)	247109.55	NA (b)	A
Beryllium	ND	ND	ND	ND	NA (b)	3.316E-05	2.345E-05	NA (b)	ND	NA (b)	F
Cadmium	8.381E-05	1.273E-04	ND	1.056E-04	NA (b)	8.739E-06	6.174E-06	NA (b)	17.10	NA (b)	A
Chromium	2.964E-03	2.847E-03	ND	2.906E-03	NA (b)	1.744E-05	1.233E-05	NA (b)	235.66	NA (b)	A
Cobalt	3.372E-04	3.215E-04	ND	3.293E-04	NA (b)	1.685E-05	1.191E-05	NA (b)	27.66	NA (b)	A
Copper	2.825E-02	2.357E-02	ND	2.591E-02	NA (b)	7.603E-05	5.368E-05	NA (b)	482.72	NA (b)	A
Lead	3.961E-03	3.426E-03	ND	3.693E-03	NA (b)	6.925E-05	4.910E-05	NA (b)	75.23	NA (b)	A
Magnesium	7.267E+00	3.532E+00	ND	5.400E+00	NA (b)	1.330E-04	9.417E-05	NA (b)	57343.84	NA (b)	A
Manganese	4.270E-03	4.403E-03	ND	4.337E-03	NA (b)	6.320E-06	4.470E-06	NA (b)	970.13	NA (b)	A
Nickel	1.520E-04	2.016E-04	ND	1.768E-04	NA (b)	3.627E-05	2.565E-05	NA (b)	6.89	NA (b)	B
Phosphorus	1.831E-03	2.382E-03	ND	2.107E-03	NA (b)	1.673E-04	1.183E-04	NA (b)	17.80	NA (b)	A
Selenium	ND	ND	ND	ND	NA (b)	6.339E-05	4.488E-05	NA (b)	ND	NA (b)	F
Silver	ND	ND	ND	ND	NA (b)	2.583E-05	1.825E-05	NA (b)	ND	NA (b)	F
Thallium	ND	ND	ND	ND	NA (b)	9.966E-05	7.053E-05	NA (b)	ND	NA (b)	F
Zinc	5.471E-03	6.182E-03	ND	5.827E-03	NA (b)	9.288E-05	6.559E-05	NA (b)	88.84	NA (b)	A
Mercury	ND	ND	ND	ND	NA (b)	0.000E+00	0.000E+00	NA (b)	ND	NA (b)	F

a
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD.
b
Insufficient material to analyze.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-4. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 1 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (a), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate											
TSP	-	-	2.124E+01	-2.672E-03	2.125E+01	0.7887	2.694E+01	33,908	5.702E-02	1	5.702E-02
PM_{10}	-	-	2.875E+01	1.793E-02	2.873E+01	0.9219	3.117E+01	33,908	6.598E-02	1	6.598E-02
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	49.467	7.503E-02	ND	7.503E-02	0.7887	9.513E-02	33,908	2.014E-04	1	2.014E-04
Cl_2 (b)	71	8.629	2.545E-02	3.231E-03	2.222E-02	0.7887	2.817E-02	33,908	5.964E-05	1	5.964E-05
Dioxin/Furan											
Dioxin TEQ (c)	-	-	6.229E-10	1.371E-10	4.858E-10	0.7887	6.159E-10	33,908	1.304E-12	1	1.304E-12
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	2538.847	2.957E+00	1.385E-01	2.819E+00	0.7887	3.574E+00	33,908	7.565E-03	1	7.565E-03
Nitrogen Oxide (NOx)	46	344.923	6.600E-01	4.064E-02	6.194E-01	0.7887	7.853E-01	33,908	1.662E-03	1	1.662E-03
HCl (b)	36	-70.619	-1.058E-01	-4.682E-02	-5.894E-02	0.7887	ND	33,908	ND	1	ND
Carbon Dioxide (CO_2)	44	405687.600	7.426E+02	6.822E+02	6.035E+01	0.7887	7.652E+01	33,908	1.620E-01	1	1.620E-01
Sulfur Dioxide (SO_2)	64	21.315	5.675E-02	1.833E-04	5.657E-02	0.7887	7.172E-02	33,908	1.518E-04	1	1.518E-04
Particulate-phase Metals											
Aluminum	27	93.665	1.052E-01	NA (d)	1.052E-01	0.7887	1.334E-01	33,908	2.824E-04	1	2.824E-04
Antimony	122	4.153	2.108E-02	NA (d)	2.108E-02	0.7887	2.673E-02	33,908	5.657E-05	1	5.657E-05
Arsenic	75	ND	ND	NA (d)	ND	0.7887	ND	33,908	ND	1	ND
Barium	137	215.478	1.228E+00	NA (d)	1.228E+00	0.7887	1.557E+00	33,908	3.296E-03	1	3.296E-03
Beryllium	9	ND	ND	NA (d)	ND	0.7887	ND	33,908	ND	1	ND
Cadmium	112	0.018	8.381E-05	NA (d)	8.381E-05	0.7887	1.063E-04	33,908	2.249E-07	1	2.249E-07
Chromium	52	1.370	2.964E-03	NA (d)	2.964E-03	0.7887	3.759E-03	33,908	7.956E-06	1	7.956E-06
Cobalt	59	0.137	3.372E-04	NA (d)	3.372E-04	0.7887	4.275E-04	33,908	9.050E-07	1	9.050E-07
Copper	64	10.612	2.825E-02	NA (d)	2.825E-02	0.7887	3.582E-02	33,908	7.583E-05	1	7.583E-05
Lead	207	0.460	3.961E-03	NA (d)	3.961E-03	0.7887	5.022E-03	33,908	1.063E-05	1	1.063E-05
Magnesium	24	7278.748	7.267E+00	NA (d)	7.267E+00	0.7887	9.214E+00	33,908	1.950E-02	1	1.950E-02
Manganese	55	1.866	4.270E-03	NA (d)	4.270E-03	0.7887	5.414E-03	33,908	1.146E-05	1	1.146E-05
Nickel	59	0.062	1.520E-04	NA (d)	1.520E-04	0.7887	1.927E-04	33,908	4.080E-07	1	4.080E-07
Phosphorus	31	1.420	1.831E-03	NA (d)	1.831E-03	0.7887	2.321E-03	33,908	4.914E-06	1	4.914E-06
Selenium	79	ND	ND	NA (d)	ND	0.7887	ND	33,908	ND	1	ND
Silver	108	ND	ND	NA (d)	ND	0.7887	ND	33,908	ND	1	ND
Thallium	204	ND	ND	NA (d)	ND	0.7887	ND	33,908	ND	1	ND
Zinc	65	2.023	5.471E-03	NA (d)	5.471E-03	0.7887	6.937E-03	33,908	1.468E-05	1	1.468E-05
Mercury	201	ND	ND	NA (d)	ND	0.7887	ND	33,908	ND	1	ND

a
Estimated from tracer data as presented in Volume IV.
b
HCl/Cl_2 levels were too low to be reliably measured.
c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.
d
Insufficient material to analyze.

TABLE A-5. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (a), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
Particulate											
TSP	-	-	1.754E+01	-2.672E-03	1.755E+01	0.8469	2.072E+01	34,499	4.462E-02	1	4.462E-02
PM_{10}	-	-	3.501E+01	1.793E-02	3.499E+01	0.8942	3.914E+01	34,499	8.429E-02	1	8.429E-02
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	20.347	3.086E-02	ND	3.086E-02	0.8469	3.644E-02	34,499	7.848E-05	1	7.848E-05
Cl_2 (b)	71	6.806	2.007E-02	3.231E-03	1.684E-02	0.8469	1.989E-02	34,499	4.283E-05	1	4.283E-05
Dioxin/Furan											
Dioxin TEQ (c)	-	-	6.054E-11	1.371E-10	ND	0.8469	ND	34,499	ND	1	ND
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	1795.400	2.091E+00	1.350E-01	1.956E+00	0.8469	2.310E+00	34,499	4.975E-03	1	4.975E-03
Nitrogen Oxide (NOx)	46	425.901	8.150E-01	4.056E-02	7.744E-01	0.8469	9.144E-01	34,499	1.969E-03	1	1.969E-03
HCl (b)	36	-102.343	-1.533E-01	-1.631E-01	9.782E-03	0.8469	1.155E-02	34,499	2.488E-05	1	2.488E-05
Carbon Dioxide (CO_2)	44	438509.800	8.026E+02	6.783E+02	1.244E+02	0.8469	1.468E+02	34,499	3.162E-01	1	3.162E-01
Sulfur Dioxide (SO_2)	64	20.408	5.433E-02	-4.336E-04	5.477E-02	0.8469	6.467E-02	34,499	1.393E-04	1	1.393E-04
Particulate-phase Metals											
Aluminum	27	97.921	1.100E-01	NA (d)	ND	0.8469	ND	34,499	ND	1	ND
Antimony	122	1.818	9.225E-03	NA (d)	9.225E-03	0.8469	1.089E-02	34,499	2.346E-05	1	2.346E-05
Arsenic	75	ND	ND	NA (d)	ND	0.8469	ND	34,499	ND	1	ND
Barium	137	194.398	1.108E+00	NA (d)	1.108E+00	0.8469	1.308E+00	34,499	2.818E-03	1	2.818E-03
Beryllium	9	ND	ND	NA (d)	ND	0.8469	ND	34,499	ND	1	ND
Cadmium	112	0.027	1.273E-04	NA (d)	1.273E-04	0.8469	1.503E-04	34,499	3.238E-07	1	3.238E-07
Chromium	52	1.316	2.847E-03	NA (d)	2.847E-03	0.8469	3.361E-03	34,499	7.240E-06	1	7.240E-06
Cobalt	59	0.131	3.215E-04	NA (d)	3.215E-04	0.8469	3.796E-04	34,499	8.176E-07	1	8.176E-07
Copper	64	8.853	2.357E-02	NA (d)	2.357E-02	0.8469	2.783E-02	34,499	5.994E-05	1	5.994E-05
Lead	207	0.398	3.426E-03	NA (d)	3.426E-03	0.8469	4.045E-03	34,499	8.713E-06	1	8.713E-06
Magnesium	24	3538.149	3.532E+00	NA (d)	3.532E+00	0.8469	4.171E+00	34,499	8.983E-03	1	8.983E-03
Manganese	55	1.925	4.403E-03	NA (d)	4.403E-03	0.8469	5.199E-03	34,499	1.120E-05	1	1.120E-05
Nickel	59	0.082	2.016E-04	NA (d)	2.016E-04	0.8469	2.380E-04	34,499	5.126E-07	1	5.126E-07
Phosphorus	31	1.847	2.382E-03	NA (d)	2.382E-03	0.8469	2.813E-03	34,499	6.058E-06	1	6.058E-06
Selenium	79	ND	ND	NA (d)	ND	0.8469	ND	34,499	ND	1	ND
Silver	108	ND	ND	NA (d)	ND	0.8469	ND	34,499	ND	1	ND
Thallium	204	ND	ND	NA (d)	ND	0.8469	ND	34,499	ND	1	ND
Zinc	65	2.286	6.182E-03	NA (d)	6.182E-03	0.8469	7.300E-03	34,499	1.572E-05	1	1.572E-05
Mercury	201	ND	ND	NA (d)	ND	0.8469	ND	34,499	ND	1	ND

a
Estimated from tracer data as presented in Volume IV.
b
HCl/Cl_2 levels were too low to be reliably measured.
c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.
d
Insufficient material to analyze.

TABLE A-6. AEC - DIOXIN/FURAN COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1-2, mg/m^3	Dilution Correction Factor (a), %	Corrected Concentration - Run 1-2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
Dioxin/Furan											
Dioxin TEQ (b)	-	-	ND	1.371E-10	ND	NA	ND	34,203	ND	1	ND

a
Estimated from tracer data as presented in Volume IV.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Total Nonmethane Hydrocarbons (TNMHC)										
TNMHC	3.020E+00	1.515E+00	2.267E+00	1.760E-01	1.000E-04	1.000E-04	12.89	22674.00	A	A
Volatile Organic Compounds (VOCs)										
Ethane	1.600E-03	1.500E-03	1.550E-03	2.300E-03	1.000E-04	1.000E-04	0.67	15.50	F	A
Ethylene	2.220E-02	1.870E-02	2.045E-02	3.000E-04	1.000E-04	1.000E-04	68.17	204.50	A	A
Acetylene	8.000E-03	7.600E-03	7.800E-03	7.500E-04	1.000E-04	1.000E-04	10.40	78.00	A	A
Propane	5.000E-04	1.000E-03	7.500E-04	1.000E-03	1.000E-04	1.000E-04	0.75	7.50	F	B
Propene	9.600E-03	9.000E-03	9.300E-03	1.000E-04	1.000E-04	1.000E-04	93.00	93.00	A	A
i-Butane	3.500E-03	2.800E-03	3.150E-03	3.000E-04	1.000E-04	1.000E-04	10.50	31.50	A	A
i-Butene	6.700E-03	5.100E-03	5.900E-03	1.000E-04	1.000E-04	1.000E-04	59.00	59.00	A	A
1-Butene	2.300E-03	2.300E-03	2.300E-03	1.000E-04	1.000E-04	1.000E-04	23.00	23.00	A	A
1,3-Butadiene	2.000E-03	1.700E-03	1.850E-03	ND	1.000E-04	1.000E-04	10.00	18.50	A	A
n-Butane	2.050E-02	1.080E-02	1.565E-02	5.000E-04	1.000E-04	1.000E-04	31.30	156.50	A	A
trans-2-Butene	1.700E-03	1.500E-03	1.600E-03	ND	1.000E-04	1.000E-04	10.00	16.00	A	A
2,2-Dimethylpropane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Butene	5.000E-04	5.000E-04	5.000E-04	ND	1.000E-04	1.000E-04	10.00	5.00	A	B
3-Methyl-1-butene	4.000E-04	4.000E-04	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
i-Pentane	1.241E-01	4.070E-02	8.240E-02	1.250E-03	1.000E-04	1.000E-04	65.92	824.00	A	A
1-Pentene	8.000E-04	8.000E-04	8.000E-04	ND	1.000E-04	1.000E-04	10.00	8.00	A	B
2-Methyl-1-butene	1.400E-03	9.000E-04	1.150E-03	ND	1.000E-04	1.000E-04	10.00	11.50	A	A
n-Pentane	1.273E-01	4.090E-02	8.410E-02	1.300E-03	1.000E-04	1.000E-04	64.69	841.00	A	A
Isoprene	1.000E-04	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
trans-2-Pentene	9.000E-04	6.000E-04	7.500E-04	ND	1.000E-04	1.000E-04	10.00	7.50	A	B
cis-2-Pentene	5.000E-04	3.000E-04	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
2-Methyl-2-butene	4.000E-04	5.000E-04	4.500E-04	ND	1.000E-04	1.000E-04	10.00	4.50	A	C
2,2-Dimethylbutane	1.120E-02	3.600E-03	7.400E-03	1.500E-04	1.000E-04	1.000E-04	49.33	74.00	A	A
Cyclopentene	4.000E-04	3.000E-04	3.500E-04	ND	1.000E-04	1.000E-04	10.00	3.50	A	C
4-Methyl-1-pentene	4.000E-04	2.000E-04	3.000E-04	ND	1.000E-04	1.000E-04	10.00	3.00	A	C
Cyclopentane	1.050E-02	3.400E-03	6.950E-03	1.500E-04	1.000E-04	1.000E-04	46.33	69.50	A	A
2,3-Dimethylbutane	2.500E-02	8.200E-03	1.660E-02	4.500E-04	1.000E-04	1.000E-04	36.89	166.00	A	A
cis-4-Methyl-2-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylpentane	1.256E-01	4.320E-02	8.440E-02	1.750E-03	1.000E-04	1.000E-04	48.23	844.00	A	A
3-Methylpentane	8.900E-02	3.020E-02	5.960E-02	1.400E-03	1.000E-04	1.000E-04	42.57	596.00	A	A
2-Methyl-1-pentene	7.000E-04	ND	7.000E-04	ND	1.000E-04	1.000E-04	10.00	7.00	A	B
1-Hexene	4.000E-04	ND	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
n-Hexane	1.438E-01	5.660E-02	1.002E-01	2.600E-03	1.000E-04	1.000E-04	38.54	1002.00	A	A
trans-2-Hexene	7.000E-04	4.000E-04	5.500E-04	ND	1.000E-04	1.000E-04	10.00	5.50	A	B
2-Methyl-2-pentene	4.000E-04	5.000E-04	4.500E-04	ND	1.000E-04	1.000E-04	10.00	4.50	A	C
cis-2-Hexene	4.000E-04	2.000E-04	3.000E-04	ND	1.000E-04	1.000E-04	10.00	3.00	A	C
Methylcyclopentane	5.380E-02	1.950E-02	3.665E-02	1.150E-03	1.000E-04	1.000E-04	31.87	366.50	A	A
2,4-Dimethylpentane	1.490E-02	5.600E-03	1.025E-02	7.500E-04	1.000E-04	1.000E-04	13.67	102.50	A	A
Benzene	1.233E-01	5.140E-02	8.735E-02	3.100E-03	1.000E-04	1.000E-04	28.18	873.50	A	A
Cyclohexane	6.350E-02	2.400E-02	4.375E-02	1.200E-03	1.000E-04	1.000E-04	36.46	437.50	A	A
2-Methylhexane	7.350E-02	3.310E-02	5.330E-02	1.750E-03	1.000E-04	1.000E-04	30.46	533.00	A	A
2,3-Dimethylpentane	2.680E-02	7.300E-03	1.705E-02	1.550E-03	1.000E-04	1.000E-04	11.00	170.50	A	A
3-Methylhexane	8.250E-02	3.330E-02	5.790E-02	1.950E-03	1.000E-04	1.000E-04	29.69	579.00	A	A

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2,2,4-Trimethylpentane	2.520E-02	7.400E-03	1.630E-02	2.150E-03	1.000E-04	1.000E-04	7.58	163.00	B	A
n-Heptane	1.069E-01	4.460E-02	7.575E-02	2.650E-03	1.000E-04	1.000E-04	28.58	757.50	A	A
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclohexane	1.098E-01	4.440E-02	7.710E-02	2.450E-03	1.000E-04	1.000E-04	31.47	771.00	A	A
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,5-Dimethylhexane	9.900E-03	5.900E-03	7.900E-03	4.500E-04	1.000E-04	1.000E-04	17.56	79.00	A	A
2,4-Dimethylhexane	1.270E-02	5.500E-03	9.100E-03	4.500E-04	1.000E-04	1.000E-04	20.22	91.00	A	A
2,3,4-Trimethylpentane	4.000E-03	1.900E-03	2.950E-03	5.000E-04	1.000E-04	1.000E-04	5.90	29.50	B	A
Toluene	2.504E-01	1.946E-01	2.225E-01	1.890E-02	1.000E-04	1.000E-04	11.77	2225.00	A	A
2,3-Dimethylhexane	6.400E-03	2.900E-03	4.650E-03	3.500E-04	1.000E-04	1.000E-04	13.29	46.50	A	A
2-Methylheptane	3.340E-02	1.530E-02	2.435E-02	7.500E-04	1.000E-04	1.000E-04	32.47	243.50	A	A
3-Ethylhexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylheptane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2,4-Trimethylhexane	2.000E-03	2.200E-03	2.100E-03	5.500E-04	1.000E-04	1.000E-04	3.82	21.00	C	A
n-Octane	3.840E-02	1.750E-02	2.795E-02	1.100E-03	1.000E-04	1.000E-04	25.41	279.50	A	A
Ethylcyclohexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Ethylbenzene	7.450E-02	3.790E-02	5.620E-02	4.050E-03	1.000E-04	1.000E-04	13.88	562.00	A	A
m-Xylene & p-Xylene	2.087E-01	1.064E-01	1.576E-01	1.660E-02	1.000E-04	1.000E-04	9.49	1575.50	B	A
Styrene	2.100E-03	1.300E-03	1.700E-03	2.000E-04	1.000E-04	1.000E-04	8.50	17.00	B	A
o-Xylene	1.286E-01	6.890E-02	9.875E-02	9.100E-03	1.000E-04	1.000E-04	10.85	987.50	A	A
n-Nonane	8.700E-03	4.700E-03	6.700E-03	1.000E-03	1.000E-04	1.000E-04	6.70	67.00	B	A
i-Propylbenzene	2.600E-03	1.400E-03	2.000E-03	ND	1.000E-04	1.000E-04	10.00	20.00	A	A
n-Propylbenzene	1.680E-02	9.400E-03	1.310E-02	1.700E-03	1.000E-04	1.000E-04	7.71	131.00	B	A
p-Ethyltoluene	6.800E-02	3.870E-02	5.335E-02	7.550E-03	1.000E-04	1.000E-04	7.07	533.50	B	A
m-Ethyltoluene	3.100E-02	1.770E-02	2.435E-02	3.500E-03	1.000E-04	1.000E-04	6.96	243.50	B	A
1,3,5-Trimethylbenzene	4.280E-02	2.530E-02	3.405E-02	5.000E-03	1.000E-04	1.000E-04	6.81	340.50	B	A
o-Ethyltoluene	2.010E-02	1.160E-02	1.585E-02	2.450E-03	1.000E-04	1.000E-04	6.47	158.50	B	A
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.066E-01	6.300E-02	8.480E-02	1.570E-02	1.000E-04	1.000E-04	5.40	848.00	B	A
n-Decane	2.400E-03	1.400E-03	1.900E-03	5.000E-04	1.000E-04	1.000E-04	3.80	19.00	C	A
alpha-Pinene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
beta-Pinene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
delta 3-Carene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
d-Limonene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
MTBE	1.351E-01	4.490E-02	9.000E-02	2.150E-03	1.000E-04	1.000E-04	41.86	900.00	A	A
ETBE	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Dichlorodifluoromethane	3.141E-03	1.657E-03	2.399E-03	1.434E-03	4.992E-04	4.992E-04	1.67	4.81	D	C
Methylchloride	ND	ND	ND	ND	2.080E-04	2.080E-04	ND	ND	F	F
Dichlorotetrafluoroethane	ND	ND	ND	ND	7.114E-04	7.114E-04	ND	ND	F	F
Chloroethene	ND	ND	ND	ND	2.621E-04	2.621E-04	ND	ND	F	F
1,3-Butadiene	2.034E-02	1.729E-02	1.882E-02	ND	2.246E-04	2.246E-04	10.00	83.76	A	A
Methylbromide	ND	ND	ND	ND	3.952E-04	3.952E-04	ND	ND	F	F
Ethylchloride	ND	ND	ND	ND	2.683E-04	2.683E-04	ND	ND	F	F
Trichloromonofluoromethane	2.335E-03	2.193E-03	2.264E-03	2.506E-03	5.699E-04	5.699E-04	0.90	3.97	F	C
Vinylidenechloride	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Methylenechloride	1.187E-02	5.499E-03	8.685E-03	9.779E-04	3.536E-04	3.536E-04	8.88	24.56	B	A
Allylchloride	ND	ND	ND	ND	3.182E-04	3.182E-04	ND	ND	F	F
1,1,2-Trichloro-1,2,2-trifluoroethane	6.732E-04	6.472E-04	6.602E-04	8.291E-04	7.821E-04	7.821E-04	0.80	0.84	F	F
1,1-Dichloroethane	ND	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
1,2-Dichloroethene	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Chloroform	ND	ND	ND	ND	4.950E-04	4.950E-04	ND	ND	F	F
1,2-Dichloroethane	ND	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
Methylchloroform	ND	3.192E-04	3.192E-04	3.562E-04	5.533E-04	5.533E-04	0.90	0.58	F	F
Benzene	1.254E+00	5.228E-01	8.885E-01	3.153E-03	3.245E-04	3.245E-04	281.77	2738.09	A	A
Carbontetrachloride	4.898E-04	6.180E-04	5.539E-04	7.588E-04	6.406E-04	6.406E-04	0.73	0.86	F	F
1,2-Dichloropropane	ND	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Trichloroethylene	ND	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
cis 1,3-Dichloro-1-propene	ND	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
trans 1,3-Dichloro-1-propene	ND	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
1,1,2-Trichloroethane	ND	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
Toluene	2.547E+00	1.979E+00	2.263E+00	1.922E-02	3.827E-04	3.827E-04	117.72	5913.18	A	A
1,2-Dibromoethane	ND	ND	ND	ND	7.821E-04	7.821E-04	ND	ND	F	F
Perchloroethylene	4.875E-02	ND	4.875E-02	ND	6.906E-04	6.906E-04	10.00	70.60	A	A
Chlorobenzene	ND	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Ethylbenzene	1.144E+00	5.819E-01	8.628E-01	6.218E-03	6.656E-04	6.656E-04	138.77	1296.31	A	A
m&p-Xylene	2.122E+00	1.082E+00	1.602E+00	1.677E-02	4.410E-04	4.410E-04	95.56	3633.42	A	A
Styrene	ND	1.266E-02	1.266E-02	2.439E-04	4.326E-04	4.326E-04	51.88	29.25	A	A
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	6.989E-04	6.989E-04	ND	ND	F	F
o-Xylene	1.308E+00	7.008E-01	1.004E+00	9.256E-03	4.410E-04	4.410E-04	108.52	2277.77	A	A
p-Ethyltoluene	4.606E-01	2.523E-01	3.565E-01	1.673E-02	4.992E-04	4.992E-04	21.31	714.08	A	A
1,3,5-Trimethylbenzene	4.434E-01	2.427E-01	3.430E-01	7.637E-03	4.992E-04	4.992E-04	44.92	687.20	A	A
1,2,4-Trimethylbenzene	8.540E-01	4.907E-01	6.724E-01	1.519E-02	4.992E-04	4.992E-04	44.28	1346.91	A	A
Benzylchloride	ND	ND	ND	ND	5.283E-04	5.283E-04	ND	ND	F	F
m-Dichlorobenzene	ND	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
p-Dichlorobenzene	ND	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
o-Dichlorobenzene	ND	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	ND	7.530E-04	7.530E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	ND	1.086E-03	1.086E-03	ND	ND	F	F
Phenylacetylene	ND	ND	ND	6.579E-04	4.243E-04	4.243E-04	ND	ND	F	F
Indane	1.895E-01	1.103E-01	1.499E-01	6.217E-03	4.909E-04	4.909E-04	24.11	305.35	A	A
2,3-Dihydro-1-methyl-1H-indene	5.526E-02	3.869E-02	4.698E-02	3.747E-03	5.491E-04	5.491E-04	12.54	85.55	A	A
2,3-Dihydro-4-methyl-1H-indene	7.088E-02	4.780E-02	5.934E-02	4.893E-03	5.491E-04	5.491E-04	12.13	108.06	A	A
Naphthalene	9.168E-02	4.951E-02	7.060E-02	7.803E-03	5.325E-04	5.325E-04	9.05	132.58	B	A
2-Methylnaphthalene	9.285E-03	ND	9.285E-03	2.818E-03	5.907E-04	5.907E-04	3.30	15.72	C	A
1-Methylnaphthalene	ND	ND	ND	1.102E-03	5.907E-04	5.907E-04	ND	ND	F	F
Cyanogen	ND	ND	ND	ND	2.163E-04	2.163E-04	ND	ND	F	F
Methylnitrite	3.079E-02	4.049E-02	3.564E-02	ND	2.538E-04	2.538E-04	10.00	140.44	A	A
Acetonitrile	ND	ND	ND	ND	1.706E-04	1.706E-04	ND	ND	F	F
Acrylonitrile	ND	ND	ND	ND	2.205E-04	2.205E-04	ND	ND	F	F
Nitromethane	5.450E-03	5.529E-03	5.490E-03	8.363E-04	2.538E-04	2.538E-04	6.56	21.63	B	A
Propanenitrile	ND	ND	ND	ND	2.288E-04	2.288E-04	ND	ND	F	F
2-Methylpropanenitrile	ND	ND	ND	ND	2.870E-04	2.870E-04	ND	ND	F	F
Pentanenitrile	ND	ND	ND	ND	3.453E-04	3.453E-04	ND	ND	F	F
Hexanenitrile	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Benzonitrile	ND	ND	ND	ND	4.285E-04	4.285E-04	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	ND	5.782E-04	5.782E-04	ND	ND	F	F
Acrolein	7.706E-03	7.451E-03	7.579E-03	ND	2.330E-04	2.330E-04	10.00	32.53	A	A
Acetone	ND	2.153E-02	2.153E-02	5.169E-03	2.330E-04	2.330E-04	4.17	92.42	C	A

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
1-Hydroxy-2-propanone	ND	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
Furan	ND	ND	ND	ND	2.829E-04	2.829E-04	ND	ND	F	F
2-Propanol	ND	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
2-Methylpropanal	ND	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
1-Propanol	ND	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
Methacrolein	ND	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
Methyl-vinyl Ketone	ND	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
MTBE	1.374E+00	4.558E-01	9.149E-01	2.181E-03	3.661E-04	3.661E-04	419.54	2499.18	A	A
2,3-Butanedione	ND	ND	ND	ND	3.578E-04	3.578E-04	ND	ND	F	F
Butanal	ND	ND	ND	2.451E-04	2.995E-04	2.995E-04	ND	ND	F	F
2-Butanone	1.217E-02	8.098E-03	1.013E-02	7.607E-04	2.995E-04	2.995E-04	13.32	33.83	A	A
2-Methyl-1,3-dioxolane	ND	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2-Methylfuran	ND	ND	ND	ND	3.411E-04	3.411E-04	ND	ND	F	F
Tetrahydrofuran	ND	ND	ND	ND	2.995E-04	2.995E-04	ND	ND	F	F
trans-2-Butenal	ND	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
Acetic Acid	2.589E-02	1.653E-02	2.121E-02	1.627E-03	2.496E-04	2.496E-04	13.03	84.98	A	A
1-Butanol	ND	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
2-Pentanone	ND	ND	ND	ND	3.578E-04	3.578E-04	ND	ND	F	F
Pentanal	ND	ND	ND	1.159E-03	3.578E-04	3.578E-04	ND	ND	F	F
1,4-Dioxane	ND	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
Methyl Methacrylate	ND	ND	ND	ND	4.160E-04	4.160E-04	ND	ND	F	F
Cyclopentanone	ND	ND	ND	ND	3.494E-04	3.494E-04	ND	ND	F	F
Hexanal	ND	ND	ND	1.143E-03	4.160E-04	4.160E-04	ND	ND	F	F
2-Furaldehyde	ND	ND	ND	ND	3.994E-04	3.994E-04	ND	ND	F	F
Cyclohexanone	ND	ND	ND	ND	4.077E-04	4.077E-04	ND	ND	F	F
Heptanal	7.642E-03	5.009E-03	6.326E-03	1.027E-03	4.742E-04	4.742E-04	6.16	13.34	B	A
2-Butoxyethanol	ND	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
Benzaldehyde	4.080E-02	4.237E-02	4.159E-02	1.868E-03	4.410E-04	4.410E-04	22.26	94.31	A	A
6-Methyl-5-hepten-2-one	ND	ND	ND	6.854E-04	5.242E-04	5.242E-04	ND	ND	F	F
Octanal	2.056E-02	1.292E-02	1.674E-02	2.349E-03	5.325E-04	5.325E-04	7.13	31.43	B	A
Benzofuran	ND	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2-Ethyl-1-hexanol	ND	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
Acetophonone	ND	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
Nonanal	2.979E-02	1.730E-02	2.354E-02	4.077E-03	5.907E-04	5.907E-04	5.77	39.85	B	A
Decanal	2.804E-02	1.159E-02	1.982E-02	2.462E-03	6.490E-04	6.490E-04	8.05	30.54	B	A
Carbonyl Sulfide	2.387E-03	2.577E-03	2.482E-03	2.681E-04	2.496E-04	2.496E-04	9.26	9.94	B	B
Carbon Disulfide	5.180E-03	1.186E-02	8.522E-03	5.882E-04	3.162E-04	3.162E-04	14.49	26.95	A	A
Thiophene	ND	ND	ND	ND	3.494E-04	3.494E-04	ND	ND	F	F
Dimethyldisulfide	ND	ND	ND	ND	3.910E-04	3.910E-04	ND	ND	F	F

a
Compounds in bold represent duplicate values.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR FLASH ARITLLERY TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	3.020E+00	3.990E-02	2.980E+00	0.9071	3.285E+00	33,908	6.953E-03	1	6.953E-03
Volatile Organic Compounds (VOCs)											
Ethane	30	1.282	1.600E-03	2.300E-03	-7.000E-04	0.9071	ND	33,908	ND	1	ND
Ethylene	28	19.059	2.220E-02	4.000E-04	2.180E-02	0.9071	2.403E-02	33,908	5.087E-05	1	5.087E-05
Acetylene	26	7.396	8.000E-03	8.000E-04	7.200E-03	0.9071	7.937E-03	33,908	1.680E-05	1	1.680E-05
Propane	44	0.273	5.000E-04	1.000E-03	-5.000E-04	0.9071	ND	33,908	ND	1	ND
Propene	42	5.495	9.600E-03	1.000E-04	9.500E-03	0.9071	1.047E-02	33,908	2.217E-05	1	2.217E-05
i-Butane	58	1.451	3.500E-03	4.000E-04	3.100E-03	0.9071	3.417E-03	33,908	7.234E-06	1	7.234E-06
i-Butene	56	2.876	6.700E-03	ND	6.700E-03	0.9071	7.386E-03	33,908	1.564E-05	1	1.564E-05
1-Butene	56	0.987	2.300E-03	ND	2.300E-03	0.9071	2.536E-03	33,908	5.367E-06	1	5.367E-06
1,3-Butadiene	54	0.890	2.000E-03	ND	2.000E-03	0.9071	2.205E-03	33,908	4.667E-06	1	4.667E-06
n-Butane	58	8.496	2.050E-02	5.000E-04	2.000E-02	0.9071	2.205E-02	33,908	4.667E-05	1	4.667E-05
trans-2-Butene	56	0.730	1.700E-03	ND	1.700E-03	0.9071	1.874E-03	33,908	3.967E-06	1	3.967E-06
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
cis-2-Butene	56	0.215	5.000E-04	ND	5.000E-04	0.9071	5.512E-04	33,908	1.167E-06	1	1.167E-06
3-Methyl-1-butene	70	0.137	4.000E-04	ND	4.000E-04	0.9071	4.410E-04	33,908	9.335E-07	1	9.335E-07
i-Pentane	72	41.433	1.241E-01	1.000E-03	1.231E-01	0.9071	1.357E-01	33,908	2.873E-04	1	2.873E-04
1-Pentene	70	0.275	8.000E-04	ND	8.000E-04	0.9071	8.819E-04	33,908	1.867E-06	1	1.867E-06
2-Methyl-1-butene	70	0.481	1.400E-03	ND	1.400E-03	0.9071	1.543E-03	33,908	3.267E-06	1	3.267E-06
n-Pentane	72	42.501	1.273E-01	9.000E-04	1.264E-01	0.9071	1.393E-01	33,908	2.950E-04	1	2.950E-04
Isoprene	68	0.035	1.000E-04	ND	1.000E-04	0.9071	1.102E-04	33,908	2.334E-07	1	2.334E-07
trans-2-Pentene	70	0.309	9.000E-04	ND	9.000E-04	0.9071	9.922E-04	33,908	2.100E-06	1	2.100E-06
cis-2-Pentene	70	0.172	5.000E-04	ND	5.000E-04	0.9071	5.512E-04	33,908	1.167E-06	1	1.167E-06
2-Methyl-2-butene	70	0.137	4.000E-04	ND	4.000E-04	0.9071	4.410E-04	33,908	9.335E-07	1	9.335E-07
2,2-Dimethylbutane	86	3.131	1.120E-02	1.000E-04	1.110E-02	0.9071	1.224E-02	33,908	2.590E-05	1	2.590E-05
Cyclopentene	68	0.141	4.000E-04	ND	4.000E-04	0.9071	4.410E-04	33,908	9.335E-07	1	9.335E-07
4-Methyl-1-pentene	84	0.114	4.000E-04	ND	4.000E-04	0.9071	4.410E-04	33,908	9.335E-07	1	9.335E-07
Cyclopentane	70	3.606	1.050E-02	1.000E-04	1.040E-02	0.9071	1.147E-02	33,908	2.427E-05	1	2.427E-05
2,3-Dimethylbutane	86	6.988	2.500E-02	4.000E-04	2.460E-02	0.9071	2.712E-02	33,908	5.741E-05	1	5.741E-05
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2-Methylpentane	86	35.107	1.256E-01	1.000E-03	1.246E-01	0.9071	1.374E-01	33,908	2.908E-04	1	2.908E-04
3-Methylpentane	86	24.877	8.900E-02	7.000E-04	8.830E-02	0.9071	9.734E-02	33,908	2.061E-04	1	2.061E-04
2-Methyl-1-pentene	84	0.200	7.000E-04	ND	7.000E-04	0.9071	7.717E-04	33,908	1.634E-06	1	1.634E-06
1-Hexene	84	0.114	4.000E-04	ND	4.000E-04	0.9071	4.410E-04	33,908	9.335E-07	1	9.335E-07
n-Hexane	86	40.195	1.438E-01	8.000E-04	1.430E-01	0.9071	1.576E-01	33,908	3.337E-04	1	3.337E-04
trans-2-Hexene	84	0.200	7.000E-04	ND	7.000E-04	0.9071	7.717E-04	33,908	1.634E-06	1	1.634E-06
2-Methyl-2-pentene	84	0.114	4.000E-04	ND	4.000E-04	0.9071	4.410E-04	33,908	9.335E-07	1	9.335E-07
cis-2-Hexene	84	0.114	4.000E-04	ND	4.000E-04	0.9071	4.410E-04	33,908	9.335E-07	1	9.335E-07
Methylcyclopentane	84	15.396	5.380E-02	4.000E-04	5.340E-02	0.9071	5.887E-02	33,908	1.246E-04	1	1.246E-04
2,4-Dimethylpentane	100	3.582	1.490E-02	8.000E-04	1.410E-02	0.9071	1.554E-02	33,908	3.290E-05	1	3.290E-05
Benzene	78	37.999	1.233E-01	1.100E-03	1.222E-01	0.9071	1.347E-01	33,908	2.852E-04	1	2.852E-04
Cyclohexane	84	18.172	6.350E-02	2.000E-04	6.330E-02	0.9071	6.978E-02	33,908	1.477E-04	1	1.477E-04
2-Methylhexane	100	17.668	7.350E-02	4.000E-04	7.310E-02	0.9071	8.059E-02	33,908	1.706E-04	1	1.706E-04
2,3-Dimethylpentane	100	6.442	2.680E-02	1.600E-03	2.520E-02	0.9071	2.778E-02	33,908	5.881E-05	1	5.881E-05
3-Methylhexane	100	19.832	8.250E-02	4.000E-04	8.210E-02	0.9071	9.051E-02	33,908	1.916E-04	1	1.916E-04
2,2,4-Trimethylpentane	114	5.314	2.520E-02	3.000E-03	2.220E-02	0.9071	2.447E-02	33,908	5.181E-05	1	5.181E-05

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR FLASH ARITLLERY TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
n-Heptane	100	25.697	1.069E-01	4.000E-04	1.065E-01	0.9071	1.174E-01	33,908	2.485E-04	1	2.485E-04
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Methylcyclohexane	98	26.933	1.098E-01	2.000E-04	1.096E-01	0.9071	1.208E-01	33,908	2.558E-04	1	2.558E-04
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2,5-Dimethylhexane	114	2.088	9.900E-03	2.000E-04	9.700E-03	0.9071	1.069E-02	33,908	2.264E-05	1	2.264E-05
2,4-Dimethylhexane	114	2.678	1.270E-02	3.000E-04	1.240E-02	0.9071	1.367E-02	33,908	2.894E-05	1	2.894E-05
2,3,4-Trimethylpentane	114	0.843	4.000E-03	6.000E-04	3.400E-03	0.9071	3.748E-03	33,908	7.934E-06	1	7.934E-06
Toluene	92	65.426	2.504E-01	2.200E-03	2.482E-01	0.9071	2.736E-01	33,908	5.792E-04	1	5.792E-04
2,3-Dimethylhexane	114	1.350	6.400E-03	3.000E-04	6.100E-03	0.9071	6.725E-03	33,908	1.424E-05	1	1.424E-05
2-Methylheptane	111	7.233	3.340E-02	1.000E-04	3.330E-02	0.9071	3.671E-02	33,908	7.771E-05	1	7.771E-05
3-Ethylhexane	114	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2,2,4-Trimethylhexane	128	0.376	2.000E-03	1.000E-04	1.900E-03	0.9071	2.095E-03	33,908	4.434E-06	1	4.434E-06
n-Octane	114	8.097	3.840E-02	1.000E-04	3.830E-02	0.9071	4.222E-02	33,908	8.938E-05	1	8.938E-05
Ethylcyclohexane	112	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Ethylbenzene	160	11.193	7.450E-02	3.000E-04	7.420E-02	0.9071	8.180E-02	33,908	1.732E-04	1	1.732E-04
m-Xylene & p-Xylene	106	47.329	2.087E-01	1.100E-03	2.076E-01	0.9071	2.289E-01	33,908	4.845E-04	1	4.845E-04
Styrene	104	0.485	2.100E-03	1.000E-04	2.000E-03	0.9071	2.205E-03	33,908	4.667E-06	1	4.667E-06
o-Xylene	106	29.164	1.286E-01	4.000E-04	1.282E-01	0.9071	1.413E-01	33,908	2.992E-04	1	2.992E-04
n-Nonane	128	1.634	8.700E-03	ND	8.700E-03	0.9071	9.591E-03	33,908	2.030E-05	1	2.030E-05
i-Propylbenzene	120	0.521	2.600E-03	ND	2.600E-03	0.9071	2.866E-03	33,908	6.067E-06	1	6.067E-06
n-Propylbenzene	120	3.365	1.680E-02	2.000E-04	1.660E-02	0.9071	1.830E-02	33,908	3.874E-05	1	3.874E-05
p-Ethyltoluene	120	13.622	6.800E-02	3.000E-04	6.770E-02	0.9071	7.463E-02	33,908	1.580E-04	1	1.580E-04
m-Ethyltoluene	120	6.210	3.100E-02	1.000E-04	3.090E-02	0.9071	3.406E-02	33,908	7.211E-05	1	7.211E-05
1,3,5-Trimethylbenzene	120	8.574	4.280E-02	1.000E-04	4.270E-02	0.9071	4.707E-02	33,908	9.965E-05	1	9.965E-05
o-Ethyltoluene	120	4.026	2.010E-02	1.000E-04	2.000E-02	0.9071	2.205E-02	33,908	4.667E-05	1	4.667E-05
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	21.354	1.066E-01	4.000E-04	1.062E-01	0.9071	1.171E-01	33,908	2.478E-04	1	2.478E-04
n-Decane	142	0.406	2.400E-03	ND	2.400E-03	0.9071	2.646E-03	33,908	5.601E-06	1	5.601E-06
alpha-Pinene	136	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
beta-Pinene	136	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
delta 3-Carene	136	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
d-Limonene	136	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
MTBE	88	36.905	1.351E-01	7.000E-04	1.344E-01	0.9071	1.482E-01	33,908	3.136E-04	1	3.136E-04
ETBE	102	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Dichlorodifluoromethane	120	0.629	3.141E-03	1.773E-03	1.368E-03	0.9071	1.508E-03	33,908	3.193E-06	1	3.193E-06
Methylchloride	50	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Chloroethene	63	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
1,3-Butadiene	54	9.056	2.034E-02	ND	2.034E-02	0.9071	2.243E-02	33,908	4.747E-05	1	4.747E-05
Methylbromide	95	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Trichloromonofluoromethane	137	0.410	2.335E-03	2.554E-03	-2.196E-04	0.9071	ND	33,908	ND	1	ND
Vinylidenechloride	97	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Methylenechloride	85	3.358	1.187E-02	3.173E-04	1.155E-02	0.9071	1.274E-02	33,908	2.697E-05	1	2.697E-05
Allylchloride	76.5	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.086	6.732E-04	8.593E-04	-1.861E-04	0.9071	ND	33,908	ND	1	ND
1,1-Dichloroethane	99	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
1,2-Dichloroethene	97	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Chloroform	119	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR FLASH ARITLLERY TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
1,2-Dichloroethane	99	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Methylchloroform	133	ND	ND	3.795E-04	ND	0.9071	ND	33,908	ND	1	ND
Benzene	78	386.498	1.254E+00	1.119E-03	1.253E+00	0.9071	1.381E+00	33,908	2.924E-03	1	2.924E-03
Carbontetrachloride	154	0.076	4.898E-04	8.153E-04	-3.255E-04	0.9071	ND	33,908	ND	1	ND
1,2-Dichloropropane	113	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Trichloroethylene	133	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Toluene	92	665.465	2.547E+00	2.238E-03	2.545E+00	0.9071	2.805E+00	33,908	5.938E-03	1	5.938E-03
1,2-Dibromoethane	188	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Perchloroethylene	166	7.060	4.875E-02	ND	4.875E-02	0.9071	5.375E-02	33,908	1.138E-04	1	1.138E-04
Chlorobenzene	113	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Ethylbenzene	160	171.842	1.144E+00	4.606E-04	1.143E+00	0.9071	1.260E+00	33,908	2.668E-03	1	2.668E-03
m&p-Xylene	106	481.334	2.122E+00	9.025E-04	2.122E+00	0.9071	2.339E+00	33,908	4.951E-03	1	4.951E-03
Styrene	104	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
o-Xylene	106	296.629	1.308E+00	4.068E-04	1.308E+00	0.9071	1.442E+00	33,908	3.051E-03	1	3.051E-03
p-Ethyltoluene	120	92.273	4.606E-01	ND	4.606E-01	0.9071	5.078E-01	33,908	1.075E-03	1	1.075E-03
1,3,5-Trimethylbenzene	120	88.816	4.434E-01	ND	4.434E-01	0.9071	4.888E-01	33,908	1.035E-03	1	1.035E-03
1,2,4-Trimethylbenzene	120	171.076	8.540E-01	3.690E-04	8.536E-01	0.9071	9.411E-01	33,908	1.992E-03	1	1.992E-03
Benzylchloride	127	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Phenylacetylene	102	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Indane	118	38.608	1.895E-01	ND	1.895E-01	0.9071	2.089E-01	33,908	4.423E-04	1	4.423E-04
2,3-Dihydro-1-methyl-1H-indene	132	10.064	5.526E-02	ND	5.526E-02	0.9071	6.092E-02	33,908	1.290E-04	1	1.290E-04
2,3-Dihydro-4-methyl-1H-indene	132	12.908	7.088E-02	ND	7.088E-02	0.9071	7.814E-02	33,908	1.654E-04	1	1.654E-04
Naphthalene	128	17.218	9.168E-02	ND	9.168E-02	0.9071	1.011E-01	33,908	2.140E-04	1	2.140E-04
2-Methylnaphthalene	142	1.572	9.285E-03	ND	9.285E-03	0.9071	1.024E-02	33,908	2.167E-05	1	2.167E-05
1-Methylnaphthalene	142	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Cyanogen	52	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Methylnitrite	61	12.133	3.079E-02	ND	3.079E-02	0.9071	3.394E-02	33,908	7.185E-05	1	7.185E-05
Acetonitrile	41	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Acrylonitrile	53	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Nitromethane	61	2.148	5.450E-03	8.363E-04	4.614E-03	0.9071	5.086E-03	33,908	1.077E-05	1	1.077E-05
Propanenitrile	55	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Pentanenitrile	83	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Hexanenitrile	97	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Benzonitrile	103	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Acrolein	56	3.308	7.706E-03	ND	7.706E-03	0.9071	8.495E-03	33,908	1.798E-05	1	1.798E-05
Acetone	56	ND	ND	3.761E-03	ND	0.9071	ND	33,908	ND	1	ND
1-Hydroxy-2-propanone	74	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Furan	68	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2-Propanol	60	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR FLASH ARITLLERY TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2-Methylpropanal	74	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
1-Propanol	60	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Methacrolein	70	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Methyl-vinyl Ketone	70	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
MTBE	88	375.330	1.374E+00	6.867E-04	1.373E+00	0.9071	1.514E+00	33,908	3.205E-03	1	3.205E-03
2,3-Butanedione	86	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Butanal	72	ND	ND	2.764E-04	ND	0.9071	ND	33,908	ND	1	ND
2-Butanone	72	4.063	1.217E-02	7.666E-04	1.140E-02	0.9071	1.257E-02	33,908	2.661E-05	1	2.661E-05
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2-Methylfuran	82	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
trans-2-Butenal	70	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Acetic Acid	60	10.372	2.589E-02	1.057E-03	2.483E-02	0.9071	2.738E-02	33,908	5.795E-05	1	5.795E-05
1-Butanol	74	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2-Pentanone	86	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Pentanal	86	ND	ND	1.240E-03	ND	0.9071	ND	33,908	ND	1	ND
1,4-Dioxane	88	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Cyclopentanone	84	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Hexanal	100	ND	ND	9.786E-04	ND	0.9071	ND	33,908	ND	1	ND
2-Furaldehyde	96	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Cyclohexanone	98	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Heptanal	114	1.611	7.642E-03	9.400E-04	6.702E-03	0.9071	7.389E-03	33,908	1.564E-05	1	1.564E-05
2-Butoxyethanol	118	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Benzaldehyde	106	9.252	4.080E-02	1.535E-03	3.926E-02	0.9071	4.328E-02	33,908	9.162E-05	1	9.162E-05
6-Methyl-5-hepten-2-one	126	ND	ND	6.854E-04	ND	0.9071	ND	33,908	ND	1	ND
Octanal	128	3.860	2.056E-02	2.034E-03	1.852E-02	0.9071	2.042E-02	33,908	4.323E-05	1	4.323E-05
Benzofuran	118	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Acetophonone	120	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Nonanal	142	5.043	2.979E-02	3.225E-03	2.656E-02	0.9071	2.928E-02	33,908	6.199E-05	1	6.199E-05
Decanal	156	4.321	2.804E-02	1.629E-03	2.641E-02	0.9071	2.912E-02	33,908	6.164E-05	1	6.164E-05
Carbonyl Sulfide	60	0.957	2.387E-03	2.742E-04	2.113E-03	0.9071	2.330E-03	33,908	4.931E-06	1	4.931E-06
Carbon Disulfide	76	1.638	5.180E-03	5.880E-04	4.592E-03	0.9071	5.062E-03	33,908	1.072E-05	1	1.072E-05
Thiophene	84	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND
Dimethyldisulfide	94	ND	ND	ND	ND	0.9071	ND	33,908	ND	1	ND

a
Compounds in bold represent duplicate values.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	1.515E+00	3.120E-01	1.203E+00	0.929	1.295E+00	34,499	2.790E-03	1	2.790E-03
Volatile Organic Compounds (VOCs)											
Ethane	30	1.202	1.500E-03	2.300E-03	-8.000E-04	0.929	ND	34,499	ND	1	ND
Ethylene	28	16.054	1.870E-02	2.000E-04	1.850E-02	0.929	1.991E-02	34,499	4.289E-05	1	4.289E-05
Acetylene	26	7.027	7.600E-03	7.000E-04	6.900E-03	0.929	7.427E-03	34,499	1.600E-05	1	1.600E-05
Propane	44	0.546	1.000E-03	1.000E-03	0.000E+00	0.929	0.000E+00	34,499	0.000E+00	1	0.000E+00
Propene	42	5.151	9.000E-03	1.000E-04	8.900E-03	0.929	9.580E-03	34,499	2.063E-05	1	2.063E-05
i-Butane	58	1.160	2.800E-03	2.000E-04	2.600E-03	0.929	2.799E-03	34,499	6.028E-06	1	6.028E-06
i-Butene	56	2.189	5.100E-03	1.000E-04	5.000E-03	0.929	5.382E-03	34,499	1.159E-05	1	1.159E-05
1-Butene	56	0.987	2.300E-03	1.000E-04	2.200E-03	0.929	2.368E-03	34,499	5.100E-06	1	5.100E-06
1,3-Butadiene	54	0.757	1.700E-03	ND	1.700E-03	0.929	1.830E-03	34,499	3.941E-06	1	3.941E-06
n-Butane	58	4.476	1.080E-02	5.000E-04	1.030E-02	0.929	1.109E-02	34,499	2.388E-05	1	2.388E-05
trans-2-Butene	56	0.644	1.500E-03	ND	1.500E-03	0.929	1.615E-03	34,499	3.477E-06	1	3.477E-06
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
cis-2-Butene	56	0.215	5.000E-04	ND	5.000E-04	0.929	5.382E-04	34,499	1.159E-06	1	1.159E-06
3-Methyl-1-butene	70	0.137	4.000E-04	ND	4.000E-04	0.929	4.306E-04	34,499	9.273E-07	1	9.273E-07
i-Pentane	72	13.588	4.070E-02	1.500E-03	3.920E-02	0.929	4.220E-02	34,499	9.088E-05	1	9.088E-05
1-Pentene	70	0.275	8.000E-04	ND	8.000E-04	0.929	8.611E-04	34,499	1.855E-06	1	1.855E-06
2-Methyl-1-butene	70	0.309	9.000E-04	ND	9.000E-04	0.929	9.688E-04	34,499	2.086E-06	1	2.086E-06
n-Pentane	72	13.655	4.090E-02	1.700E-03	3.920E-02	0.929	4.220E-02	34,499	9.088E-05	1	9.088E-05
Isoprene	68	0.035	1.000E-04	ND	1.000E-04	0.929	1.076E-04	34,499	2.318E-07	1	2.318E-07
trans-2-Pentene	70	0.206	6.000E-04	ND	6.000E-04	0.929	6.459E-04	34,499	1.391E-06	1	1.391E-06
cis-2-Pentene	70	0.103	3.000E-04	ND	3.000E-04	0.929	3.229E-04	34,499	6.955E-07	1	6.955E-07
2-Methyl-2-butene	70	0.172	5.000E-04	ND	5.000E-04	0.929	5.382E-04	34,499	1.159E-06	1	1.159E-06
2,2-Dimethylbutane	86	1.006	3.600E-03	2.000E-04	3.400E-03	0.929	3.660E-03	34,499	7.882E-06	1	7.882E-06
Cyclopentene	68	0.106	3.000E-04	ND	3.000E-04	0.929	3.229E-04	34,499	6.955E-07	1	6.955E-07
4-Methyl-1-pentene	84	0.057	2.000E-04	ND	2.000E-04	0.929	2.153E-04	34,499	4.637E-07	1	4.637E-07
Cyclopentane	70	1.168	3.400E-03	2.000E-04	3.200E-03	0.929	3.445E-03	34,499	7.419E-06	1	7.419E-06
2,3-Dimethylbutane	86	2.292	8.200E-03	5.000E-04	7.700E-03	0.929	8.288E-03	34,499	1.785E-05	1	1.785E-05
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2-Methylpentane	86	12.075	4.320E-02	2.500E-03	4.070E-02	0.929	4.381E-02	34,499	9.436E-05	1	9.436E-05
3-Methylpentane	86	8.441	3.020E-02	2.100E-03	2.810E-02	0.929	3.025E-02	34,499	6.514E-05	1	6.514E-05
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
1-Hexene	84	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
n-Hexane	86	15.821	5.660E-02	4.400E-03	5.220E-02	0.929	5.619E-02	34,499	1.210E-04	1	1.210E-04
trans-2-Hexene	84	0.114	4.000E-04	ND	4.000E-04	0.929	4.306E-04	34,499	9.273E-07	1	9.273E-07
2-Methyl-2-pentene	84	0.143	5.000E-04	ND	5.000E-04	0.929	5.382E-04	34,499	1.159E-06	1	1.159E-06
cis-2-Hexene	84	0.057	2.000E-04	ND	2.000E-04	0.929	2.153E-04	34,499	4.637E-07	1	4.637E-07
Methylcyclopentane	84	5.580	1.950E-02	1.900E-03	1.760E-02	0.929	1.895E-02	34,499	4.080E-05	1	4.080E-05
2,4-Dimethylpentane	100	1.346	5.600E-03	7.000E-04	4.900E-03	0.929	5.274E-03	34,499	1.136E-05	1	1.136E-05
Benzene	78	15.841	5.140E-02	5.100E-03	4.630E-02	0.929	4.984E-02	34,499	1.073E-04	1	1.073E-04
Cyclohexane	84	6.868	2.400E-02	2.200E-03	2.180E-02	0.929	2.347E-02	34,499	5.054E-05	1	5.054E-05
2-Methylhexane	100	7.957	3.310E-02	3.100E-03	3.000E-02	0.929	3.229E-02	34,499	6.955E-05	1	6.955E-05
2,3-Dimethylpentane	100	1.755	7.300E-03	1.500E-03	5.800E-03	0.929	6.243E-03	34,499	1.345E-05	1	1.345E-05
3-Methylhexane	100	8.005	3.330E-02	3.500E-03	2.980E-02	0.929	3.208E-02	34,499	6.909E-05	1	6.909E-05

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
2,2,4-Trimethylpentane	114	1.560	7.400E-03	1.300E-03	6.100E-03	0.929	6.566E-03	34,499	1.414E-05	1	1.414E-05
n-Heptane	100	10.721	4.460E-02	4.900E-03	3.970E-02	0.929	4.273E-02	34,499	9.204E-05	1	9.204E-05
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Methylcyclohexane	98	10.891	4.440E-02	4.700E-03	3.970E-02	0.929	4.273E-02	34,499	9.204E-05	1	9.204E-05
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2,5-Dimethylhexane	114	1.244	5.900E-03	7.000E-04	5.200E-03	0.929	5.597E-03	34,499	1.206E-05	1	1.206E-05
2,4-Dimethylhexane	114	1.160	5.500E-03	6.000E-04	4.900E-03	0.929	5.274E-03	34,499	1.136E-05	1	1.136E-05
2,3,4-Trimethylpentane	114	0.401	1.900E-03	4.000E-04	1.500E-03	0.929	1.615E-03	34,499	3.477E-06	1	3.477E-06
Toluene	92	50.847	1.946E-01	3.560E-02	1.590E-01	0.929	1.712E-01	34,499	3.686E-04	1	3.686E-04
2,3-Dimethylhexane	114	0.612	2.900E-03	4.000E-04	2.500E-03	0.929	2.691E-03	34,499	5.796E-06	1	5.796E-06
2-Methylheptane	111	3.313	1.530E-02	1.400E-03	1.390E-02	0.929	1.496E-02	34,499	3.222E-05	1	3.222E-05
3-Ethylhexane	114	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2,2,4-Trimethylhexane	128	0.413	2.200E-03	1.000E-03	1.200E-03	0.929	1.292E-03	34,499	2.782E-06	1	2.782E-06
n-Octane	114	3.690	1.750E-02	2.100E-03	1.540E-02	0.929	1.658E-02	34,499	3.570E-05	1	3.570E-05
Ethylcyclohexane	112	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Ethylbenzene	160	5.694	3.790E-02	7.800E-03	3.010E-02	0.929	3.240E-02	34,499	6.978E-05	1	6.978E-05
m-Xylene & p-Xylene	106	24.129	1.064E-01	3.210E-02	7.430E-02	0.929	7.998E-02	34,499	1.723E-04	1	1.723E-04
Styrene	104	0.300	1.300E-03	3.000E-04	1.000E-03	0.929	1.076E-03	34,499	2.318E-06	1	2.318E-06
o-Xylene	106	15.625	6.890E-02	1.780E-02	5.110E-02	0.929	5.501E-02	34,499	1.185E-04	1	1.185E-04
n-Nonane	128	0.883	4.700E-03	1.000E-03	3.700E-03	0.929	3.983E-03	34,499	8.578E-06	1	8.578E-06
i-Propylbenzene	120	0.280	1.400E-03	ND	1.400E-03	0.929	1.507E-03	34,499	3.246E-06	1	3.246E-06
n-Propylbenzene	120	1.883	9.400E-03	3.200E-03	6.200E-03	0.929	6.674E-03	34,499	1.437E-05	1	1.437E-05
p-Ethyltoluene	120	7.752	3.870E-02	1.480E-02	2.390E-02	0.929	2.573E-02	34,499	5.541E-05	1	5.541E-05
m-Ethyltoluene	120	3.546	1.770E-02	6.900E-03	1.080E-02	0.929	1.163E-02	34,499	2.504E-05	1	2.504E-05
1,3,5-Trimethylbenzene	120	5.068	2.530E-02	9.900E-03	1.540E-02	0.929	1.658E-02	34,499	3.570E-05	1	3.570E-05
o-Ethyltoluene	120	2.324	1.160E-02	4.800E-03	6.800E-03	0.929	7.320E-03	34,499	1.576E-05	1	1.576E-05
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	12.620	6.300E-02	3.100E-02	3.200E-02	0.929	3.445E-02	34,499	7.419E-05	1	7.419E-05
n-Decane	142	0.237	1.400E-03	5.000E-04	9.000E-04	0.929	9.688E-04	34,499	2.086E-06	1	2.086E-06
alpha-Pinene	136	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
beta-Pinene	136	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
delta 3-Carene	136	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
d-Limonene	136	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
MTBE	88	12.265	4.490E-02	3.600E-03	4.130E-02	0.929	4.446E-02	34,499	9.575E-05	1	9.575E-05
ETBE	102	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Dichlorodifluoromethane	120	0.332	1.657E-03	1.095E-03	5.622E-04	0.929	6.052E-04	34,499	1.303E-06	1	1.303E-06
Methylchloride	50	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Chloroethene	63	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
1,3-Butadiene	54	7.697	1.729E-02	ND	1.729E-02	0.929	1.861E-02	34,499	4.009E-05	1	4.009E-05
Methylbromide	95	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Trichloromonofluoromethane	137	0.385	2.193E-03	2.457E-03	-2.639E-04	0.929	ND	34,499	ND	1	ND
Vinylidenechloride	97	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Methylenechloride	85	1.555	5.499E-03	1.638E-03	3.860E-03	0.929	4.155E-03	34,499	8.949E-06	1	8.949E-06
Allylchloride	76.5	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.083	6.472E-04	7.990E-04	-1.518E-04	0.929	ND	34,499	ND	1	ND
1,1-Dichloroethane	99	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
1,2-Dichloroethene	97	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Chloroform	119	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
1,2-Dichloroethane	99	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Methylchloroform	133	0.058	3.192E-04	3.328E-04	-1.370E-05	0.929	ND	34,499	ND	1	ND
Benzene	78	161.119	5.228E-01	5.187E-03	5.176E-01	0.929	5.572E-01	34,499	1.200E-03	1	1.200E-03
Carbontetrachloride	154	0.096	6.180E-04	7.023E-04	-8.433E-05	0.929	ND	34,499	ND	1	ND
1,2-Dichloropropane	113	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Trichloroethylene	133	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Toluene	92	517.171	1.979E+00	3.621E-02	1.943E+00	0.929	2.092E+00	34,499	4.505E-03	1	4.505E-03
1,2-Dibromoethane	188	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Perchloroethylene	166	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Chlorobenzene	113	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Ethylbenzene	160	87.420	5.819E-01	1.198E-02	5.699E-01	0.929	6.134E-01	34,499	1.321E-03	1	1.321E-03
m&p-Xylene	106	245.350	1.082E+00	3.263E-02	1.049E+00	0.929	1.129E+00	34,499	2.433E-03	1	2.433E-03
Styrene	104	2.925	1.266E-02	2.439E-04	1.241E-02	0.929	1.336E-02	34,499	2.878E-05	1	2.878E-05
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
o-Xylene	106	158.925	7.008E-01	1.810E-02	6.827E-01	0.929	7.349E-01	34,499	1.583E-03	1	1.583E-03
p-Ethyltoluene	120	50.543	2.523E-01	1.673E-02	2.356E-01	0.929	2.536E-01	34,499	5.462E-04	1	5.462E-04
1,3,5-Trimethylbenzene	120	48.623	2.427E-01	7.637E-03	2.351E-01	0.929	2.531E-01	34,499	5.450E-04	1	5.450E-04
1,2,4-Trimethylbenzene	120	98.307	4.907E-01	3.000E-02	4.607E-01	0.929	4.960E-01	34,499	1.068E-03	1	1.068E-03
Benzylchloride	127	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Phenylacetylene	102	ND	ND	6.579E-04	ND	0.929	ND	34,499	ND	1	ND
Indane	118	22.461	1.103E-01	6.217E-03	1.040E-01	0.929	1.120E-01	34,499	2.412E-04	1	2.412E-04
2,3-Dihydro-1-methyl-1H-indene	132	7.046	3.869E-02	3.747E-03	3.494E-02	0.929	3.761E-02	34,499	8.101E-05	1	8.101E-05
2,3-Dihydro-4-methyl-1H-indene	132	8.704	4.780E-02	4.893E-03	4.290E-02	0.929	4.618E-02	34,499	9.946E-05	1	9.946E-05
Naphthalene	128	9.298	4.951E-02	7.803E-03	4.171E-02	0.929	4.490E-02	34,499	9.669E-05	1	9.669E-05
2-Methylnaphthalene	142	ND	ND	2.818E-03	ND	0.929	ND	34,499	ND	1	ND
1-Methylnaphthalene	142	ND	ND	1.102E-03	ND	0.929	ND	34,499	ND	1	ND
Cyanogen	52	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Methylnitrite	61	15.955	4.049E-02	ND	4.049E-02	0.929	4.358E-02	34,499	9.387E-05	1	9.387E-05
Acetonitrile	41	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Acrylonitrile	53	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Nitromethane	61	2.179	5.529E-03	ND	5.529E-03	0.929	5.952E-03	34,499	1.282E-05	1	1.282E-05
Propanenitrile	55	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Pentanenitrile	83	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Hexanenitrile	97	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Benzonitrile	103	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Acrolein	56	3.198	7.451E-03	ND	7.451E-03	0.929	8.021E-03	34,499	1.727E-05	1	1.727E-05
Acetone	56	9.242	2.153E-02	6.577E-03	1.495E-02	0.929	1.610E-02	34,499	3.467E-05	1	3.467E-05

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
1-Hydroxy-2-propanone	74	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Furan	68	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2-Propanol	60	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2-Methylpropanal	74	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
1-Propanol	60	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Methacrolein	70	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Methyl-vinyl Ketone	70	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
MTBE	88	124.505	4.558E-01	3.675E-03	4.521E-01	0.929	4.867E-01	34,499	1.048E-03	1	1.048E-03
2,3-Butanedione	86	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Butanal	72	ND	ND	2.138E-04	ND	0.929	ND	34,499	ND	1	ND
2-Butanone	72	2.704	8.098E-03	7.549E-04	7.343E-03	0.929	7.904E-03	34,499	1.702E-05	1	1.702E-05
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2-Methylfuran	82	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
trans-2-Butenal	70	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Acetic Acid	60	6.623	1.653E-02	2.198E-03	1.433E-02	0.929	1.543E-02	34,499	3.323E-05	1	3.323E-05
1-Butanol	74	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2-Pentanone	86	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Pentanal	86	ND	ND	1.078E-03	ND	0.929	ND	34,499	ND	1	ND
1,4-Dioxane	88	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Cyclopentanone	84	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Hexanal	100	ND	ND	1.307E-03	ND	0.929	ND	34,499	ND	1	ND
2-Furaldehyde	96	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Cyclohexanone	98	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Heptanal	114	1.056	5.009E-03	1.114E-03	3.895E-03	0.929	4.192E-03	34,499	9.029E-06	1	9.029E-06
2-Butoxyethanol	118	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Benzaldehyde	106	9.610	4.237E-02	2.201E-03	4.017E-02	0.929	4.324E-02	34,499	9.314E-05	1	9.314E-05
6-Methyl-5-hepten-2-one	126	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Octanal	128	2.426	1.292E-02	2.664E-03	1.025E-02	0.929	1.104E-02	34,499	2.377E-05	1	2.377E-05
Benzofuran	118	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Acetophonone	120	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Nonanal	142	2.928	1.730E-02	4.928E-03	1.237E-02	0.929	1.331E-02	34,499	2.868E-05	1	2.868E-05
Decanal	156	1.786	1.159E-02	3.296E-03	8.298E-03	0.929	8.932E-03	34,499	1.924E-05	1	1.924E-05
Carbonyl Sulfide	60	1.032	2.577E-03	2.621E-04	2.315E-03	0.929	2.491E-03	34,499	5.366E-06	1	5.366E-06
Carbon Disulfide	76	3.752	1.186E-02	5.883E-04	1.128E-02	0.929	1.214E-02	34,499	2.614E-05	1	2.614E-05
Thiophene	84	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND
Dimethyldisulfide	94	ND	ND	ND	ND	0.929	ND	34,499	ND	1	ND

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Compounds in bold represent duplicate values.

TABLE A-10. AEC - SVOC DATA EVALUATION FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	1.228E-04	1.228E-04	ND	ND	F	F
Pyridine	ND	ND	ND	ND	ND	3.599E-04	3.599E-04	ND	ND	F	F
2-Picoline	ND	ND	ND	ND	ND	3.740E-04	3.740E-04	ND	ND	F	F
Methyl methanesulfonate	ND	ND	ND	ND	ND	1.415E-04	1.415E-04	ND	ND	F	F
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	2.809E-04	2.809E-04	ND	ND	F	F
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	2.999E-04	2.999E-04	ND	ND	F	F
Ethyl methanesulfonate	ND	ND	ND	ND	ND	1.380E-04	1.380E-04	ND	ND	F	F
Phenol	ND	ND	ND	ND	ND	8.821E-05	8.821E-05	ND	ND	F	F
Aniline	ND	ND	ND	ND	ND	1.408E-04	1.408E-04	ND	ND	F	F
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	1.101E-04	1.101E-04	ND	ND	F	F
Pentachloroethane	ND	ND	ND	ND	ND	2.544E-04	2.544E-04	ND	ND	F	F
2-Chlorophenol	ND	ND	ND	ND	ND	5.610E-05	5.610E-05	ND	ND	F	F
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	1.083E-04	1.083E-04	ND	ND	F	F
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	2.173E-04	2.173E-04	ND	ND	F	F
Benzyl alcohol	4.289E-04	ND	6.016E-04	5.153E-04	ND	2.459E-04	2.459E-04	10.00	2.10	A	C
2-Methylphenol	ND	ND	ND	ND	ND	1.979E-04	1.979E-04	ND	ND	F	F
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	1.574E-04	1.574E-04	ND	ND	F	F
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	1.327E-04	1.327E-04	ND	ND	F	F
o-Toluidine	ND	ND	ND	ND	ND	1.397E-04	1.397E-04	ND	ND	F	F
4-Methylphenol/3-Methylphenol	4.388E-04	5.304E-04	4.560E-04	4.751E-04	ND	1.672E-04	1.672E-04	10.00	2.84	A	C
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	9.915E-05	9.915E-05	ND	ND	F	F
Acetophenone	ND	ND	ND	ND	1.786E-04	1.041E-04	1.041E-04	ND	ND	F	F
N-Nitrosomorpholine	ND	ND	ND	ND	ND	3.172E-04	3.172E-04	ND	ND	F	F
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	4.199E-04	4.199E-04	ND	ND	F	F
Hexachloroethane	ND	ND	ND	ND	ND	1.743E-04	1.743E-04	ND	ND	F	F
Nitrobenzene	ND	ND	ND	ND	ND	3.144E-04	3.144E-04	ND	ND	F	F
N-Nitrosopiperidine	ND	ND	ND	ND	ND	2.572E-04	2.572E-04	ND	ND	F	F
Isophorone	ND	ND	ND	ND	ND	7.551E-05	7.551E-05	ND	ND	F	F
2,4-Dimethylphenol	ND	ND	ND	ND	ND	1.189E-04	1.189E-04	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	ND	ND	1.891E-04	1.891E-04	ND	ND	F	F
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	1.380E-04	1.380E-04	ND	ND	F	F
Benzoic acid	ND	ND	ND	ND	ND	1.291E-02	1.291E-02	ND	ND	F	F
2,4-Dichlorophenol	ND	ND	ND	ND	ND	1.729E-04	1.729E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	1.246E-04	1.246E-04	ND	ND	F	F
Naphthalene	2.541E-02	1.952E-02	2.969E-02	2.487E-02	ND	1.577E-04	1.577E-04	10.00	157.72	A	A
p-Chloroaniline	ND	ND	ND	ND	ND	1.136E-04	1.136E-04	ND	ND	F	F
2,6-Dichlorophenol	ND	ND	ND	ND	ND	1.214E-04	1.214E-04	ND	ND	F	F
Hexachloropropene	ND	ND	ND	ND	ND	1.994E-04	1.994E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	ND	ND	1.799E-04	1.799E-04	ND	ND	F	F
Dimethylphenethylamine	ND	ND	ND	ND	ND	7.198E-03	7.198E-03	ND	ND	F	F
N-Nitroso-di-n-butylamine	ND	ND	ND	ND	ND	1.320E-04	1.320E-04	ND	ND	F	F
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	2.001E-04	2.001E-04	ND	ND	F	F
Safrole	ND	ND	ND	ND	ND	2.509E-04	2.509E-04	ND	ND	F	F
2-Methylnaphthalene	9.332E-03	1.010E-02	1.279E-02	1.074E-02	ND	1.267E-04	1.267E-04	10.00	84.78	A	A
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	1.926E-04	1.926E-04	ND	ND	F	F
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	3.916E-03	3.916E-03	ND	ND	F	F
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	2.226E-04	2.226E-04	ND	ND	F	F
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	1.891E-04	1.891E-04	ND	ND	F	F
Isosafrole	ND	ND	ND	ND	ND	3.811E-04	3.811E-04	ND	ND	F	F

TABLE A-10. AEC - SVOC DATA EVALUATION FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2-Chloronaphthalene	ND	ND	ND	ND	ND	1.990E-04	1.990E-04	ND	ND	F	F
2-Nitroaniline	ND	ND	ND	ND	ND	1.263E-04	1.263E-04	ND	ND	F	F
1,4-Naphthoquinone	ND	ND	ND	ND	ND	3.528E-04	3.528E-04	ND	ND	F	F
Dimethylphthalate	ND	ND	ND	ND	ND	1.027E-04	1.027E-04	ND	ND	F	F
1,3-Dinitrobenzene	ND	ND	ND	ND	ND	2.953E-04	2.953E-04	ND	ND	F	F
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	2.484E-04	2.484E-04	ND	ND	F	F
Acenaphthylene	5.632E-04	ND	4.483E-04	5.057E-04	ND	1.154E-04	1.154E-04	10.00	4.38	A	C
3-Nitroaniline	ND	ND	ND	ND	ND	3.108E-04	3.108E-04	ND	ND	F	F
4-Nitrophenol	ND	ND	ND	ND	ND	1.083E-02	1.083E-02	ND	ND	F	F
2,4-Dinitrophenol	ND	ND	ND	ND	ND	1.111E-02	1.111E-02	ND	ND	F	F
Acenaphthene	ND	ND	ND	ND	ND	1.270E-04	1.270E-04	ND	ND	F	F
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	1.570E-04	1.570E-04	ND	ND	F	F
Dibenzofuran	ND	ND	ND	ND	ND	8.609E-05	8.609E-05	ND	ND	F	F
Pentachlorobenzene	ND	ND	ND	ND	ND	2.378E-04	2.378E-04	ND	ND	F	F
1-Naphthylamine	ND	ND	ND	ND	ND	6.210E-04	6.210E-04	ND	ND	F	F
2-Naphthylamine	ND	ND	ND	ND	ND	5.504E-04	5.504E-04	ND	ND	F	F
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	2.519E-04	2.519E-04	ND	ND	F	F
Diethylphthalate	1.238E-04	ND	7.510E-05	9.944E-05	2.247E-04	9.174E-05	9.174E-05	0.44	1.08	F	D
4-Chlorophenylphenyl ether	ND	ND	ND	ND	ND	9.985E-05	9.985E-05	ND	ND	F	F
Fluorene	ND	ND	1.009E-04	1.009E-04	ND	1.200E-04	1.200E-04	10.00	0.84	A	F
5-Nitro-o-toluidine	ND	ND	ND	ND	ND	1.281E-04	1.281E-04	ND	ND	F	F
4-Nitroaniline	ND	ND	ND	ND	ND	2.734E-04	2.734E-04	ND	ND	F	F
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	9.597E-03	9.597E-03	ND	ND	F	F
Diphenylamine/N-NitrosoDPA	ND	ND	ND	ND	ND	1.298E-04	1.298E-04	ND	ND	F	F
sym-Trinitrobenzene	ND	ND	ND	ND	ND	4.410E-04	4.410E-04	ND	ND	F	F
Diallate	ND	ND	ND	ND	ND	1.676E-04	1.676E-04	ND	ND	F	F
Phenacetin	ND	ND	ND	ND	ND	7.904E-05	7.904E-05	ND	ND	F	F
4-Bromophenylphenyl ether	ND	ND	ND	ND	ND	2.431E-04	2.431E-04	ND	ND	F	F
Hexachlorobenzene	ND	ND	ND	ND	ND	1.309E-04	1.309E-04	ND	ND	F	F
4-Aminobiphenyl	ND	ND	ND	ND	ND	7.304E-04	7.304E-04	ND	ND	F	F
Pronamide	ND	ND	ND	ND	ND	9.068E-05	9.068E-05	ND	ND	F	F
Pentachlorophenol	ND	ND	ND	ND	ND	1.016E-02	1.016E-02	ND	ND	F	F
Pentachloronitrobenzene	ND	ND	ND	ND	ND	4.728E-04	4.728E-04	ND	ND	F	F
Phenanthrene	3.035E-04	ND	2.872E-04	2.954E-04	ND	2.152E-04	2.152E-04	10.00	1.37	A	D
Anthracene	ND	ND	ND	ND	ND	1.291E-04	1.291E-04	ND	ND	F	F
Carbazole	ND	ND	ND	ND	ND	8.644E-05	8.644E-05	ND	ND	F	F
Di-n-butylphthalate	4.813E-04	1.400E-03	3.202E-04	7.337E-04	1.615E-03	5.998E-05	5.998E-05	0.45	12.23	F	A
4-Nitroquinoline-1-oxide	ND	ND	ND	ND	ND	7.939E-03	7.939E-03	ND	ND	F	F
Methapyrilene	ND	ND	ND	ND	ND	7.304E-03	7.304E-03	ND	ND	F	F
Fluoranthene	ND	ND	ND	ND	ND	1.274E-04	1.274E-04	ND	ND	F	F
Benzidine	ND	ND	ND	ND	ND	4.728E-03	4.728E-03	ND	ND	F	F
Pyrene	ND	ND	ND	ND	ND	1.750E-04	1.750E-04	ND	ND	F	F
p-Dimethylaminoazobenzene	ND	ND	ND	ND	ND	1.298E-04	1.298E-04	ND	ND	F	F
Chlorobenzilate	ND	ND	ND	ND	ND	1.807E-04	1.807E-04	ND	ND	F	F
Kepone	ND	ND	ND	ND	ND	6.633E-03	6.633E-03	ND	ND	F	F
Butylbenzylphthalate	ND	ND	ND	ND	ND	7.233E-05	7.233E-05	ND	ND	F	F
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	6.986E-04	6.986E-04	ND	ND	F	F
2-Acetylaminofluorene	ND	ND	ND	ND	ND	1.101E-04	1.101E-04	ND	ND	F	F
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	4.305E-04	4.305E-04	ND	ND	F	F
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	1.182E-04	1.182E-04	ND	ND	F	F
Benz(a)anthracene	ND	ND	ND	ND	ND	1.595E-04	1.595E-04	ND	ND	F	F

TABLE A-10. AEC - SVOC DATA EVALUATION FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 2, mg/m^3	Average Concentration - Run 1-2, mg/m^3	Average Concentration - Run 1-2, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Chrysene	ND	ND	ND	ND	ND	1.722E-04	1.722E-04	ND	ND	F	F
Di-n-octylphthalate	ND	ND	ND	ND	ND	1.101E-04	1.101E-04	ND	ND	F	F
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND	ND	1.627E-04	1.627E-04	ND	ND	F	F
Benzo(b)fluoranthene (a)	ND	ND	ND	ND	ND	9.809E-05	9.809E-05	ND	ND	F	F
Benzo(k)fluoranthene (a)	ND	ND	ND	ND	ND	2.050E-04	2.050E-04	ND	ND	F	F
Benz(a)pyrene	ND	ND	ND	ND	ND	1.161E-04	1.161E-04	ND	ND	F	F
3-Methylcholanthrene	ND	ND	ND	ND	ND	4.128E-04	4.128E-04	ND	ND	F	F
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	7.727E-05	7.727E-05	ND	ND	F	F
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	8.680E-05	8.680E-05	ND	ND	F	F
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	8.327E-05	8.327E-05	ND	ND	F	F

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-11. AEC - SVOC RUN NO. 1 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Pyridine	79	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2-Picoline	93	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Phenol	94	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Aniline	93	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Pentachloroethane	202	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Benzyl alcohol	108	0.095	4.289E-04	ND	4.289E-04	0.7887	5.439E-04	33,908	1.151E-06	1	1.151E-06
2-Methylphenol	108	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
o-Toluidine	107	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
4-Methylphenol/3-Methylphenol	108	0.098	4.388E-04	ND	4.388E-04	0.7887	5.563E-04	33,908	1.178E-06	1	1.178E-06
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Acetophenone	120	ND	ND	1.786E-04	ND	0.7887	ND	33,908	ND	1	ND
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Hexachloroethane	237	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Nitrobenzene	123	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Isophorone	138	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Benzoic acid	122	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Naphthalene	128	4.772	2.541E-02	ND	2.541E-02	0.7887	3.222E-02	33,908	6.820E-05	1	6.820E-05
p-Chloroaniline	128	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Hexachloropropene	249	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Safrole	162	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2-Methylnaphthalene	142	1.580	9.332E-03	ND	9.332E-03	0.7887	1.183E-02	33,908	2.505E-05	1	2.505E-05
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND

TABLE A-11. AEC - SVOC RUN NO. 1 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Isosafrole	162	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Acenaphthylene	152	0.089	5.632E-04	ND	5.632E-04	0.7887	7.141E-04	33,908	1.512E-06	1	1.512E-06
3-Nitroaniline	138	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Acenaphthene	154	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Dibenzofuran	168	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Diethylphthalate	222	0.013	1.238E-04	2.247E-04	-1.009E-04	0.7887	ND	33,908	ND	1	ND
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Fluorene	166	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Diallate	270	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Phenacetin	179	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Pronamide	228	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Phenanthrene	178	0.041	3.035E-04	ND	3.035E-04	0.7887	3.849E-04	33,908	8.147E-07	1	8.147E-07
Anthracene	178	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Carbazole	167	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Di-n-butylphthalate	278	0.042	4.813E-04	1.615E-03	-1.134E-03	0.7887	ND	33,908	ND	1	ND
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Methapyrilene	261	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Fluoranthene	202	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Benzidine	184	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Pyrene	202	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Kepone	491	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Butylbenzylphthalate	312	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND

TABLE A-11. AEC - SVOC RUN NO. 1 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
bis(2-Ethylhexyl)phthalate	391	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Chrysene	228	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.7887	ND	33,908	ND	1	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-12. AEC - SVOC RUN NO. 2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Pyridine	79	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2-Picoline	93	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Phenol	94	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Aniline	93	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Pentachloroethane	202	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2-Methylphenol	108	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
o-Toluidine	107	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
4-Methylphenol/3-Methylphenol	108	0.118	5.304E-04	ND	5.304E-04	0.8469	6.263E-04	34,499	1.349E-06	1	1.349E-06
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Acetophenone	120	ND	ND	1.786E-04	ND	0.8469	ND	34,499	ND	1	ND
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Hexachloroethane	237	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Nitrobenzene	123	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Isophorone	138	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Benzoic acid	122	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Naphthalene	128	3.666	1.952E-02	ND	1.952E-02	0.8469	2.305E-02	34,499	4.965E-05	1	4.965E-05
p-Chloroaniline	128	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Hexachloropropene	249	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Safrole	162	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2-Methylnaphthalene	142	1.709	1.010E-02	ND	1.010E-02	0.8469	1.192E-02	34,499	2.568E-05	1	2.568E-05
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND

TABLE A-12. AEC - SVOC RUN NO. 2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Isosafrole	162	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Acenaphthylene	152	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Acenaphthene	154	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Dibenzofuran	168	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Diethylphthalate	222	ND	ND	2.247E-04	ND	0.8469	ND	34,499	ND	1	ND
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Fluorene	166	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Diallate	270	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Phenacetin	179	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Pronamide	228	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Phenanthrene	178	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Anthracene	178	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Carbazole	167	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Di-n-butylphthalate	278	0.121	1.400E-03	1.615E-03	-2.156E-04	0.8469	ND	34,499	ND	1	ND
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Methapyrilene	261	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Fluoranthene	202	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Benzidine	184	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Pyrene	202	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Kepone	491	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Butylbenzylphthalate	312	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND

TABLE A-12. AEC - SVOC RUN NO. 2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
bis(2-Ethylhexyl)phthalate	391	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Chrysene	228	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.8469	ND	34,499	ND	1	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-13. AEC - SVOC COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1-2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1-2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Pyridine	79	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2-Picoline	93	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Phenol	94	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Aniline	93	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Pentachloroethane	202	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Benzyl alcohol	108	0.134	6.016E-04	ND	6.016E-04	0.8178	7.356E-04	34,203	1.571E-06	1	1.571E-06
2-Methylphenol	108	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
o-Toluidine	107	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
4-Methylphenol/3-Methylphenol	108	0.102	4.560E-04	ND	4.560E-04	0.8178	5.576E-04	34,203	1.191E-06	1	1.191E-06
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Acetophenone	120	ND	ND	1.786E-04	ND	0.8178	ND	34,203	ND	1	ND
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Hexachloroethane	237	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Nitrobenzene	123	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Isophorone	138	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Benzoic acid	122	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Naphthalene	128	5.576	2.969E-02	ND	2.969E-02	0.8178	3.631E-02	34,203	7.752E-05	1	7.752E-05
p-Chloroaniline	128	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Hexachloropropene	249	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Safrole	162	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2-Methylnaphthalene	142	2.165	1.279E-02	ND	1.279E-02	0.8178	1.564E-02	34,203	3.339E-05	1	3.339E-05
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND

TABLE A-13. AEC - SVOC COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1-2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1-2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Isosafrole	162	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Acenaphthylene	152	0.071	4.483E-04	ND	4.483E-04	0.8178	5.481E-04	34,203	1.170E-06	1	1.170E-06
3-Nitroaniline	138	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Acenaphthene	154	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Dibenzofuran	168	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Diethylphthalate	222	0.008	7.510E-05	2.247E-04	-1.496E-04	0.8178	ND	34,203	ND	1	ND
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Fluorene	166	0.015	1.009E-04	ND	1.009E-04	0.8178	1.234E-04	34,203	2.635E-07	1	2.635E-07
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Diallate	270	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Phenacetin	179	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Pronamide	228	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Phenanthrene	178	0.039	2.872E-04	ND	2.872E-04	0.8178	3.512E-04	34,203	7.499E-07	1	7.499E-07
Anthracene	178	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Carbazole	167	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Di-n-butylphthalate	278	0.028	3.202E-04	1.615E-03	-1.295E-03	0.8178	ND	34,203	ND	1	ND
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Methapyrilene	261	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Fluoranthene	202	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Benzidine	184	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Pyrene	202	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Kepone	491	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Butylbenzylphthalate	312	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND

TABLE A-13. AEC - SVOC COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR FLASH ARTILLERY TEST (28 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1-2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1-2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
bis(2-Ethylhexyl)phthalate	391	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Chrysene	228	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.8178	ND	34,203	ND	1	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

SIMULATOR HAND GRENADE

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TABLE A-1. AEC MUNITION ITEM INPUT DATA SHEET (30 MARCH 1998)
Munition Item: Simulator Hand Grenade
Created by: Radian International LLC

No. of Runs = 2

Sample Volumes:	Run No. 1		Run No. 2		Composite Run		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	252.8	306.2	251.6	301.9	NA	NA	278.12
PM_{10}	138.1	132.4	141.5	132.9	NA	NA	136.22
Metals	252.8	306.2	251.6	301.9	NA	NA	278.12
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	56.3	49.4	41.2	36.4	NA	85.7	45.78
HCl/Cl_2	30.4	23.8	29.8	23.7	NA	NA	26.91
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	57.7	58.6	40.8	46.4	NA	104.9	50.84
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	Run No. 1		Run No. 2		Composite Run		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	39.0	40.5	51.5	40.5	NA	NA	42.88
HCl/Cl_2 (NaOH)	40.0	33.0	36.0	37.0	NA	NA	36.50

Sample Weight Gain:	Run No. 1		Run No. 2		Composite Run		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.9240	0.9317	1.2870	1.3282	NA	NA	1.1177
PM_{10}	0.5243	0.5491	0.7267	0.7687	NA	NA	0.6422

Dilution Correction Factors:	Run No. 1	Run No. 2	Composite Run	Average
TSP	0.9373	0.9377	NA	0.9375
PM_{10}	0.9680	0.9682	NA	0.9681
Metals	0.9373	0.9377	NA	0.9375
VOCs	0.9236	0.9330	NA	0.9283
SVOCs	0.8797	0.9085	0.8941	0.8941
HCl/Cl_2	0.8797	0.9085	NA	0.8941
Energetics	NA	NA	NA	NA
Dioxin/Furan	0.8797	0.9085	0.8941	0.8941
Residue	NA	NA	NA	NA
CEM	0.8269	0.8281	NA	0.8275

	Run No. 1	Run No. 2	Composite Run	Average
Initial Plume Volume (m^3)	1057.41	1009.29	1033.35	1033.35
Net Explosive Weight (g)	146.96	146.96	146.96	146.96

TABLE A-2. AEC BACKGROUND INPUT DATA SHEET (30 MARCH 1998)
Munition Item: Simulator Hand Grenade
Created by: Radian International LLC

No. of Runs = 2

Sample Volumes:	HG - Background		Reagent Blank		Field Blank		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	1404.0	NA	NA	NA	NA	NA	1403.98
PM_{10}	1044.2	NA	NA	NA	NA	NA	1044.23
Metals	1404.0	NA	NA	NA	NA	NA	1403.98
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	108.3	NA	NA	NA	NA	NA	108.32
HCl/Cl_2	29.8	NA	NA	NA	NA	NA	29.83
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	152.0	NA	NA	NA	NA	NA	152.03
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	HG - Background		Reagent Blank		Field Blank		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	43.0	NA	107.2	NA	45.3	NA	75.10
HCl/Cl_2 (NaOH)	37.0	NA	92.0	NA	41.5	NA	64.50
HCl/Cl_2 (H_2O)	NA	NA	100.0	NA	NA	NA	100.00

Sample Weight Gain:	HG - Background		Reagent Blank		Field Blank		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	-0.0025	NA	-0.0026	NA	-0.0037	NA	-0.0026
PM_{10}	-0.0238	NA	-0.0002	NA	-0.0029	NA	-0.0120

TABLE A-3. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS DATA EVALUATION FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate											
TSP	1.183E+02	1.665E+02	ND	1.424E+02	-6.288E-02	ND	ND	2264.24	10.00	A	A
PM_{10}	1.402E+02	1.954E+02	ND	1.678E+02	-8.049E-01	ND	ND	208.51	10.00	A	A
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl	ND	ND	ND	ND	ND	7.504E-02	5.682E-02	ND	ND	F	F
Cl_2	7.579E-03	1.458E-02	ND	1.108E-02	3.877E-03	1.588E-03	1.312E-03	2.86	8.44	C	B
Dioxin/Furan											
Dioxin TEQ (a)	3.472E-11	2.571E-10	ND	1.459E-10	ND	ND	ND	10.00	10.00	A	A
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	4.539E-01	3.204E-01	ND	3.871E-01	2.252E-02	ND	ND	17.19	10.00	A	A
Nitrogen Oxide (NOx)	5.809E+00	1.018E+01	ND	7.996E+00	3.925E-02	ND	ND	203.71	10.00	A	A
HCl	8.485E-01	-7.869E-01	ND	3.078E-02	8.719E-01	ND	ND	0.04	10.00	F	A
Carbon Dioxide (CO_2)	6.844E+02	7.009E+02	ND	6.927E+02	6.829E+02	ND	ND	1.01	10.00	D	A
Sulfur Dioxide (SO_2)	9.990E-01	2.909E-01	ND	6.450E-01	-9.235E-04	ND	ND	698.38	10.00	A	A
Particulate-phase Metals											
Aluminum	1.089E+01	1.727E+01	ND	1.408E+01	NA (b)	3.378E-03	2.200E-03	NA (b)	6399.31	NA (b)	A
Antimony	1.485E-02	3.530E-02	ND	2.507E-02	NA (b)	4.840E-04	3.165E-04	NA (b)	79.22	NA (b)	A
Arsenic	2.963E-04	3.924E-04	ND	3.443E-04	NA (b)	3.321E-04	2.171E-04	NA (b)	1.59	NA (b)	D
Barium	3.264E-02	6.634E-02	ND	4.949E-02	NA (b)	3.690E-05	2.413E-05	NA (b)	2051.21	NA (b)	A
Beryllium	5.991E-05	3.472E-05	ND	4.732E-05	NA (b)	2.058E-05	1.341E-05	NA (b)	3.53	NA (b)	C
Cadmium	2.075E-04	3.740E-04	ND	2.907E-04	NA (b)	4.102E-05	2.682E-05	NA (b)	10.84	NA (b)	A
Chromium	5.370E-04	1.038E-03	ND	7.877E-04	NA (b)	7.252E-05	4.740E-05	NA (b)	16.62	NA (b)	A
Cobalt	3.366E-04	5.136E-04	ND	4.251E-04	NA (b)	7.252E-05	4.740E-05	NA (b)	8.97	NA (b)	B
Copper	1.277E-02	3.376E-02	ND	2.327E-02	NA (b)	1.774E-04	1.162E-04	NA (b)	200.16	NA (b)	A
Lead	1.499E-03	2.065E-03	ND	1.782E-03	NA (b)	2.739E-04	1.788E-04	NA (b)	9.97	NA (b)	B
Magnesium	1.312E+01	2.033E+01	ND	1.673E+01	NA (b)	7.096E-04	2.058E-05	NA (b)	812760.39	NA (b)	A
Manganese	1.265E-02	1.904E-02	ND	1.585E-02	NA (b)	3.151E-05	2.058E-05	NA (b)	770.01	NA (b)	A
Nickel	1.137E-03	1.962E-03	ND	1.550E-03	NA (b)	1.108E-04	7.238E-05	NA (b)	21.41	NA (b)	A
Phosphorus	1.155E-02	2.773E-02	ND	1.964E-02	NA (b)	7.792E-04	5.095E-04	NA (b)	38.55	NA (b)	A
Selenium	ND	3.371E-04	ND	3.371E-04	NA (b)	2.640E-04	1.732E-04	NA (b)	1.95	NA (b)	D
Silver	ND	ND	ND	ND	NA (b)	4.925E-05	3.222E-05	NA (b)	ND	NA (b)	F
Thallium	ND	ND	ND	ND	NA (b)	6.245E-04	4.073E-04	NA (b)	ND	NA (b)	F
Zinc	9.439E-03	2.257E-02	ND	1.600E-02	NA (b)	5.933E-04	3.875E-04	NA (b)	41.30	NA (b)	A
Mercury	1.580E-06	2.816E-06	ND	2.198E-06	NA (b)	1.304E-06	5.393E-07	NA (b)	4.08	NA (b)	C

a
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD.
b
Insufficient material to analyze.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-4. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 1 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (a), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate											
TSP	-	-	1.183E+02	-6.288E-02	1.183E+02	0.9373	1.263E+02	37,342	2.943E-01	4	7.358E-02
PM_{10}	-	-	1.402E+02	-8.049E-01	1.411E+02	0.9680	1.457E+02	37,342	3.397E-01	4	8.492E-02
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Cl_2 (b)	71	2.570	7.579E-03	3.877E-03	3.702E-03	0.8797	4.209E-03	37,342	9.811E-06	4	2.453E-06
Dioxin/Furan											
Dioxin TEQ (c)	-	-	3.472E-11	ND	3.472E-11	0.8797	3.947E-11	37,342	9.201E-14	4	2.300E-14
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	389.655	4.539E-01	2.252E-02	4.313E-01	0.8269	5.216E-01	37,342	1.216E-03	4	3.040E-04
Nitrogen Oxide (NOx)	46	3035.694	5.809E+00	3.925E-02	5.770E+00	0.8269	6.978E+00	37,342	1.627E-02	4	4.067E-03
HCl (b)	36	566.555	8.485E-01	8.719E-01	-2.342E-02	0.8269	ND	37,342	ND	4	ND
Carbon Dioxide (CO_2)	44	373927.200	6.844E+02	6.829E+02	1.494E+00	0.8269	1.807E+00	37,342	4.212E-03	4	1.053E-03
Sulfur Dioxide (SO_2)	64	375.232	9.990E-01	-9.235E-04	9.999E-01	0.8269	1.209E+00	37,342	2.819E-03	4	7.048E-04
Particulate-phase Metals											
Aluminum	27	9692.207	1.089E+01	NA (d)	1.089E+01	0.9373	1.161E+01	37,342	2.708E-02	4	6.769E-03
Antimony	122	2.926	1.485E-02	NA (d)	1.485E-02	0.9373	1.584E-02	37,342	3.693E-05	4	9.232E-06
Arsenic	75	0.095	2.963E-04	NA (d)	2.963E-04	0.9373	3.161E-04	37,342	7.369E-07	4	1.842E-07
Barium	137	5.727	3.264E-02	NA (d)	3.264E-02	0.9373	3.482E-02	37,342	8.118E-05	4	2.030E-05
Beryllium	9	0.160	5.991E-05	NA (d)	5.991E-05	0.9373	6.392E-05	37,342	1.490E-07	4	3.725E-08
Cadmium	112	0.045	2.075E-04	NA (d)	2.075E-04	0.9373	2.214E-04	37,342	5.161E-07	4	1.290E-07
Chromium	52	0.248	5.370E-04	NA (d)	5.370E-04	0.9373	5.729E-04	37,342	1.336E-06	4	3.339E-07
Cobalt	59	0.137	3.366E-04	NA (d)	3.366E-04	0.9373	3.592E-04	37,342	8.373E-07	4	2.093E-07
Copper	64	4.798	1.277E-02	NA (d)	1.277E-02	0.9373	1.363E-02	37,342	3.177E-05	4	7.942E-06
Lead	207	0.174	1.499E-03	NA (d)	1.499E-03	0.9373	1.599E-03	37,342	3.728E-06	4	9.320E-07
Magnesium	24	13145.744	1.312E+01	NA (d)	1.312E+01	0.9373	1.400E+01	37,342	3.264E-02	4	8.161E-03
Manganese	55	5.531	1.265E-02	NA (d)	1.265E-02	0.9373	1.350E-02	37,342	3.147E-05	4	7.869E-06
Nickel	59	0.463	1.137E-03	NA (d)	1.137E-03	0.9373	1.213E-03	37,342	2.829E-06	4	7.072E-07
Phosphorus	31	8.959	1.155E-02	NA (d)	1.155E-02	0.9373	1.233E-02	37,342	2.874E-05	4	7.184E-06
Selenium	79	ND	ND	NA (d)	ND	0.9373	ND	37,342	ND	4	ND
Silver	108	ND	ND	NA (d)	ND	0.9373	ND	37,342	ND	4	ND
Thallium	204	ND	ND	NA (d)	ND	0.9373	ND	37,342	ND	4	ND
Zinc	65	3.491	9.439E-03	NA (d)	9.439E-03	0.9373	1.007E-02	37,342	2.348E-05	4	5.869E-06
Mercury	201	0.000	1.580E-06	NA (d)	1.580E-06	0.9373	1.685E-06	37,342	3.929E-09	4	9.821E-10

a
Estimated from tracer data as presented in Volume IV.
b
HCl/Cl_2 levels were too low to be reliably measured.
c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.
d
Insufficient material to analyze.

TABLE A-5. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 2, mg/m³	Dilution Correction Factor (a), %	Corrected Concentration - Run 2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
Particulate											
TSP	-	-	1.665E+02	-6.288E-02	1.666E+02	0.9377	1.776E+02	35,643	3.952E-01	4	9.881E-02
PM_{10}	-	-	1.954E+02	-8.049E-01	1.962E+02	0.9682	2.027E+02	35,643	4.509E-01	4	1.127E-01
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Cl_2 (b)	71	4.944	1.458E-02	3.877E-03	1.070E-02	0.9085	1.178E-02	35,643	2.622E-05	4	6.554E-06
Dioxin/Furan											
Dioxin TEQ (c)	-	-	2.571E-10	ND	2.571E-10	0.9085	2.830E-10	35,643	6.297E-13	4	1.574E-13
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	275.040	3.204E-01	9.373E-03	3.110E-01	0.8281	3.756E-01	35,643	8.356E-04	4	2.089E-04
Nitrogen Oxide (NOx)	46	5320.853	1.018E+01	6.595E-02	1.012E+01	0.8281	1.222E+01	35,643	2.718E-02	4	6.796E-03
HCl (b)	36	-525.452	-7.869E-01	4.766E-01	-1.264E+00	0.8281	ND	35,643	ND	4	ND
Carbon Dioxide (CO_2)	44	382932.900	7.009E+02	6.906E+02	1.030E+01	0.8281	1.244E+01	35,643	2.767E-02	4	6.918E-03
Sulfur Dioxide (SO_2)	64	109.279	2.909E-01	-2.690E-03	2.936E-01	0.8281	3.546E-01	35,643	7.890E-04	4	1.973E-04
Particulate-phase Metals											
Aluminum	27	15374.726	1.727E+01	NA (d)	1.727E+01	0.9377	1.842E+01	35,643	4.098E-02	4	1.024E-02
Antimony	122	6.955	3.530E-02	NA (d)	3.530E-02	0.9377	3.764E-02	35,643	8.376E-05	4	2.094E-05
Arsenic	75	0.126	3.924E-04	NA (d)	3.924E-04	0.9377	4.184E-04	35,643	9.311E-07	4	2.328E-07
Barium	137	11.640	6.634E-02	NA (d)	6.634E-02	0.9377	7.075E-02	35,643	1.574E-04	4	3.936E-05
Beryllium	9	0.093	3.472E-05	NA (d)	3.472E-05	0.9377	3.703E-05	35,643	8.239E-08	4	2.060E-08
Cadmium	112	0.080	3.740E-04	NA (d)	3.740E-04	0.9377	3.988E-04	35,643	8.874E-07	4	2.219E-07
Chromium	52	0.480	1.038E-03	NA (d)	1.038E-03	0.9377	1.107E-03	35,643	2.464E-06	4	6.160E-07
Cobalt	59	0.209	5.136E-04	NA (d)	5.136E-04	0.9377	5.477E-04	35,643	1.219E-06	4	3.047E-07
Copper	64	12.680	3.376E-02	NA (d)	3.376E-02	0.9377	3.600E-02	35,643	8.011E-05	4	2.003E-05
Lead	207	0.240	2.065E-03	NA (d)	2.065E-03	0.9377	2.203E-03	35,643	4.901E-06	4	1.225E-06
Magnesium	24	20360.000	2.033E+01	NA (d)	2.033E+01	0.9377	2.168E+01	35,643	4.824E-02	4	1.206E-02
Manganese	55	8.321	1.904E-02	NA (d)	1.904E-02	0.9377	2.030E-02	35,643	4.518E-05	4	1.129E-05
Nickel	59	0.799	1.962E-03	NA (d)	1.962E-03	0.9377	2.092E-03	35,643	4.656E-06	4	1.164E-06
Phosphorus	31	21.507	2.773E-02	NA (d)	2.773E-02	0.9377	2.958E-02	35,643	6.581E-05	4	1.645E-05
Selenium	79	0.103	3.371E-04	NA (d)	3.371E-04	0.9377	3.595E-04	35,643	7.999E-07	4	2.000E-07
Silver	108	ND	ND	NA (d)	ND	0.9377	ND	35,643	ND	4	ND
Thallium	204	ND	ND	NA (d)	ND	0.9377	ND	35,643	ND	4	ND
Zinc	65	8.346	2.257E-02	NA (d)	2.257E-02	0.9377	2.407E-02	35,643	5.355E-05	4	1.339E-05
Mercury	201	0.000	2.816E-06	NA (d)	2.816E-06	0.9377	3.004E-06	35,643	6.683E-09	4	1.671E-09

a
Estimated from tracer data as presented in Volume IV.

b
HCl/Cl_2 levels were too low to be reliably measured.

c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.

d
Insufficient material to analyze.

TABLE A-6. AEC - DIOXIN/FURAN COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1-2, mg/m^3	Dilution Correction Factor (a), %	Corrected Concentration - Run 1-2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
Dioxin/Furan											
Dioxin TEQ (b)	-	-	ND	ND	ND	0.8941	ND	36,492	ND	4	ND

a
Estimated from tracer data as presented in Volume IV.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Total Nonmethane Hydrocarbons (TNMHC)										
TNMHC	6.430E-02	1.189E-01	9.160E-02	2.310E-02	1.000E-04	1.000E-04	3.97	916.00	C	A
Volatile Organic Compounds (VOCs)										
Ethane	5.000E-03	6.400E-03	5.700E-03	2.900E-03	1.000E-04	1.000E-04	1.97	57.00	D	A
Ethylene	8.300E-03	1.720E-02	1.275E-02	1.500E-04	1.000E-04	1.000E-04	85.00	127.50	A	A
Acetylene	9.000E-03	1.690E-02	1.295E-02	9.500E-04	1.000E-04	1.000E-04	13.63	129.50	A	A
Propane	2.200E-03	2.600E-03	2.400E-03	1.900E-03	1.000E-04	1.000E-04	1.26	24.00	D	A
Propene	2.900E-03	5.700E-03	4.300E-03	1.000E-04	1.000E-04	1.000E-04	43.00	43.00	A	A
i-Butane	3.000E-04	6.000E-04	4.500E-04	4.000E-04	1.000E-04	1.000E-04	1.13	4.50	D	C
i-Butene	2.000E-04	1.300E-03	7.500E-04	ND	1.000E-04	1.000E-04	10.00	7.50	A	B
1-Butene	4.000E-04	6.000E-04	5.000E-04	ND	1.000E-04	1.000E-04	10.00	5.00	A	B
1,3-Butadiene	2.000E-04	3.000E-04	2.500E-04	ND	1.000E-04	1.000E-04	10.00	2.50	A	C
n-Butane	8.000E-04	9.000E-04	8.500E-04	8.500E-04	1.000E-04	1.000E-04	1.00	8.50	D	B
trans-2-Butene	5.000E-04	1.000E-03	7.500E-04	ND	1.000E-04	1.000E-04	10.00	7.50	A	B
2,2-Dimethylpropane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Butene	1.000E-04	2.000E-04	1.500E-04	ND	1.000E-04	1.000E-04	10.00	1.50	A	D
3-Methyl-1-butene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
i-Pentane	5.000E-04	4.000E-04	4.500E-04	3.000E-04	1.000E-04	1.000E-04	1.50	4.50	D	C
1-Pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-1-butene	ND	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
n-Pentane	3.000E-04	4.000E-04	3.500E-04	3.000E-04	1.000E-04	1.000E-04	1.17	3.50	D	C
Isoprene	ND	ND	ND	2.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
trans-2-Pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-butene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylbutane	ND	ND	ND	4.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
Cyclopentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
4-Methyl-1-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Cyclopentane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,3-Dimethylbutane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-4-Methyl-2-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylpentane	2.000E-04	2.000E-04	2.000E-04	1.500E-04	1.000E-04	1.000E-04	1.33	2.00	D	C
3-Methylpentane	ND	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-1-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
1-Hexene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Hexane	2.000E-04	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
trans-2-Hexene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Hexene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclopentane	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
2,4-Dimethylpentane	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
Benzene	2.100E-03	3.800E-03	2.950E-03	5.500E-04	1.000E-04	1.000E-04	5.36	29.50	B	A
Cyclohexane	ND	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylhexane	ND	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2,3-Dimethylpentane	ND	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
3-Methylhexane	ND	ND	ND	2.500E-04	1.000E-04	1.000E-04	ND	ND	F	F

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2,2,4-Trimethylpentane	5.000E-04	7.000E-04	6.000E-04	2.000E-04	1.000E-04	1.000E-04	3.00	6.00	C	B
n-Heptane	ND	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
2,4,4-Trimethyl-1-pentene	ND	ND	ND	2.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclohexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,5-Dimethylhexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,4-Dimethylhexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,3,4-Trimethylpentane	ND	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
Toluene	1.300E-03	1.900E-03	1.600E-03	5.000E-04	1.000E-04	1.000E-04	3.20	16.00	C	A
2,3-Dimethylhexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylheptane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
3-Ethylhexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylheptane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2,4-Trimethylhexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Octane	1.000E-04	ND	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
Ethylcyclohexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Ethylbenzene	3.000E-04	5.000E-04	4.000E-04	1.000E-04	1.000E-04	1.000E-04	4.00	4.00	C	C
m-Xylene & p-Xylene	8.000E-04	8.000E-04	8.000E-04	5.500E-04	1.000E-04	1.000E-04	1.45	8.00	D	B
Styrene	4.000E-04	ND	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
o-Xylene	4.000E-04	7.000E-04	5.500E-04	2.000E-04	1.000E-04	1.000E-04	2.75	5.50	C	B
n-Nonane	2.000E-04	5.000E-04	3.500E-04	1.000E-04	1.000E-04	1.000E-04	3.50	3.50	C	C
i-Propylbenzene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Propylbenzene	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
p-Ethyltoluene	5.000E-04	5.000E-04	5.000E-04	3.000E-04	1.000E-04	1.000E-04	1.67	5.00	D	B
m-Ethyltoluene	3.000E-04	3.000E-04	3.000E-04	1.000E-04	1.000E-04	1.000E-04	3.00	3.00	C	C
1,3,5-Trimethylbenzene	4.000E-04	4.000E-04	4.000E-04	2.000E-04	1.000E-04	1.000E-04	2.00	4.00	C	C
o-Ethyltoluene	4.000E-04	3.000E-04	3.500E-04	1.000E-04	1.000E-04	1.000E-04	3.50	3.50	C	C
1,2,4-Trimethylbenzene & sec-Butylbenzene	9.000E-04	1.100E-03	1.000E-03	3.000E-04	1.000E-04	1.000E-04	3.33	10.00	C	A
n-Decane	2.000E-04	ND	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
alpha-Pinene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
beta-Pinene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
delta 3-Carene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
d-Limonene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
MTBE	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
ETBE	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Dichlorodifluoromethane	1.485E-03	9.456E-04	1.215E-03	9.510E-04	4.992E-04	4.992E-04	1.28	2.43	D	C
Methylchloride	ND	ND	ND	ND	2.080E-04	2.080E-04	ND	ND	F	F
Dichlorotetrafluoroethane	ND	ND	ND	ND	7.114E-04	7.114E-04	ND	ND	F	F
Chloroethene	ND	ND	ND	ND	2.621E-04	2.621E-04	ND	ND	F	F
1,3-Butadiene	2.034E-04	3.051E-04	2.543E-04	ND	2.246E-04	2.246E-04	10.00	1.13	A	D
Methylbromide	ND	ND	ND	ND	3.952E-04	3.952E-04	ND	ND	F	F
Ethylchloride	ND	ND	ND	ND	2.683E-04	2.683E-04	ND	ND	F	F
Trichloromonofluoromethane	2.435E-03	2.447E-03	2.441E-03	2.527E-03	5.699E-04	5.699E-04	0.97	4.28	F	C
Vinylidenechloride	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Methylenechloride	9.024E-03	4.652E-03	6.838E-03	6.733E-04	3.536E-04	3.536E-04	10.16	19.34	A	A
Allylchloride	ND	ND	ND	ND	3.182E-04	3.182E-04	ND	ND	F	F
1,1,2-Trichloro-1,2,2-trifluoroethane	7.574E-04	8.358E-04	7.966E-04	8.874E-04	7.821E-04	7.821E-04	0.90	1.02	F	D
1,1-Dichloroethane	ND	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
1,2-Dichloroethene	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Chloroform	ND	ND	ND	ND	4.950E-04	4.950E-04	ND	ND	F	F
1,2-Dichloroethane	ND	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
Methylchloroform	3.500E-04	3.570E-04	3.535E-04	3.485E-04	5.533E-04	5.533E-04	1.01	0.64	D	F
Benzene	2.136E-03	3.865E-03	3.001E-03	5.594E-04	3.245E-04	3.245E-04	5.36	9.25	B	B
Carbontetrachloride	7.429E-04	7.876E-04	7.652E-04	7.138E-04	6.406E-04	6.406E-04	1.07	1.19	D	D
1,2-Dichloropropane	ND	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Trichloroethylene	ND	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
cis 1,3-Dichloro-1-propene	ND	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
trans 1,3-Dichloro-1-propene	ND	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
1,1,2-Trichloroethane	ND	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
Toluene	1.322E-03	1.933E-03	1.627E-03	5.086E-04	3.827E-04	3.827E-04	3.20	4.25	C	C
1,2-Dibromoethane	ND	ND	ND	ND	7.821E-04	7.821E-04	ND	ND	F	F
Perchloroethylene	ND	ND	ND	ND	6.906E-04	6.906E-04	ND	ND	F	F
Chlorobenzene	ND	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Ethylbenzene	4.606E-04	7.676E-04	6.141E-04	ND	6.656E-04	6.656E-04	10.00	0.92	A	F
m&p-Xylene	9.715E-04	1.094E-03	1.033E-03	5.045E-04	4.410E-04	4.410E-04	2.05	2.34	C	C
Styrene	ND	ND	ND	ND	4.326E-04	4.326E-04	ND	ND	F	F
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	6.989E-04	6.989E-04	ND	ND	F	F
o-Xylene	4.068E-04	7.120E-04	5.594E-04	ND	4.410E-04	4.410E-04	10.00	1.27	A	D
p-Ethyltoluene	3.110E-04	3.170E-04	3.140E-04	ND	4.992E-04	4.992E-04	10.00	0.63	A	F
1,3,5-Trimethylbenzene	ND	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
1,2,4-Trimethylbenzene	7.719E-04	7.311E-04	7.515E-04	5.401E-04	4.992E-04	4.992E-04	1.39	1.51	D	D
Benzylchloride	ND	ND	ND	ND	5.283E-04	5.283E-04	ND	ND	F	F
m-Dichlorobenzene	ND	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
p-Dichlorobenzene	ND	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
o-Dichlorobenzene	ND	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	ND	7.530E-04	7.530E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	ND	1.086E-03	1.086E-03	ND	ND	F	F
Phenylacetylene	ND	ND	ND	ND	4.243E-04	4.243E-04	ND	ND	F	F
Indane	ND	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2,3-Dihydro-1-methyl-1H-indene	ND	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F
2,3-Dihydro-4-methyl-1H-indene	ND	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F
Naphthalene	9.807E-04	9.847E-04	9.827E-04	5.793E-04	5.325E-04	5.325E-04	1.70	1.85	D	D
2-Methylnaphthalene	ND	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
1-Methylnaphthalene	ND	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
Cyanogen	ND	ND	ND	ND	2.163E-04	2.163E-04	ND	ND	F	F
Methylnitrite	1.062E-03	1.759E-03	1.411E-03	ND	2.538E-04	2.538E-04	10.00	5.56	A	B
Acetonitrile	8.923E-05	1.547E-04	1.220E-04	ND	1.706E-04	1.706E-04	10.00	0.72	A	F
Acrylonitrile	9.772E-04	ND	9.772E-04	ND	2.205E-04	2.205E-04	10.00	4.43	A	C
Nitromethane	1.037E-03	1.401E-03	1.219E-03	ND	2.538E-04	2.538E-04	10.00	4.80	A	C
Propanenitrile	ND	1.324E-04	1.324E-04	ND	2.288E-04	2.288E-04	10.00	0.58	A	F
2-Methylpropanenitrile	ND	ND	ND	ND	2.870E-04	2.870E-04	ND	ND	F	F
Pentanenitrile	ND	ND	ND	ND	3.453E-04	3.453E-04	ND	ND	F	F
Hexanenitrile	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Benzonitrile	ND	ND	ND	ND	4.285E-04	4.285E-04	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	ND	5.782E-04	5.782E-04	ND	ND	F	F
Acrolein	1.985E-03	3.545E-03	2.765E-03	ND	2.330E-04	2.330E-04	10.00	11.87	A	A
Acetone	6.171E-03	1.154E-02	8.855E-03	8.869E-03	2.330E-04	2.330E-04	1.00	38.01	F	A

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
1-Hydroxy-2-propanone	4.819E-03	2.717E-04	2.545E-03	1.136E-03	3.078E-04	3.078E-04	2.24	8.27	C	B
Furan	3.341E-04	7.307E-04	5.324E-04	ND	2.829E-04	2.829E-04	10.00	1.88	A	D
2-Propanol	ND	ND	ND	1.513E-02	2.496E-04	2.496E-04	ND	ND	F	F
2-Methylpropanal	ND	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
1-Propanol	ND	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
Methacrolein	ND	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
Methyl-vinyl Ketone	2.847E-04	4.865E-04	3.856E-04	ND	2.912E-04	2.912E-04	10.00	1.32	A	D
MTBE	ND	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2,3-Butanedione	ND	ND	ND	ND	3.578E-04	3.578E-04	ND	ND	F	F
Butanal	2.638E-04	2.534E-04	2.586E-04	2.322E-04	2.995E-04	2.995E-04	1.11	0.86	D	F
2-Butanone	1.322E-03	1.956E-03	1.639E-03	7.609E-04	2.995E-04	2.995E-04	2.15	5.47	C	B
2-Methyl-1,3-dioxolane	ND	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2-Methylfuran	ND	ND	ND	ND	3.411E-04	3.411E-04	ND	ND	F	F
Tetrahydrofuran	ND	ND	ND	ND	2.995E-04	2.995E-04	ND	ND	F	F
trans-2-Butenal	2.828E-04	4.303E-04	3.566E-04	ND	2.912E-04	2.912E-04	10.00	1.22	A	D
Acetic Acid	2.217E-03	1.757E-03	1.987E-03	2.458E-03	2.496E-04	2.496E-04	0.81	7.96	F	B
1-Butanol	ND	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
2-Pentanone	ND	2.863E-04	2.863E-04	ND	3.578E-04	3.578E-04	10.00	0.80	A	F
Pentanal	8.189E-04	9.410E-04	8.800E-04	1.022E-03	3.578E-04	3.578E-04	0.86	2.46	F	C
1,4-Dioxane	ND	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
Methyl Methacrylate	ND	ND	ND	ND	4.160E-04	4.160E-04	ND	ND	F	F
Cyclopentanone	ND	ND	ND	ND	3.494E-04	3.494E-04	ND	ND	F	F
Hexanal	5.802E-04	4.954E-04	5.378E-04	5.402E-04	4.160E-04	4.160E-04	1.00	1.29	F	D
2-Furaldehyde	1.638E-03	2.585E-03	2.111E-03	ND	3.994E-04	3.994E-04	10.00	5.29	A	B
Cyclohexanone	ND	ND	ND	ND	4.077E-04	4.077E-04	ND	ND	F	F
Heptanal	5.966E-04	5.343E-04	5.654E-04	6.054E-04	4.742E-04	4.742E-04	0.93	1.19	F	D
2-Butoxyethanol	6.911E-04	ND	6.911E-04	7.468E-04	4.909E-04	4.909E-04	0.93	1.41	F	D
Benzaldehyde	2.153E-03	2.135E-03	2.144E-03	9.684E-04	4.410E-04	4.410E-04	2.21	4.86	C	C
6-Methyl-5-hepten-2-one	ND	ND	ND	1.540E-03	5.242E-04	5.242E-04	ND	ND	F	F
Octanal	1.295E-03	1.120E-03	1.208E-03	1.242E-03	5.325E-04	5.325E-04	0.97	2.27	F	C
Benzofuran	ND	3.581E-04	3.581E-04	ND	4.909E-04	4.909E-04	10.00	0.73	A	F
2-Ethyl-1-hexanol	ND	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
Acetophonone	3.675E-04	2.712E-04	3.193E-04	ND	4.992E-04	4.992E-04	10.00	0.64	A	F
Nonanal	1.894E-03	1.301E-03	1.597E-03	1.812E-03	5.907E-04	5.907E-04	0.88	2.70	F	C
Decanal	1.933E-03	1.111E-03	1.522E-03	2.042E-03	6.490E-04	6.490E-04	0.75	2.35	F	C
Carbonyl Sulfide	4.284E-04	4.555E-04	4.419E-04	1.790E-04	2.496E-04	2.496E-04	2.47	1.77	C	D
Carbon Disulfide	7.394E-02	1.051E-01	8.951E-02	6.089E-04	3.162E-04	3.162E-04	147.01	283.11	A	A
Thiophene	3.392E-04	5.170E-04	4.281E-04	ND	3.494E-04	3.494E-04	10.00	1.23	A	D
Dimethyldisulfide	ND	ND	ND	ND	3.910E-04	3.910E-04	ND	ND	F	F

a
Compounds in bold represent duplicate values.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	6.430E-02	2.150E-02	4.280E-02	0.9236	4.634E-02	37,342	1.080E-04	4	2.701E-05
Volatile Organic Compounds (VOCs)											
Ethane	30	4.006	5.000E-03	2.200E-03	2.800E-03	0.9236	3.032E-03	37,342	7.067E-06	4	1.767E-06
Ethylene	28	7.126	8.300E-03	2.000E-04	8.100E-03	0.9236	8.770E-03	37,342	2.044E-05	4	5.111E-06
Acetylene	26	8.321	9.000E-03	1.000E-03	8.000E-03	0.9236	8.662E-03	37,342	2.019E-05	4	5.048E-06
Propane	44	1.202	2.200E-03	2.000E-03	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
Propene	42	1.660	2.900E-03	1.000E-04	2.800E-03	0.9236	3.032E-03	37,342	7.067E-06	4	1.767E-06
i-Butane	58	0.124	3.000E-04	4.000E-04	-1.000E-04	0.9236	ND	37,342	ND	4	ND
i-Butene	56	0.086	2.000E-04	ND	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
1-Butene	56	0.172	4.000E-04	ND	4.000E-04	0.9236	4.331E-04	37,342	1.010E-06	4	2.524E-07
1,3-Butadiene	54	0.089	2.000E-04	ND	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
n-Butane	58	0.332	8.000E-04	8.000E-04	0.000E+00	0.9236	ND	37,342	ND	4	ND
trans-2-Butene	56	0.215	5.000E-04	ND	5.000E-04	0.9236	5.414E-04	37,342	1.262E-06	4	3.155E-07
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
cis-2-Butene	56	0.043	1.000E-04	ND	1.000E-04	0.9236	1.083E-04	37,342	2.524E-07	4	6.310E-08
3-Methyl-1-butene	70	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
i-Pentane	72	0.167	5.000E-04	3.000E-04	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
1-Pentene	70	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Methyl-1-butene	70	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
n-Pentane	72	0.100	3.000E-04	3.000E-04	0.000E+00	0.9236	ND	37,342	ND	4	ND
Isoprene	68	ND	ND	2.000E-04	ND	0.9236	ND	37,342	ND	4	ND
trans-2-Pentene	70	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
cis-2-Pentene	70	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Methyl-2-butene	70	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,2-Dimethylbutane	86	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Cyclopentene	68	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Cyclopentane	70	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,3-Dimethylbutane	86	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Methylpentane	86	0.056	2.000E-04	2.000E-04	0.000E+00	0.9236	ND	37,342	ND	4	ND
3-Methylpentane	86	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1-Hexene	84	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
n-Hexane	86	0.056	2.000E-04	1.000E-04	1.000E-04	0.9236	1.083E-04	37,342	2.524E-07	4	6.310E-08
trans-2-Hexene	84	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
cis-2-Hexene	84	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Methylcyclopentane	84	0.029	1.000E-04	1.000E-04	0.000E+00	0.9236	ND	37,342	ND	4	ND
2,4-Dimethylpentane	100	0.024	1.000E-04	1.000E-04	0.000E+00	0.9236	ND	37,342	ND	4	ND
Benzene	78	0.647	2.100E-03	5.000E-04	1.600E-03	0.9236	1.732E-03	37,342	4.038E-06	4	1.010E-06
Cyclohexane	84	ND	ND	1.000E-04	ND	0.9236	ND	37,342	ND	4	ND
2-Methylhexane	100	ND	ND	1.000E-04	ND	0.9236	ND	37,342	ND	4	ND
2,3-Dimethylpentane	100	ND	ND	1.000E-04	ND	0.9236	ND	37,342	ND	4	ND
3-Methylhexane	100	ND	ND	2.000E-04	ND	0.9236	ND	37,342	ND	4	ND
2,2,4-Trimethylpentane	114	0.105	5.000E-04	2.000E-04	3.000E-04	0.9236	3.248E-04	37,342	7.572E-07	4	1.893E-07

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
n-Heptane	100	ND	ND	1.000E-04	ND	0.9236	ND	37,342	ND	4	ND
2,4,4-Trimethyl-1-pentene	112	ND	ND	2.000E-04	ND	0.9236	ND	37,342	ND	4	ND
Methylcyclohexane	98	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,5-Dimethylhexane	114	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,4-Dimethylhexane	114	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,3,4-Trimethylpentane	114	ND	ND	1.000E-04	ND	0.9236	ND	37,342	ND	4	ND
Toluene	92	0.340	1.300E-03	5.000E-04	8.000E-04	0.9236	8.662E-04	37,342	2.019E-06	4	5.048E-07
2,3-Dimethylhexane	114	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Methylheptane	111	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
3-Ethylhexane	114	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,2,4-Trimethylhexane	128	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
n-Octane	114	0.021	1.000E-04	1.000E-04	0.000E+00	0.9236	ND	37,342	ND	4	ND
Ethylcyclohexane	112	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Ethylbenzene	160	0.045	3.000E-04	1.000E-04	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
m-Xylene & p-Xylene	106	0.181	8.000E-04	6.000E-04	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
Styrene	104	0.092	4.000E-04	ND	4.000E-04	0.9236	4.331E-04	37,342	1.010E-06	4	2.524E-07
o-Xylene	106	0.091	4.000E-04	2.000E-04	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
n-Nonane	128	0.038	2.000E-04	1.000E-04	1.000E-04	0.9236	1.083E-04	37,342	2.524E-07	4	6.310E-08
i-Propylbenzene	120	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
n-Propylbenzene	120	0.020	1.000E-04	1.000E-04	0.000E+00	0.9236	ND	37,342	ND	4	ND
p-Ethyltoluene	120	0.100	5.000E-04	3.000E-04	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
m-Ethyltoluene	120	0.060	3.000E-04	1.000E-04	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
1,3,5-Trimethylbenzene	120	0.080	4.000E-04	2.000E-04	2.000E-04	0.9236	2.165E-04	37,342	5.048E-07	4	1.262E-07
o-Ethyltoluene	120	0.080	4.000E-04	1.000E-04	3.000E-04	0.9236	3.248E-04	37,342	7.572E-07	4	1.893E-07
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.180	9.000E-04	2.000E-04	7.000E-04	0.9236	7.579E-04	37,342	1.767E-06	4	4.417E-07
n-Decane	142	0.034	2.000E-04	1.000E-04	1.000E-04	0.9236	1.083E-04	37,342	2.524E-07	4	6.310E-08
alpha-Pinene	136	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
beta-Pinene	136	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
delta 3-Carene	136	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
d-Limonene	136	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
MTBE	88	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
ETBE	102	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Dichlorodifluoromethane	120	0.297	1.485E-03	1.379E-03	1.053E-04	0.9236	1.140E-04	37,342	2.658E-07	4	6.646E-08
Methylchloride	50	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Chloroethene	63	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1,3-Butadiene	54	0.091	2.034E-04	ND	2.034E-04	0.9236	2.203E-04	37,342	5.135E-07	4	1.284E-07
Methylbromide	95	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Trichloromonofluoromethane	137	0.427	2.435E-03	2.533E-03	-9.803E-05	0.9236	ND	37,342	ND	4	ND
Vinylidenechloride	97	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Methylenechloride	85	2.552	9.024E-03	9.447E-04	8.079E-03	0.9236	8.748E-03	37,342	2.039E-05	4	5.098E-06
Allylchloride	76.5	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.097	7.574E-04	9.142E-04	-1.568E-04	0.9236	ND	37,342	ND	4	ND
1,1-Dichloroethane	99	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1,2-Dichloroethene	97	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Chloroform	119	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
1,2-Dichloroethane	99	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Methylchloroform	133	0.063	3.500E-04	3.458E-04	4.195E-06	0.9236	4.542E-06	37,342	1.059E-08	4	2.647E-09
Benzene	78	0.658	2.136E-03	5.086E-04	1.627E-03	0.9236	1.762E-03	37,342	4.108E-06	4	1.027E-06
Carbontetrachloride	154	0.116	7.429E-04	7.248E-04	1.814E-05	0.9236	1.964E-05	37,342	4.580E-08	4	1.145E-08
1,2-Dichloropropane	113	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Trichloroethylene	133	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Toluene	92	0.345	1.322E-03	5.086E-04	8.137E-04	0.9236	8.810E-04	37,342	2.054E-06	4	5.135E-07
1,2-Dibromoethane	188	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Perchloroethylene	166	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Chlorobenzene	113	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Ethylbenzene	160	0.069	4.606E-04	ND	4.606E-04	0.9236	4.987E-04	37,342	1.163E-06	4	2.906E-07
m&p-Xylene	106	0.220	9.715E-04	5.549E-04	4.166E-04	0.9236	4.510E-04	37,342	1.051E-06	4	2.629E-07
Styrene	104	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
o-Xylene	106	0.092	4.068E-04	ND	4.068E-04	0.9236	4.405E-04	37,342	1.027E-06	4	2.567E-07
p-Ethyltoluene	120	0.062	3.110E-04	ND	3.110E-04	0.9236	3.367E-04	37,342	7.850E-07	4	1.962E-07
1,3,5-Trimethylbenzene	120	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1,2,4-Trimethylbenzene	120	0.155	7.719E-04	6.311E-04	1.408E-04	0.9236	1.525E-04	37,342	3.554E-07	4	8.886E-08
Benzylchloride	127	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Phenylacetylene	102	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Indane	118	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,3-Dihydro-1-methyl-1H-indene	132	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,3-Dihydro-4-methyl-1H-indene	132	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Naphthalene	128	0.184	9.807E-04	6.852E-04	2.955E-04	0.9236	3.199E-04	37,342	7.458E-07	4	1.865E-07
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1-Methylnaphthalene	142	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Cyanogen	52	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Methylnitrite	61	0.419	1.062E-03	ND	1.062E-03	0.9236	1.150E-03	37,342	2.681E-06	4	6.704E-07
Acetonitrile	41	0.052	8.923E-05	ND	8.923E-05	0.9236	9.661E-05	37,342	2.252E-07	4	5.631E-08
Acrylonitrile	53	0.443	9.772E-04	ND	9.772E-04	0.9236	1.058E-03	37,342	2.466E-06	4	6.166E-07
Nitromethane	61	0.409	1.037E-03	ND	1.037E-03	0.9236	1.123E-03	37,342	2.618E-06	4	6.546E-07
Propanenitrile	55	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Pentanenitrile	83	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Hexanenitrile	97	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Benzonitrile	103	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Acrolein	56	0.852	1.985E-03	ND	1.985E-03	0.9236	2.149E-03	37,342	5.010E-06	4	1.253E-06
Acetone	56	2.649	6.171E-03	1.177E-02	-5.603E-03	0.9236	ND	37,342	ND	4	ND
1-Hydroxy-2-propanone	74	1.565	4.819E-03	1.136E-03	3.682E-03	0.9236	3.987E-03	37,342	9.294E-06	4	2.323E-06
Furan	68	0.118	3.341E-04	ND	3.341E-04	0.9236	3.618E-04	37,342	8.433E-07	4	2.108E-07
2-Propanol	60	ND	ND	1.513E-02	ND	0.9236	ND	37,342	ND	4	ND

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2-Methylpropanal	74	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
1-Propanol	60	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Methacrolein	70	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Methyl-vinyl Ketone	70	0.098	2.847E-04	ND	2.847E-04	0.9236	3.082E-04	37,342	7.185E-07	4	1.796E-07
MTBE	88	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2,3-Butanedione	86	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Butanal	72	0.088	2.638E-04	2.639E-04	-1.217E-07	0.9236	ND	37,342	ND	4	ND
2-Butanone	72	0.441	1.322E-03	7.127E-04	6.094E-04	0.9236	6.598E-04	37,342	1.538E-06	4	3.846E-07
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Methylfuran	82	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
trans-2-Butenal	70	0.097	2.828E-04	ND	2.828E-04	0.9236	3.062E-04	37,342	7.139E-07	4	1.785E-07
Acetic Acid	60	0.888	2.217E-03	3.365E-03	-1.148E-03	0.9236	ND	37,342	ND	4	ND
1-Butanol	74	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Pentanone	86	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Pentanal	86	0.229	8.189E-04	9.701E-04	-1.512E-04	0.9236	ND	37,342	ND	4	ND
1,4-Dioxane	88	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Cyclopentanone	84	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Hexanal	100	0.139	5.802E-04	5.910E-04	-1.072E-05	0.9236	ND	37,342	ND	4	ND
2-Furaldehyde	96	0.410	1.638E-03	ND	1.638E-03	0.9236	1.773E-03	37,342	4.133E-06	4	1.033E-06
Cyclohexanone	98	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Heptanal	114	0.126	5.966E-04	7.495E-04	-1.529E-04	0.9236	ND	37,342	ND	4	ND
2-Butoxyethanol	118	0.141	6.911E-04	9.842E-04	-2.931E-04	0.9236	ND	37,342	ND	4	ND
Benzaldehyde	106	0.488	2.153E-03	1.230E-03	9.228E-04	0.9236	9.991E-04	37,342	2.329E-06	4	5.823E-07
6-Methyl-5-hepten-2-one	126	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Octanal	128	0.243	1.295E-03	1.720E-03	-4.244E-04	0.9236	ND	37,342	ND	4	ND
Benzofuran	118	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND
Acetophonone	120	0.074	3.675E-04	ND	3.675E-04	0.9236	3.979E-04	37,342	9.275E-07	4	2.319E-07
Nonanal	142	0.321	1.894E-03	2.304E-03	-4.096E-04	0.9236	ND	37,342	ND	4	ND
Decanal	156	0.298	1.933E-03	2.755E-03	-8.218E-04	0.9236	ND	37,342	ND	4	ND
Carbonyl Sulfide	60	0.172	4.284E-04	2.330E-04	1.954E-04	0.9236	2.116E-04	37,342	4.932E-07	4	1.233E-07
Carbon Disulfide	76	23.388	7.394E-02	5.899E-04	7.335E-02	0.9236	7.942E-02	37,342	1.851E-04	4	4.629E-05
Thiophene	84	0.097	3.392E-04	ND	3.392E-04	0.9236	3.673E-04	37,342	8.563E-07	4	2.141E-07
Dimethyldisulfide	94	ND	ND	ND	ND	0.9236	ND	37,342	ND	4	ND

a
Compounds in bold represent duplicate values.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	1.189E-01	2.470E-02	9.420E-02	0.933	1.010E-01	35,643	2.247E-04	4	5.616E-05
Volatile Organic Compounds (VOCs)											
Ethane	30	5.128	6.400E-03	3.600E-03	2.800E-03	0.933	3.001E-03	35,643	6.678E-06	4	1.669E-06
Ethylene	28	14.766	1.720E-02	1.000E-04	1.710E-02	0.933	1.833E-02	35,643	4.078E-05	4	1.020E-05
Acetylene	26	15.625	1.690E-02	9.000E-04	1.600E-02	0.933	1.715E-02	35,643	3.816E-05	4	9.540E-06
Propane	44	1.420	2.600E-03	1.800E-03	8.000E-04	0.933	8.574E-04	35,643	1.908E-06	4	4.770E-07
Propene	42	3.262	5.700E-03	ND	5.700E-03	0.933	6.109E-03	35,643	1.359E-05	4	3.399E-06
i-Butane	58	0.249	6.000E-04	4.000E-04	2.000E-04	0.933	2.144E-04	35,643	4.770E-07	4	1.192E-07
i-Butene	56	0.558	1.300E-03	ND	1.300E-03	0.933	1.393E-03	35,643	3.100E-06	4	7.751E-07
1-Butene	56	0.258	6.000E-04	ND	6.000E-04	0.933	6.431E-04	35,643	1.431E-06	4	3.577E-07
1,3-Butadiene	54	0.134	3.000E-04	ND	3.000E-04	0.933	3.215E-04	35,643	7.155E-07	4	1.789E-07
n-Butane	58	0.373	9.000E-04	9.000E-04	0.000E+00	0.933	ND	35,643	ND	4	ND
trans-2-Butene	56	0.429	1.000E-03	ND	1.000E-03	0.933	1.072E-03	35,643	2.385E-06	4	5.962E-07
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
cis-2-Butene	56	0.086	2.000E-04	ND	2.000E-04	0.933	2.144E-04	35,643	4.770E-07	4	1.192E-07
3-Methyl-1-butene	70	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
i-Pentane	72	0.134	4.000E-04	3.000E-04	1.000E-04	0.933	1.072E-04	35,643	2.385E-07	4	5.962E-08
1-Pentene	70	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Methyl-1-butene	70	0.034	1.000E-04	ND	1.000E-04	0.933	1.072E-04	35,643	2.385E-07	4	5.962E-08
n-Pentane	72	0.134	4.000E-04	3.000E-04	1.000E-04	0.933	1.072E-04	35,643	2.385E-07	4	5.962E-08
Isoprene	68	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
trans-2-Pentene	70	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
cis-2-Pentene	70	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Methyl-2-butene	70	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,2-Dimethylbutane	86	ND	ND	4.000E-04	ND	0.933	ND	35,643	ND	4	ND
Cyclopentene	68	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Cyclopentane	70	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,3-Dimethylbutane	86	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Methylpentane	86	0.056	2.000E-04	1.000E-04	1.000E-04	0.933	1.072E-04	35,643	2.385E-07	4	5.962E-08
3-Methylpentane	86	ND	ND	1.000E-04	ND	0.933	ND	35,643	ND	4	ND
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1-Hexene	84	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
n-Hexane	86	0.056	2.000E-04	1.000E-04	1.000E-04	0.933	1.072E-04	35,643	2.385E-07	4	5.962E-08
trans-2-Hexene	84	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
cis-2-Hexene	84	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Methylcyclopentane	84	0.029	1.000E-04	1.000E-04	0.000E+00	0.933	ND	35,643	ND	4	ND
2,4-Dimethylpentane	100	0.024	1.000E-04	1.000E-04	0.000E+00	0.933	ND	35,643	ND	4	ND
Benzene	78	1.171	3.800E-03	6.000E-04	3.200E-03	0.933	3.430E-03	35,643	7.632E-06	4	1.908E-06
Cyclohexane	84	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Methylhexane	100	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,3-Dimethylpentane	100	ND	ND	1.000E-04	ND	0.933	ND	35,643	ND	4	ND
3-Methylhexane	100	ND	ND	3.000E-04	ND	0.933	ND	35,643	ND	4	ND

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
2,2,4-Trimethylpentane	114	0.148	7.000E-04	2.000E-04	5.000E-04	0.933	5.359E-04	35,643	1.192E-06	4	2.981E-07
n-Heptane	100	0.048	2.000E-04	1.000E-04	1.000E-04	0.933	1.072E-04	35,643	2.385E-07	4	5.962E-08
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Methylcyclohexane	98	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,5-Dimethylhexane	114	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,4-Dimethylhexane	114	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,3,4-Trimethylpentane	114	0.021	1.000E-04	1.000E-04	0.000E+00	0.933	ND	35,643	ND	4	ND
Toluene	92	0.496	1.900E-03	5.000E-04	1.400E-03	0.933	1.501E-03	35,643	3.339E-06	4	8.347E-07
2,3-Dimethylhexane	114	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Methylheptane	111	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
3-Ethylhexane	114	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,2,4-Trimethylhexane	128	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
n-Octane	114	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Ethylcyclohexane	112	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Ethylbenzene	160	0.075	5.000E-04	1.000E-04	4.000E-04	0.933	4.287E-04	35,643	9.540E-07	4	2.385E-07
m-Xylene & p-Xylene	106	0.181	8.000E-04	5.000E-04	3.000E-04	0.933	3.215E-04	35,643	7.155E-07	4	1.789E-07
Styrene	104	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
o-Xylene	106	0.159	7.000E-04	2.000E-04	5.000E-04	0.933	5.359E-04	35,643	1.192E-06	4	2.981E-07
n-Nonane	128	0.094	5.000E-04	ND	5.000E-04	0.933	5.359E-04	35,643	1.192E-06	4	2.981E-07
i-Propylbenzene	120	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
n-Propylbenzene	120	0.020	1.000E-04	ND	1.000E-04	0.933	1.072E-04	35,643	2.385E-07	4	5.962E-08
p-Ethyltoluene	120	0.100	5.000E-04	ND	5.000E-04	0.933	5.359E-04	35,643	1.192E-06	4	2.981E-07
m-Ethyltoluene	120	0.060	3.000E-04	ND	3.000E-04	0.933	3.215E-04	35,643	7.155E-07	4	1.789E-07
1,3,5-Trimethylbenzene	120	0.080	4.000E-04	ND	4.000E-04	0.933	4.287E-04	35,643	9.540E-07	4	2.385E-07
o-Ethyltoluene	120	0.060	3.000E-04	ND	3.000E-04	0.933	3.215E-04	35,643	7.155E-07	4	1.789E-07
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.220	1.100E-03	4.000E-04	7.000E-04	0.933	7.503E-04	35,643	1.669E-06	4	4.174E-07
n-Decane	142	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
alpha-Pinene	136	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
beta-Pinene	136	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
delta 3-Carene	136	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
d-Limonene	136	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
MTBE	88	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
ETBE	102	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Dichlorodifluoromethane	120	0.189	9.456E-04	5.226E-04	4.230E-04	0.933	4.534E-04	35,643	1.009E-06	4	2.522E-07
Methylchloride	50	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Chloroethene	63	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1,3-Butadiene	54	0.136	3.051E-04	ND	3.051E-04	0.933	3.270E-04	35,643	7.277E-07	4	1.819E-07
Methylbromide	95	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Trichloromonofluoromethane	137	0.429	2.447E-03	2.521E-03	-7.369E-05	0.933	ND	35,643	ND	4	ND
Vinylidenechloride	97	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Methylenechloride	85	1.316	4.652E-03	4.020E-04	4.250E-03	0.933	4.555E-03	35,643	1.014E-05	4	2.534E-06
Allylchloride	76.5	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.107	8.358E-04	8.606E-04	-2.476E-05	0.933	ND	35,643	ND	4	ND
1,1-Dichloroethane	99	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
1,2-Dichloroethene	97	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Chloroform	119	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1,2-Dichloroethane	99	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Methylchloroform	133	0.065	3.570E-04	3.511E-04	5.822E-06	0.933	6.240E-06	35,643	1.388E-08	4	3.471E-09
Benzene	78	1.191	3.865E-03	6.103E-04	3.255E-03	0.933	3.489E-03	35,643	7.762E-06	4	1.941E-06
Carbontetrachloride	154	0.123	7.876E-04	7.028E-04	8.479E-05	0.933	9.088E-05	35,643	2.022E-07	4	5.056E-08
1,2-Dichloropropane	113	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Trichloroethylene	133	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Toluene	92	0.505	1.933E-03	5.086E-04	1.424E-03	0.933	1.526E-03	35,643	3.396E-06	4	8.490E-07
1,2-Dibromoethane	188	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Perchloroethylene	166	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Chlorobenzene	113	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Ethylbenzene	160	0.115	7.676E-04	ND	7.676E-04	0.933	8.228E-04	35,643	1.831E-06	4	4.577E-07
m&p-Xylene	106	0.248	1.094E-03	4.541E-04	6.398E-04	0.933	6.858E-04	35,643	1.526E-06	4	3.815E-07
Styrene	104	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
o-Xylene	106	0.161	7.120E-04	ND	7.120E-04	0.933	7.631E-04	35,643	1.698E-06	4	4.245E-07
p-Ethyltoluene	120	0.063	3.170E-04	ND	3.170E-04	0.933	3.398E-04	35,643	7.560E-07	4	1.890E-07
1,3,5-Trimethylbenzene	120	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1,2,4-Trimethylbenzene	120	0.146	7.311E-04	4.490E-04	2.820E-04	0.933	3.023E-04	35,643	6.727E-07	4	1.682E-07
Benzylchloride	127	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Phenylacetylene	102	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Indane	118	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,3-Dihydro-1-methyl-1H-indene	132	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,3-Dihydro-4-methyl-1H-indene	132	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Naphthalene	128	0.185	9.847E-04	4.734E-04	5.113E-04	0.933	5.481E-04	35,643	1.219E-06	4	3.049E-07
2-Methylnaphthalene	142	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1-Methylnaphthalene	142	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Cyanogen	52	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Methylnitrite	61	0.693	1.759E-03	ND	1.759E-03	0.933	1.885E-03	35,643	4.195E-06	4	1.049E-06
Acetonitrile	41	0.091	1.547E-04	ND	1.547E-04	0.933	1.658E-04	35,643	3.689E-07	4	9.223E-08
Acrylonitrile	53	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Nitromethane	61	0.552	1.401E-03	ND	1.401E-03	0.933	1.501E-03	35,643	3.341E-06	4	8.352E-07
Propanenitrile	55	0.058	1.324E-04	ND	1.324E-04	0.933	1.419E-04	35,643	3.157E-07	4	7.892E-08
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Pentanenitrile	83	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Hexanenitrile	97	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Benzonitrile	103	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Acrolein	56	1.522	3.545E-03	ND	3.545E-03	0.933	3.800E-03	35,643	8.455E-06	4	2.114E-06
Acetone	56	4.953	1.154E-02	5.964E-03	5.575E-03	0.933	5.975E-03	35,643	1.330E-05	4	3.324E-06

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
1-Hydroxy-2-propanone	74	0.088	2.717E-04	ND	2.717E-04	0.933	2.912E-04	35,643	6.479E-07	4	1.620E-07
Furan	68	0.258	7.307E-04	ND	7.307E-04	0.933	7.832E-04	35,643	1.743E-06	4	4.357E-07
2-Propanol	60	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Methylpropanal	74	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
1-Propanol	60	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Methacrolein	70	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Methyl-vinyl Ketone	70	0.167	4.865E-04	ND	4.865E-04	0.933	5.214E-04	35,643	1.160E-06	4	2.901E-07
MTBE	88	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2,3-Butanedione	86	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Butanal	72	0.085	2.534E-04	2.005E-04	5.284E-05	0.933	5.663E-05	35,643	1.260E-07	4	3.150E-08
2-Butanone	72	0.653	1.956E-03	8.091E-04	1.147E-03	0.933	1.229E-03	35,643	2.735E-06	4	6.838E-07
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Methylfuran	82	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
trans-2-Butenal	70	0.148	4.303E-04	ND	4.303E-04	0.933	4.612E-04	35,643	1.026E-06	4	2.566E-07
Acetic Acid	60	0.704	1.757E-03	1.550E-03	2.073E-04	0.933	2.222E-04	35,643	4.944E-07	4	1.236E-07
1-Butanol	74	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
2-Pentanone	86	0.080	2.863E-04	ND	2.863E-04	0.933	3.069E-04	35,643	6.829E-07	4	1.707E-07
Pentanal	86	0.263	9.410E-04	1.075E-03	-1.338E-04	0.933	ND	35,643	ND	4	ND
1,4-Dioxane	88	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Cyclopentanone	84	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Hexanal	100	0.119	4.954E-04	4.894E-04	6.005E-06	0.933	6.437E-06	35,643	1.432E-08	4	3.581E-09
2-Furaldehyde	96	0.647	2.585E-03	ND	2.585E-03	0.933	2.770E-03	35,643	6.164E-06	4	1.541E-06
Cyclohexanone	98	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Heptanal	114	0.113	5.343E-04	4.613E-04	7.300E-05	0.933	7.824E-05	35,643	1.741E-07	4	4.352E-08
2-Butoxyethanol	118	ND	ND	5.094E-04	ND	0.933	ND	35,643	ND	4	ND
Benzaldehyde	106	0.484	2.135E-03	7.071E-04	1.428E-03	0.933	1.531E-03	35,643	3.406E-06	4	8.514E-07
6-Methyl-5-hepten-2-one	126	ND	ND	1.540E-03	ND	0.933	ND	35,643	ND	4	ND
Octanal	128	0.210	1.120E-03	7.641E-04	3.560E-04	0.933	3.816E-04	35,643	8.491E-07	4	2.123E-07
Benzofuran	118	0.073	3.581E-04	ND	3.581E-04	0.933	3.838E-04	35,643	8.541E-07	4	2.135E-07
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND
Acetophonone	120	0.054	2.712E-04	ND	2.712E-04	0.933	2.906E-04	35,643	6.467E-07	4	1.617E-07
Nonanal	142	0.220	1.301E-03	1.320E-03	-1.925E-05	0.933	ND	35,643	ND	4	ND
Decanal	156	0.171	1.111E-03	1.329E-03	-2.184E-04	0.933	ND	35,643	ND	4	ND
Carbonyl Sulfide	60	0.182	4.555E-04	1.251E-04	3.304E-04	0.933	3.542E-04	35,643	7.880E-07	4	1.970E-07
Carbon Disulfide	76	33.234	1.051E-01	6.278E-04	1.044E-01	0.933	1.119E-01	35,643	2.491E-04	4	6.227E-05
Thiophene	84	0.148	5.170E-04	ND	5.170E-04	0.933	5.541E-04	35,643	1.233E-06	4	3.082E-07
Dimethyldisulfide	94	ND	ND	ND	ND	0.933	ND	35,643	ND	4	ND

a
Compounds in bold represent duplicate values.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-10. AEC - SVOC DATA EVALUATION FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	2.684E-04	2.684E-04	ND	ND	F	F
Pyridine	ND	ND	ND	ND	ND	7.868E-04	7.868E-04	ND	ND	F	F
2-Picoline	ND	ND	ND	ND	ND	8.177E-04	8.177E-04	ND	ND	F	F
Methyl methanesulfonate	ND	ND	ND	ND	ND	3.093E-04	3.093E-04	ND	ND	F	F
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	6.140E-04	6.140E-04	ND	ND	F	F
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	6.557E-04	6.557E-04	ND	ND	F	F
Ethyl methanesulfonate	ND	ND	ND	ND	ND	3.016E-04	3.016E-04	ND	ND	F	F
Phenol	ND	ND	ND	ND	ND	1.928E-04	1.928E-04	ND	ND	F	F
Aniline	ND	ND	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	2.407E-04	2.407E-04	ND	ND	F	F
Pentachloroethane	ND	ND	ND	ND	ND	5.562E-04	5.562E-04	ND	ND	F	F
2-Chlorophenol	ND	ND	ND	ND	ND	1.227E-04	1.227E-04	ND	ND	F	F
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.368E-04	2.368E-04	ND	ND	F	F
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	4.752E-04	4.752E-04	ND	ND	F	F
Benzyl alcohol	ND	ND	ND	ND	ND	5.377E-04	5.377E-04	ND	ND	F	F
2-Methylphenol	ND	ND	ND	ND	ND	4.328E-04	4.328E-04	ND	ND	F	F
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	3.440E-04	3.440E-04	ND	ND	F	F
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	2.900E-04	2.900E-04	ND	ND	F	F
o-Toluidine	ND	ND	ND	ND	ND	3.055E-04	3.055E-04	ND	ND	F	F
4-Methylphenol/3-Methylphenol	ND	ND	ND	ND	ND	3.656E-04	3.656E-04	ND	ND	F	F
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	2.168E-04	2.168E-04	ND	ND	F	F
Acetophenone	5.368E-04	6.871E-04	6.387E-04	6.209E-04	1.897E-04	2.276E-04	2.276E-04	3.27	2.73	C	C
N-Nitrosomorpholine	ND	ND	ND	ND	ND	6.935E-04	6.935E-04	ND	ND	F	F
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	9.180E-04	9.180E-04	ND	ND	F	F
Hexachloroethane	ND	ND	ND	ND	ND	3.811E-04	3.811E-04	ND	ND	F	F
Nitrobenzene	ND	ND	ND	ND	ND	6.873E-04	6.873E-04	ND	ND	F	F
N-Nitrosopiperidine	ND	ND	ND	ND	ND	5.623E-04	5.623E-04	ND	ND	F	F
Isophorone	ND	ND	ND	ND	ND	1.651E-04	1.651E-04	ND	ND	F	F
2,4-Dimethylphenol	ND	ND	ND	ND	ND	2.600E-04	2.600E-04	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	ND	ND	4.135E-04	4.135E-04	ND	ND	F	F
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	3.016E-04	3.016E-04	ND	ND	F	F
Benzoic acid	ND	ND	ND	ND	ND	2.823E-02	2.823E-02	ND	ND	F	F
2,4-Dichlorophenol	ND	ND	ND	ND	ND	3.780E-04	3.780E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.723E-04	2.723E-04	ND	ND	F	F
Naphthalene	4.307E-04	6.931E-04	7.129E-04	6.122E-04	ND	3.448E-04	3.448E-04	10.00	1.78	A	D
p-Chloroaniline	ND	ND	ND	ND	ND	2.484E-04	2.484E-04	ND	ND	F	F
2,6-Dichlorophenol	ND	ND	ND	ND	ND	2.654E-04	2.654E-04	ND	ND	F	F
Hexachloropropene	ND	ND	ND	ND	ND	4.358E-04	4.358E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	ND	ND	3.934E-04	3.934E-04	ND	ND	F	F
Dimethylphenethylamine	ND	ND	ND	ND	ND	1.574E-02	1.574E-02	ND	ND	F	F
N-Nitroso-di-n-butylamine	ND	ND	ND	ND	ND	2.885E-04	2.885E-04	ND	ND	F	F
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	4.374E-04	4.374E-04	ND	ND	F	F
Safrole	ND	ND	ND	ND	ND	5.485E-04	5.485E-04	ND	ND	F	F
2-Methylnaphthalene	ND	ND	2.530E-04	2.530E-04	ND	2.769E-04	2.769E-04	10.00	0.91	A	F
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	4.212E-04	4.212E-04	ND	ND	F	F
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	8.562E-03	8.562E-03	ND	ND	F	F
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	4.868E-04	4.868E-04	ND	ND	F	F
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	4.135E-04	4.135E-04	ND	ND	F	F
Isosafrole	ND	ND	ND	ND	ND	8.331E-04	8.331E-04	ND	ND	F	F

TABLE A-10. AEC - SVOC DATA EVALUATION FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2-Chloronaphthalene	ND	ND	ND	ND	ND	4.351E-04	4.351E-04	ND	ND	F	F
2-Nitroaniline	ND	ND	ND	ND	ND	2.762E-04	2.762E-04	ND	ND	F	F
1,4-Naphthoquinone	ND	ND	ND	ND	ND	7.714E-04	7.714E-04	ND	ND	F	F
Dimethylphthalate	ND	ND	ND	ND	ND	2.245E-04	2.245E-04	ND	ND	F	F
1,3-Dinitrobenzene	ND	ND	ND	ND	ND	6.457E-04	6.457E-04	ND	ND	F	F
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	5.431E-04	5.431E-04	ND	ND	F	F
Acenaphthylene	ND	ND	ND	ND	ND	2.522E-04	2.522E-04	ND	ND	F	F
3-Nitroaniline	ND	ND	ND	ND	ND	6.796E-04	6.796E-04	ND	ND	F	F
4-Nitrophenol	ND	ND	ND	ND	ND	2.368E-02	2.368E-02	ND	ND	F	F
2,4-Dinitrophenol	ND	ND	ND	ND	ND	2.430E-02	2.430E-02	ND	ND	F	F
Acenaphthene	ND	ND	ND	ND	ND	2.777E-04	2.777E-04	ND	ND	F	F
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	3.433E-04	3.433E-04	ND	ND	F	F
Dibenzofuran	ND	ND	ND	ND	ND	1.882E-04	1.882E-04	ND	ND	F	F
Pentachlorobenzene	ND	ND	ND	ND	ND	5.199E-04	5.199E-04	ND	ND	F	F
1-Naphthylamine	ND	ND	ND	ND	ND	1.358E-03	1.358E-03	ND	ND	F	F
2-Naphthylamine	ND	ND	ND	ND	ND	1.203E-03	1.203E-03	ND	ND	F	F
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	5.508E-04	5.508E-04	ND	ND	F	F
Diethylphthalate	ND	ND	2.007E-04	2.007E-04	ND	2.006E-04	2.006E-04	10.00	1.00	A	D
4-Chlorophenylphenyl ether	ND	ND	ND	ND	ND	2.183E-04	2.183E-04	ND	ND	F	F
Fluorene	ND	ND	ND	ND	ND	2.623E-04	2.623E-04	ND	ND	F	F
5-Nitro-o-toluidine	ND	ND	ND	ND	ND	2.800E-04	2.800E-04	ND	ND	F	F
4-Nitroaniline	ND	ND	ND	ND	ND	5.978E-04	5.978E-04	ND	ND	F	F
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	2.098E-02	2.098E-02	ND	ND	F	F
Diphenylamine/N-NitrosoDPA	ND	ND	ND	ND	ND	2.839E-04	2.839E-04	ND	ND	F	F
sym-Trinitrobenzene	ND	ND	ND	ND	ND	9.642E-04	9.642E-04	ND	ND	F	F
Diallate	ND	ND	ND	ND	ND	3.664E-04	3.664E-04	ND	ND	F	F
Phenacetin	ND	ND	ND	ND	ND	1.728E-04	1.728E-04	ND	ND	F	F
4-Bromophenylphenyl ether	ND	ND	ND	ND	ND	5.315E-04	5.315E-04	ND	ND	F	F
Hexachlorobenzene	ND	ND	ND	ND	ND	2.862E-04	2.862E-04	ND	ND	F	F
4-Aminobiphenyl	ND	ND	ND	ND	ND	1.597E-03	1.597E-03	ND	ND	F	F
Pronamide	ND	ND	ND	ND	ND	1.982E-04	1.982E-04	ND	ND	F	F
Pentachlorophenol	ND	ND	ND	ND	ND	2.222E-02	2.222E-02	ND	ND	F	F
Pentachloronitrobenzene	ND	ND	ND	ND	ND	1.034E-03	1.034E-03	ND	ND	F	F
Phenanthrene	ND	ND	ND	ND	ND	4.706E-04	4.706E-04	ND	ND	F	F
Anthracene	ND	ND	ND	ND	ND	2.823E-04	2.823E-04	ND	ND	F	F
Carbazole	ND	ND	ND	ND	ND	1.890E-04	1.890E-04	ND	ND	F	F
Di-n-butylphthalate	1.048E-03	5.395E-03	5.233E-03	3.892E-03	ND	1.311E-04	1.311E-04	10.00	29.68	A	A
4-Nitroquinoline-1-oxide	ND	ND	ND	ND	ND	1.736E-02	1.736E-02	ND	ND	F	F
Methapyrilene	ND	ND	ND	ND	ND	1.597E-02	1.597E-02	ND	ND	F	F
Fluoranthene	ND	ND	ND	ND	ND	2.785E-04	2.785E-04	ND	ND	F	F
Benzidine	ND	ND	ND	ND	ND	1.034E-02	1.034E-02	ND	ND	F	F
Pyrene	ND	ND	ND	ND	ND	3.826E-04	3.826E-04	ND	ND	F	F
p-Dimethylaminoazobenzene	ND	ND	ND	ND	ND	2.839E-04	2.839E-04	ND	ND	F	F
Chlorobenzilate	ND	ND	ND	ND	ND	3.950E-04	3.950E-04	ND	ND	F	F
Kepone	ND	ND	ND	ND	ND	1.450E-02	1.450E-02	ND	ND	F	F
Butylbenzylphthalate	1.011E-03	1.861E-03	1.595E-03	1.489E-03	ND	1.581E-04	1.581E-04	10.00	9.42	A	B
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	1.527E-03	1.527E-03	ND	ND	F	F
2-Acetylaminofluorene	ND	ND	ND	ND	ND	2.407E-04	2.407E-04	ND	ND	F	F
bis(2-Ethylhexyl)phthalate	ND	1.115E-03	7.912E-04	9.531E-04	2.139E-02	9.411E-04	9.411E-04	0.04	1.01	F	D
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	2.584E-04	2.584E-04	ND	ND	F	F
Benz(a)anthracene	ND	ND	ND	ND	ND	3.487E-04	3.487E-04	ND	ND	F	F

TABLE A-10. AEC - SVOC DATA EVALUATION FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Chrysene	ND	ND	ND	ND	ND	3.764E-04	3.764E-04	ND	ND	F	F
Di-n-octylphthalate	ND	ND	ND	ND	ND	2.407E-04	2.407E-04	ND	ND	F	F
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND	ND	3.556E-04	3.556E-04	ND	ND	F	F
Benzo(b)fluoranthene (a)	ND	ND	ND	ND	ND	2.144E-04	2.144E-04	ND	ND	F	F
Benzo(k)fluoranthene (a)	ND	ND	ND	ND	ND	4.482E-04	4.482E-04	ND	ND	F	F
Benz(a)pyrene	ND	ND	ND	ND	ND	2.538E-04	2.538E-04	ND	ND	F	F
3-Methylcholanthrene	ND	ND	ND	ND	ND	9.025E-04	9.025E-04	ND	ND	F	F
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	1.689E-04	1.689E-04	ND	ND	F	F
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	1.898E-04	1.898E-04	ND	ND	F	F
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	1.820E-04	1.820E-04	ND	ND	F	F

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-11. AEC - SVOC RUN NO. 1 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Pyridine	79	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2-Picoline	93	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Phenol	94	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Aniline	93	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Pentachloroethane	202	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2-Methylphenol	108	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
o-Toluidine	107	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Acetophenone	120	0.108	5.368E-04	1.897E-04	3.470E-04	0.8797	3.945E-04	37,342	9.197E-07	4	2.299E-07
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Hexachloroethane	237	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Nitrobenzene	123	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Isophorone	138	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Benzoic acid	122	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Naphthalene	128	0.081	4.307E-04	ND	4.307E-04	0.8797	4.896E-04	37,342	1.141E-06	4	2.853E-07
p-Chloroaniline	128	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Hexachloropropene	249	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Safrole	162	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2-Methylnaphthalene	142	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND

TABLE A-11. AEC - SVOC RUN NO. 1 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Isosafrole	162	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Acenaphthylene	152	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Acenaphthene	154	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Dibenzofuran	168	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Diethylphthalate	222	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Fluorene	166	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Diallate	270	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Phenacetin	179	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Pronamide	228	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Phenanthrene	178	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Anthracene	178	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Carbazole	167	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Di-n-butylphthalate	278	0.091	1.048E-03	ND	1.048E-03	0.8797	1.192E-03	37,342	2.778E-06	4	6.946E-07
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Methapyrilene	261	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Fluoranthene	202	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Benzidine	184	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Pyrene	202	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Kepone	491	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Butylbenzylphthalate	312	0.078	1.011E-03	ND	1.011E-03	0.8797	1.149E-03	37,342	2.679E-06	4	6.696E-07
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND

TABLE A-11. AEC - SVOC RUN NO. 1 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
bis(2-Ethylhexyl)phthalate	391	ND	ND	2.139E-02	ND	0.8797	ND	37,342	ND	4	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Chrysene	228	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.8797	ND	37,342	ND	4	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-12. AEC - SVOC RUN NO. 2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Pyridine	79	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2-Picoline	93	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Phenol	94	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Aniline	93	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Pentachloroethane	202	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2-Methylphenol	108	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
o-Toluidine	107	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Acetophenone	120	0.138	6.871E-04	1.897E-04	4.973E-04	0.9085	5.474E-04	35,643	1.218E-06	4	3.045E-07
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Hexachloroethane	237	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Nitrobenzene	123	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Isophorone	138	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Benzoic acid	122	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Naphthalene	128	0.130	6.931E-04	ND	6.931E-04	0.9085	7.629E-04	35,643	1.698E-06	4	4.244E-07
p-Chloroaniline	128	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Hexachloropropene	249	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Safrole	162	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND

TABLE A-12. AEC - SVOC RUN NO. 2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Isosafrole	162	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Acenaphthylene	152	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Acenaphthene	154	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Dibenzofuran	168	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Diethylphthalate	222	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Fluorene	166	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Diallate	270	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Phenacetin	179	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Pronamide	228	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Phenanthrene	178	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Anthracene	178	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Carbazole	167	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Di-n-butylphthalate	278	0.467	5.395E-03	ND	5.395E-03	0.9085	5.939E-03	35,643	1.321E-05	4	3.304E-06
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Methapyrilene	261	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Fluoranthene	202	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Benzidine	184	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Pyrene	202	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Kepone	491	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Butylbenzylphthalate	312	0.143	1.861E-03	ND	1.861E-03	0.9085	2.049E-03	35,643	4.559E-06	4	1.140E-06
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND

TABLE A-12. AEC - SVOC RUN NO. 2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
bis(2-Ethylhexyl)phthalate	391	0.069	1.115E-03	2.139E-02	-2.027E-02	0.9085	ND	35,643	ND	4	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Chrysene	228	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.9085	ND	35,643	ND	4	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-13. AEC - SVOC COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1-2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1-2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Pyridine	79	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2-Picoline	93	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Phenol	94	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Aniline	93	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Pentachloroethane	202	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2-Methylphenol	108	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
o-Toluidine	107	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Acetophenone	120	0.128	6.387E-04	1.897E-04	4.490E-04	0.8941	5.021E-04	36,492	1.144E-06	4	2.860E-07
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Hexachloroethane	237	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Nitrobenzene	123	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Isophorone	138	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Benzoic acid	122	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Naphthalene	128	0.134	7.129E-04	ND	7.129E-04	0.8941	7.973E-04	36,492	1.816E-06	4	4.541E-07
p-Chloroaniline	128	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Hexachloropropene	249	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Safrole	162	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2-Methylnaphthalene	142	0.043	2.530E-04	ND	2.530E-04	0.8941	2.830E-04	36,492	6.447E-07	4	1.612E-07
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND

TABLE A-13. AEC - SVOC COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1-2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1-2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Isosafrole	162	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Acenaphthylene	152	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Acenaphthene	154	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Dibenzofuran	168	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Diethylphthalate	222	0.022	2.007E-04	ND	2.007E-04	0.8941	2.244E-04	36,492	5.113E-07	4	1.278E-07
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Fluorene	166	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Diallate	270	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Phenacetin	179	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Pronamide	228	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Phenanthrene	178	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Anthracene	178	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Carbazole	167	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Di-n-butylphthalate	278	0.453	5.233E-03	ND	5.233E-03	0.8941	5.853E-03	36,492	1.333E-05	4	3.334E-06
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Methapyrilene	261	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Fluoranthene	202	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Benzidine	184	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Pyrene	202	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Kepone	491	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Butylbenzylphthalate	312	0.123	1.595E-03	ND	1.595E-03	0.8941	1.784E-03	36,492	4.063E-06	4	1.016E-06
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND

TABLE A-13. AEC - SVOC COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR HAND GRENADE TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1-2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1-2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
bis(2-Ethylhexyl)phthalate	391	0.049	7.912E-04	2.139E-02	-2.060E-02	0.8941	ND	36,492	ND	4	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Chrysene	228	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.8941	ND	36,492	ND	4	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

SIMULATOR GROUND BURST

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TABLE A-1. AEC MUNITION ITEM INPUT DATA SHEET (30 MARCH 1998)
Munition Item: Simulator Ground Burst
Created by: Radian International LLC

No. of Runs = 2

Sample Volumes:	Run No. 1		Run No. 2		Composite Run		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	300.3	363.1	130.0	164.1	NA	NA	239.35
PM_{10}	128.9	116.7	61.3	55.1	NA	NA	90.51
Metals	300.3	363.1	130.0	164.1	NA	NA	239.35
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	46.1	39.5	27.0	24.3	NA	63.9	34.22
HCl/Cl_2	29.7	22.6	29.2	22.1	NA	NA	25.91
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	56.2	55.9	36.1	32.2	NA	88.1	45.09
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	Run No. 1		Run No. 2		Composite Run		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	39.5	38.5	37.0	45.0	NA	NA	40.00
HCl/Cl_2 (NaOH)	37.0	40.0	41.0	40.0	NA	NA	39.50

Sample Weight Gain:	Run No. 1		Run No. 2		Composite Run		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.9579	0.9814	0.8747	0.8766	NA	NA	0.9227
PM_{10}	0.4100	0.4609	0.3817	0.3837	NA	NA	0.4091

Dilution Correction Factors:	Run No. 1	Run No. 2	Composite Run	Average
TSP	0.9396	0.7537	NA	0.8467
PM_{10}	0.9752	0.8899	NA	0.9326
Metals	0.9396	0.7537	NA	0.8467
VOCs	0.9278	0.9323	NA	0.9301
SVOCs	0.9112	0.5847	0.7480	0.7480
HCl/Cl_2	0.9112	0.5847	NA	0.7480
Energetics	NA	NA	NA	NA
Dioxin/Furan	0.9112	0.5847	0.7480	0.7480
Residue	NA	NA	NA	NA
CEM	0.8327	0.2722	NA	0.5525

	Run No. 1	Run No. 2	Composite Run	Average
Initial Plume Volume (m^3)	1008.68	976.11	992.40	992.40
Net Explosive Weight (g)	127.01	190.51	158.76	158.76

TABLE A-2. AEC BACKGROUND INPUT DATA SHEET (30 MARCH 1998)
Munition Item: Simulator Ground Burst
Created by: Radian International LLC

No. of Runs = 2

Sample Volumes:	HG - Background		Reagent Blank		Field Blank		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	1404.0	NA	NA	NA	NA	NA	1403.98
PM_{10}	1044.2	NA	NA	NA	NA	NA	1044.23
Metals	1404.0	NA	NA	NA	NA	NA	1403.98
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	108.3	NA	NA	NA	NA	NA	108.32
HCl/Cl_2	29.8	NA	NA	NA	NA	NA	29.83
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	152.0	NA	NA	NA	NA	NA	152.03
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	HG - Background		Reagent Blank		Field Blank		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	43.0	NA	107.2	NA	45.3	NA	75.10
HCl/Cl_2 (NaOH)	37.0	NA	92.0	NA	41.5	NA	64.50
HCl/Cl_2 (H_2O)	NA	NA	100.0	NA	NA	NA	100.00

Sample Weight Gain:	HG - Background		Reagent Blank		Field Blank		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	-0.0025	NA	-0.0026	NA	-0.0037	NA	-0.0026
PM_{10}	-0.0238	NA	-0.0002	NA	-0.0029	NA	-0.0120

TABLE A-3. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS DATA EVALUATION FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate											
TSP	1.041E+02	9.407E+01	ND	9.907E+01	-6.288E-02	ND	ND	1575.42	10.00	A	A
PM_{10}	1.259E+02	1.103E+02	ND	1.181E+02	-8.049E-01	ND	ND	146.74	10.00	A	A
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl	6.633E-02	8.015E-02	ND	7.324E-02	ND	6.814E-02	5.608E-02	10.00	1.31	A	D
Cl_2	6.706E-02	5.982E-02	ND	6.344E-02	3.877E-03	1.690E-03	1.527E-03	16.36	41.55	A	A
Dioxin/Furan											
Dioxin TEQ (a)	1.217E-09	1.757E-09	ND	1.487E-09	ND	ND	ND	10.00	10.00	A	A
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	1.662E+00	2.498E+00	ND	2.080E+00	2.687E-01	ND	ND	7.74	10.00	B	A
Nitrogen Oxide (NOx)	4.502E+00	5.444E+00	ND	4.973E+00	3.974E-02	ND	ND	125.13	10.00	A	A
HCl	-2.008E+00	-1.667E+00	ND	-1.838E+00	-2.129E-01	ND	ND	8.63	10.00	B	A
Carbon Dioxide (CO_2)	6.768E+02	6.838E+02	ND	6.803E+02	6.726E+02	ND	ND	1.01	10.00	D	A
Sulfur Dioxide (SO_2)	1.105E-01	1.262E-01	ND	1.184E-01	-2.744E-02	ND	ND	4.31	10.00	C	A
Particulate-phase Metals											
Aluminum	9.118E+00	2.586E+01	ND	1.749E+01	NA (b)	3.485E-03	2.927E-03	NA (b)	5974.77	NA (b)	A
Antimony	1.249E-02	3.867E-02	ND	2.558E-02	NA (b)	4.996E-04	4.193E-04	NA (b)	61.01	NA (b)	A
Arsenic	2.310E-04	ND	ND	2.310E-04	NA (b)	3.430E-04	2.886E-04	NA (b)	0.80	NA (b)	F
Barium	2.451E-02	9.290E-02	ND	5.871E-02	NA (b)	3.812E-05	3.199E-05	NA (b)	1835.09	NA (b)	A
Beryllium	2.845E-05	5.683E-05	ND	4.264E-05	NA (b)	2.124E-05	1.783E-05	NA (b)	2.39	NA (b)	C
Cadmium	1.777E-04	5.372E-04	ND	3.575E-04	NA (b)	4.234E-05	3.553E-05	NA (b)	10.06	NA (b)	A
Chromium	5.114E-04	1.704E-03	ND	1.107E-03	NA (b)	7.487E-05	6.289E-05	NA (b)	17.61	NA (b)	A
Cobalt	3.273E-04	7.573E-04	ND	5.423E-04	NA (b)	7.487E-05	6.289E-05	NA (b)	8.62	NA (b)	B
Copper	1.833E-02	5.596E-02	ND	3.714E-02	NA (b)	1.838E-04	1.538E-04	NA (b)	241.47	NA (b)	A
Lead	2.257E-03	5.196E-03	ND	3.726E-03	NA (b)	2.818E-04	2.369E-04	NA (b)	15.73	NA (b)	A
Magnesium	1.114E+01	3.036E+01	ND	2.075E+01	NA (b)	7.310E-04	6.139E-04	NA (b)	33795.13	NA (b)	A
Manganese	2.420E-02	4.135E-02	ND	3.277E-02	NA (b)	3.253E-05	2.723E-05	NA (b)	1203.71	NA (b)	A
Nickel	1.189E-03	2.662E-03	ND	1.926E-03	NA (b)	1.143E-04	9.611E-05	NA (b)	20.04	NA (b)	A
Phosphorus	4.045E-02	7.749E-02	ND	5.897E-02	NA (b)	8.032E-04	6.752E-04	NA (b)	87.34	NA (b)	A
Selenium	ND	ND	ND	ND	NA (b)	2.723E-04	2.287E-04	NA (b)	ND	NA (b)	F
Silver	ND	ND	ND	ND	NA (b)	5.078E-05	4.274E-05	NA (b)	ND	NA (b)	F
Thallium	ND	ND	ND	ND	NA (b)	6.439E-04	5.404E-04	NA (b)	ND	NA (b)	F
Zinc	1.466E-02	4.140E-02	ND	2.803E-02	NA (b)	6.112E-04	5.132E-04	NA (b)	54.62	NA (b)	A
Mercury	6.823E-06	2.953E-05	ND	1.817E-05	NA (b)	1.078E-06	7.460E-07	NA (b)	24.36	NA (b)	A

a
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD.
b
Insufficient material to analyze.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-4. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 1 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (a), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate											
TSP	-	-	1.041E+02	-6.288E-02	1.041E+02	0.9396	1.108E+02	35,621	2.464E-01	2	1.232E-01
PM_{10}	-	-	1.259E+02	-8.049E-01	1.267E+02	0.9752	1.299E+02	35,621	2.889E-01	2	1.445E-01
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	43.735	6.633E-02	ND	6.633E-02	0.9112	7.280E-02	35,621	1.619E-04	2	8.094E-05
Cl_2 (b)	71	22.735	6.706E-02	3.877E-03	6.318E-02	0.9112	6.934E-02	35,621	1.542E-04	2	7.709E-05
Dioxin/Furan											
Dioxin TEQ (c)	-	-	1.217E-09	ND	1.217E-09	0.9112	1.336E-09	35,621	2.970E-12	2	1.485E-12
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	1427.143	1.662E+00	2.687E-01	1.394E+00	0.8327	1.674E+00	35,621	3.722E-03	2	1.861E-03
Nitrogen Oxide (NOx)	46	2352.856	4.502E+00	3.974E-02	4.463E+00	0.8327	5.359E+00	35,621	1.192E-02	2	5.959E-03
HCl (b)	36	-1340.773	-2.008E+00	-2.129E-01	-1.795E+00	0.8327	ND	35,621	ND	2	ND
Carbon Dioxide (CO_2)	44	369758.100	6.768E+02	6.726E+02	4.218E+00	0.8327	5.066E+00	35,621	1.127E-02	2	5.633E-03
Sulfur Dioxide (SO_2)	64	41.495	1.105E-01	-2.744E-02	1.379E-01	0.8327	1.656E-01	35,621	3.683E-04	2	1.842E-04
Particulate-phase Metals											
Aluminum	27	8118.105	9.118E+00	NA (d)	9.118E+00	0.9396	9.704E+00	35,621	2.158E-02	2	1.079E-02
Antimony	122	2.461	1.249E-02	NA (d)	1.249E-02	0.9396	1.330E-02	35,621	2.957E-05	2	1.478E-05
Arsenic	75	0.074	2.310E-04	NA (d)	2.310E-04	0.9396	2.459E-04	35,621	5.468E-07	2	2.734E-07
Barium	137	4.301	2.451E-02	NA (d)	2.451E-02	0.9396	2.609E-02	35,621	5.802E-05	2	2.901E-05
Beryllium	9	0.076	2.845E-05	NA (d)	2.845E-05	0.9396	3.028E-05	35,621	6.733E-08	2	3.366E-08
Cadmium	112	0.038	1.777E-04	NA (d)	1.777E-04	0.9396	1.891E-04	35,621	4.206E-07	2	2.103E-07
Chromium	52	0.236	5.114E-04	NA (d)	5.114E-04	0.9396	5.443E-04	35,621	1.210E-06	2	6.052E-07
Cobalt	59	0.133	3.273E-04	NA (d)	3.273E-04	0.9396	3.484E-04	35,621	7.747E-07	2	3.874E-07
Copper	64	6.886	1.833E-02	NA (d)	1.833E-02	0.9396	1.951E-02	35,621	4.339E-05	2	2.169E-05
Lead	207	0.262	2.257E-03	NA (d)	2.257E-03	0.9396	2.402E-03	35,621	5.341E-06	2	2.671E-06
Magnesium	24	11158.650	1.114E+01	NA (d)	1.114E+01	0.9396	1.186E+01	35,621	2.637E-02	2	1.318E-02
Manganese	55	10.575	2.420E-02	NA (d)	2.420E-02	0.9396	2.575E-02	35,621	5.726E-05	2	2.863E-05
Nickel	59	0.485	1.189E-03	NA (d)	1.189E-03	0.9396	1.266E-03	35,621	2.815E-06	2	1.407E-06
Phosphorus	31	31.370	4.045E-02	NA (d)	4.045E-02	0.9396	4.305E-02	35,621	9.574E-05	2	4.787E-05
Selenium	79	ND	ND	NA (d)	ND	0.9396	ND	35,621	ND	2	ND
Silver	108	ND	ND	NA (d)	ND	0.9396	ND	35,621	ND	2	ND
Thallium	204	ND	ND	NA (d)	ND	0.9396	ND	35,621	ND	2	ND
Zinc	65	5.420	1.466E-02	NA (d)	1.466E-02	0.9396	1.560E-02	35,621	3.469E-05	2	1.734E-05
Mercury	201	0.001	6.823E-06	NA (d)	6.823E-06	0.9396	7.262E-06	35,621	1.615E-08	2	8.074E-09

a
Estimated from tracer data as presented in Volume IV.
b
HCl/Cl_2 levels were too low to be reliably measured.
c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.
d
Insufficient material to analyze.

TABLE A-5. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 2, mg/m³	Dilution Correction Factor (a), %	Corrected Concentration - Run 2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
Particulate											
TSP	-	-	9.407E+01	-6.288E-02	9.414E+01	0.7537	1.249E+02	34,471	2.688E-01	3	8.959E-02
PM_{10}	-	-	1.103E+02	-8.049E-01	1.111E+02	0.8899	1.249E+02	34,471	2.688E-01	3	8.958E-02
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	52.845	8.015E-02	ND	8.015E-02	0.5847	1.371E-01	34,471	2.950E-04	3	9.833E-05
Cl_2 (b)	71	20.281	5.982E-02	3.877E-03	5.594E-02	0.5847	9.568E-02	34,471	2.059E-04	3	6.863E-05
Dioxin/Furan											
Dioxin TEQ (c)	-	-	1.757E-09	ND	1.757E-09	0.5847	3.006E-09	34,471	6.468E-12	3	2.156E-12
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	2144.911	2.498E+00	1.258E-01	2.373E+00	0.2722	8.717E+00	34,471	1.876E-02	3	6.253E-03
Nitrogen Oxide (NOx)	46	2844.788	5.444E+00	5.384E-02	5.390E+00	0.2722	1.980E+01	34,471	4.261E-02	3	1.420E-02
HCl (b)	36	-1113.386	-1.667E+00	3.737E-01	-2.041E+00	0.2722	ND	34,471	ND	3	ND
Carbon Dioxide (CO_2)	44	373605.500	6.838E+02	6.758E+02	8.010E+00	0.2722	2.943E+01	34,471	6.333E-02	3	2.111E-02
Sulfur Dioxide (SO_2)	64	47.419	1.262E-01	-5.272E-03	1.315E-01	0.2722	4.832E-01	34,471	1.040E-03	3	3.466E-04
Particulate-phase Metals											
Aluminum	27	23019.445	2.586E+01	NA (d)	2.586E+01	0.7537	3.430E+01	34,471	7.382E-02	3	2.461E-02
Antimony	122	7.619	3.867E-02	NA (d)	3.867E-02	0.7537	5.130E-02	34,471	1.104E-04	3	3.680E-05
Arsenic	75	ND	ND	NA (d)	ND	0.7537	ND	34,471	ND	3	ND
Barium	137	16.300	9.290E-02	NA (d)	9.290E-02	0.7537	1.233E-01	34,471	2.652E-04	3	8.841E-05
Beryllium	9	0.152	5.683E-05	NA (d)	5.683E-05	0.7537	7.540E-05	34,471	1.623E-07	3	5.409E-08
Cadmium	112	0.115	5.372E-04	NA (d)	5.372E-04	0.7537	7.128E-04	34,471	1.534E-06	3	5.113E-07
Chromium	52	0.788	1.704E-03	NA (d)	1.704E-03	0.7537	2.260E-03	34,471	4.864E-06	3	1.621E-06
Cobalt	59	0.309	7.573E-04	NA (d)	7.573E-04	0.7537	1.005E-03	34,471	2.162E-06	3	7.208E-07
Copper	64	21.017	5.596E-02	NA (d)	5.596E-02	0.7537	7.424E-02	34,471	1.598E-04	3	5.326E-05
Lead	207	0.603	5.196E-03	NA (d)	5.196E-03	0.7537	6.893E-03	34,471	1.483E-05	3	4.945E-06
Magnesium	24	30404.444	3.036E+01	NA (d)	3.036E+01	0.7537	4.028E+01	34,471	8.667E-02	3	2.889E-02
Manganese	55	18.072	4.135E-02	NA (d)	4.135E-02	0.7537	5.486E-02	34,471	1.181E-04	3	3.935E-05
Nickel	59	1.085	2.662E-03	NA (d)	2.662E-03	0.7537	3.532E-03	34,471	7.601E-06	3	2.534E-06
Phosphorus	31	60.086	7.749E-02	NA (d)	7.749E-02	0.7537	1.028E-01	34,471	2.212E-04	3	7.375E-05
Selenium	79	ND	ND	NA (d)	ND	0.7537	ND	34,471	ND	3	ND
Silver	108	ND	ND	NA (d)	ND	0.7537	ND	34,471	ND	3	ND
Thallium	204	ND	ND	NA (d)	ND	0.7537	ND	34,471	ND	3	ND
Zinc	65	15.312	4.140E-02	NA (d)	4.140E-02	0.7537	5.494E-02	34,471	1.182E-04	3	3.941E-05
Mercury	201	0.004	2.953E-05	NA (d)	2.953E-05	0.7537	3.917E-05	34,471	8.430E-08	3	2.810E-08

a
Estimated from tracer data as presented in Volume IV.

b
HCl/Cl_2 levels were too low to be reliably measured.

c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.

d
Insufficient material to analyze.

TABLE A-6. AEC - DIOXIN/FURAN COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1-2, mg/m^3	Dilution Correction Factor (a), %	Corrected Concentration - Run 1-2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
Dioxin/Furan											
Dioxin TEQ (b)	-	-	ND	ND	ND	0.7480	ND	35,046	ND	2.5	ND

a
Estimated from tracer data as presented in Volume IV.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Total Nonmethane Hydrocarbons (TNMHC)										
TNMHC	1.230E-01	1.930E-01	1.580E-01	2.165E-02	1.000E-04	1.000E-04	7.30	1580.00	B	A
Volatile Organic Compounds (VOCs)										
Ethane	2.900E-03	3.400E-03	3.150E-03	2.700E-03	1.000E-04	1.000E-04	1.17	31.50	D	A
Ethylene	2.430E-02	4.660E-02	3.545E-02	1.000E-04	1.000E-04	1.000E-04	354.50	354.50	A	A
Acetylene	3.180E-02	5.710E-02	4.445E-02	7.000E-04	1.000E-04	1.000E-04	63.50	444.50	A	A
Propane	2.300E-03	2.300E-03	2.300E-03	1.650E-03	1.000E-04	1.000E-04	1.39	23.00	D	A
Propene	5.200E-03	1.020E-02	7.700E-03	ND	1.000E-04	1.000E-04	10.00	77.00	A	A
i-Butane	5.000E-04	4.000E-04	4.500E-04	4.000E-04	1.000E-04	1.000E-04	1.13	4.50	D	C
i-Butene	3.000E-04	1.000E-03	6.500E-04	ND	1.000E-04	1.000E-04	10.00	6.50	A	B
1-Butene	7.000E-04	1.700E-03	1.200E-03	ND	1.000E-04	1.000E-04	10.00	12.00	A	A
1,3-Butadiene	7.000E-04	1.400E-03	1.050E-03	ND	1.000E-04	1.000E-04	10.00	10.50	A	A
n-Butane	7.000E-04	7.000E-04	7.000E-04	7.500E-04	1.000E-04	1.000E-04	0.93	7.00	F	B
trans-2-Butene	1.800E-03	3.500E-03	2.650E-03	ND	1.000E-04	1.000E-04	10.00	26.50	A	A
2,2-Dimethylpropane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Butene	1.000E-04	3.000E-04	2.000E-04	ND	1.000E-04	1.000E-04	10.00	2.00	A	C
3-Methyl-1-butene	ND	2.000E-04	2.000E-04	ND	1.000E-04	1.000E-04	10.00	2.00	A	C
i-Pentane	4.000E-04	5.000E-04	4.500E-04	3.500E-04	1.000E-04	1.000E-04	1.29	4.50	D	C
1-Pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-1-butene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Pentane	3.000E-04	5.000E-04	4.000E-04	2.500E-04	1.000E-04	1.000E-04	1.60	4.00	D	C
Isoprene	ND	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
trans-2-Pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-butene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylbutane	ND	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
Cyclopentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
4-Methyl-1-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Cyclopentane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,3-Dimethylbutane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-4-Methyl-2-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylpentane	2.000E-04	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
3-Methylpentane	ND	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-1-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
1-Hexene	ND	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
n-Hexane	2.000E-04	2.000E-04	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.00	2.00	D	C
trans-2-Hexene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Hexene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclopentane	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
2,4-Dimethylpentane	2.000E-04	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
Benzene	7.500E-03	1.230E-02	9.900E-03	5.500E-04	1.000E-04	1.000E-04	18.00	99.00	A	A
Cyclohexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylhexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,3-Dimethylpentane	ND	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
3-Methylhexane	ND	ND	ND	2.000E-04	1.000E-04	1.000E-04	ND	ND	F	F

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2,2,4-Trimethylpentane	7.000E-04	8.000E-04	7.500E-04	3.500E-04	1.000E-04	1.000E-04	2.14	7.50	C	B
n-Heptane	2.000E-04	ND	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclohexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,5-Dimethylhexane	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
2,4-Dimethylhexane	1.000E-04	2.000E-04	1.500E-04	1.000E-04	1.000E-04	1.000E-04	1.50	1.50	D	D
2,3,4-Trimethylpentane	1.000E-04	2.000E-04	1.500E-04	1.000E-04	1.000E-04	1.000E-04	1.50	1.50	D	D
Toluene	2.000E-03	3.000E-03	2.500E-03	6.000E-04	1.000E-04	1.000E-04	4.17	25.00	C	A
2,3-Dimethylhexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylheptane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
3-Ethylhexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylheptane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2,4-Trimethylhexane	ND	2.000E-04	2.000E-04	ND	1.000E-04	1.000E-04	10.00	2.00	A	C
n-Octane	ND	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
Ethylcyclohexane	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Ethylbenzene	5.000E-04	5.000E-04	5.000E-04	1.000E-04	1.000E-04	1.000E-04	5.00	5.00	B	B
m-Xylene & p-Xylene	1.300E-03	1.700E-03	1.500E-03	6.500E-04	1.000E-04	1.000E-04	2.31	15.00	C	A
Styrene	4.000E-04	7.000E-04	5.500E-04	ND	1.000E-04	1.000E-04	10.00	5.50	A	B
o-Xylene	6.000E-04	7.000E-04	6.500E-04	2.500E-04	1.000E-04	1.000E-04	2.60	6.50	C	B
n-Nonane	5.000E-04	4.000E-04	4.500E-04	ND	1.000E-04	1.000E-04	10.00	4.50	A	C
i-Propylbenzene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Propylbenzene	2.000E-04	1.000E-04	1.500E-04	1.000E-04	1.000E-04	1.000E-04	1.50	1.50	D	D
p-Ethyltoluene	5.000E-04	5.000E-04	5.000E-04	3.000E-04	1.000E-04	1.000E-04	1.67	5.00	D	B
m-Ethyltoluene	2.000E-04	3.000E-04	2.500E-04	1.000E-04	1.000E-04	1.000E-04	2.50	2.50	C	C
1,3,5-Trimethylbenzene	3.000E-04	4.000E-04	3.500E-04	2.000E-04	1.000E-04	1.000E-04	1.75	3.50	D	C
o-Ethyltoluene	2.000E-04	2.000E-04	2.000E-04	ND	1.000E-04	1.000E-04	10.00	2.00	A	C
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.000E-03	1.300E-03	1.150E-03	5.500E-04	1.000E-04	1.000E-04	2.09	11.50	C	A
n-Decane	1.000E-04	ND	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
alpha-Pinene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
beta-Pinene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
delta 3-Carene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
d-Limonene	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
MTBE	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
ETBE	ND	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Dichlorodifluoromethane	1.274E-03	8.369E-04	1.055E-03	1.413E-03	4.992E-04	4.992E-04	0.75	2.11	F	C
Methylchloride	ND	ND	ND	ND	2.080E-04	2.080E-04	ND	ND	F	F
Dichlorotetrafluoroethane	ND	ND	ND	ND	7.114E-04	7.114E-04	ND	ND	F	F
Chloroethene	ND	ND	ND	ND	2.621E-04	2.621E-04	ND	ND	F	F
1,3-Butadiene	7.120E-04	1.424E-03	1.068E-03	ND	2.246E-04	2.246E-04	10.00	4.75	A	C
Methylbromide	ND	ND	ND	ND	3.952E-04	3.952E-04	ND	ND	F	F
Ethylchloride	ND	ND	ND	ND	2.683E-04	2.683E-04	ND	ND	F	F
Trichloromonofluoromethane	2.445E-03	2.554E-03	2.500E-03	2.517E-03	5.699E-04	5.699E-04	0.99	4.39	F	C
Vinylidenechloride	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Methylenechloride	1.093E-02	6.835E-03	8.883E-03	3.194E-04	3.536E-04	3.536E-04	27.82	25.12	A	A
Allylchloride	ND	ND	ND	ND	3.182E-04	3.182E-04	ND	ND	F	F
1,1,2-Trichloro-1,2,2-trifluoroethane	8.157E-04	8.965E-04	8.561E-04	8.324E-04	7.821E-04	7.821E-04	1.03	1.09	D	D
1,1-Dichloroethane	ND	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
1,2-Dichloroethene	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Chloroform	ND	ND	ND	ND	4.950E-04	4.950E-04	ND	ND	F	F
1,2-Dichloroethane	ND	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
Methylchloroform	3.614E-04	3.668E-04	3.641E-04	3.521E-04	5.533E-04	5.533E-04	1.03	0.66	D	F
Benzene	7.628E-03	1.251E-02	1.007E-02	5.594E-04	3.245E-04	3.245E-04	18.00	31.03	A	A
Carbontetrachloride	8.337E-04	8.006E-04	8.171E-04	7.262E-04	6.406E-04	6.406E-04	1.13	1.28	D	D
1,2-Dichloropropane	ND	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Trichloroethylene	ND	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
cis 1,3-Dichloro-1-propene	ND	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
trans 1,3-Dichloro-1-propene	ND	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
1,1,2-Trichloroethane	ND	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
Toluene	2.034E-03	3.051E-03	2.543E-03	6.103E-04	3.827E-04	3.827E-04	4.17	6.64	C	B
1,2-Dibromoethane	ND	ND	ND	ND	7.821E-04	7.821E-04	ND	ND	F	F
Perchloroethylene	ND	ND	ND	ND	6.906E-04	6.906E-04	ND	ND	F	F
Chlorobenzene	ND	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Ethylbenzene	7.676E-04	7.676E-04	7.676E-04	ND	6.656E-04	6.656E-04	10.00	1.15	A	D
m&p-Xylene	1.287E-03	1.601E-03	1.444E-03	5.892E-04	4.410E-04	4.410E-04	2.45	3.27	C	C
Styrene	ND	3.956E-04	3.956E-04	ND	4.326E-04	4.326E-04	10.00	0.91	A	F
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	6.989E-04	6.989E-04	ND	ND	F	F
o-Xylene	6.103E-04	7.120E-04	6.611E-04	3.051E-04	4.410E-04	4.410E-04	2.17	1.50	C	D
p-Ethyltoluene	3.997E-04	4.837E-04	4.417E-04	ND	4.992E-04	4.992E-04	10.00	0.88	A	F
1,3,5-Trimethylbenzene	ND	3.074E-04	3.074E-04	ND	4.992E-04	4.992E-04	10.00	0.62	A	F
1,2,4-Trimethylbenzene	9.661E-04	8.005E-04	8.833E-04	5.112E-04	4.992E-04	4.992E-04	1.73	1.77	D	D
Benzylchloride	ND	ND	ND	ND	5.283E-04	5.283E-04	ND	ND	F	F
m-Dichlorobenzene	ND	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
p-Dichlorobenzene	ND	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
o-Dichlorobenzene	ND	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	ND	7.530E-04	7.530E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	ND	1.086E-03	1.086E-03	ND	ND	F	F
Phenylacetylene	4.939E-04	9.232E-04	7.086E-04	ND	4.243E-04	4.243E-04	10.00	1.67	A	D
Indane	ND	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2,3-Dihydro-1-methyl-1H-indene	ND	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F
2,3-Dihydro-4-methyl-1H-indene	ND	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F
Naphthalene	1.580E-03	2.183E-03	1.881E-03	4.632E-04	5.325E-04	5.325E-04	4.06	3.53	C	C
2-Methylnaphthalene	ND	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
1-Methylnaphthalene	ND	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
Cyanogen	ND	ND	ND	ND	2.163E-04	2.163E-04	ND	ND	F	F
Methylnitrite	3.302E-04	7.248E-04	5.275E-04	ND	2.538E-04	2.538E-04	10.00	2.08	A	C
Acetonitrile	1.912E-04	3.699E-04	2.806E-04	ND	1.706E-04	1.706E-04	10.00	1.65	A	D
Acrylonitrile	ND	1.886E-04	1.886E-04	ND	2.205E-04	2.205E-04	10.00	0.86	A	F
Nitromethane	1.070E-03	1.797E-03	1.433E-03	ND	2.538E-04	2.538E-04	10.00	5.65	A	B
Propanenitrile	ND	ND	ND	ND	2.288E-04	2.288E-04	ND	ND	F	F
2-Methylpropanenitrile	ND	ND	ND	ND	2.870E-04	2.870E-04	ND	ND	F	F
Pentanenitrile	ND	ND	ND	ND	3.453E-04	3.453E-04	ND	ND	F	F
Hexanenitrile	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Benzonitrile	ND	2.555E-04	2.555E-04	ND	4.285E-04	4.285E-04	10.00	0.60	A	F
2-Nitrophenol	3.249E-04	3.067E-04	3.158E-04	ND	5.782E-04	5.782E-04	10.00	0.55	A	F
Acrolein	1.740E-03	4.296E-03	3.018E-03	ND	2.330E-04	2.330E-04	10.00	12.96	A	A
Acetone	1.126E-02	1.559E-02	1.343E-02	6.292E-03	2.330E-04	2.330E-04	2.13	57.63	C	A

TABLE A-7. AEC - VOC DATA EVALUATION FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
1-Hydroxy-2-propanone	ND	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
Furan	2.262E-04	6.072E-04	4.167E-04	ND	2.829E-04	2.829E-04	10.00	1.47	A	D
2-Propanol	ND	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
2-Methylpropanal	ND	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
1-Propanol	ND	ND	ND	8.791E-04	2.496E-04	2.496E-04	ND	ND	F	F
Methacrolein	ND	2.032E-04	2.032E-04	ND	2.912E-04	2.912E-04	10.00	0.70	A	F
Methyl-vinyl Ketone	2.613E-04	5.590E-04	4.102E-04	ND	2.912E-04	2.912E-04	10.00	1.41	A	D
MTBE	ND	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2,3-Butanedione	ND	ND	ND	ND	3.578E-04	3.578E-04	ND	ND	F	F
Butanal	3.821E-04	3.321E-04	3.571E-04	2.684E-04	2.995E-04	2.995E-04	1.33	1.19	D	D
2-Butanone	1.744E-03	2.727E-03	2.235E-03	8.793E-04	2.995E-04	2.995E-04	2.54	7.46	C	B
2-Methyl-1,3-dioxolane	ND	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2-Methylfuran	ND	ND	ND	ND	3.411E-04	3.411E-04	ND	ND	F	F
Tetrahydrofuran	ND	ND	ND	ND	2.995E-04	2.995E-04	ND	ND	F	F
trans-2-Butenal	3.548E-04	5.850E-04	4.699E-04	ND	2.912E-04	2.912E-04	10.00	1.61	A	D
Acetic Acid	2.064E-03	2.149E-03	2.106E-03	1.697E-03	2.496E-04	2.496E-04	1.24	8.44	D	B
1-Butanol	ND	ND	ND	9.110E-04	3.078E-04	3.078E-04	ND	ND	F	F
2-Pentanone	3.099E-04	4.984E-04	4.042E-04	ND	3.578E-04	3.578E-04	10.00	1.13	A	D
Pentanal	8.990E-04	1.208E-03	1.054E-03	9.559E-04	3.578E-04	3.578E-04	1.10	2.94	D	C
1,4-Dioxane	ND	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
Methyl Methacrylate	ND	ND	ND	ND	4.160E-04	4.160E-04	ND	ND	F	F
Cyclopentanone	ND	ND	ND	ND	3.494E-04	3.494E-04	ND	ND	F	F
Hexanal	5.297E-04	5.956E-04	5.627E-04	5.660E-04	4.160E-04	4.160E-04	0.99	1.35	F	D
2-Furaldehyde	1.365E-03	2.300E-03	1.833E-03	ND	3.994E-04	3.994E-04	10.00	4.59	A	C
Cyclohexanone	ND	ND	ND	ND	4.077E-04	4.077E-04	ND	ND	F	F
Heptanal	7.042E-04	7.036E-04	7.039E-04	5.144E-04	4.742E-04	4.742E-04	1.37	1.48	D	D
2-Butoxyethanol	ND	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
Benzaldehyde	1.964E-03	2.276E-03	2.120E-03	7.777E-04	4.410E-04	4.410E-04	2.73	4.81	C	C
6-Methyl-5-hepten-2-one	ND	ND	ND	ND	5.242E-04	5.242E-04	ND	ND	F	F
Octanal	1.198E-03	1.262E-03	1.230E-03	9.778E-04	5.325E-04	5.325E-04	1.26	2.31	D	C
Benzofuran	ND	3.422E-04	3.422E-04	ND	4.909E-04	4.909E-04	10.00	0.70	A	F
2-Ethyl-1-hexanol	ND	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
Acetophonone	2.963E-04	3.033E-04	2.998E-04	ND	4.992E-04	4.992E-04	10.00	0.60	A	F
Nonanal	1.633E-03	1.414E-03	1.523E-03	1.605E-03	5.907E-04	5.907E-04	0.95	2.58	F	C
Decanal	2.151E-03	1.672E-03	1.912E-03	1.352E-03	6.490E-04	6.490E-04	1.41	2.95	D	C
Carbonyl Sulfide	3.888E-04	4.156E-04	4.022E-04	1.881E-04	2.496E-04	2.496E-04	2.14	1.61	C	D
Carbon Disulfide	4.077E-02	6.916E-02	5.496E-02	4.533E-04	3.162E-04	3.162E-04	121.25	173.85	A	A
Thiophene	2.894E-04	4.824E-04	3.859E-04	ND	3.494E-04	3.494E-04	10.00	1.10	A	D
Dimethyldisulfide	ND	ND	ND	ND	3.910E-04	3.910E-04	ND	ND	F	F

a
Compounds in bold represent duplicate values.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	1.230E-01	1.970E-02	1.033E-01	0.9278	1.113E-01	35,621	2.476E-04	2	1.238E-04
Volatile Organic Compounds (VOCs)											
Ethane	30	2.324	2.900E-03	2.300E-03	6.000E-04	0.9278	6.467E-04	35,621	1.438E-06	2	7.191E-07
Ethylene	28	20.862	2.430E-02	1.000E-04	2.420E-02	0.9278	2.608E-02	35,621	5.800E-05	2	2.900E-05
Acetylene	26	29.401	3.180E-02	7.000E-04	3.110E-02	0.9278	3.352E-02	35,621	7.454E-05	2	3.727E-05
Propane	44	1.257	2.300E-03	1.800E-03	5.000E-04	0.9278	5.389E-04	35,621	1.198E-06	2	5.992E-07
Propene	42	2.976	5.200E-03	ND	5.200E-03	0.9278	5.605E-03	35,621	1.246E-05	2	6.232E-06
i-Butane	58	0.207	5.000E-04	4.000E-04	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
i-Butene	56	0.129	3.000E-04	ND	3.000E-04	0.9278	3.233E-04	35,621	7.191E-07	2	3.595E-07
1-Butene	56	0.300	7.000E-04	ND	7.000E-04	0.9278	7.545E-04	35,621	1.678E-06	2	8.389E-07
1,3-Butadiene	54	0.312	7.000E-04	ND	7.000E-04	0.9278	7.545E-04	35,621	1.678E-06	2	8.389E-07
n-Butane	58	0.290	7.000E-04	8.000E-04	-1.000E-04	0.9278	ND	35,621	ND	2	ND
trans-2-Butene	56	0.773	1.800E-03	ND	1.800E-03	0.9278	1.940E-03	35,621	4.314E-06	2	2.157E-06
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
cis-2-Butene	56	0.043	1.000E-04	ND	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
3-Methyl-1-butene	70	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
i-Pentane	72	0.134	4.000E-04	3.000E-04	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
1-Pentene	70	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Methyl-1-butene	70	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
n-Pentane	72	0.100	3.000E-04	2.000E-04	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
Isoprene	68	ND	ND	1.000E-04	ND	0.9278	ND	35,621	ND	2	ND
trans-2-Pentene	70	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
cis-2-Pentene	70	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Methyl-2-butene	70	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,2-Dimethylbutane	86	ND	ND	1.000E-04	ND	0.9278	ND	35,621	ND	2	ND
Cyclopentene	68	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Cyclopentane	70	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,3-Dimethylbutane	86	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Methylpentane	86	0.056	2.000E-04	1.000E-04	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
3-Methylpentane	86	ND	ND	1.000E-04	ND	0.9278	ND	35,621	ND	2	ND
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1-Hexene	84	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
n-Hexane	86	0.056	2.000E-04	2.000E-04	0.000E+00	0.9278	ND	35,621	ND	2	ND
trans-2-Hexene	84	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
cis-2-Hexene	84	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Methylcyclopentane	84	0.029	1.000E-04	1.000E-04	0.000E+00	0.9278	ND	35,621	ND	2	ND
2,4-Dimethylpentane	100	0.048	2.000E-04	1.000E-04	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
Benzene	78	2.311	7.500E-03	5.000E-04	7.000E-03	0.9278	7.545E-03	35,621	1.678E-05	2	8.389E-06
Cyclohexane	84	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Methylhexane	100	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,3-Dimethylpentane	100	ND	ND	1.000E-04	ND	0.9278	ND	35,621	ND	2	ND
3-Methylhexane	100	ND	ND	2.000E-04	ND	0.9278	ND	35,621	ND	2	ND
2,2,4-Trimethylpentane	114	0.148	7.000E-04	2.000E-04	5.000E-04	0.9278	5.389E-04	35,621	1.198E-06	2	5.992E-07

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
n-Heptane	100	0.048	2.000E-04	1.000E-04	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Methylcyclohexane	98	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,5-Dimethylhexane	114	0.021	1.000E-04	ND	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
2,4-Dimethylhexane	114	0.021	1.000E-04	ND	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
2,3,4-Trimethylpentane	114	0.021	1.000E-04	1.000E-04	0.000E+00	0.9278	ND	35,621	ND	2	ND
Toluene	92	0.523	2.000E-03	5.000E-04	1.500E-03	0.9278	1.617E-03	35,621	3.595E-06	2	1.798E-06
2,3-Dimethylhexane	114	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Methylheptane	111	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
3-Ethylhexane	114	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,2,4-Trimethylhexane	128	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
n-Octane	114	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Ethylcyclohexane	112	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Ethylbenzene	160	0.075	5.000E-04	1.000E-04	4.000E-04	0.9278	4.311E-04	35,621	9.587E-07	2	4.794E-07
m-Xylene & p-Xylene	106	0.295	1.300E-03	5.000E-04	8.000E-04	0.9278	8.623E-04	35,621	1.917E-06	2	9.587E-07
Styrene	104	0.092	4.000E-04	ND	4.000E-04	0.9278	4.311E-04	35,621	9.587E-07	2	4.794E-07
o-Xylene	106	0.136	6.000E-04	2.000E-04	4.000E-04	0.9278	4.311E-04	35,621	9.587E-07	2	4.794E-07
n-Nonane	128	0.094	5.000E-04	ND	5.000E-04	0.9278	5.389E-04	35,621	1.198E-06	2	5.992E-07
i-Propylbenzene	120	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
n-Propylbenzene	120	0.040	2.000E-04	ND	2.000E-04	0.9278	2.156E-04	35,621	4.794E-07	2	2.397E-07
p-Ethyltoluene	120	0.100	5.000E-04	ND	5.000E-04	0.9278	5.389E-04	35,621	1.198E-06	2	5.992E-07
m-Ethyltoluene	120	0.040	2.000E-04	ND	2.000E-04	0.9278	2.156E-04	35,621	4.794E-07	2	2.397E-07
1,3,5-Trimethylbenzene	120	0.060	3.000E-04	ND	3.000E-04	0.9278	3.233E-04	35,621	7.191E-07	2	3.595E-07
o-Ethyltoluene	120	0.040	2.000E-04	ND	2.000E-04	0.9278	2.156E-04	35,621	4.794E-07	2	2.397E-07
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.200	1.000E-03	5.000E-04	5.000E-04	0.9278	5.389E-04	35,621	1.198E-06	2	5.992E-07
n-Decane	142	0.017	1.000E-04	ND	1.000E-04	0.9278	1.078E-04	35,621	2.397E-07	2	1.198E-07
alpha-Pinene	136	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
beta-Pinene	136	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
delta 3-Carene	136	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
d-Limonene	136	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
MTBE	88	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
ETBE	102	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Dichlorodifluoromethane	120	0.255	1.274E-03	1.536E-03	-2.618E-04	0.9278	ND	35,621	ND	2	ND
Methylchloride	50	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Chloroethene	63	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1,3-Butadiene	54	0.317	7.120E-04	ND	7.120E-04	0.9278	7.674E-04	35,621	1.707E-06	2	8.533E-07
Methylbromide	95	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Trichloromonofluoromethane	137	0.429	2.445E-03	2.471E-03	-2.578E-05	0.9278	ND	35,621	ND	2	ND
Vinylidenechloride	97	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Methylenechloride	85	3.091	1.093E-02	3.684E-04	1.056E-02	0.9278	1.138E-02	35,621	2.532E-05	2	1.266E-05
Allylchloride	76.5	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.104	8.157E-04	8.132E-04	2.528E-06	0.9278	2.724E-06	35,621	6.058E-09	2	3.029E-09
1,1-Dichloroethane	99	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1,2-Dichloroethene	97	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Chloroform	119	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
1,2-Dichloroethane	99	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Methylchloroform	133	0.065	3.614E-04	3.433E-04	1.805E-05	0.9278	1.945E-05	35,621	4.326E-08	2	2.163E-08
Benzene	78	2.351	7.628E-03	5.086E-04	7.120E-03	0.9278	7.674E-03	35,621	1.707E-05	2	8.533E-06
Carbontetrachloride	154	0.130	8.337E-04	7.055E-04	1.282E-04	0.9278	1.381E-04	35,621	3.072E-07	2	1.536E-07
1,2-Dichloropropane	113	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Trichloroethylene	133	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Toluene	92	0.532	2.034E-03	5.086E-04	1.526E-03	0.9278	1.644E-03	35,621	3.657E-06	2	1.828E-06
1,2-Dibromoethane	188	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Perchloroethylene	166	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Chlorobenzene	113	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Ethylbenzene	160	0.115	7.676E-04	ND	7.676E-04	0.9278	8.274E-04	35,621	1.840E-06	2	9.200E-07
m&p-Xylene	106	0.292	1.287E-03	4.827E-04	8.043E-04	0.9278	8.669E-04	35,621	1.928E-06	2	9.639E-07
Styrene	104	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
o-Xylene	106	0.138	6.103E-04	ND	6.103E-04	0.9278	6.578E-04	35,621	1.463E-06	2	7.314E-07
p-Ethyltoluene	120	0.080	3.997E-04	ND	3.997E-04	0.9278	4.308E-04	35,621	9.579E-07	2	4.790E-07
1,3,5-Trimethylbenzene	120	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1,2,4-Trimethylbenzene	120	0.194	9.661E-04	4.472E-04	5.189E-04	0.9278	5.593E-04	35,621	1.244E-06	2	6.218E-07
Benzylchloride	127	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Phenylacetylene	102	0.116	4.939E-04	ND	4.939E-04	0.9278	5.323E-04	35,621	1.184E-06	2	5.919E-07
Indane	118	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,3-Dihydro-1-methyl-1H-indene	132	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,3-Dihydro-4-methyl-1H-indene	132	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Naphthalene	128	0.297	1.580E-03	4.245E-04	1.156E-03	0.9278	1.245E-03	35,621	2.770E-06	2	1.385E-06
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1-Methylnaphthalene	142	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Cyanogen	52	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Methylnitrite	61	0.130	3.302E-04	ND	3.302E-04	0.9278	3.559E-04	35,621	7.915E-07	2	3.957E-07
Acetonitrile	41	0.112	1.912E-04	ND	1.912E-04	0.9278	2.061E-04	35,621	4.584E-07	2	2.292E-07
Acrylonitrile	53	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Nitromethane	61	0.422	1.070E-03	ND	1.070E-03	0.9278	1.153E-03	35,621	2.564E-06	2	1.282E-06
Propanenitrile	55	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Pentanenitrile	83	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Hexanenitrile	97	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Benzonitrile	103	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Nitrophenol	139	0.056	3.249E-04	ND	3.249E-04	0.9278	3.502E-04	35,621	7.788E-07	2	3.894E-07
Acrolein	56	0.747	1.740E-03	ND	1.740E-03	0.9278	1.875E-03	35,621	4.171E-06	2	2.085E-06
Acetone	56	4.834	1.126E-02	7.108E-03	4.154E-03	0.9278	4.478E-03	35,621	9.958E-06	2	4.979E-06
1-Hydroxy-2-propanone	74	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Furan	68	0.080	2.262E-04	ND	2.262E-04	0.9278	2.438E-04	35,621	5.421E-07	2	2.710E-07
2-Propanol	60	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND

TABLE A-8. AEC - VOC RUN NO. 1 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2-Methylpropanal	74	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
1-Propanol	60	ND	ND	8.791E-04	ND	0.9278	ND	35,621	ND	2	ND
Methacrolein	70	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Methyl-vinyl Ketone	70	0.090	2.613E-04	ND	2.613E-04	0.9278	2.817E-04	35,621	6.264E-07	2	3.132E-07
MTBE	88	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2,3-Butanedione	86	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Butanal	72	0.128	3.821E-04	3.214E-04	6.077E-05	0.9278	6.550E-05	35,621	1.456E-07	2	7.282E-08
2-Butanone	72	0.582	1.744E-03	ND	1.744E-03	0.9278	1.880E-03	35,621	4.180E-06	2	2.090E-06
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Methylfuran	82	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
trans-2-Butenal	70	0.122	3.548E-04	ND	3.548E-04	0.9278	3.824E-04	35,621	8.504E-07	2	4.252E-07
Acetic Acid	60	0.827	2.064E-03	2.195E-03	-1.311E-04	0.9278	ND	35,621	ND	2	ND
1-Butanol	74	ND	ND	9.110E-04	ND	0.9278	ND	35,621	ND	2	ND
2-Pentanone	86	0.087	3.099E-04	ND	3.099E-04	0.9278	3.340E-04	35,621	7.428E-07	2	3.714E-07
Pentanal	86	0.251	8.990E-04	7.957E-04	1.033E-04	0.9278	1.113E-04	35,621	2.475E-07	2	1.238E-07
1,4-Dioxane	88	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Cyclopentanone	84	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Hexanal	100	0.127	5.297E-04	3.526E-04	1.771E-04	0.9278	1.909E-04	35,621	4.244E-07	2	2.122E-07
2-Furaldehyde	96	0.342	1.365E-03	ND	1.365E-03	0.9278	1.471E-03	35,621	3.272E-06	2	1.636E-06
Cyclohexanone	98	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Heptanal	114	0.148	7.042E-04	3.273E-04	3.769E-04	0.9278	4.063E-04	35,621	9.034E-07	2	4.517E-07
2-Butoxyethanol	118	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Benzaldehyde	106	0.446	1.964E-03	6.918E-04	1.273E-03	0.9278	1.372E-03	35,621	3.050E-06	2	1.525E-06
6-Methyl-5-hepten-2-one	126	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Octanal	128	0.225	1.198E-03	1.001E-03	1.969E-04	0.9278	2.122E-04	35,621	4.719E-07	2	2.360E-07
Benzofuran	118	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND
Acetophonone	120	0.059	2.963E-04	ND	2.963E-04	0.9278	3.193E-04	35,621	7.101E-07	2	3.551E-07
Nonanal	142	0.276	1.633E-03	1.841E-03	-2.081E-04	0.9278	ND	35,621	ND	2	ND
Decanal	156	0.331	2.151E-03	1.958E-03	1.934E-04	0.9278	2.085E-04	35,621	4.636E-07	2	2.318E-07
Carbonyl Sulfide	60	0.156	3.888E-04	1.583E-04	2.305E-04	0.9278	2.484E-04	35,621	5.525E-07	2	2.762E-07
Carbon Disulfide	76	12.895	4.077E-02	4.600E-04	4.031E-02	0.9278	4.344E-02	35,621	9.661E-05	2	4.831E-05
Thiophene	84	0.083	2.894E-04	ND	2.894E-04	0.9278	3.119E-04	35,621	6.936E-07	2	3.468E-07
Dimethyldisulfide	94	ND	ND	ND	ND	0.9278	ND	35,621	ND	2	ND

a
Compounds in bold represent duplicate values.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	1.930E-01	2.360E-02	1.694E-01	0.9323	1.817E-01	34,471	3.910E-04	3	1.303E-04
Volatile Organic Compounds (VOCs)											
Ethane	30	2.724	3.400E-03	3.100E-03	3.000E-04	0.9323	3.218E-04	34,471	6.925E-07	3	2.308E-07
Ethylene	28	40.007	4.660E-02	1.000E-04	4.650E-02	0.9323	4.988E-02	34,471	1.073E-04	3	3.578E-05
Acetylene	26	52.792	5.710E-02	7.000E-04	5.640E-02	0.9323	6.050E-02	34,471	1.302E-04	3	4.340E-05
Propane	44	1.257	2.300E-03	1.500E-03	8.000E-04	0.9323	8.581E-04	34,471	1.847E-06	3	6.155E-07
Propene	42	5.838	1.020E-02	ND	1.020E-02	0.9323	1.094E-02	34,471	2.354E-05	3	7.848E-06
i-Butane	58	0.166	4.000E-04	4.000E-04	0.000E+00	0.9323	ND	34,471	ND	3	ND
i-Butene	56	0.429	1.000E-03	ND	1.000E-03	0.9323	1.073E-03	34,471	2.308E-06	3	7.694E-07
1-Butene	56	0.730	1.700E-03	ND	1.700E-03	0.9323	1.823E-03	34,471	3.924E-06	3	1.308E-06
1,3-Butadiene	54	0.623	1.400E-03	ND	1.400E-03	0.9323	1.502E-03	34,471	3.232E-06	3	1.077E-06
n-Butane	58	0.290	7.000E-04	7.000E-04	0.000E+00	0.9323	ND	34,471	ND	3	ND
trans-2-Butene	56	1.502	3.500E-03	ND	3.500E-03	0.9323	3.754E-03	34,471	8.079E-06	3	2.693E-06
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
cis-2-Butene	56	0.129	3.000E-04	ND	3.000E-04	0.9323	3.218E-04	34,471	6.925E-07	3	2.308E-07
3-Methyl-1-butene	70	0.069	2.000E-04	ND	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
i-Pentane	72	0.167	5.000E-04	4.000E-04	1.000E-04	0.9323	1.073E-04	34,471	2.308E-07	3	7.694E-08
1-Pentene	70	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methyl-1-butene	70	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
n-Pentane	72	0.167	5.000E-04	3.000E-04	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
Isoprene	68	ND	ND	1.000E-04	ND	0.9323	ND	34,471	ND	3	ND
trans-2-Pentene	70	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
cis-2-Pentene	70	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methyl-2-butene	70	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,2-Dimethylbutane	86	0.056	2.000E-04	ND	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
Cyclopentene	68	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Cyclopentane	70	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,3-Dimethylbutane	86	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methylpentane	86	0.056	2.000E-04	1.000E-04	1.000E-04	0.9323	1.073E-04	34,471	2.308E-07	3	7.694E-08
3-Methylpentane	86	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
1-Hexene	84	0.029	1.000E-04	ND	1.000E-04	0.9323	1.073E-04	34,471	2.308E-07	3	7.694E-08
n-Hexane	86	0.056	2.000E-04	2.000E-04	0.000E+00	0.9323	ND	34,471	ND	3	ND
trans-2-Hexene	84	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
cis-2-Hexene	84	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Methylcyclopentane	84	0.029	1.000E-04	1.000E-04	0.000E+00	0.9323	ND	34,471	ND	3	ND
2,4-Dimethylpentane	100	0.048	2.000E-04	ND	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
Benzene	78	3.791	1.230E-02	6.000E-04	1.170E-02	0.9323	1.255E-02	34,471	2.701E-05	3	9.002E-06
Cyclohexane	84	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methylhexane	100	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,3-Dimethylpentane	100	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
3-Methylhexane	100	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
2,2,4-Trimethylpentane	114	0.169	8.000E-04	5.000E-04	3.000E-04	0.9323	3.218E-04	34,471	6.925E-07	3	2.308E-07
n-Heptane	100	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Methylcyclohexane	98	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,5-Dimethylhexane	114	0.021	1.000E-04	1.000E-04	0.000E+00	0.9323	ND	34,471	ND	3	ND
2,4-Dimethylhexane	114	0.042	2.000E-04	1.000E-04	1.000E-04	0.9323	1.073E-04	34,471	2.308E-07	3	7.694E-08
2,3,4-Trimethylpentane	114	0.042	2.000E-04	ND	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
Toluene	92	0.784	3.000E-03	7.000E-04	2.300E-03	0.9323	2.467E-03	34,471	5.309E-06	3	1.770E-06
2,3-Dimethylhexane	114	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methylheptane	111	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
3-Ethylhexane	114	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,2,4-Trimethylhexane	128	0.038	2.000E-04	ND	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
n-Octane	114	0.021	1.000E-04	ND	1.000E-04	0.9323	1.073E-04	34,471	2.308E-07	3	7.694E-08
Ethylcyclohexane	112	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Ethylbenzene	160	0.075	5.000E-04	1.000E-04	4.000E-04	0.9323	4.290E-04	34,471	9.233E-07	3	3.078E-07
m-Xylene & p-Xylene	106	0.386	1.700E-03	8.000E-04	9.000E-04	0.9323	9.654E-04	34,471	2.077E-06	3	6.925E-07
Styrene	104	0.162	7.000E-04	ND	7.000E-04	0.9323	7.508E-04	34,471	1.616E-06	3	5.386E-07
o-Xylene	106	0.159	7.000E-04	3.000E-04	4.000E-04	0.9323	4.290E-04	34,471	9.233E-07	3	3.078E-07
n-Nonane	128	0.075	4.000E-04	ND	4.000E-04	0.9323	4.290E-04	34,471	9.233E-07	3	3.078E-07
i-Propylbenzene	120	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
n-Propylbenzene	120	0.020	1.000E-04	1.000E-04	0.000E+00	0.9323	ND	34,471	ND	3	ND
p-Ethyltoluene	120	0.100	5.000E-04	3.000E-04	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
m-Ethyltoluene	120	0.060	3.000E-04	1.000E-04	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
1,3,5-Trimethylbenzene	120	0.080	4.000E-04	2.000E-04	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
o-Ethyltoluene	120	0.040	2.000E-04	ND	2.000E-04	0.9323	2.145E-04	34,471	4.616E-07	3	1.539E-07
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.260	1.300E-03	6.000E-04	7.000E-04	0.9323	7.508E-04	34,471	1.616E-06	3	5.386E-07
n-Decane	142	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
alpha-Pinene	136	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
beta-Pinene	136	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
delta 3-Carene	136	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
d-Limonene	136	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
MTBE	88	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
ETBE	102	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Dichlorodifluoromethane	120	0.168	8.369E-04	1.290E-03	-4.532E-04	0.9323	ND	34,471	ND	3	ND
Methylchloride	50	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Chloroethene	63	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
1,3-Butadiene	54	0.634	1.424E-03	ND	1.424E-03	0.9323	1.527E-03	34,471	3.287E-06	3	1.096E-06
Methylbromide	95	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Trichloromonofluoromethane	137	0.448	2.554E-03	2.562E-03	-8.631E-06	0.9323	ND	34,471	ND	3	ND
Vinylidenechloride	97	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Methylenechloride	85	1.933	6.835E-03	2.704E-04	6.564E-03	0.9323	7.041E-03	34,471	1.515E-05	3	5.051E-06
Allylchloride	76.5	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.115	8.965E-04	8.515E-04	4.495E-05	0.9323	4.821E-05	34,471	1.037E-07	3	3.458E-08
1,1-Dichloroethane	99	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
1,2-Dichloroethene	97	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Chloroform	119	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
1,2-Dichloroethane	99	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Methylchloroform	133	0.066	3.668E-04	3.608E-04	6.043E-06	0.9323	6.482E-06	34,471	1.395E-08	3	4.650E-09
Benzene	78	3.856	1.251E-02	6.103E-04	1.190E-02	0.9323	1.276E-02	34,471	2.747E-05	3	9.156E-06
Carbontetrachloride	154	0.125	8.006E-04	7.468E-04	5.381E-05	0.9323	5.771E-05	34,471	1.242E-07	3	4.140E-08
1,2-Dichloropropane	113	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Trichloroethylene	133	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Toluene	92	0.797	3.051E-03	7.120E-04	2.339E-03	0.9323	2.509E-03	34,471	5.400E-06	3	1.800E-06
1,2-Dibromoethane	188	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Perchloroethylene	166	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Chlorobenzene	113	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Ethylbenzene	160	0.115	7.676E-04	ND	7.676E-04	0.9323	8.234E-04	34,471	1.772E-06	3	5.906E-07
m&p-Xylene	106	0.363	1.601E-03	6.957E-04	9.048E-04	0.9323	9.705E-04	34,471	2.089E-06	3	6.962E-07
Styrene	104	0.091	3.956E-04	ND	3.956E-04	0.9323	4.243E-04	34,471	9.131E-07	3	3.044E-07
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
o-Xylene	106	0.161	7.120E-04	3.051E-04	4.068E-04	0.9323	4.364E-04	34,471	9.391E-07	3	3.130E-07
p-Ethyltoluene	120	0.097	4.837E-04	ND	4.837E-04	0.9323	5.188E-04	34,471	1.116E-06	3	3.721E-07
1,3,5-Trimethylbenzene	120	0.062	3.074E-04	ND	3.074E-04	0.9323	3.297E-04	34,471	7.094E-07	3	2.365E-07
1,2,4-Trimethylbenzene	120	0.160	8.005E-04	5.753E-04	2.253E-04	0.9323	2.416E-04	34,471	5.199E-07	3	1.733E-07
Benzylchloride	127	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Phenylacetylene	102	0.218	9.232E-04	ND	9.232E-04	0.9323	9.903E-04	34,471	2.131E-06	3	7.103E-07
Indane	118	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,3-Dihydro-1-methyl-1H-indene	132	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,3-Dihydro-4-methyl-1H-indene	132	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Naphthalene	128	0.410	2.183E-03	5.018E-04	1.681E-03	0.9323	1.803E-03	34,471	3.880E-06	3	1.293E-06
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
1-Methylnaphthalene	142	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Cyanogen	52	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Methylnitrite	61	0.286	7.248E-04	ND	7.248E-04	0.9323	7.774E-04	34,471	1.673E-06	3	5.577E-07
Acetonitrile	41	0.217	3.699E-04	ND	3.699E-04	0.9323	3.968E-04	34,471	8.538E-07	3	2.846E-07
Acrylonitrile	53	0.086	1.886E-04	ND	1.886E-04	0.9323	2.023E-04	34,471	4.353E-07	3	1.451E-07
Nitromethane	61	0.708	1.797E-03	ND	1.797E-03	0.9323	1.927E-03	34,471	4.148E-06	3	1.383E-06
Propanenitrile	55	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Pentanenitrile	83	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Hexanenitrile	97	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Benzonitrile	103	0.060	2.555E-04	ND	2.555E-04	0.9323	2.740E-04	34,471	5.897E-07	3	1.966E-07
2-Nitrophenol	139	0.053	3.067E-04	ND	3.067E-04	0.9323	3.290E-04	34,471	7.080E-07	3	2.360E-07
Acrolein	56	1.844	4.296E-03	ND	4.296E-03	0.9323	4.608E-03	34,471	9.917E-06	3	3.306E-06
Acetone	56	6.691	1.559E-02	5.477E-03	1.011E-02	0.9323	1.085E-02	34,471	2.334E-05	3	7.780E-06

TABLE A-9. AEC - VOC RUN NO. 2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
1-Hydroxy-2-propanone	74	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Furan	68	0.215	6.072E-04	ND	6.072E-04	0.9323	6.513E-04	34,471	1.401E-06	3	4.672E-07
2-Propanol	60	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methylpropanal	74	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
1-Propanol	60	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Methacrolein	70	0.070	2.032E-04	ND	2.032E-04	0.9323	2.179E-04	34,471	4.689E-07	3	1.563E-07
Methyl-vinyl Ketone	70	0.192	5.590E-04	ND	5.590E-04	0.9323	5.996E-04	34,471	1.290E-06	3	4.301E-07
MTBE	88	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2,3-Butanedione	86	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Butanal	72	0.111	3.321E-04	2.155E-04	1.167E-04	0.9323	1.251E-04	34,471	2.693E-07	3	8.977E-08
2-Butanone	72	0.910	2.727E-03	8.793E-04	1.848E-03	0.9323	1.982E-03	34,471	4.265E-06	3	1.422E-06
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Methylfuran	82	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
trans-2-Butenal	70	0.201	5.850E-04	ND	5.850E-04	0.9323	6.275E-04	34,471	1.350E-06	3	4.501E-07
Acetic Acid	60	0.861	2.149E-03	1.200E-03	9.486E-04	0.9323	1.017E-03	34,471	2.189E-06	3	7.298E-07
1-Butanol	74	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
2-Pentanone	86	0.139	4.984E-04	ND	4.984E-04	0.9323	5.346E-04	34,471	1.150E-06	3	3.835E-07
Pentanal	86	0.338	1.208E-03	1.116E-03	9.191E-05	0.9323	9.859E-05	34,471	2.122E-07	3	7.072E-08
1,4-Dioxane	88	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Cyclopentanone	84	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Hexanal	100	0.143	5.956E-04	7.794E-04	-1.838E-04	0.9323	ND	34,471	ND	3	ND
2-Furaldehyde	96	0.576	2.300E-03	ND	2.300E-03	0.9323	2.468E-03	34,471	5.310E-06	3	1.770E-06
Cyclohexanone	98	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Heptanal	114	0.148	7.036E-04	7.015E-04	2.163E-06	0.9323	2.320E-06	34,471	4.994E-09	3	1.665E-09
2-Butoxyethanol	118	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Benzaldehyde	106	0.516	2.276E-03	8.636E-04	1.413E-03	0.9323	1.515E-03	34,471	3.260E-06	3	1.087E-06
6-Methyl-5-hepten-2-one	126	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Octanal	128	0.237	1.262E-03	9.545E-04	3.078E-04	0.9323	3.301E-04	34,471	7.104E-07	3	2.368E-07
Benzofuran	118	0.070	3.422E-04	ND	3.422E-04	0.9323	3.670E-04	34,471	7.898E-07	3	2.633E-07
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND
Acetophonone	120	0.061	3.033E-04	ND	3.033E-04	0.9323	3.253E-04	34,471	7.001E-07	3	2.334E-07
Nonanal	142	0.239	1.414E-03	1.368E-03	4.537E-05	0.9323	4.867E-05	34,471	1.047E-07	3	3.491E-08
Decanal	156	0.258	1.672E-03	7.454E-04	9.266E-04	0.9323	9.939E-04	34,471	2.139E-06	3	7.129E-07
Carbonyl Sulfide	60	0.167	4.156E-04	2.178E-04	1.978E-04	0.9323	2.121E-04	34,471	4.565E-07	3	1.522E-07
Carbon Disulfide	76	21.875	6.916E-02	4.467E-04	6.871E-02	0.9323	7.370E-02	34,471	1.586E-04	3	5.287E-05
Thiophene	84	0.138	4.824E-04	ND	4.824E-04	0.9323	5.174E-04	34,471	1.114E-06	3	3.712E-07
Dimethyldisulfide	94	ND	ND	ND	ND	0.9323	ND	34,471	ND	3	ND

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Compounds in bold represent duplicate values.

TABLE A-10. AEC - SVOC DATA EVALUATION FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	3.591E-04	3.591E-04	ND	ND	F	F
Pyridine	ND	ND	ND	ND	ND	1.053E-03	1.053E-03	ND	ND	F	F
2-Picoline	ND	ND	ND	ND	ND	1.094E-03	1.094E-03	ND	ND	F	F
Methyl methanesulfonate	ND	ND	ND	ND	ND	4.138E-04	4.138E-04	ND	ND	F	F
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	8.214E-04	8.214E-04	ND	ND	F	F
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	8.771E-04	8.771E-04	ND	ND	F	F
Ethyl methanesulfonate	ND	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Phenol	ND	ND	ND	ND	ND	2.580E-04	2.580E-04	ND	ND	F	F
Aniline	ND	ND	ND	ND	ND	4.117E-04	4.117E-04	ND	ND	F	F
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	3.220E-04	3.220E-04	ND	ND	F	F
Pentachloroethane	ND	ND	ND	ND	ND	7.440E-04	7.440E-04	ND	ND	F	F
2-Chlorophenol	ND	ND	ND	ND	ND	1.641E-04	1.641E-04	ND	ND	F	F
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	3.168E-04	3.168E-04	ND	ND	F	F
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	6.357E-04	6.357E-04	ND	ND	F	F
Benzyl alcohol	ND	ND	ND	ND	ND	7.192E-04	7.192E-04	ND	ND	F	F
2-Methylphenol	ND	ND	ND	ND	ND	5.789E-04	5.789E-04	ND	ND	F	F
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	4.602E-04	4.602E-04	ND	ND	F	F
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	3.880E-04	3.880E-04	ND	ND	F	F
o-Toluidine	ND	ND	ND	ND	ND	4.086E-04	4.086E-04	ND	ND	F	F
4-Methylphenol/3-Methylphenol	ND	ND	ND	ND	ND	4.891E-04	4.891E-04	ND	ND	F	F
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	2.900E-04	2.900E-04	ND	ND	F	F
Acetophenone	4.915E-04	7.980E-04	7.518E-04	6.804E-04	1.897E-04	3.044E-04	3.044E-04	3.59	2.24	C	C
N-Nitrosomorpholine	ND	ND	ND	ND	ND	9.277E-04	9.277E-04	ND	ND	F	F
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	1.228E-03	1.228E-03	ND	ND	F	F
Hexachloroethane	ND	ND	ND	ND	ND	5.098E-04	5.098E-04	ND	ND	F	F
Nitrobenzene	ND	ND	ND	ND	ND	9.194E-04	9.194E-04	ND	ND	F	F
N-Nitrosopiperidine	ND	ND	ND	ND	ND	7.523E-04	7.523E-04	ND	ND	F	F
Isophorone	ND	ND	ND	ND	ND	2.208E-04	2.208E-04	ND	ND	F	F
2,4-Dimethylphenol	ND	ND	ND	ND	ND	3.478E-04	3.478E-04	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	ND	ND	5.531E-04	5.531E-04	ND	ND	F	F
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Benzoic acid	ND	ND	ND	ND	ND	3.777E-02	3.777E-02	ND	ND	F	F
2,4-Dichlorophenol	ND	ND	ND	ND	ND	5.056E-04	5.056E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	3.643E-04	3.643E-04	ND	ND	F	F
Naphthalene	6.663E-04	1.572E-03	1.200E-03	1.146E-03	ND	4.613E-04	4.613E-04	10.00	2.48	A	C
p-Chloroaniline	ND	ND	ND	ND	ND	3.323E-04	3.323E-04	ND	ND	F	F
2,6-Dichlorophenol	ND	ND	ND	ND	ND	3.550E-04	3.550E-04	ND	ND	F	F
Hexachloropropene	ND	ND	ND	ND	ND	5.830E-04	5.830E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	ND	ND	5.263E-04	5.263E-04	ND	ND	F	F
Dimethylphenethylamine	ND	ND	ND	ND	ND	2.105E-02	2.105E-02	ND	ND	F	F
N-Nitroso-di-n-butylamine	ND	ND	ND	ND	ND	3.859E-04	3.859E-04	ND	ND	F	F
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	5.851E-04	5.851E-04	ND	ND	F	F
Safrole	ND	ND	ND	ND	ND	7.337E-04	7.337E-04	ND	ND	F	F
2-Methylnaphthalene	ND	ND	3.538E-04	3.538E-04	ND	3.705E-04	3.705E-04	10.00	0.96	A	F
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	5.634E-04	5.634E-04	ND	ND	F	F
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	1.145E-02	1.145E-02	ND	ND	F	F
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	6.511E-04	6.511E-04	ND	ND	F	F
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	5.531E-04	5.531E-04	ND	ND	F	F
Isosafrole	ND	ND	ND	ND	ND	1.114E-03	1.114E-03	ND	ND	F	F

TABLE A-10. AEC - SVOC DATA EVALUATION FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Concentration - Run 1-2, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2-Chloronaphthalene	ND	ND	ND	ND	ND	5.820E-04	5.820E-04	ND	ND	F	F
2-Nitroaniline	ND	ND	ND	ND	ND	3.694E-04	3.694E-04	ND	ND	F	F
1,4-Naphthoquinone	ND	ND	ND	ND	ND	1.032E-03	1.032E-03	ND	ND	F	F
Dimethylphthalate	ND	ND	ND	ND	ND	3.003E-04	3.003E-04	ND	ND	F	F
1,3-Dinitrobenzene	ND	ND	ND	ND	ND	8.637E-04	8.637E-04	ND	ND	F	F
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	7.265E-04	7.265E-04	ND	ND	F	F
Acenaphthylene	ND	ND	ND	ND	ND	3.374E-04	3.374E-04	ND	ND	F	F
3-Nitroaniline	ND	ND	ND	ND	ND	9.091E-04	9.091E-04	ND	ND	F	F
4-Nitrophenol	ND	ND	ND	ND	ND	3.168E-02	3.168E-02	ND	ND	F	F
2,4-Dinitrophenol	ND	ND	ND	ND	ND	3.251E-02	3.251E-02	ND	ND	F	F
Acenaphthene	ND	ND	ND	ND	ND	3.715E-04	3.715E-04	ND	ND	F	F
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	4.592E-04	4.592E-04	ND	ND	F	F
Dibenzofuran	ND	ND	ND	ND	ND	2.518E-04	2.518E-04	ND	ND	F	F
Pentachlorobenzene	ND	ND	ND	ND	ND	6.955E-04	6.955E-04	ND	ND	F	F
1-Naphthylamine	ND	ND	ND	ND	ND	1.816E-03	1.816E-03	ND	ND	F	F
2-Naphthylamine	ND	ND	ND	ND	ND	1.610E-03	1.610E-03	ND	ND	F	F
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	7.368E-04	7.368E-04	ND	ND	F	F
Diethylphthalate	ND	ND	2.278E-04	2.278E-04	ND	2.683E-04	2.683E-04	10.00	0.85	A	F
4-Chlorophenylphenyl ether	ND	ND	ND	ND	ND	2.920E-04	2.920E-04	ND	ND	F	F
Fluorene	ND	ND	ND	ND	ND	3.508E-04	3.508E-04	ND	ND	F	F
5-Nitro-o-toluidine	ND	ND	ND	ND	ND	3.746E-04	3.746E-04	ND	ND	F	F
4-Nitroaniline	ND	ND	ND	ND	ND	7.997E-04	7.997E-04	ND	ND	F	F
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	2.807E-02	2.807E-02	ND	ND	F	F
Diphenylamine/N-NitrosoDPA	ND	ND	ND	ND	ND	3.797E-04	3.797E-04	ND	ND	F	F
sym-Trinitrobenzene	ND	ND	ND	ND	ND	1.290E-03	1.290E-03	ND	ND	F	F
Diallate	ND	ND	ND	ND	ND	4.902E-04	4.902E-04	ND	ND	F	F
Phenacetin	ND	ND	ND	ND	ND	2.311E-04	2.311E-04	ND	ND	F	F
4-Bromophenylphenyl ether	ND	ND	ND	ND	ND	7.110E-04	7.110E-04	ND	ND	F	F
Hexachlorobenzene	ND	ND	ND	ND	ND	3.828E-04	3.828E-04	ND	ND	F	F
4-Aminobiphenyl	ND	ND	ND	ND	ND	2.136E-03	2.136E-03	ND	ND	F	F
Pronamide	ND	ND	ND	ND	ND	2.652E-04	2.652E-04	ND	ND	F	F
Pentachlorophenol	ND	ND	ND	ND	ND	2.972E-02	2.972E-02	ND	ND	F	F
Pentachloronitrobenzene	ND	ND	ND	ND	ND	1.383E-03	1.383E-03	ND	ND	F	F
Phenanthrene	ND	ND	ND	ND	ND	6.295E-04	6.295E-04	ND	ND	F	F
Anthracene	ND	ND	ND	ND	ND	3.777E-04	3.777E-04	ND	ND	F	F
Carbazole	ND	ND	ND	ND	ND	2.528E-04	2.528E-04	ND	ND	F	F
Di-n-butylphthalate	4.424E-04	5.268E-03	1.515E-03	2.408E-03	ND	1.754E-04	1.754E-04	10.00	13.73	A	A
4-Nitroquinoline-1-oxide	ND	ND	ND	ND	ND	2.322E-02	2.322E-02	ND	ND	F	F
Methapyrilene	ND	ND	ND	ND	ND	2.136E-02	2.136E-02	ND	ND	F	F
Fluoranthene	ND	ND	ND	ND	ND	3.725E-04	3.725E-04	ND	ND	F	F
Benzidine	ND	ND	ND	ND	ND	1.383E-02	1.383E-02	ND	ND	F	F
Pyrene	ND	ND	ND	ND	ND	5.118E-04	5.118E-04	ND	ND	F	F
p-Dimethylaminoazobenzene	ND	ND	ND	ND	ND	3.797E-04	3.797E-04	ND	ND	F	F
Chlorobenzilate	ND	ND	ND	ND	ND	5.283E-04	5.283E-04	ND	ND	F	F
Kepone	ND	ND	ND	ND	ND	1.940E-02	1.940E-02	ND	ND	F	F
Butylbenzylphthalate	3.036E-03	1.278E-03	1.028E-03	1.781E-03	ND	2.115E-04	2.115E-04	10.00	8.42	A	B
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	2.043E-03	2.043E-03	ND	ND	F	F
2-Acetylaminofluorene	ND	ND	ND	ND	ND	3.220E-04	3.220E-04	ND	ND	F	F
bis(2-Ethylhexyl)phthalate	3.903E-03	ND	7.684E-04	2.335E-03	2.139E-02	1.259E-03	1.259E-03	0.11	1.86	F	D
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	3.457E-04	3.457E-04	ND	ND	F	F
Benz(a)anthracene	ND	ND	ND	ND	ND	4.664E-04	4.664E-04	ND	ND	F	F

TABLE A-10. AEC - SVOC DATA EVALUATION FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 2, mg/m^3	Average Concentration - Run 1-2, mg/m^3	Average Concentration - Run 1-2, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Chrysene	ND	ND	ND	ND	ND	5.036E-04	5.036E-04	ND	ND	F	F
Di-n-octylphthalate	1.035E-03	ND	1.924E-04	6.137E-04	ND	3.220E-04	3.220E-04	10.00	1.91	A	D
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND	ND	4.757E-04	4.757E-04	ND	ND	F	F
Benzo(b)fluoranthene (a)	ND	ND	ND	ND	ND	2.869E-04	2.869E-04	ND	ND	F	F
Benzo(k)fluoranthene (a)	ND	ND	ND	ND	ND	5.995E-04	5.995E-04	ND	ND	F	F
Benz(a)pyrene	ND	ND	ND	ND	ND	3.395E-04	3.395E-04	ND	ND	F	F
3-Methylcholanthrene	ND	ND	ND	ND	ND	1.207E-03	1.207E-03	ND	ND	F	F
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	2.260E-04	2.260E-04	ND	ND	F	F
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	2.538E-04	2.538E-04	ND	ND	F	F
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	2.435E-04	2.435E-04	ND	ND	F	F

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-11. AEC - SVOC RUN NO. 1 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Pyridine	79	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2-Picoline	93	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Phenol	94	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Aniline	93	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Pentachloroethane	202	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2-Methylphenol	108	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
o-Toluidine	107	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Acetophenone	120	0.098	4.915E-04	1.897E-04	3.017E-04	0.9112	3.311E-04	35,621	7.363E-07	2	3.682E-07
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Hexachloroethane	237	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Nitrobenzene	123	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Isophorone	138	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Benzoic acid	122	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Naphthalene	128	0.125	6.663E-04	ND	6.663E-04	0.9112	7.312E-04	35,621	1.626E-06	2	8.130E-07
p-Chloroaniline	128	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Hexachloropropene	249	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Safrole	162	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND

TABLE A-11. AEC - SVOC RUN NO. 1 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Isosafrole	162	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Acenaphthylene	152	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Acenaphthene	154	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Dibenzofuran	168	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Diethylphthalate	222	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Fluorene	166	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Diallate	270	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Phenacetin	179	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Pronamide	228	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Phenanthrene	178	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Anthracene	178	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Carbazole	167	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Di-n-butylphthalate	278	0.038	4.424E-04	ND	4.424E-04	0.9112	4.855E-04	35,621	1.080E-06	2	5.398E-07
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Methapyrilene	261	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Fluoranthene	202	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Benzidine	184	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Pyrene	202	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Kepone	491	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Butylbenzylphthalate	312	0.234	3.036E-03	ND	3.036E-03	0.9112	3.332E-03	35,621	7.410E-06	2	3.705E-06
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND

TABLE A-11. AEC - SVOC RUN NO. 1 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
bis(2-Ethylhexyl)phthalate	391	0.240	3.903E-03	2.139E-02	-1.748E-02	0.9112	ND	35,621	ND	2	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Chrysene	228	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Di-n-octylphthalate	391	0.064	1.035E-03	ND	1.035E-03	0.9112	1.136E-03	35,621	2.526E-06	2	1.263E-06
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.9112	ND	35,621	ND	2	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-12. AEC - SVOC RUN NO. 2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Pyridine	79	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2-Picoline	93	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Phenol	94	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Aniline	93	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Pentachloroethane	202	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2-Methylphenol	108	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
o-Toluidine	107	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Acetophenone	120	0.160	7.980E-04	1.897E-04	6.083E-04	0.5847	1.040E-03	34,471	2.239E-06	3	7.462E-07
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Hexachloroethane	237	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Nitrobenzene	123	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Isophorone	138	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Benzoic acid	122	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Naphthalene	128	0.295	1.572E-03	ND	1.572E-03	0.5847	2.689E-03	34,471	5.787E-06	3	1.929E-06
p-Chloroaniline	128	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Hexachloropropene	249	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Safrole	162	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2-Methylnaphthalene	142	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND

TABLE A-12. AEC - SVOC RUN NO. 2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Isosafrole	162	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Acenaphthylene	152	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Acenaphthene	154	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Dibenzofuran	168	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Diethylphthalate	222	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Fluorene	166	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Diallate	270	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Phenacetin	179	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Pronamide	228	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Phenanthrene	178	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Anthracene	178	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Carbazole	167	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Di-n-butylphthalate	278	0.455	5.268E-03	ND	5.268E-03	0.5847	9.009E-03	34,471	1.939E-05	3	6.463E-06
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Methapyrilene	261	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Fluoranthene	202	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Benzidine	184	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Pyrene	202	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Kepone	491	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Butylbenzylphthalate	312	0.098	1.278E-03	ND	1.278E-03	0.5847	2.185E-03	34,471	4.702E-06	3	1.567E-06
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND

TABLE A-12. AEC - SVOC RUN NO. 2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 2, ppbv	Average Concentration - Run 2, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 2, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 2, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 2, lb	Number of Items	Corrected Emission Factor - Run 2, lb/item
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
bis(2-Ethylhexyl)phthalate	391	ND	ND	2.139E-02	ND	0.5847	ND	34,471	ND	3	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Chrysene	228	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.5847	ND	34,471	ND	3	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-13. AEC - SVOC COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1-2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1-2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Pyridine	79	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2-Picoline	93	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Phenol	94	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Aniline	93	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Pentachloroethane	202	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2-Methylphenol	108	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
o-Toluidine	107	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Acetophenone	120	0.151	7.518E-04	1.897E-04	5.621E-04	0.74795	7.515E-04	35,046	1.644E-06	2.5	6.577E-07
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Hexachloroethane	237	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Nitrobenzene	123	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Isophorone	138	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Benzoic acid	122	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Naphthalene	128	0.225	1.200E-03	ND	1.200E-03	0.74795	1.604E-03	35,046	3.509E-06	2.5	1.404E-06
p-Chloroaniline	128	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Hexachloropropene	249	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Safrole	162	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2-Methylnaphthalene	142	0.060	3.538E-04	ND	3.538E-04	0.74795	4.730E-04	35,046	1.035E-06	2.5	4.140E-07
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND

TABLE A-13. AEC - SVOC COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1-2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1-2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Isosafrole	162	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Acenaphthylene	152	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Acenaphthene	154	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Dibenzofuran	168	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Diethylphthalate	222	0.025	2.278E-04	ND	2.278E-04	0.74795	3.045E-04	35,046	6.662E-07	2.5	2.665E-07
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Fluorene	166	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Diallate	270	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Phenacetin	179	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Pronamide	228	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Phenanthrene	178	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Anthracene	178	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Carbazole	167	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Di-n-butylphthalate	278	0.131	1.515E-03	ND	1.515E-03	0.74795	2.025E-03	35,046	4.431E-06	2.5	1.772E-06
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Methapyrilene	261	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Fluoranthene	202	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Benzidine	184	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Pyrene	202	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Kepone	491	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Butylbenzylphthalate	312	0.079	1.028E-03	ND	1.028E-03	0.74795	1.375E-03	35,046	3.008E-06	2.5	1.203E-06
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND

TABLE A-13. AEC - SVOC COMPOSITE RUN NO. 1-2 DATA FOR SIMULATOR GROUND BURST TEST (30 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1-2, ppbv	Average Concentration - Run 1-2, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1-2, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1-2, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1-2, lb	Number of Items	Corrected Emission Factor - Run 1 2, lb/item
bis(2-Ethylhexyl)phthalate	391	0.047	7.684E-04	2.139E-02	-2.062E-02	0.74795	ND	35,046	ND	2.5	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Chrysene	228	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Di-n-octylphthalate	391	0.012	1.924E-04	ND	1.924E-04	0.74795	2.572E-04	35,046	5.628E-07	2.5	2.251E-07
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.74795	ND	35,046	ND	2.5	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

GREEN STAR CLUSTER

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TABLE A-1. AEC MUNITION ITEM INPUT DATA SHEET (31 MARCH 1998)
Munition Item: Green Star Cluster
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	726.9	903.9	NA	NA	NA	NA	815.36
PM_{10}	436.2	453.3	NA	NA	NA	NA	444.78
Metals	726.9	903.9	NA	NA	NA	NA	815.36
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	90.2	73.8	NA	NA	NA	NA	81.99
HCl/Cl_2	28.8	23.2	NA	NA	NA	NA	26.01
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	116.8	109.8	NA	NA	NA	NA	113.28
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	47.5	51.5	NA	NA	NA	NA	49.50
HCl/Cl_2 (NaOH)	42.0	42.0	NA	NA	NA	NA	42.00

Sample Weight Gain:	Run No. 1		Run No. 2		Run No. 3		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.6996	0.7025	NA	NA	NA	NA	0.7011
PM_{10}	0.3056	0.3914	NA	NA	NA	NA	0.3485

Dilution Correction Factors:	Run No. 1	Run No. 2	Run No. 3	Average
TSP	0.8827	NA	NA	0.8827
PM_{10}	0.9370	NA	NA	0.9370
Metals	0.8827	NA	NA	0.8827
VOCs	0.9595	NA	NA	0.9595
SVOCs	0.8827	NA	NA	0.8827
HCl/Cl_2	0.8827	NA	NA	0.8827
Energetics	NA	NA	NA	NA
Dioxin/Furan	0.8827	NA	NA	0.8827
Residue	NA	NA	NA	NA
CEM	0.8865	NA	NA	0.8865

	Run No. 1	Run No. 2	Run No. 3	Average
Initial Plume Volume (m^3)	979.83	NA	NA	979.83
Net Explosive Weight (g)	757.05	NA	NA	757.05

TABLE A-2. AEC BACKGROUND INPUT DATA SHEET (31 MARCH 1998)
Munition Item: Green Star Cluster
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	WP - Background		Reagent Blank		Field Blank		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	1360.6	NA	NA	NA	NA	NA	1360.64
PM_{10}	1008.5	NA	NA	NA	NA	NA	1008.45
Metals	1360.6	NA	NA	NA	NA	NA	1360.64
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	117.9	NA	NA	NA	NA	NA	117.90
HCl/Cl_2	29.9	NA	NA	NA	NA	NA	29.93
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	156.5	NA	NA	NA	NA	NA	156.49
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	WP - Background		Reagent Blank		Field Blank		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	42.5	NA	107.2	NA	45.3	NA	42.50
HCl/Cl_2 (NaOH)	37.0	NA	92.0	NA	41.5	NA	37.00
HCl/Cl_2 (H_2O)	NA	NA	100.0	NA	NA	NA	NA

Sample Weight Gain:	WP - Background		Reagent Blank		Field Blank		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.0015	NA	-0.0026	NA	-0.0037	NA	0.0015
PM_{10}	0.0027	NA	-0.0002	NA	-0.0029	NA	0.0027

TABLE A-3. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS DATA EVALUATION FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate									
TSP	3.072E+01	3.072E+01	3.893E-02	ND	ND	789.05	10.00	A	A
PM_{10}	2.762E+01	2.762E+01	9.455E-02	ND	ND	292.07	10.00	A	A
Hydrogen Chloride (HCl)/Chlorine (Cl_2)									
HCl	7.165E-02	7.165E-02	ND	7.764E-02	7.164E-02	10.00	1.00	A	D
Cl_2	1.748E-02	1.748E-02	1.380E-02	1.724E-03	1.724E-03	1.27	10.14	D	A
Dioxin/Furan									
Dioxin TEQ (a)	2.664E-10	2.664E-10	1.512E-10	ND	ND	1.76	10.00	D	A
Continuous Emissions Monitoring (CEM) System									
Carbon Monoxide (CO)	4.242E+00	4.242E+00	2.661E-01	ND	ND	15.94	10.00	A	A
Nitrogen Oxide (NOx)	6.984E-01	6.984E-01	4.099E-02	ND	ND	17.04	10.00	A	A
HCl	6.057E-02	6.057E-02	9.941E-02	ND	ND	0.61	10.00	F	A
Carbon Dioxide (CO_2)	7.272E+02	7.272E+02	6.695E+02	ND	ND	1.09	10.00	D	A
Sulfur Dioxide (SO_2)	2.268E-03	2.268E-03	2.445E-03	ND	ND	0.93	10.00	F	A
Particulate-phase Metals									
Aluminum	1.011E-02	1.011E-02	NA (b)	7.712E-04	6.953E-04	NA (b)	14.53	NA (b)	A
Antimony	5.252E-04	5.252E-04	NA (b)	1.108E-04	9.990E-05	NA (b)	5.26	NA (b)	B
Arsenic	ND	ND	NA (b)	7.591E-05	6.862E-05	NA (b)	ND	NA (b)	F
Barium	5.109E-01	5.109E-01	NA (b)	8.441E-06	7.621E-06	NA (b)	67036.65	NA (b)	A
Beryllium	6.956E-06	6.956E-06	NA (b)	4.676E-06	4.221E-06	NA (b)	1.65	NA (b)	D
Cadmium	3.421E-05	3.421E-05	NA (b)	9.382E-06	8.471E-06	NA (b)	4.04	NA (b)	C
Chromium	2.643E-03	2.643E-03	NA (b)	1.658E-05	1.494E-05	NA (b)	176.95	NA (b)	A
Cobalt	3.134E-04	3.134E-04	NA (b)	1.658E-05	1.494E-05	NA (b)	20.98	NA (b)	A
Copper	3.929E-03	3.929E-03	NA (b)	4.069E-05	3.674E-05	NA (b)	106.95	NA (b)	A
Lead	7.961E-04	7.961E-04	NA (b)	6.255E-05	5.648E-05	NA (b)	14.10	NA (b)	A
Magnesium	3.118E+00	3.118E+00	NA (b)	1.618E-04	1.460E-04	NA (b)	21350.88	NA (b)	A
Manganese	6.595E-03	6.595E-03	NA (b)	7.196E-06	6.498E-06	NA (b)	1015.01	NA (b)	A
Nickel	1.989E-04	1.989E-04	NA (b)	2.532E-05	2.283E-05	NA (b)	8.71	NA (b)	B
Phosphorus	2.547E-03	2.547E-03	NA (b)	1.779E-04	1.603E-04	NA (b)	15.88	NA (b)	A
Selenium	ND	ND	NA (b)	6.042E-05	5.435E-05	NA (b)	ND	NA (b)	F
Silver	ND	ND	NA (b)	1.126E-05	1.014E-05	NA (b)	ND	NA (b)	F
Thallium	ND	ND	NA (b)	1.427E-04	1.284E-04	NA (b)	ND	NA (b)	F
Zinc	6.875E-03	6.875E-03	NA (b)	1.354E-04	1.221E-04	NA (b)	56.32	NA (b)	A
Mercury	3.323E-06	3.323E-06	NA (b)	1.081E-06	3.097E-07	NA (b)	10.73	NA (b)	A

a
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD.
b
Insufficient material to analyze.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-4. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 1 DATA FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (a), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate											
TSP	-	-	3.072E+01	3.893E-02	3.068E+01	0.8827	3.476E+01	34,602	7.508E-02	1	7.508E-02
PM_{10}	-	-	2.762E+01	9.455E-02	2.752E+01	0.9370	2.937E+01	34,602	6.345E-02	1	6.345E-02
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	47.237	7.165E-02	ND	7.165E-02	0.8827	8.117E-02	34,602	1.753E-04	1	1.753E-04
Cl_2 (b)	71	5.927	1.748E-02	1.380E-02	3.677E-03	0.8827	4.166E-03	34,602	8.998E-06	1	8.998E-06
Dioxin/Furan											
Dioxin TEQ (c)	-	-	2.664E-10	1.512E-10	1.152E-10	0.8827	1.306E-10	34,602	2.820E-13	1	2.820E-13
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	3642.119	4.242E+00	2.661E-01	3.976E+00	0.8865	4.485E+00	34,602	9.689E-03	1	9.689E-03
Nitrogen Oxide (NOx)	46	364.980	6.984E-01	4.099E-02	6.574E-01	0.8865	7.416E-01	34,602	1.602E-03	1	1.602E-03
HCl (b)	36	40.446	6.057E-02	9.941E-02	-3.884E-02	0.8865	ND	34,602	ND	1	ND
Carbon Dioxide (CO_2)	44	397292.400	7.272E+02	6.695E+02	5.768E+01	0.8865	6.507E+01	34,602	1.406E-01	1	1.406E-01
Sulfur Dioxide (SO_2)	64	0.852	2.268E-03	2.445E-03	-1.771E-04	0.8865	ND	34,602	ND	1	ND
Particulate-phase Metals											
Aluminum	27	8.998	1.011E-02	NA (d)	1.011E-02	0.8827	1.145E-02	34,602	2.473E-05	1	2.473E-05
Antimony	122	0.103	5.252E-04	NA (d)	5.252E-04	0.8827	5.949E-04	34,602	1.285E-06	1	1.285E-06
Arsenic	75	ND	ND	NA (d)	ND	0.8827	ND	34,602	ND	1	ND
Barium	137	89.645	5.109E-01	NA (d)	5.109E-01	0.8827	5.788E-01	34,602	1.250E-03	1	1.250E-03
Beryllium	9	0.019	6.956E-06	NA (d)	6.956E-06	0.8827	7.880E-06	34,602	1.702E-08	1	1.702E-08
Cadmium	112	0.007	3.421E-05	NA (d)	3.421E-05	0.8827	3.875E-05	34,602	8.372E-08	1	8.372E-08
Chromium	52	1.222	2.643E-03	NA (d)	2.643E-03	0.8827	2.995E-03	34,602	6.469E-06	1	6.469E-06
Cobalt	59	0.128	3.134E-04	NA (d)	3.134E-04	0.8827	3.550E-04	34,602	7.668E-07	1	7.668E-07
Copper	64	1.476	3.929E-03	NA (d)	3.929E-03	0.8827	4.452E-03	34,602	9.616E-06	1	9.616E-06
Lead	207	0.092	7.961E-04	NA (d)	7.961E-04	0.8827	9.019E-04	34,602	1.948E-06	1	1.948E-06
Magnesium	24	3123.264	3.118E+00	NA (d)	3.118E+00	0.8827	3.533E+00	34,602	7.631E-03	1	7.631E-03
Manganese	55	2.883	6.595E-03	NA (d)	6.595E-03	0.8827	7.472E-03	34,602	1.614E-05	1	1.614E-05
Nickel	59	0.081	1.989E-04	NA (d)	1.989E-04	0.8827	2.254E-04	34,602	4.868E-07	1	4.868E-07
Phosphorus	31	1.975	2.547E-03	NA (d)	2.547E-03	0.8827	2.885E-03	34,602	6.232E-06	1	6.232E-06
Selenium	79	ND	ND	NA (d)	ND	0.8827	ND	34,602	ND	1	ND
Silver	108	ND	ND	NA (d)	ND	0.8827	ND	34,602	ND	1	ND
Thallium	204	ND	ND	NA (d)	ND	0.8827	ND	34,602	ND	1	ND
Zinc	65	2.543	6.875E-03	NA (d)	6.875E-03	0.8827	7.789E-03	34,602	1.682E-05	1	1.682E-05
Mercury	201	0.000	3.323E-06	NA (d)	3.323E-06	0.8827	3.765E-06	34,602	8.133E-09	1	8.133E-09

a
Estimated from tracer data as presented in Volume IV.
b
HCl/Cl_2 levels were too low to be reliably measured.
c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.
d
Insufficient material to analzye.

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Total Nonmethane Hydrocarbons (TNMHC)									
TNMHC	1.486E-01	1.486E-01	3.600E-02	1.000E-04	1.000E-04	4.13	1486.00	C	A
Volatile Organic Compounds (VOCs)									
Ethane	5.700E-03	5.700E-03	2.800E-03	1.000E-04	1.000E-04	2.04	57.00	C	A
Ethylene	2.380E-02	2.380E-02	2.000E-04	1.000E-04	1.000E-04	119.00	238.00	A	A
Acetylene	2.570E-02	2.570E-02	8.000E-04	1.000E-04	1.000E-04	32.13	257.00	A	A
Propane	2.400E-03	2.400E-03	1.300E-03	1.000E-04	1.000E-04	1.85	24.00	D	A
Propene	8.300E-03	8.300E-03	ND	1.000E-04	1.000E-04	10.00	83.00	A	A
i-Butane	3.000E-04	3.000E-04	3.000E-04	1.000E-04	1.000E-04	1.00	3.00	D	C
i-Butene	7.000E-04	7.000E-04	ND	1.000E-04	1.000E-04	10.00	7.00	A	B
1-Butene	1.300E-03	1.300E-03	ND	1.000E-04	1.000E-04	10.00	13.00	A	A
1,3-Butadiene	1.600E-03	1.600E-03	ND	1.000E-04	1.000E-04	10.00	16.00	A	A
n-Butane	7.000E-04	7.000E-04	5.000E-04	1.000E-04	1.000E-04	1.40	7.00	D	B
trans-2-Butene	1.400E-03	1.400E-03	ND	1.000E-04	1.000E-04	10.00	14.00	A	A
2,2-Dimethylpropane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Butene	4.000E-04	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
3-Methyl-1-butene	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
i-Pentane	5.000E-04	5.000E-04	8.000E-04	1.000E-04	1.000E-04	0.63	5.00	F	B
1-Pentene	2.000E-04	2.000E-04	ND	1.000E-04	1.000E-04	10.00	2.00	A	C
2-Methyl-1-butene	2.000E-04	2.000E-04	ND	1.000E-04	1.000E-04	10.00	2.00	A	C
n-Pentane	8.000E-04	8.000E-04	8.000E-04	1.000E-04	1.000E-04	1.00	8.00	D	B
Isoprene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
trans-2-Pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-butene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylbutane	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
Cyclopentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
4-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Cyclopentane	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2,3-Dimethylbutane	4.000E-04	4.000E-04	3.000E-04	1.000E-04	1.000E-04	1.33	4.00	D	C
cis-4-Methyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylpentane	7.000E-04	7.000E-04	7.000E-04	1.000E-04	1.000E-04	1.00	7.00	D	B
3-Methylpentane	8.000E-04	8.000E-04	5.000E-04	1.000E-04	1.000E-04	1.60	8.00	D	B
2-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
1-Hexene	1.000E-03	1.000E-03	ND	1.000E-04	1.000E-04	10.00	10.00	A	A
n-Hexane	7.000E-04	7.000E-04	7.000E-04	1.000E-04	1.000E-04	1.00	7.00	D	B
trans-2-Hexene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Hexene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclopentane	3.000E-04	3.000E-04	3.000E-04	1.000E-04	1.000E-04	1.00	3.00	D	C
2,4-Dimethylpentane	8.000E-04	8.000E-04	7.000E-04	1.000E-04	1.000E-04	1.14	8.00	D	B

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Benzene	8.500E-03	8.500E-03	1.000E-03	1.000E-04	1.000E-04	8.50	85.00	B	A
Cyclohexane	2.000E-04	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.00	2.00	D	C
2-Methylhexane	ND	ND	3.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2,3-Dimethylpentane	ND	ND	1.500E-03	1.000E-04	1.000E-04	ND	ND	F	F
3-Methylhexane	ND	ND	4.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2,2,4-Trimethylpentane	2.900E-03	2.900E-03	2.900E-03	1.000E-04	1.000E-04	1.00	29.00	D	A
n-Heptane	3.000E-04	3.000E-04	2.000E-04	1.000E-04	1.000E-04	1.50	3.00	D	C
2,4,4-Trimethyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclohexane	2.000E-04	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.00	2.00	D	C
2,4,4-Trimethyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,5-Dimethylhexane	2.000E-04	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.00	2.00	D	C
2,4-Dimethylhexane	3.000E-04	3.000E-04	4.000E-04	1.000E-04	1.000E-04	0.75	3.00	F	C
2,3,4-Trimethylpentane	7.000E-04	7.000E-04	7.000E-04	1.000E-04	1.000E-04	1.00	7.00	D	B
Toluene	4.300E-03	4.300E-03	2.200E-03	1.000E-04	1.000E-04	1.95	43.00	D	A
2,3-Dimethylhexane	2.000E-04	2.000E-04	3.000E-04	1.000E-04	1.000E-04	0.67	2.00	F	C
2-Methylheptane	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
3-Ethylhexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylheptane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2,4-Trimethylhexane	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
n-Octane	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
Ethylcyclohexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Ethylbenzene	5.000E-04	5.000E-04	2.000E-04	1.000E-04	1.000E-04	2.50	5.00	C	B
m-Xylene & p-Xylene	1.700E-03	1.700E-03	1.200E-03	1.000E-04	1.000E-04	1.42	17.00	D	A
Styrene	7.000E-04	7.000E-04	ND	1.000E-04	1.000E-04	10.00	7.00	A	B
o-Xylene	8.000E-04	8.000E-04	4.000E-04	1.000E-04	1.000E-04	2.00	8.00	C	B
n-Nonane	4.000E-04	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
i-Propylbenzene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Propylbenzene	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
p-Ethyltoluene	1.100E-03	1.100E-03	3.000E-04	1.000E-04	1.000E-04	3.67	11.00	C	A
m-Ethyltoluene	5.000E-04	5.000E-04	1.000E-04	1.000E-04	1.000E-04	5.00	5.00	B	B
1,3,5-Trimethylbenzene	4.000E-04	4.000E-04	2.000E-04	1.000E-04	1.000E-04	2.00	4.00	C	C
o-Ethyltoluene	4.000E-04	4.000E-04	1.000E-04	1.000E-04	1.000E-04	4.00	4.00	C	C
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.000E-03	1.000E-03	6.000E-04	1.000E-04	1.000E-04	1.67	10.00	D	A
n-Decane	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
alpha-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
beta-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
delta 3-Carene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
d-Limonene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
MTBE	4.000E-04	4.000E-04	4.000E-04	1.000E-04	1.000E-04	1.00	4.00	D	C
ETBE	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Dichlorodifluoromethane	1.398E-03	1.398E-03	1.179E-03	4.992E-04	4.992E-04	1.19	2.80	D	C
Methylchloride	ND	ND	ND	2.080E-04	2.080E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Dichlorotetrafluoroethane	ND	ND	ND	7.114E-04	7.114E-04	ND	ND	F	F
Chloroethene	ND	ND	ND	2.621E-04	2.621E-04	ND	ND	F	F
1,3-Butadiene	1.627E-03	1.627E-03	ND	2.246E-04	2.246E-04	10.00	7.24	A	B
Methylbromide	ND	ND	ND	3.952E-04	3.952E-04	ND	ND	F	F
Ethylchloride	ND	ND	ND	2.683E-04	2.683E-04	ND	ND	F	F
Trichloromonofluoromethane	2.495E-03	2.495E-03	2.434E-03	5.699E-04	5.699E-04	1.02	4.38	D	C
Vinylidenechloride	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Methylenechloride	4.153E-02	4.153E-02	2.283E-04	3.536E-04	3.536E-04	181.89	117.44	A	A
Allylchloride	ND	ND	ND	3.182E-04	3.182E-04	ND	ND	F	F
1,1,2-Trichloro-1,2,2-trifluoroethane	8.335E-04	8.335E-04	8.665E-04	7.821E-04	7.821E-04	0.96	1.07	F	D
1,1-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
1,2-Dichloroethene	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Chloroform	ND	ND	ND	4.950E-04	4.950E-04	ND	ND	F	F
1,2-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
Methylchloroform	3.759E-04	3.759E-04	3.490E-04	5.533E-04	5.533E-04	1.08	0.68	D	F
Benzene	8.646E-03	8.646E-03	1.017E-03	3.245E-04	3.245E-04	8.50	26.64	B	A
Carbontetrachloride	7.904E-04	7.904E-04	6.758E-04	6.406E-04	6.406E-04	1.17	1.23	D	D
1,2-Dichloropropane	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Trichloroethylene	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
cis 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
trans 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
1,1,2-Trichloroethane	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
Toluene	4.374E-03	4.374E-03	2.238E-03	3.827E-04	3.827E-04	1.95	11.43	D	A
1,2-Dibromoethane	ND	ND	ND	7.821E-04	7.821E-04	ND	ND	F	F
Perchloroethylene	ND	ND	ND	6.906E-04	6.906E-04	ND	ND	F	F
Chlorobenzene	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Ethylbenzene	7.676E-04	7.676E-04	ND	6.656E-04	6.656E-04	10.00	1.15	A	D
m&p-Xylene	1.798E-03	1.798E-03	1.121E-03	4.410E-04	4.410E-04	1.60	4.08	D	C
Styrene	2.975E-04	2.975E-04	ND	4.326E-04	4.326E-04	10.00	0.69	A	F
1,1,2,2-Tetrachloroethane	ND	ND	ND	6.989E-04	6.989E-04	ND	ND	F	F
o-Xylene	8.137E-04	8.137E-04	4.068E-04	4.410E-04	4.410E-04	2.00	1.85	C	D
p-Ethyltoluene	3.914E-04	3.914E-04	ND	4.992E-04	4.992E-04	10.00	0.78	A	F
1,3,5-Trimethylbenzene	2.552E-04	2.552E-04	ND	4.992E-04	4.992E-04	10.00	0.51	A	F
1,2,4-Trimethylbenzene	8.568E-04	8.568E-04	5.425E-04	4.992E-04	4.992E-04	1.58	1.72	D	D
Benzylchloride	ND	ND	ND	5.283E-04	5.283E-04	ND	ND	F	F
m-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
p-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
o-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	7.530E-04	7.530E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	1.086E-03	1.086E-03	ND	ND	F	F
Phenylacetylene	ND	ND	ND	4.243E-04	4.243E-04	ND	ND	F	F
Indane	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2,3-Dihydro-1-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2,3-Dihydro-4-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F
Naphthalene	1.393E-03	1.393E-03	4.069E-04	5.325E-04	5.325E-04	3.42	2.62	C	C
2-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
1-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
Cyanogen	ND	ND	ND	2.163E-04	2.163E-04	ND	ND	F	F
Methylnitrite	4.034E-04	4.034E-04	ND	2.538E-04	2.538E-04	10.00	1.59	A	D
Acetonitrile	9.500E-04	9.500E-04	ND	1.706E-04	1.706E-04	10.00	5.57	A	B
Acrylonitrile	1.900E-03	1.900E-03	ND	2.205E-04	2.205E-04	10.00	8.62	A	B
Nitromethane	9.490E-04	9.490E-04	ND	2.538E-04	2.538E-04	10.00	3.74	A	C
Propanenitrile	ND	ND	ND	2.288E-04	2.288E-04	ND	ND	F	F
2-Methylpropanenitrile	ND	ND	ND	2.870E-04	2.870E-04	ND	ND	F	F
Pentanenitrile	ND	ND	ND	3.453E-04	3.453E-04	ND	ND	F	F
Hexanenitrile	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Benzonitrile	5.134E-04	5.134E-04	ND	4.285E-04	4.285E-04	10.00	1.20	A	D
2-Nitrophenol	ND	ND	ND	5.782E-04	5.782E-04	ND	ND	F	F
Acrolein	5.830E-04	5.830E-04	ND	2.330E-04	2.330E-04	10.00	2.50	A	C
Acetone	1.231E-02	1.231E-02	8.894E-03	2.330E-04	2.330E-04	1.38	52.85	D	A
1-Hydroxy-2-propanone	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
Furan	5.863E-04	5.863E-04	ND	2.829E-04	2.829E-04	10.00	2.07	A	C
2-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
2-Methylpropanal	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
1-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
Methacrolein	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
Methyl-vinyl Ketone	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
MTBE	4.995E-04	4.995E-04	4.457E-04	3.661E-04	3.661E-04	1.12	1.36	D	D
2,3-Butanedione	ND	ND	ND	3.578E-04	3.578E-04	ND	ND	F	F
Butanal	3.698E-04	3.698E-04	3.055E-04	2.995E-04	2.995E-04	1.21	1.23	D	D
2-Butanone	2.305E-03	2.305E-03	9.320E-04	2.995E-04	2.995E-04	2.47	7.69	C	B
2-Methyl-1,3-dioxolane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2-Methylfuran	ND	ND	ND	3.411E-04	3.411E-04	ND	ND	F	F
Tetrahydrofuran	ND	ND	ND	2.995E-04	2.995E-04	ND	ND	F	F
trans-2-Butenal	1.850E-04	1.850E-04	ND	2.912E-04	2.912E-04	10.00	0.64	A	F
Acetic Acid	1.900E-03	1.900E-03	1.714E-03	2.496E-04	2.496E-04	1.11	7.61	D	B
1-Butanol	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
2-Pentanone	4.483E-04	4.483E-04	ND	3.578E-04	3.578E-04	10.00	1.25	A	D
Pentanal	1.153E-03	1.153E-03	1.392E-03	3.578E-04	3.578E-04	0.83	3.22	F	C
1,4-Dioxane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
Methyl Methacrylate	ND	ND	ND	4.160E-04	4.160E-04	ND	ND	F	F
Cyclopentanone	ND	ND	ND	3.494E-04	3.494E-04	ND	ND	F	F
Hexanal	5.630E-04	5.630E-04	ND	4.160E-04	4.160E-04	10.00	1.35	A	D
2-Furaldehyde	7.089E-04	7.089E-04	ND	3.994E-04	3.994E-04	10.00	1.78	A	D
Cyclohexanone	ND	ND	ND	4.077E-04	4.077E-04	ND	ND	F	F
Heptanal	6.895E-04	6.895E-04	7.930E-04	4.742E-04	4.742E-04	0.87	1.45	F	D

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2-Butoxyethanol	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
Benzaldehyde	1.947E-03	1.947E-03	1.041E-03	4.410E-04	4.410E-04	1.87	4.41	D	C
6-Methyl-5-hepten-2-one	ND	ND	2.114E-03	5.242E-04	5.242E-04	ND	ND	F	F
Octanal	1.011E-03	1.011E-03	1.006E-03	5.325E-04	5.325E-04	1.01	1.90	D	D
Benzofuran	3.797E-04	3.797E-04	ND	4.909E-04	4.909E-04	10.00	0.77	A	F
2-Ethyl-1-hexanol	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
Acetophonone	4.260E-04	4.260E-04	ND	4.992E-04	4.992E-04	10.00	0.85	A	F
Nonanal	1.139E-03	1.139E-03	1.026E-03	5.907E-04	5.907E-04	1.11	1.93	D	D
Decanal	8.744E-04	8.744E-04	8.777E-04	6.490E-04	6.490E-04	1.00	1.35	F	D
Carbonyl Sulfide	3.619E-04	3.619E-04	3.282E-04	2.496E-04	2.496E-04	1.10	1.45	D	D
Carbon Disulfide	9.335E-03	9.335E-03	1.684E-03	3.162E-04	3.162E-04	5.54	29.53	B	A
Thiophene	3.834E-04	3.834E-04	ND	3.494E-04	3.494E-04	10.00	1.10	A	D
Dimethyldisulfide	ND	ND	ND	3.910E-04	3.910E-04	ND	ND	F	F

a
Compounds in bold represent duplicate values.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	1.486E-01	3.600E-02	1.126E-01	0.9595	1.174E-01	34,602	2.535E-04	1	2.535E-04
Volatile Organic Compounds (VOCs)											
Ethane	30	4.567	5.700E-03	2.800E-03	2.900E-03	0.9595	3.022E-03	34,602	6.529E-06	1	6.529E-06
Ethylene	28	20.433	2.380E-02	2.000E-04	2.360E-02	0.9595	2.460E-02	34,602	5.313E-05	1	5.313E-05
Acetylene	26	23.761	2.570E-02	8.000E-04	2.490E-02	0.9595	2.595E-02	34,602	5.606E-05	1	5.606E-05
Propane	44	1.311	2.400E-03	1.300E-03	1.100E-03	0.9595	1.146E-03	34,602	2.476E-06	1	2.476E-06
Propene	42	4.750	8.300E-03	ND	8.300E-03	0.9595	8.650E-03	34,602	1.869E-05	1	1.869E-05
i-Butane	58	0.124	3.000E-04	3.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
i-Butene	56	0.300	7.000E-04	ND	7.000E-04	0.9595	7.295E-04	34,602	1.576E-06	1	1.576E-06
1-Butene	56	0.558	1.300E-03	ND	1.300E-03	0.9595	1.355E-03	34,602	2.927E-06	1	2.927E-06
1,3-Butadiene	54	0.712	1.600E-03	ND	1.600E-03	0.9595	1.668E-03	34,602	3.602E-06	1	3.602E-06
n-Butane	58	0.290	7.000E-04	5.000E-04	2.000E-04	0.9595	2.084E-04	34,602	4.503E-07	1	4.503E-07
trans-2-Butene	56	0.601	1.400E-03	ND	1.400E-03	0.9595	1.459E-03	34,602	3.152E-06	1	3.152E-06
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
cis-2-Butene	56	0.172	4.000E-04	ND	4.000E-04	0.9595	4.169E-04	34,602	9.005E-07	1	9.005E-07
3-Methyl-1-butene	70	0.034	1.000E-04	ND	1.000E-04	0.9595	1.042E-04	34,602	2.251E-07	1	2.251E-07
i-Pentane	72	0.167	5.000E-04	8.000E-04	-3.000E-04	0.9595	ND	34,602	ND	1	ND
1-Pentene	70	0.069	2.000E-04	ND	2.000E-04	0.9595	2.084E-04	34,602	4.503E-07	1	4.503E-07
2-Methyl-1-butene	70	0.069	2.000E-04	ND	2.000E-04	0.9595	2.084E-04	34,602	4.503E-07	1	4.503E-07
n-Pentane	72	0.267	8.000E-04	8.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
Isoprene	68	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
trans-2-Pentene	70	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
cis-2-Pentene	70	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2-Methyl-2-butene	70	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2,2-Dimethylbutane	86	0.028	1.000E-04	1.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
Cyclopentene	68	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Cyclopentane	70	ND	ND	1.000E-04	ND	0.9595	ND	34,602	ND	1	ND
2,3-Dimethylbutane	86	0.112	4.000E-04	3.000E-04	1.000E-04	0.9595	1.042E-04	34,602	2.251E-07	1	2.251E-07
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2-Methylpentane	86	0.196	7.000E-04	7.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
3-Methylpentane	86	0.224	8.000E-04	5.000E-04	3.000E-04	0.9595	3.127E-04	34,602	6.754E-07	1	6.754E-07
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
1-Hexene	84	0.286	1.000E-03	ND	1.000E-03	0.9595	1.042E-03	34,602	2.251E-06	1	2.251E-06
n-Hexane	86	0.196	7.000E-04	7.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
trans-2-Hexene	84	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
cis-2-Hexene	84	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Methylcyclopentane	84	0.086	3.000E-04	3.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
2,4-Dimethylpentane	100	0.192	8.000E-04	7.000E-04	1.000E-04	0.9595	1.042E-04	34,602	2.251E-07	1	2.251E-07
Benzene	78	2.620	8.500E-03	1.000E-03	7.500E-03	0.9595	7.817E-03	34,602	1.689E-05	1	1.689E-05
Cyclohexane	84	0.057	2.000E-04	2.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
2-Methylhexane	100	ND	ND	3.000E-04	ND	0.9595	ND	34,602	ND	1	ND
2,3-Dimethylpentane	100	ND	ND	1.500E-03	ND	0.9595	ND	34,602	ND	1	ND
3-Methylhexane	100	ND	ND	4.000E-04	ND	0.9595	ND	34,602	ND	1	ND
2,2,4-Trimethylpentane	114	0.612	2.900E-03	2.900E-03	0.000E+00	0.9595	ND	34,602	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
n-Heptane	100	0.072	3.000E-04	2.000E-04	1.000E-04	0.9595	1.042E-04	34,602	2.251E-07	1	2.251E-07
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Methylcyclohexane	98	0.049	2.000E-04	2.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2,5-Dimethylhexane	114	0.042	2.000E-04	2.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
2,4-Dimethylhexane	114	0.063	3.000E-04	4.000E-04	-1.000E-04	0.9595	ND	34,602	ND	1	ND
2,3,4-Trimethylpentane	114	0.148	7.000E-04	7.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
Toluene	92	1.124	4.300E-03	2.200E-03	2.100E-03	0.9595	2.189E-03	34,602	4.728E-06	1	4.728E-06
2,3-Dimethylhexane	114	0.042	2.000E-04	3.000E-04	-1.000E-04	0.9595	ND	34,602	ND	1	ND
2-Methylheptane	111	ND	ND	1.000E-04	ND	0.9595	ND	34,602	ND	1	ND
3-Ethylhexane	114	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2,2,4-Trimethylhexane	128	0.038	2.000E-04	1.000E-04	1.000E-04	0.9595	1.042E-04	34,602	2.251E-07	1	2.251E-07
n-Octane	114	0.042	2.000E-04	1.000E-04	1.000E-04	0.9595	1.042E-04	34,602	2.251E-07	1	2.251E-07
Ethylcyclohexane	112	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Ethylbenzene	160	0.075	5.000E-04	2.000E-04	3.000E-04	0.9595	3.127E-04	34,602	6.754E-07	1	6.754E-07
m-Xylene & p-Xylene	106	0.386	1.700E-03	1.200E-03	5.000E-04	0.9595	5.211E-04	34,602	1.126E-06	1	1.126E-06
Styrene	104	0.162	7.000E-04	ND	7.000E-04	0.9595	7.295E-04	34,602	1.576E-06	1	1.576E-06
o-Xylene	106	0.181	8.000E-04	4.000E-04	4.000E-04	0.9595	4.169E-04	34,602	9.005E-07	1	9.005E-07
n-Nonane	128	0.075	4.000E-04	ND	4.000E-04	0.9595	4.169E-04	34,602	9.005E-07	1	9.005E-07
i-Propylbenzene	120	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
n-Propylbenzene	120	0.040	2.000E-04	1.000E-04	1.000E-04	0.9595	1.042E-04	34,602	2.251E-07	1	2.251E-07
p-Ethyltoluene	120	0.220	1.100E-03	3.000E-04	8.000E-04	0.9595	8.338E-04	34,602	1.801E-06	1	1.801E-06
m-Ethyltoluene	120	0.100	5.000E-04	1.000E-04	4.000E-04	0.9595	4.169E-04	34,602	9.005E-07	1	9.005E-07
1,3,5-Trimethylbenzene	120	0.080	4.000E-04	2.000E-04	2.000E-04	0.9595	2.084E-04	34,602	4.503E-07	1	4.503E-07
o-Ethyltoluene	120	0.080	4.000E-04	1.000E-04	3.000E-04	0.9595	3.127E-04	34,602	6.754E-07	1	6.754E-07
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.200	1.000E-03	6.000E-04	4.000E-04	0.9595	4.169E-04	34,602	9.005E-07	1	9.005E-07
n-Decane	142	0.017	1.000E-04	1.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
alpha-Pinene	136	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
beta-Pinene	136	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
delta 3-Carene	136	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
d-Limonene	136	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
MTBE	88	0.109	4.000E-04	4.000E-04	0.000E+00	0.9595	ND	34,602	ND	1	ND
ETBE	102	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Dichlorodifluoromethane	120	0.280	1.398E-03	1.179E-03	2.188E-04	0.9595	2.280E-04	34,602	4.925E-07	1	4.925E-07
Methylchloride	50	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Chloroethene	63	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
1,3-Butadiene	54	0.724	1.627E-03	ND	1.627E-03	0.9595	1.696E-03	34,602	3.664E-06	1	3.664E-06
Methylbromide	95	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Trichloromonofluoromethane	137	0.438	2.495E-03	2.434E-03	6.025E-05	0.9595	6.279E-05	34,602	1.356E-07	1	1.356E-07
Vinylidenechloride	97	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Methylenechloride	85	11.744	4.153E-02	2.283E-04	4.130E-02	0.9595	4.304E-02	34,602	9.298E-05	1	9.298E-05
Allylchloride	76.5	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.107	8.335E-04	8.665E-04	-3.305E-05	0.9595	ND	34,602	ND	1	ND
1,1-Dichloroethane	99	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
1,2-Dichloroethene	97	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Chloroform	119	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
1,2-Dichloroethane	99	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Methylchloroform	133	0.068	3.759E-04	3.490E-04	2.690E-05	0.9595	2.803E-05	34,602	6.056E-08	1	6.056E-08
Benzene	78	2.664	8.646E-03	1.017E-03	7.628E-03	0.9595	7.950E-03	34,602	1.717E-05	1	1.717E-05
Carbontetrachloride	154	0.123	7.904E-04	6.758E-04	1.146E-04	0.9595	1.194E-04	34,602	2.580E-07	1	2.580E-07
1,2-Dichloropropane	113	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Trichloroethylene	133	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Toluene	92	1.143	4.374E-03	2.238E-03	2.136E-03	0.9595	2.226E-03	34,602	4.809E-06	1	4.809E-06
1,2-Dibromoethane	188	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Perchloroethylene	166	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Chlorobenzene	113	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Ethylbenzene	160	0.115	7.676E-04	ND	7.676E-04	0.9595	8.000E-04	34,602	1.728E-06	1	1.728E-06
m&p-Xylene	106	0.408	1.798E-03	1.121E-03	6.774E-04	0.9595	7.060E-04	34,602	1.525E-06	1	1.525E-06
Styrene	104	0.069	2.975E-04	ND	2.975E-04	0.9595	3.100E-04	34,602	6.697E-07	1	6.697E-07
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
o-Xylene	106	0.185	8.137E-04	4.068E-04	4.068E-04	0.9595	4.240E-04	34,602	9.160E-07	1	9.160E-07
p-Ethyltoluene	120	0.078	3.914E-04	ND	3.914E-04	0.9595	4.079E-04	34,602	8.811E-07	1	8.811E-07
1,3,5-Trimethylbenzene	120	0.051	2.552E-04	ND	2.552E-04	0.9595	2.660E-04	34,602	5.746E-07	1	5.746E-07
1,2,4-Trimethylbenzene	120	0.172	8.568E-04	5.425E-04	3.143E-04	0.9595	3.275E-04	34,602	7.075E-07	1	7.075E-07
Benzylchloride	127	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Phenylacetylene	102	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Indane	118	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2,3-Dihydro-1-methyl-1H-indene	132	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2,3-Dihydro-4-methyl-1H-indene	132	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Naphthalene	128	0.262	1.393E-03	4.069E-04	9.864E-04	0.9595	1.028E-03	34,602	2.221E-06	1	2.221E-06
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
1-Methylnaphthalene	142	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Cyanogen	52	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Methylnitrite	61	0.159	4.034E-04	ND	4.034E-04	0.9595	4.204E-04	34,602	9.082E-07	1	9.082E-07
Acetonitrile	41	0.557	9.500E-04	ND	9.500E-04	0.9595	9.901E-04	34,602	2.139E-06	1	2.139E-06
Acrylonitrile	53	0.862	1.900E-03	ND	1.900E-03	0.9595	1.981E-03	34,602	4.278E-06	1	4.278E-06
Nitromethane	61	0.374	9.490E-04	ND	9.490E-04	0.9595	9.891E-04	34,602	2.137E-06	1	2.137E-06
Propanenitrile	55	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Pentanenitrile	83	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Hexanenitrile	97	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Benzonitrile	103	0.120	5.134E-04	ND	5.134E-04	0.9595	5.351E-04	34,602	1.156E-06	1	1.156E-06
2-Nitrophenol	139	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Acrolein	56	0.250	5.830E-04	ND	5.830E-04	0.9595	6.076E-04	34,602	1.313E-06	1	1.313E-06
Acetone	56	5.285	1.231E-02	8.894E-03	3.418E-03	0.9595	3.563E-03	34,602	7.696E-06	1	7.696E-06
1-Hydroxy-2-propanone	74	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Furan	68	0.207	5.863E-04	ND	5.863E-04	0.9595	6.110E-04	34,602	1.320E-06	1	1.320E-06
2-Propanol	60	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2-Methylpropanal	74	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
1-Propanol	60	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Methacrolein	70	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Methyl-vinyl Ketone	70	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
MTBE	88	0.136	4.995E-04	4.457E-04	5.376E-05	0.9595	5.603E-05	34,602	1.210E-07	1	1.210E-07
2,3-Butanedione	86	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Butanal	72	0.123	3.698E-04	3.055E-04	6.426E-05	0.9595	6.697E-05	34,602	1.447E-07	1	1.447E-07
2-Butanone	72	0.769	2.305E-03	9.320E-04	1.373E-03	0.9595	1.431E-03	34,602	3.090E-06	1	3.090E-06
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2-Methylfuran	82	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
trans-2-Butenal	70	0.064	1.850E-04	ND	1.850E-04	0.9595	1.928E-04	34,602	4.166E-07	1	4.166E-07
Acetic Acid	60	0.761	1.900E-03	1.714E-03	1.853E-04	0.9595	1.931E-04	34,602	4.171E-07	1	4.171E-07
1-Butanol	74	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
2-Pentanone	86	0.125	4.483E-04	ND	4.483E-04	0.9595	4.673E-04	34,602	1.009E-06	1	1.009E-06
Pentanal	86	0.322	1.153E-03	1.392E-03	-2.384E-04	0.9595	ND	34,602	ND	1	ND
1,4-Dioxane	88	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Cyclopentanone	84	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Hexanal	100	0.135	5.630E-04	ND	5.630E-04	0.9595	5.868E-04	34,602	1.268E-06	1	1.268E-06
2-Furaldehyde	96	0.178	7.089E-04	ND	7.089E-04	0.9595	7.388E-04	34,602	1.596E-06	1	1.596E-06
Cyclohexanone	98	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Heptanal	114	0.145	6.895E-04	7.930E-04	-1.035E-04	0.9595	ND	34,602	ND	1	ND
2-Butoxyethanol	118	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Benzaldehyde	106	0.441	1.947E-03	1.041E-03	9.060E-04	0.9595	9.442E-04	34,602	2.040E-06	1	2.040E-06
6-Methyl-5-hepten-2-one	126	ND	ND	2.114E-03	ND	0.9595	ND	34,602	ND	1	ND
Octanal	128	0.190	1.011E-03	1.006E-03	5.069E-06	0.9595	5.283E-06	34,602	1.141E-08	1	1.141E-08
Benzofuran	118	0.077	3.797E-04	ND	3.797E-04	0.9595	3.957E-04	34,602	8.549E-07	1	8.549E-07
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND
Acetophonone	120	0.085	4.260E-04	ND	4.260E-04	0.9595	4.440E-04	34,602	9.592E-07	1	9.592E-07
Nonanal	142	0.193	1.139E-03	1.026E-03	1.135E-04	0.9595	1.183E-04	34,602	2.555E-07	1	2.555E-07
Decanal	156	0.135	8.744E-04	8.777E-04	-3.313E-06	0.9595	ND	34,602	ND	1	ND
Carbonyl Sulfide	60	0.145	3.619E-04	3.282E-04	3.376E-05	0.9595	3.519E-05	34,602	7.601E-08	1	7.601E-08
Carbon Disulfide	76	2.953	9.335E-03	1.684E-03	7.651E-03	0.9595	7.974E-03	34,602	1.723E-05	1	1.723E-05
Thiophene	84	0.110	3.834E-04	ND	3.834E-04	0.9595	3.996E-04	34,602	8.632E-07	1	8.632E-07
Dimethyldisulfide	94	ND	ND	ND	ND	0.9595	ND	34,602	ND	1	ND

a
Compounds in bold represent duplicate values.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-7. AEC - SVOC DATA EVALUATION FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate/Vapor-phase SVOCs									
N-Nitrosodimethylamine	ND	ND	ND	1.499E-04	1.499E-04	ND	ND	F	F
Pyridine	ND	ND	ND	4.393E-04	4.393E-04	ND	ND	F	F
2-Picoline	ND	ND	ND	4.566E-04	4.566E-04	ND	ND	F	F
Methyl methanesulfonate	ND	ND	ND	1.727E-04	1.727E-04	ND	ND	F	F
N-Nitrosomethylethylamine	ND	ND	ND	3.429E-04	3.429E-04	ND	ND	F	F
N-Nitrosodiethylamine	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
Ethyl methanesulfonate	ND	ND	ND	1.684E-04	1.684E-04	ND	ND	F	F
Phenol	ND	ND	ND	1.077E-04	1.077E-04	ND	ND	F	F
Aniline	ND	ND	ND	1.719E-04	1.719E-04	ND	ND	F	F
bis(2-Chloroethyl)ether	ND	ND	ND	1.344E-04	1.344E-04	ND	ND	F	F
Pentachloroethane	ND	ND	ND	3.105E-04	3.105E-04	ND	ND	F	F
2-Chlorophenol	ND	ND	ND	6.848E-05	6.848E-05	ND	ND	F	F
1,3-Dichlorobenzene	ND	ND	ND	1.322E-04	1.322E-04	ND	ND	F	F
1,4-Dichlorobenzene	ND	ND	ND	2.653E-04	2.653E-04	ND	ND	F	F
Benzyl alcohol	ND	ND	ND	3.002E-04	3.002E-04	ND	ND	F	F
2-Methylphenol	ND	ND	ND	2.416E-04	2.416E-04	ND	ND	F	F
1,2-Dichlorobenzene	ND	ND	ND	1.921E-04	1.921E-04	ND	ND	F	F
bis(2-Chloroisopropyl)ether	ND	ND	ND	1.619E-04	1.619E-04	ND	ND	F	F
o-Toluidine	ND	ND	ND	1.706E-04	1.706E-04	ND	ND	F	F
4-Methylphenol/3-Methylphenol	ND	ND	ND	2.042E-04	2.042E-04	ND	ND	F	F
N-Nitroso-di-n-propylamine	ND	ND	ND	1.210E-04	1.210E-04	ND	ND	F	F
Acetophenone	5.830E-04	5.830E-04	2.708E-04	1.271E-04	1.271E-04	2.15	4.59	C	C
N-Nitrosomorpholine	ND	ND	ND	3.872E-04	3.872E-04	ND	ND	F	F
N-Nitrosopyrrolidine	ND	ND	ND	5.126E-04	5.126E-04	ND	ND	F	F
Hexachloroethane	ND	ND	ND	2.128E-04	2.128E-04	ND	ND	F	F
Nitrobenzene	ND	ND	ND	3.838E-04	3.838E-04	ND	ND	F	F
N-Nitrosopiperidine	ND	ND	ND	3.140E-04	3.140E-04	ND	ND	F	F
Isophorone	ND	ND	ND	9.217E-05	9.217E-05	ND	ND	F	F
2,4-Dimethylphenol	ND	ND	ND	1.452E-04	1.452E-04	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	2.309E-04	2.309E-04	ND	ND	F	F
bis(2-Chloroethoxy)methane	ND	ND	ND	1.684E-04	1.684E-04	ND	ND	F	F
Benzoic acid	ND	ND	ND	1.576E-02	1.576E-02	ND	ND	F	F
2,4-Dichlorophenol	ND	ND	ND	2.111E-04	2.111E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	1.520E-04	1.520E-04	ND	ND	F	F
Naphthalene	6.994E-04	6.994E-04	2.995E-04	1.925E-04	1.925E-04	2.34	3.63	C	C
p-Chloroaniline	ND	ND	ND	1.387E-04	1.387E-04	ND	ND	F	F
2,6-Dichlorophenol	ND	ND	ND	1.482E-04	1.482E-04	ND	ND	F	F
Hexachloropropene	ND	ND	ND	2.434E-04	2.434E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	2.197E-04	2.197E-04	ND	ND	F	F
Dimethylphenethylamine	ND	ND	ND	8.787E-03	8.787E-03	ND	ND	F	F
N-Nitroso-di-n-butylamine	ND	ND	ND	1.611E-04	1.611E-04	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
4-Chloro-3-methylphenol	ND	ND	ND	2.442E-04	2.442E-04	ND	ND	F	F
Safrole	ND	ND	ND	3.062E-04	3.062E-04	ND	ND	F	F
2-Methylnaphthalene	2.725E-04	2.725E-04	ND	1.546E-04	1.546E-04	10.00	1.76	A	D
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	2.352E-04	2.352E-04	ND	ND	F	F
Hexachlorocyclopentadiene	ND	ND	ND	4.781E-03	4.781E-03	ND	ND	F	F
2,4,6-Trichlorophenol	ND	ND	ND	2.718E-04	2.718E-04	ND	ND	F	F
2,4,5-Trichlorophenol	ND	ND	ND	2.309E-04	2.309E-04	ND	ND	F	F
Isosafrole	ND	ND	ND	4.652E-04	4.652E-04	ND	ND	F	F
2-Chloronaphthalene	ND	ND	ND	2.429E-04	2.429E-04	ND	ND	F	F
2-Nitroaniline	ND	ND	ND	1.542E-04	1.542E-04	ND	ND	F	F
1,4-Naphthoquinone	ND	ND	ND	4.307E-04	4.307E-04	ND	ND	F	F
Dimethylphthalate	ND	ND	ND	1.253E-04	1.253E-04	ND	ND	F	F
1,3-Dinitrobenzene	ND	ND	ND	3.605E-04	3.605E-04	ND	ND	F	F
2,6-Dinitrotoluene	ND	ND	ND	3.032E-04	3.032E-04	ND	ND	F	F
Acenaphthylene	ND	ND	ND	1.408E-04	1.408E-04	ND	ND	F	F
3-Nitroaniline	ND	ND	ND	3.795E-04	3.795E-04	ND	ND	F	F
4-Nitrophenol	ND	ND	ND	1.322E-02	1.322E-02	ND	ND	F	F
2,4-Dinitrophenol	ND	ND	ND	1.357E-02	1.357E-02	ND	ND	F	F
Acenaphthene	ND	ND	ND	1.551E-04	1.551E-04	ND	ND	F	F
2,4-Dinitrotoluene	ND	ND	ND	1.917E-04	1.917E-04	ND	ND	F	F
Dibenzofuran	ND	ND	ND	1.051E-04	1.051E-04	ND	ND	F	F
Pentachlorobenzene	ND	ND	ND	2.903E-04	2.903E-04	ND	ND	F	F
1-Naphthylamine	ND	ND	ND	7.581E-04	7.581E-04	ND	ND	F	F
2-Naphthylamine	ND	ND	ND	6.719E-04	6.719E-04	ND	ND	F	F
2,3,4,6-Tetrachlorophenol	ND	ND	ND	3.075E-04	3.075E-04	ND	ND	F	F
Diethylphthalate	8.956E-04	8.956E-04	3.475E-04	1.120E-04	1.120E-04	2.58	8.00	C	B
4-Chlorophenylphenyl ether	ND	ND	ND	1.219E-04	1.219E-04	ND	ND	F	F
Fluorene	ND	ND	ND	1.464E-04	1.464E-04	ND	ND	F	F
5-Nitro-o-toluidine	ND	ND	ND	1.564E-04	1.564E-04	ND	ND	F	F
4-Nitroaniline	ND	ND	ND	3.338E-04	3.338E-04	ND	ND	F	F
4,6-Dinitro-2-methylphenol	ND	ND	ND	1.172E-02	1.172E-02	ND	ND	F	F
Diphenylamine/N-NitrosoDPA	ND	ND	ND	1.585E-04	1.585E-04	ND	ND	F	F
sym-Trinitrobenzene	ND	ND	ND	5.384E-04	5.384E-04	ND	ND	F	F
Diallate	ND	ND	ND	2.046E-04	2.046E-04	ND	ND	F	F
Phenacetin	ND	ND	ND	9.648E-05	9.648E-05	ND	ND	F	F
4-Bromophenylphenyl ether	ND	ND	ND	2.968E-04	2.968E-04	ND	ND	F	F
Hexachlorobenzene	ND	ND	ND	1.598E-04	1.598E-04	ND	ND	F	F
4-Aminobiphenyl	ND	ND	ND	8.916E-04	8.916E-04	ND	ND	F	F
Pronamide	ND	ND	ND	1.107E-04	1.107E-04	ND	ND	F	F
Pentachlorophenol	ND	ND	ND	1.240E-02	1.240E-02	ND	ND	F	F
Pentachloronitrobenzene	ND	ND	ND	5.772E-04	5.772E-04	ND	ND	F	F
Phenanthrene	ND	ND	ND	2.627E-04	2.627E-04	ND	ND	F	F
Anthracene	ND	ND	ND	1.576E-04	1.576E-04	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Carbazole	ND	ND	ND	1.055E-04	1.055E-04	ND	ND	F	F
Di-n-butylphthalate	1.302E-03	1.302E-03	1.357E-03	7.322E-05	7.322E-05	0.96	17.78	F	A
4-Nitroquinoline-1-oxide	ND	ND	ND	9.691E-03	9.691E-03	ND	ND	F	F
Methapyrilene	ND	ND	ND	8.916E-03	8.916E-03	ND	ND	F	F
Fluoranthene	ND	ND	ND	1.555E-04	1.555E-04	ND	ND	F	F
Benzidine	ND	ND	ND	5.772E-03	5.772E-03	ND	ND	F	F
Pyrene	ND	ND	ND	2.136E-04	2.136E-04	ND	ND	F	F
p-Dimethylaminoazobenzene	ND	ND	ND	1.585E-04	1.585E-04	ND	ND	F	F
Chlorobenzilate	ND	ND	ND	2.205E-04	2.205E-04	ND	ND	F	F
Kepone	ND	ND	ND	8.097E-03	8.097E-03	ND	ND	F	F
Butylbenzylphthalate	ND	ND	ND	8.830E-05	8.830E-05	ND	ND	F	F
3,3'-Dimethylbenzidine	ND	ND	ND	8.528E-04	8.528E-04	ND	ND	F	F
2-Acetylaminofluorene	ND	ND	ND	1.344E-04	1.344E-04	ND	ND	F	F
bis(2-Ethylhexyl)phthalate	6.725E-03	6.725E-03	ND	5.255E-04	5.255E-04	10.00	12.80	A	A
3,3'-Dichlorobenzidine	ND	ND	ND	1.443E-04	1.443E-04	ND	ND	F	F
Benz(a)anthracene	ND	ND	ND	1.947E-04	1.947E-04	ND	ND	F	F
Chrysene	ND	ND	ND	2.102E-04	2.102E-04	ND	ND	F	F
Di-n-octylphthalate	ND	ND	ND	1.344E-04	1.344E-04	ND	ND	F	F
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	1.986E-04	1.986E-04	ND	ND	F	F
Benzo(b)fluoranthene (a)	ND	ND	ND	1.197E-04	1.197E-04	ND	ND	F	F
Benzo(k)fluoranthene (a)	ND	ND	ND	2.502E-04	2.502E-04	ND	ND	F	F
Benz(a)pyrene	ND	ND	ND	1.417E-04	1.417E-04	ND	ND	F	F
3-Methylcholanthrene	ND	ND	ND	5.039E-04	5.039E-04	ND	ND	F	F
Indeno(1,2,3-cd)pyrene	ND	ND	ND	9.433E-05	9.433E-05	ND	ND	F	F
Dibenz(a,h)anthracene	ND	ND	ND	1.060E-04	1.060E-04	ND	ND	F	F
Benzo(g,h,i)perylene	ND	ND	ND	1.016E-04	1.016E-04	ND	ND	F	F

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Pyridine	79	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2-Picoline	93	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Phenol	94	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Aniline	93	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Pentachloroethane	202	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2-Methylphenol	108	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
o-Toluidine	107	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Acetophenone	120	0.117	5.830E-04	2.708E-04	3.122E-04	0.8827	3.537E-04	34,602	7.641E-07	1	7.641E-07
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Hexachloroethane	237	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Nitrobenzene	123	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Isophorone	138	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Benzoic acid	122	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Naphthalene	128	0.131	6.994E-04	2.995E-04	3.999E-04	0.8827	4.530E-04	34,602	9.786E-07	1	9.786E-07
p-Chloroaniline	128	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Hexachloropropene	249	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Safrole	162	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2-Methylnaphthalene	142	0.046	2.725E-04	ND	2.725E-04	0.8827	3.087E-04	34,602	6.669E-07	1	6.669E-07
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Isosafrole	162	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Acenaphthylene	152	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Acenaphthene	154	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Dibenzofuran	168	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Diethylphthalate	222	0.097	8.956E-04	3.475E-04	5.482E-04	0.8827	6.210E-04	34,602	1.342E-06	1	1.342E-06
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Fluorene	166	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Diallate	270	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Phenacetin	179	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Pronamide	228	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Phenanthrene	178	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Anthracene	178	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Carbazole	167	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Di-n-butylphthalate	278	0.113	1.302E-03	1.357E-03	-5.494E-05	0.8827	ND	34,602	ND	1	ND
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Methapyrilene	261	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Fluoranthene	202	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Benzidine	184	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Pyrene	202	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Kepone	491	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Butylbenzylphthalate	312	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR GREEN STAR CLUSTER TEST (31 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
bis(2-Ethylhexyl)phthalate	391	0.413	6.725E-03	ND	6.725E-03	0.8827	7.618E-03	34,602	1.646E-05	1	1.646E-05
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Chrysene	228	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.8827	ND	34,602	ND	1	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

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GREEN PARACHUTE SIGNAL FLARE

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TABLE A-1. AEC MUNITION ITEM INPUT DATA SHEET (31 MARCH 1998)
Munition Item: Green Parachute Signal Flare
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	509.2	626.8	NA	NA	NA	NA	567.98
PM_{10}	302.7	324.3	NA	NA	NA	NA	313.52
Metals	509.2	626.8	NA	NA	NA	NA	567.98
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	75.2	64.8	NA	NA	NA	NA	69.98
HCl/Cl_2	28.7	23.0	NA	NA	NA	NA	25.85
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	106.0	93.7	NA	NA	NA	NA	99.81
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	43.5	45.0	NA	NA	NA	NA	44.25
HCl/Cl_2 (NaOH)	40.0	40.5	NA	NA	NA	NA	40.25

Sample Weight Gain:	Run No. 1		Run No. 2		Run No. 3		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.8734	0.8782	NA	NA	NA	NA	0.8758
PM_{10}	0.3787	0.4867	NA	NA	NA	NA	0.4327

Dilution Correction Factors:	Run No. 1	Run No. 2	Run No. 3	Average
TSP	0.8762	NA	NA	0.8762
PM_{10}	0.9151	NA	NA	0.9151
Metals	0.8762	NA	NA	0.8762
VOCs	0.9429	NA	NA	0.9429
SVOCs	0.8575	NA	NA	0.8575
HCl/Cl_2	0.8575	NA	NA	0.8575
Energetics	NA	NA	NA	NA
Dioxin/Furan	0.8575	NA	NA	0.8575
Residue	NA	NA	NA	NA
CEM	0.8767	NA	NA	0.8767

	Run No. 1	Run No. 2	Run No. 3	Average
Initial Plume Volume (m^3)	968.70	NA	NA	968.70
Net Explosive Weight (g)	143.34	NA	NA	143.34

TABLE A-2. AEC BACKGROUND INPUT DATA SHEET (31 MARCH 1998)
Munition Item: Green Parachute Signal Flare
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	WP - Background		Reagent Blank		Field Blank		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	1360.6	NA	NA	NA	NA	NA	1360.64
PM_{10}	1008.5	NA	NA	NA	NA	NA	1008.45
Metals	1360.6	NA	NA	NA	NA	NA	1360.64
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	117.9	NA	NA	NA	NA	NA	117.90
HCl/Cl_2	29.9	NA	NA	NA	NA	NA	29.93
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	156.5	NA	NA	NA	NA	NA	156.49
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	WP - Background		Reagent Blank		Field Blank		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	42.5	NA	107.2	NA	45.3	NA	42.50
HCl/Cl_2 (NaOH)	37.0	NA	92.0	NA	41.5	NA	37.00
HCl/Cl_2 (H_2O)	NA	NA	100.0	NA	NA	NA	#DIV/0!

Sample Weight Gain:	WP - Background		Reagent Blank		Field Blank		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.0015	NA	-0.0026	NA	-0.0037	NA	0.0015
PM_{10}	0.0027	NA	-0.0002	NA	-0.0029	NA	0.0027

TABLE A-3. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS DATA EVALUATION FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate									
TSP	5.503E+01	5.503E+01	3.893E-02	ND	ND	1413.46	10.00	A	A
PM_{10}	4.859E+01	4.859E+01	9.455E-02	ND	ND	513.88	10.00	A	A
Hydrogen Chloride (HCl)/Chlorine (Cl_2)									
HCl	ND	ND	ND	6.829E-02	6.604E-02	ND	ND	F	F
Cl_2	1.574E-02	1.574E-02	1.380E-02	1.680E-03	1.653E-03	1.14	9.52	D	B
Dioxin/Furan									
Dioxin TEQ (a)	1.380E-09	1.380E-09	1.512E-10	ND	ND	9.13	10.00	B	A
Continuous Emissions Monitoring (CEM) System									
Carbon Monoxide (CO)	3.939E+00	3.939E+00	5.106E-01	ND	ND	7.71	10.00	B	A
Nitrogen Oxide (NOx)	9.963E-01	9.963E-01	1.313E-01	ND	ND	7.59	10.00	B	A
HCl	-3.659E-01	-3.659E-01	-3.404E-01	ND	ND	1.07	10.00	D	A
Carbon Dioxide (CO_2)	7.370E+02	7.370E+02	7.034E+02	ND	ND	1.05	10.00	D	A
Sulfur Dioxide (SO_2)	7.964E-04	7.964E-04	-2.560E-02	ND	ND	0.03	10.00	F	A
Particulate-phase Metals									
Aluminum	3.827E-02	3.827E-02	NA (b)	1.247E-03	9.475E-04	NA (b)	40.39	NA (b)	A
Antimony	4.842E-04	4.842E-04	NA (b)	1.792E-04	1.356E-04	NA (b)	3.57	NA (b)	C
Arsenic	ND	ND	NA (b)	1.231E-04	9.312E-05	NA (b)	ND	NA (b)	F
Barium	3.535E+00	3.535E+00	NA (b)	1.367E-05	1.035E-05	NA (b)	341704.24	NA (b)	A
Beryllium	6.674E-06	6.674E-06	NA (b)	7.623E-06	5.772E-06	NA (b)	1.16	NA (b)	D
Cadmium	4.751E-04	4.751E-04	NA (b)	1.519E-05	1.149E-05	NA (b)	41.35	NA (b)	A
Chromium	2.984E-03	2.984E-03	NA (b)	2.685E-05	2.031E-05	NA (b)	146.91	NA (b)	A
Cobalt	1.492E-03	1.492E-03	NA (b)	2.685E-05	2.031E-05	NA (b)	73.46	NA (b)	A
Copper	5.651E-03	5.651E-03	NA (b)	6.589E-05	4.982E-05	NA (b)	113.42	NA (b)	A
Lead	1.887E-04	1.887E-04	NA (b)	1.013E-04	7.678E-05	NA (b)	2.46	NA (b)	C
Magnesium	1.113E+01	1.113E+01	NA (b)	2.625E-04	1.988E-04	NA (b)	56010.54	NA (b)	A
Manganese	4.658E-03	4.658E-03	NA (b)	1.165E-05	8.821E-06	NA (b)	528.05	NA (b)	A
Nickel	2.130E-04	2.130E-04	NA (b)	4.100E-05	3.104E-05	NA (b)	6.86	NA (b)	B
Phosphorus	4.809E-03	4.809E-03	NA (b)	2.881E-04	2.184E-04	NA (b)	22.02	NA (b)	A
Selenium	ND	ND	NA (b)	9.802E-05	7.406E-05	NA (b)	ND	NA (b)	F
Silver	ND	ND	NA (b)	1.824E-05	1.383E-05	NA (b)	ND	NA (b)	F
Thallium	ND	ND	NA (b)	2.309E-04	1.748E-04	NA (b)	ND	NA (b)	F
Zinc	1.518E-03	1.518E-03	NA (b)	2.194E-04	1.661E-04	NA (b)	9.14	NA (b)	B
Mercury	5.603E-06	5.603E-06	NA (b)	4.433E-07	4.313E-07	NA (b)	12.99	NA (b)	A

a
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD.
b
Insufficient material to analyze.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-4. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 1 DATA FOR GREEN PARACHUTE SIGNAL FLARE (31 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (a), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate											
TSP	-	-	5.503E+01	3.893E-02	5.499E+01	0.8762	6.276E+01	34,209	1.340E-01	1	1.340E-01
PM_{10}	-	-	4.859E+01	9.455E-02	4.849E+01	0.9151	5.299E+01	34,209	1.132E-01	1	1.132E-01
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Cl_2 (b)	71	5.338	1.574E-02	1.380E-02	1.939E-03	0.8575	2.261E-03	34,209	4.830E-06	1	4.830E-06
Dioxin/Furan											
Dioxin TEQ (c)	-	-	1.380E-09	1.512E-10	1.229E-09	0.8575	1.433E-09	34,209	3.060E-12	1	3.060E-12
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	3381.302	3.939E+00	5.106E-01	3.428E+00	0.8767	3.910E+00	34,209	8.350E-03	1	8.350E-03
Nitrogen Oxide (NOx)	46	520.620	9.963E-01	1.313E-01	8.650E-01	0.8767	9.866E-01	34,209	2.107E-03	1	2.107E-03
HCl (b)	36	-244.292	-3.659E-01	-3.404E-01	-2.541E-02	0.8767	ND	34,209	ND	1	ND
Carbon Dioxide (CO_2)	44	402662.400	7.370E+02	7.034E+02	3.359E+01	0.8767	3.831E+01	34,209	8.182E-02	1	8.182E-02
Sulfur Dioxide (SO_2)	64	0.299	7.964E-04	-2.560E-02	2.640E-02	0.8767	3.011E-02	34,209	6.430E-05	1	6.430E-05
Particulate-phase Metals											
Aluminum	27	34.073	3.827E-02	NA (d)	3.827E-02	0.8762	4.368E-02	34,209	9.328E-05	1	9.328E-05
Antimony	122	0.095	4.842E-04	NA (d)	4.842E-04	0.8762	5.526E-04	34,209	1.180E-06	1	1.180E-06
Arsenic	75	ND	ND	NA (d)	ND	0.8762	ND	34,209	ND	1	ND
Barium	137	620.319	3.535E+00	NA (d)	3.535E+00	0.8762	4.035E+00	34,209	8.617E-03	1	8.617E-03
Beryllium	9	0.018	6.674E-06	NA (d)	6.674E-06	0.8762	7.617E-06	34,209	1.627E-08	1	1.627E-08
Cadmium	112	0.102	4.751E-04	NA (d)	4.751E-04	0.8762	5.422E-04	34,209	1.158E-06	1	1.158E-06
Chromium	52	1.379	2.984E-03	NA (d)	2.984E-03	0.8762	3.405E-03	34,209	7.273E-06	1	7.273E-06
Cobalt	59	0.608	1.492E-03	NA (d)	1.492E-03	0.8762	1.703E-03	34,209	3.637E-06	1	3.637E-06
Copper	64	2.123	5.651E-03	NA (d)	5.651E-03	0.8762	6.450E-03	34,209	1.377E-05	1	1.377E-05
Lead	207	0.022	1.887E-04	NA (d)	1.887E-04	0.8762	2.153E-04	34,209	4.599E-07	1	4.599E-07
Magnesium	24	11150.201	1.113E+01	NA (d)	1.113E+01	0.8762	1.271E+01	34,209	2.713E-02	1	2.713E-02
Manganese	55	2.036	4.658E-03	NA (d)	4.658E-03	0.8762	5.316E-03	34,209	1.135E-05	1	1.135E-05
Nickel	59	0.087	2.130E-04	NA (d)	2.130E-04	0.8762	2.431E-04	34,209	5.191E-07	1	5.191E-07
Phosphorus	31	3.729	4.809E-03	NA (d)	4.809E-03	0.8762	5.489E-03	34,209	1.172E-05	1	1.172E-05
Selenium	79	ND	ND	NA (d)	ND	0.8762	ND	34,209	ND	1	ND
Silver	108	ND	ND	NA (d)	ND	0.8762	ND	34,209	ND	1	ND
Thallium	204	ND	ND	NA (d)	ND	0.8762	ND	34,209	ND	1	ND
Zinc	65	0.561	1.518E-03	NA (d)	1.518E-03	0.8762	1.732E-03	34,209	3.699E-06	1	3.699E-06
Mercury	201	0.001	5.603E-06	NA (d)	5.603E-06	0.8762	6.394E-06	34,209	1.366E-08	1	1.366E-08

a
Estimated from tracer data as presented in Volume IV.
b
HCl/Cl_2 levels were too low to be reliably measured.
c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.
d
Insufficient material to analyze.

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Total Nonmethane Hydrocarbons (TNMHC)									
TNMHC	1.380E-01	1.380E-01	6.070E-02	1.000E-04	1.000E-04	2.27	1379.50	C	A
Volatile Organic Compounds (VOCs)									
Ethane	5.000E-03	5.000E-03	1.900E-03	1.000E-04	1.000E-04	2.63	50.00	C	A
Ethylene	2.605E-02	2.605E-02	8.000E-04	1.000E-04	1.000E-04	32.56	260.50	A	A
Acetylene	1.390E-02	1.390E-02	2.800E-03	1.000E-04	1.000E-04	4.96	139.00	C	A
Propane	1.900E-03	1.900E-03	1.400E-03	1.000E-04	1.000E-04	1.36	19.00	D	A
Propene	7.650E-03	7.650E-03	7.000E-04	1.000E-04	1.000E-04	10.93	76.50	A	A
i-Butane	4.000E-04	4.000E-04	4.000E-04	1.000E-04	1.000E-04	1.00	4.00	D	C
i-Butene	9.500E-04	9.500E-04	4.000E-04	1.000E-04	1.000E-04	2.38	9.50	C	B
1-Butene	2.350E-03	2.350E-03	2.000E-04	1.000E-04	1.000E-04	11.75	23.50	A	A
1,3-Butadiene	1.750E-03	1.750E-03	2.000E-04	1.000E-04	1.000E-04	8.75	17.50	B	A
n-Butane	1.250E-03	1.250E-03	1.100E-03	1.000E-04	1.000E-04	1.14	12.50	D	A
trans-2-Butene	1.100E-03	1.100E-03	3.000E-04	1.000E-04	1.000E-04	3.67	11.00	C	A
2,2-Dimethylpropane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Butene	3.000E-04	3.000E-04	1.000E-04	1.000E-04	1.000E-04	3.00	3.00	C	C
3-Methyl-1-butene	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
i-Pentane	1.500E-03	1.500E-03	1.600E-03	1.000E-04	1.000E-04	0.94	15.00	F	A
1-Pentene	4.000E-04	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
2-Methyl-1-butene	1.500E-04	1.500E-04	ND	1.000E-04	1.000E-04	10.00	1.50	A	D
n-Pentane	1.650E-03	1.650E-03	1.600E-03	1.000E-04	1.000E-04	1.03	16.50	D	A
Isoprene	1.000E-04	1.000E-04	2.000E-04	1.000E-04	1.000E-04	0.50	1.00	F	D
trans-2-Pentene	2.000E-04	2.000E-04	ND	1.000E-04	1.000E-04	10.00	2.00	A	C
cis-2-Pentene	2.000E-04	2.000E-04	ND	1.000E-04	1.000E-04	10.00	2.00	A	C
2-Methyl-2-butene	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
2,2-Dimethylbutane	2.000E-04	2.000E-04	6.000E-04	1.000E-04	1.000E-04	0.33	2.00	F	C
Cyclopentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
4-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Cyclopentane	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2,3-Dimethylbutane	6.500E-04	6.500E-04	5.000E-04	1.000E-04	1.000E-04	1.30	6.50	D	B
cis-4-Methyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylpentane	1.400E-03	1.400E-03	1.900E-03	1.000E-04	1.000E-04	0.74	14.00	F	A
3-Methylpentane	3.000E-04	3.000E-04	1.000E-03	1.000E-04	1.000E-04	0.30	3.00	F	C
2-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
1-Hexene	3.500E-04	3.500E-04	ND	1.000E-04	1.000E-04	10.00	3.50	A	C
n-Hexane	1.500E-03	1.500E-03	1.600E-03	1.000E-04	1.000E-04	0.94	15.00	F	A
trans-2-Hexene	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
2-Methyl-2-pentene	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
cis-2-Hexene	1.000E-04	1.000E-04	ND	1.000E-04	1.000E-04	10.00	1.00	A	D
Methylcyclopentane	5.500E-04	5.500E-04	6.000E-04	1.000E-04	1.000E-04	0.92	5.50	F	B
2,4-Dimethylpentane	1.100E-03	1.100E-03	1.000E-03	1.000E-04	1.000E-04	1.10	11.00	D	A

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Benzene	8.050E-03	8.050E-03	2.300E-03	1.000E-04	1.000E-04	3.50	80.50	C	A
Cyclohexane	5.000E-04	5.000E-04	6.000E-04	1.000E-04	1.000E-04	0.83	5.00	F	B
2-Methylhexane	7.500E-04	7.500E-04	7.000E-04	1.000E-04	1.000E-04	1.07	7.50	D	B
2,3-Dimethylpentane	2.150E-03	2.150E-03	2.100E-03	1.000E-04	1.000E-04	1.02	21.50	D	A
3-Methylhexane	7.500E-04	7.500E-04	1.000E-03	1.000E-04	1.000E-04	0.75	7.50	F	B
2,2,4-Trimethylpentane	4.100E-03	4.100E-03	4.200E-03	1.000E-04	1.000E-04	0.98	41.00	F	A
n-Heptane	7.000E-04	7.000E-04	7.000E-04	1.000E-04	1.000E-04	1.00	7.00	D	B
2,4,4-Trimethyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclohexane	4.500E-04	4.500E-04	5.000E-04	1.000E-04	1.000E-04	0.90	4.50	F	C
2,4,4-Trimethyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,5-Dimethylhexane	3.500E-04	3.500E-04	4.000E-04	1.000E-04	1.000E-04	0.88	3.50	F	C
2,4-Dimethylhexane	5.000E-04	5.000E-04	5.000E-04	1.000E-04	1.000E-04	1.00	5.00	D	B
2,3,4-Trimethylpentane	1.000E-03	1.000E-03	1.000E-03	1.000E-04	1.000E-04	1.00	10.00	D	A
Toluene	5.700E-03	5.700E-03	5.000E-03	1.000E-04	1.000E-04	1.14	57.00	D	A
2,3-Dimethylhexane	3.500E-04	3.500E-04	4.000E-04	1.000E-04	1.000E-04	0.88	3.50	F	C
2-Methylheptane	4.500E-04	4.500E-04	2.000E-04	1.000E-04	1.000E-04	2.25	4.50	C	C
3-Ethylhexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylheptane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2,4-Trimethylhexane	1.000E-04	1.000E-04	2.000E-04	1.000E-04	1.000E-04	0.50	1.00	F	D
n-Octane	3.000E-04	3.000E-04	2.000E-04	1.000E-04	1.000E-04	1.50	3.00	D	C
Ethylcyclohexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Ethylbenzene	6.500E-04	6.500E-04	5.000E-04	1.000E-04	1.000E-04	1.30	6.50	D	B
m-Xylene & p-Xylene	2.850E-03	2.850E-03	2.500E-03	1.000E-04	1.000E-04	1.14	28.50	D	A
Styrene	4.500E-04	4.500E-04	5.000E-04	1.000E-04	1.000E-04	0.90	4.50	F	C
o-Xylene	1.050E-03	1.050E-03	9.000E-04	1.000E-04	1.000E-04	1.17	10.50	D	A
n-Nonane	1.500E-04	1.500E-04	ND	1.000E-04	1.000E-04	10.00	1.50	A	D
i-Propylbenzene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Propylbenzene	2.500E-04	2.500E-04	2.000E-04	1.000E-04	1.000E-04	1.25	2.50	D	C
p-Ethyltoluene	1.000E-03	1.000E-03	6.000E-04	1.000E-04	1.000E-04	1.67	10.00	D	A
m-Ethyltoluene	3.500E-04	3.500E-04	2.000E-04	1.000E-04	1.000E-04	1.75	3.50	D	C
1,3,5-Trimethylbenzene	4.500E-04	4.500E-04	3.000E-04	1.000E-04	1.000E-04	1.50	4.50	D	C
o-Ethyltoluene	3.500E-04	3.500E-04	2.000E-04	1.000E-04	1.000E-04	1.75	3.50	D	C
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.150E-03	1.150E-03	8.000E-04	1.000E-04	1.000E-04	1.44	11.50	D	A
n-Decane	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
alpha-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
beta-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
delta 3-Carene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
d-Limonene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
MTBE	9.000E-04	9.000E-04	7.000E-04	1.000E-04	1.000E-04	1.29	9.00	D	B
ETBE	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Dichlorodifluoromethane	1.482E-03	1.482E-03	1.130E-03	4.992E-04	4.992E-04	1.31	2.97	D	C
Methylchloride	ND	ND	ND	2.080E-04	2.080E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Dichlorotetrafluoroethane	ND	ND	ND	7.114E-04	7.114E-04	ND	ND	F	F
Chloroethene	ND	ND	ND	2.621E-04	2.621E-04	ND	ND	F	F
1,3-Butadiene	1.780E-03	1.780E-03	2.034E-04	2.246E-04	2.246E-04	8.75	7.92	B	B
Methylbromide	ND	ND	ND	3.952E-04	3.952E-04	ND	ND	F	F
Ethylchloride	ND	ND	ND	2.683E-04	2.683E-04	ND	ND	F	F
Trichloromonofluoromethane	2.576E-03	2.576E-03	2.533E-03	5.699E-04	5.699E-04	1.02	4.52	D	C
Vinylidenechloride	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Methylenechloride	5.547E-02	5.547E-02	8.068E-04	3.536E-04	3.536E-04	68.75	156.86	A	A
Allylchloride	ND	ND	ND	3.182E-04	3.182E-04	ND	ND	F	F
1,1,2-Trichloro-1,2,2-trifluoroethane	8.817E-04	8.817E-04	8.258E-04	7.821E-04	7.821E-04	1.07	1.13	D	D
1,1-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
1,2-Dichloroethene	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Chloroform	ND	ND	ND	4.950E-04	4.950E-04	ND	ND	F	F
1,2-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
Methylchloroform	3.897E-04	3.897E-04	3.482E-04	5.533E-04	5.533E-04	1.12	0.70	D	F
Benzene	8.188E-03	8.188E-03	2.339E-03	3.245E-04	3.245E-04	3.50	25.23	C	A
Carbontetrachloride	8.360E-04	8.360E-04	7.072E-04	6.406E-04	6.406E-04	1.18	1.30	D	D
1,2-Dichloropropane	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Trichloroethylene	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
cis 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
trans 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
1,1,2-Trichloroethane	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
Toluene	5.798E-03	5.798E-03	5.086E-03	3.827E-04	3.827E-04	1.14	15.15	D	A
1,2-Dibromoethane	ND	ND	ND	7.821E-04	7.821E-04	ND	ND	F	F
Perchloroethylene	ND	ND	ND	6.906E-04	6.906E-04	ND	ND	F	F
Chlorobenzene	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Ethylbenzene	9.979E-04	9.979E-04	7.676E-04	6.656E-04	6.656E-04	1.30	1.50	D	D
m&p-Xylene	2.859E-03	2.859E-03	2.390E-03	4.410E-04	4.410E-04	1.20	6.48	D	B
Styrene	ND	ND	ND	4.326E-04	4.326E-04	ND	ND	F	F
1,1,2,2-Tetrachloroethane	ND	ND	ND	6.989E-04	6.989E-04	ND	ND	F	F
o-Xylene	1.068E-03	1.068E-03	9.154E-04	4.410E-04	4.410E-04	1.17	2.42	D	C
p-Ethyltoluene	5.413E-04	5.413E-04	4.433E-04	4.992E-04	4.992E-04	1.22	1.08	D	D
1,3,5-Trimethylbenzene	3.447E-04	3.447E-04	2.679E-04	4.992E-04	4.992E-04	1.29	0.69	D	F
1,2,4-Trimethylbenzene	1.097E-03	1.097E-03	8.531E-04	4.992E-04	4.992E-04	1.29	2.20	D	C
Benzylchloride	ND	ND	ND	5.283E-04	5.283E-04	ND	ND	F	F
m-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
p-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
o-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	7.530E-04	7.530E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	1.086E-03	1.086E-03	ND	ND	F	F
Phenylacetylene	ND	ND	ND	4.243E-04	4.243E-04	ND	ND	F	F
Indane	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2,3-Dihydro-1-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2,3-Dihydro-4-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F
Naphthalene	1.276E-03	1.276E-03	4.078E-04	5.325E-04	5.325E-04	3.13	2.40	C	C
2-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
1-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
Cyanogen	ND	ND	ND	2.163E-04	2.163E-04	ND	ND	F	F
Methylnitrite	3.948E-04	3.948E-04	ND	2.538E-04	2.538E-04	10.00	1.56	A	D
Acetonitrile	5.775E-04	5.775E-04	ND	1.706E-04	1.706E-04	10.00	3.39	A	C
Acrylonitrile	5.531E-04	5.531E-04	ND	2.205E-04	2.205E-04	10.00	2.51	A	C
Nitromethane	1.328E-03	1.328E-03	ND	2.538E-04	2.538E-04	10.00	5.24	A	B
Propanenitrile	ND	ND	ND	2.288E-04	2.288E-04	ND	ND	F	F
2-Methylpropanenitrile	ND	ND	ND	2.870E-04	2.870E-04	ND	ND	F	F
Pentanenitrile	ND	ND	ND	3.453E-04	3.453E-04	ND	ND	F	F
Hexanenitrile	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Benzonitrile	5.671E-04	5.671E-04	ND	4.285E-04	4.285E-04	10.00	1.32	A	D
2-Nitrophenol	ND	ND	ND	5.782E-04	5.782E-04	ND	ND	F	F
Acrolein	4.793E-04	4.793E-04	ND	2.330E-04	2.330E-04	10.00	2.06	A	C
Acetone	1.064E-02	1.064E-02	7.510E-03	2.330E-04	2.330E-04	1.42	45.67	D	A
1-Hydroxy-2-propanone	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
Furan	3.231E-04	3.231E-04	ND	2.829E-04	2.829E-04	10.00	1.14	A	D
2-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
2-Methylpropanal	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
1-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
Methacrolein	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
Methyl-vinyl Ketone	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
MTBE	1.008E-03	1.008E-03	9.140E-04	3.661E-04	3.661E-04	1.10	2.75	D	C
2,3-Butanedione	ND	ND	ND	3.578E-04	3.578E-04	ND	ND	F	F
Butanal	4.578E-04	4.578E-04	3.905E-04	2.995E-04	2.995E-04	1.17	1.53	D	D
2-Butanone	1.902E-03	1.902E-03	9.694E-04	2.995E-04	2.995E-04	1.96	6.35	D	B
2-Methyl-1,3-dioxolane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2-Methylfuran	ND	ND	ND	3.411E-04	3.411E-04	ND	ND	F	F
Tetrahydrofuran	ND	ND	ND	2.995E-04	2.995E-04	ND	ND	F	F
trans-2-Butenal	1.774E-04	1.774E-04	ND	2.912E-04	2.912E-04	10.00	0.61	A	F
Acetic Acid	2.194E-03	2.194E-03	1.131E-03	2.496E-04	2.496E-04	1.94	8.79	D	B
1-Butanol	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
2-Pentanone	6.079E-04	6.079E-04	ND	3.578E-04	3.578E-04	10.00	1.70	A	D
Pentanal	1.427E-03	1.427E-03	1.187E-03	3.578E-04	3.578E-04	1.20	3.99	D	C
1,4-Dioxane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
Methyl Methacrylate	ND	ND	ND	4.160E-04	4.160E-04	ND	ND	F	F
Cyclopentanone	4.337E-04	4.337E-04	ND	3.494E-04	3.494E-04	10.00	1.24	A	D
Hexanal	7.876E-04	7.876E-04	7.147E-04	4 160E-04	4.160E-04	1.10	1.89	D	D
2-Furaldehyde	3.859E-04	3.859E-04	ND	3.994E-04	3.994E-04	10.00	0.97	A	F
Cyclohexanone	ND	ND	ND	4.077E-04	4.077E-04	ND	ND	F	F
Heptanal	6.667E-04	6.667E-04	5.849E-04	4.742E-04	4.742E-04	1.14	1.41	D	D

TABLE A-5. AEC - VOC DATA EVALUATION FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2-Butoxyethanol	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
Benzaldehyde	1.651E-03	1.651E-03	7.646E-04	4.410E-04	4.410E-04	2.16	3.74	C	C
6-Methyl-5-hepten-2-one	ND	ND	9.693E-04	5.242E-04	5.242E-04	ND	ND	F	F
Octanal	1.515E-03	1.515E-03	9.075E-04	5.325E-04	5.325E-04	1.67	2.85	D	C
Benzofuran	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2-Ethyl-1-hexanol	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
Acetophonone	3.137E-04	3.137E-04	ND	4.992E-04	4.992E-04	10.00	0.63	A	F
Nonanal	2.434E-03	2.434E-03	1.344E-03	5.907E-04	5.907E-04	1.81	4.12	D	C
Decanal	2.660E-03	2.660E-03	1.007E-03	6.490E-04	6.490E-04	2.64	4.10	C	C
Carbonyl Sulfide	2.988E-04	2.988E-04	1.869E-04	2.496E-04	2.496E-04	1.60	1.20	D	D
Carbon Disulfide	9.840E-03	9.840E-03	5.277E-04	3.162E-04	3.162E-04	18.65	31.12	A	A
Thiophene	3.457E-04	3.457E-04	ND	3.494E-04	3.494E-04	10.00	0.99	A	F
Dimethyldisulfide	ND	ND	ND	3.910E-04	3.910E-04	ND	ND	F	F

a
Compounds in bold represent duplicate values.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	1.380E-01	6.070E-02	7.725E-02	0.9429	8.193E-02	34,209	1.750E-04	1	1.750E-04
Volatile Organic Compounds (VOCs)											
Ethane	30	4.006	5.000E-03	1.900E-03	3.100E-03	0.9429	3.288E-03	34,209	7.021E-06	1	7.021E-06
Ethylene	28	22.364	2.605E-02	8.000E-04	2.525E-02	0.9429	2.678E-02	34,209	5.719E-05	1	5.719E-05
Acetylene	26	12.851	1.390E-02	2.800E-03	1.110E-02	0.9429	1.177E-02	34,209	2.514E-05	1	2.514E-05
Propane	44	1.038	1.900E-03	1.400E-03	5.000E-04	0.9429	5.303E-04	34,209	1.132E-06	1	1.132E-06
Propene	42	4.378	7.650E-03	7.000E-04	6.950E-03	0.9429	7.371E-03	34,209	1.574E-05	1	1.574E-05
i-Butane	58	0.166	4.000E-04	4.000E-04	0.000E+00	0.9429	ND	34,209	ND	1	ND
i-Butene	56	0.408	9.500E-04	4.000E-04	5.500E-04	0.9429	5.833E-04	34,209	1.246E-06	1	1.246E-06
1-Butene	56	1.009	2.350E-03	2.000E-04	2.150E-03	0.9429	2.280E-03	34,209	4.870E-06	1	4.870E-06
1,3-Butadiene	54	0.779	1.750E-03	2.000E-04	1.550E-03	0.9429	1.644E-03	34,209	3.511E-06	1	3.511E-06
n-Butane	58	0.518	1.250E-03	1.100E-03	1.500E-04	0.9429	1.591E-04	34,209	3.397E-07	1	3.397E-07
trans-2-Butene	56	0.472	1.100E-03	3.000E-04	8.000E-04	0.9429	8.484E-04	34,209	1.812E-06	1	1.812E-06
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
cis-2-Butene	56	0.129	3.000E-04	1.000E-04	2.000E-04	0.9429	2.121E-04	34,209	4.530E-07	1	4.530E-07
3-Methyl-1-butene	70	0.034	1.000E-04	ND	1.000E-04	0.9429	1.061E-04	34,209	2.265E-07	1	2.265E-07
i-Pentane	72	0.501	1.500E-03	1.600E-03	-1.000E-04	0.9429	ND	34,209	ND	1	ND
1-Pentene	70	0.137	4.000E-04	ND	4.000E-04	0.9429	4.242E-04	34,209	9.060E-07	1	9.060E-07
2-Methyl-1-butene	70	0.052	1.500E-04	ND	1.500E-04	0.9429	1.591E-04	34,209	3.397E-07	1	3.397E-07
n-Pentane	72	0.551	1.650E-03	1.600E-03	5.000E-05	0.9429	5.303E-05	34,209	1.132E-07	1	1.132E-07
Isoprene	68	0.035	1.000E-04	2.000E-04	-1.000E-04	0.9429	ND	34,209	ND	1	ND
trans-2-Pentene	70	0.069	2.000E-04	ND	2.000E-04	0.9429	2.121E-04	34,209	4.530E-07	1	4.530E-07
cis-2-Pentene	70	0.069	2.000E-04	ND	2.000E-04	0.9429	2.121E-04	34,209	4.530E-07	1	4.530E-07
2-Methyl-2-butene	70	0.034	1.000E-04	ND	1.000E-04	0.9429	1.061E-04	34,209	2.265E-07	1	2.265E-07
2,2-Dimethylbutane	86	0.056	2.000E-04	6.000E-04	-4.000E-04	0.9429	ND	34,209	ND	1	ND
Cyclopentene	68	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Cyclopentane	70	ND	ND	1.000E-04	ND	0.9429	ND	34,209	ND	1	ND
2,3-Dimethylbutane	86	0.182	6.500E-04	5.000E-04	1.500E-04	0.9429	1.591E-04	34,209	3.397E-07	1	3.397E-07
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2-Methylpentane	86	0.391	1.400E-03	1.900E-03	-5.000E-04	0.9429	ND	34,209	ND	1	ND
3-Methylpentane	86	0.084	3.000E-04	1.000E-03	-7.000E-04	0.9429	ND	34,209	ND	1	ND
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
1-Hexene	84	0.100	3.500E-04	ND	3.500E-04	0.9429	3.712E-04	34,209	7.927E-07	1	7.927E-07
n-Hexane	86	0.419	1.500E-03	1.600E-03	-1.000E-04	0.9429	ND	34,209	ND	1	ND
trans-2-Hexene	84	0.029	1.000E-04	ND	1.000E-04	0.9429	1.061E-04	34,209	2.265E-07	1	2.265E-07
2-Methyl-2-pentene	84	0.029	1.000E-04	ND	1.000E-04	0.9429	1.061E-04	34,209	2.265E-07	1	2.265E-07
cis-2-Hexene	84	0.029	1.000E-04	ND	1.000E-04	0.9429	1.061E-04	34,209	2.265E-07	1	2.265E-07
Methylcyclopentane	84	0.157	5.500E-04	6.000E-04	-5.000E-05	0.9429	ND	34,209	ND	1	ND
2,4-Dimethylpentane	100	0.264	1.100E-03	1.000E-03	1.000E-04	0.9429	1.061E-04	34,209	2.265E-07	1	2.265E-07
Benzene	78	2.481	8.050E-03	2.300E-03	5.750E-03	0.9429	6.098E-03	34,209	1.302E-05	1	1.302E-05
Cyclohexane	84	0.143	5.000E-04	6.000E-04	-1.000E-04	0.9429	ND	34,209	ND	1	ND
2-Methylhexane	100	0.180	7.500E-04	7.000E-04	5.000E-05	0.9429	5.303E-05	34,209	1.132E-07	1	1.132E-07
2,3-Dimethylpentane	100	0.517	2.150E-03	2.100E-03	5.000E-05	0.9429	5.303E-05	34,209	1.132E-07	1	1.132E-07
3-Methylhexane	100	0.180	7.500E-04	1.000E-03	-2.500E-04	0.9429	ND	34,209	ND	1	ND
2,2,4-Trimethylpentane	114	0.865	4.100E-03	4.200E-03	-1.000E-04	0.9429	ND	34,209	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
n-Heptane	100	0.168	7.000E-04	7.000E-04	0.000E+00	0.9429	ND	34,209	ND	1	ND
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Methylcyclohexane	98	0.110	4.500E-04	5.000E-04	-5.000E-05	0.9429	ND	34,209	ND	1	ND
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2,5-Dimethylhexane	114	0.074	3.500E-04	4.000E-04	-5.000E-05	0.9429	ND	34,209	ND	1	ND
2,4-Dimethylhexane	114	0.105	5.000E-04	5.000E-04	0.000E+00	0.9429	ND	34,209	ND	1	ND
2,3,4-Trimethylpentane	114	0.211	1.000E-03	1.000E-03	0.000E+00	0.9429	ND	34,209	ND	1	ND
Toluene	92	1.489	5.700E-03	5.000E-03	7.000E-04	0.9429	7.424E-04	34,209	1.585E-06	1	1.585E-06
2,3-Dimethylhexane	114	0.074	3.500E-04	4.000E-04	-5.000E-05	0.9429	ND	34,209	ND	1	ND
2-Methylheptane	111	0.097	4.500E-04	2.000E-04	2.500E-04	0.9429	2.651E-04	34,209	5.662E-07	1	5.662E-07
3-Ethylhexane	114	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2,2,4-Trimethylhexane	128	0.019	1.000E-04	2.000E-04	-1.000E-04	0.9429	ND	34,209	ND	1	ND
n-Octane	114	0.063	3.000E-04	2.000E-04	1.000E-04	0.9429	1.061E-04	34,209	2.265E-07	1	2.265E-07
Ethylcyclohexane	112	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Ethylbenzene	160	0.098	6.500E-04	5.000E-04	1.500E-04	0.9429	1.591E-04	34,209	3.397E-07	1	3.397E-07
m-Xylene & p-Xylene	106	0.646	2.850E-03	2.500E-03	3.500E-04	0.9429	3.712E-04	34,209	7.927E-07	1	7.927E-07
Styrene	104	0.104	4.500E-04	5.000E-04	-5.000E-05	0.9429	ND	34,209	ND	1	ND
o-Xylene	106	0.238	1.050E-03	9.000E-04	1.500E-04	0.9429	1.591E-04	34,209	3.397E-07	1	3.397E-07
n-Nonane	128	0.028	1.500E-04	ND	1.500E-04	0.9429	1.591E-04	34,209	3.397E-07	1	3.397E-07
i-Propylbenzene	120	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
n-Propylbenzene	120	0.050	2.500E-04	2.000E-04	5.000E-05	0.9429	5.303E-05	34,209	1.132E-07	1	1.132E-07
p-Ethyltoluene	120	0.200	1.000E-03	6.000E-04	4.000E-04	0.9429	4.242E-04	34,209	9.060E-07	1	9.060E-07
m-Ethyltoluene	120	0.070	3.500E-04	2.000E-04	1.500E-04	0.9429	1.591E-04	34,209	3.397E-07	1	3.397E-07
1,3,5-Trimethylbenzene	120	0.090	4.500E-04	3.000E-04	1.500E-04	0.9429	1.591E-04	34,209	3.397E-07	1	3.397E-07
o-Ethyltoluene	120	0.070	3.500E-04	2.000E-04	1.500E-04	0.9429	1.591E-04	34,209	3.397E-07	1	3.397E-07
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.230	1.150E-03	8.000E-04	3.500E-04	0.9429	3.712E-04	34,209	7.927E-07	1	7.927E-07
n-Decane	142	0.034	2.000E-04	1.000E-04	1.000E-04	0.9429	1.061E-04	34,209	2.265E-07	1	2.265E-07
alpha-Pinene	136	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
beta-Pinene	136	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
delta 3-Carene	136	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
d-Limonene	136	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
MTBE	88	0.246	9.000E-04	7.000E-04	2.000E-04	0.9429	2.121E-04	34,209	4.530E-07	1	4.530E-07
ETBE	102	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Dichlorodifluoromethane	120	0.297	1.482E-03	1.130E-03	3.521E-04	0.9429	3.735E-04	34,209	7.976E-07	1	7.976E-07
Methylchloride	50	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Chloroethene	63	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
1,3-Butadiene	54	0.792	1.780E-03	2.034E-04	1.577E-03	0.9429	1.672E-03	34,209	3.571E-06	1	3.571E-06
Methylbromide	95	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Trichloromonofluoromethane	137	0.452	2.576E-03	2.533E-03	4.241E-05	0.9429	4.498E-05	34,209	9.606E-08	1	9.606E-08
Vinylidenechloride	97	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Methylenechloride	85	15.686	5.547E-02	8.068E-04	5.466E-02	0.9429	5.797E-02	34,209	1.238E-04	1	1.238E-04
Allylchloride	76.5	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.113	8.817E-04	8.258E-04	5.588E-05	0.9429	5.927E-05	34,209	1.266E-07	1	1.266E-07
1,1-Dichloroethane	99	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
1,2-Dichloroethene	97	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Chloroform	119	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
1,2-Dichloroethane	99	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Methylchloroform	133	0.070	3.897E-04	3.482E-04	4.150E-05	0.9429	4.401E-05	34,209	9.400E-08	1	9.400E-08
Benzene	78	2.523	8.188E-03	2.339E-03	5.848E-03	0.9429	6.203E-03	34,209	1.325E-05	1	1.325E-05
Carbontetrachloride	154	0.130	8.360E-04	7.072E-04	1.288E-04	0.9429	1.366E-04	34,209	2.918E-07	1	2.918E-07
1,2-Dichloropropane	113	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Trichloroethylene	133	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Toluene	92	1.515	5.798E-03	5.086E-03	7.120E-04	0.9429	7.551E-04	34,209	1.613E-06	1	1.613E-06
1,2-Dibromoethane	188	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Perchloroethylene	166	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Chlorobenzene	113	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Ethylbenzene	160	0.150	9.979E-04	7.676E-04	2.303E-04	0.9429	2.442E-04	34,209	5.216E-07	1	5.216E-07
m&p-Xylene	106	0.648	2.859E-03	2.390E-03	4.685E-04	0.9429	4.969E-04	34,209	1.061E-06	1	1.061E-06
Styrene	104	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
o-Xylene	106	0.242	1.068E-03	9.154E-04	1.526E-04	0.9429	1.618E-04	34,209	3.456E-07	1	3.456E-07
p-Ethyltoluene	120	0.108	5.413E-04	4.433E-04	9.799E-05	0.9429	1.039E-04	34,209	2.219E-07	1	2.219E-07
1,3,5-Trimethylbenzene	120	0.069	3.447E-04	2.679E-04	7.689E-05	0.9429	8.154E-05	34,209	1.742E-07	1	1.742E-07
1,2,4-Trimethylbenzene	120	0.220	1.097E-03	8.531E-04	2.437E-04	0.9429	2.584E-04	34,209	5.519E-07	1	5.519E-07
Benzylchloride	127	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Phenylacetylene	102	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Indane	118	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2,3-Dihydro-1-methyl-1H-indene	132	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2,3-Dihydro-4-methyl-1H-indene	132	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Naphthalene	128	0.240	1.276E-03	4.078E-04	8.685E-04	0.9429	9.211E-04	34,209	1.967E-06	1	1.967E-06
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
1-Methylnaphthalene	142	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Cyanogen	52	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Methylnitrite	61	0.156	3.948E-04	ND	3.948E-04	0.9429	4.187E-04	34,209	8.941E-07	1	8.941E-07
Acetonitrile	41	0.339	5.775E-04	ND	5.775E-04	0.9429	6.125E-04	34,209	1.308E-06	1	1.308E-06
Acrylonitrile	53	0.251	5.531E-04	ND	5.531E-04	0.9429	5.866E-04	34,209	1.253E-06	1	1.253E-06
Nitromethane	61	0.524	1.328E-03	ND	1.328E-03	0.9429	1.409E-03	34,209	3.009E-06	1	3.009E-06
Propanenitrile	55	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Pentanenitrile	83	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Hexanenitrile	97	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Benzonitrile	103	0.132	5.671E-04	ND	5.671E-04	0.9429	6.015E-04	34,209	1.285E-06	1	1.285E-06
2-Nitrophenol	139	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Acrolein	56	0.206	4.793E-04	ND	4.793E-04	0.9429	5.083E-04	34,209	1.086E-06	1	1.086E-06
Acetone	56	4.567	1.064E-02	7.510E-03	3.128E-03	0.9429	3.318E-03	34,209	7.085E-06	1	7.085E-06
1-Hydroxy-2-propanone	74	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Furan	68	0.114	3.231E-04	ND	3.231E-04	0.9429	3.427E-04	34,209	7.318E-07	1	7.318E-07
2-Propanol	60	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2-Methylpropanal	74	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
1-Propanol	60	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Methacrolein	70	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Methyl-vinyl Ketone	70	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
MTBE	88	0.275	1.008E-03	9.140E-04	9.359E-05	0.9429	9.926E-05	34,209	2.120E-07	1	2.120E-07
2,3-Butanedione	86	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Butanal	72	0.153	4.578E-04	3.905E-04	6.733E-05	0.9429	7.140E-05	34,209	1.525E-07	1	1.525E-07
2-Butanone	72	0.635	1.902E-03	9.694E-04	9.327E-04	0.9429	9.892E-04	34,209	2.112E-06	1	2.112E-06
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2-Methylfuran	82	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
trans-2-Butenal	70	0.061	1.774E-04	ND	1.774E-04	0.9429	1.881E-04	34,209	4.018E-07	1	4.018E-07
Acetic Acid	60	0.879	2.194E-03	1.131E-03	1.063E-03	0.9429	1.127E-03	34,209	2.407E-06	1	2.407E-06
1-Butanol	74	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2-Pentanone	86	0.170	6.079E-04	ND	6.079E-04	0.9429	6.447E-04	34,209	1.377E-06	1	1.377E-06
Pentanal	86	0.399	1.427E-03	1.187E-03	2.404E-04	0.9429	2.550E-04	34,209	5.446E-07	1	5.446E-07
1,4-Dioxane	88	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Cyclopentanone	84	0.124	4.337E-04	ND	4.337E-04	0.9429	4.600E-04	34,209	9.824E-07	1	9.824E-07
Hexanal	100	0.189	7.876E-04	7.147E-04	7.285E-05	0.9429	7.726E-05	34,209	1.650E-07	1	1.650E-07
2-Furaldehyde	96	0.097	3.859E-04	ND	3.859E-04	0.9429	4.093E-04	34,209	8.741E-07	1	8.741E-07
Cyclohexanone	98	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Heptanal	114	0.141	6.667E-04	5.849E-04	8.176E-05	0.9429	8.672E-05	34,209	1.852E-07	1	1.852E-07
2-Butoxyethanol	118	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Benzaldehyde	106	0.374	1.651E-03	7.646E-04	8.864E-04	0.9429	9.401E-04	34,209	2.008E-06	1	2.008E-06
6-Methyl-5-hepten-2-one	126	ND	ND	9.693E-04	ND	0.9429	ND	34,209	ND	1	ND
Octanal	128	0.285	1.515E-03	9.075E-04	6.078E-04	0.9429	6.446E-04	34,209	1.377E-06	1	1.377E-06
Benzofuran	118	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND
Acetophonone	120	0.063	3.137E-04	ND	3.137E-04	0.9429	3.327E-04	34,209	7.106E-07	1	7.106E-07
Nonanal	142	0.412	2.434E-03	1.344E-03	1.091E-03	0.9429	1.157E-03	34,209	2.471E-06	1	2.471E-06
Decanal	156	0.410	2.660E-03	1.007E-03	1.653E-03	0.9429	1.753E-03	34,209	3.745E-06	1	3.745E-06
Carbonyl Sulfide	60	0.120	2.988E-04	1.869E-04	1.119E-04	0.9429	1.187E-04	34,209	2.535E-07	1	2.535E-07
Carbon Disulfide	76	3.112	9.840E-03	5.277E-04	9.312E-03	0.9429	9.876E-03	34,209	2.109E-05	1	2.109E-05
Thiophene	84	0.099	3.457E-04	ND	3.457E-04	0.9429	3.667E-04	34,209	7.831E-07	1	7.831E-07
Dimethyldisulfide	94	ND	ND	ND	ND	0.9429	ND	34,209	ND	1	ND

a
Compounds in bold represent duplicate values.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-7. AEC - SVOC DATA EVALUATION FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate/Vapor-phase SVOCs									
N-Nitrosodimethylamine	ND	ND	ND	1.756E-04	1.756E-04	ND	ND	F	F
Pyridine	ND	ND	ND	5.148E-04	5.148E-04	ND	ND	F	F
2-Picoline	ND	ND	ND	5.350E-04	5.350E-04	ND	ND	F	F
Methyl methanesulfonate	ND	ND	ND	2.024E-04	2.024E-04	ND	ND	F	F
N-Nitrosomethylethylamine	ND	ND	ND	4.017E-04	4.017E-04	ND	ND	F	F
N-Nitrosodiethylamine	ND	ND	ND	4.290E-04	4.290E-04	ND	ND	F	F
Ethyl methanesulfonate	ND	ND	ND	1.973E-04	1.973E-04	ND	ND	F	F
Phenol	ND	ND	ND	1.262E-04	1.262E-04	ND	ND	F	F
Aniline	ND	ND	ND	2.014E-04	2.014E-04	ND	ND	F	F
bis(2-Chloroethyl)ether	ND	ND	ND	1.575E-04	1.575E-04	ND	ND	F	F
Pentachloroethane	ND	ND	ND	3.639E-04	3.639E-04	ND	ND	F	F
2-Chlorophenol	ND	ND	ND	8.024E-05	8.024E-05	ND	ND	F	F
1,3-Dichlorobenzene	ND	ND	ND	1.549E-04	1.549E-04	ND	ND	F	F
1,4-Dichlorobenzene	ND	ND	ND	3.109E-04	3.109E-04	ND	ND	F	F
Benzyl alcohol	ND	ND	ND	3.518E-04	3.518E-04	ND	ND	F	F
2-Methylphenol	ND	ND	ND	2.831E-04	2.831E-04	ND	ND	F	F
1,2-Dichlorobenzene	ND	ND	ND	2.251E-04	2.251E-04	ND	ND	F	F
bis(2-Chloroisopropyl)ether	ND	ND	ND	1.898E-04	1.898E-04	ND	ND	F	F
o-Toluidine	ND	ND	ND	1.999E-04	1.999E-04	ND	ND	F	F
4-Methylphenol/3-Methylphenol	ND	ND	ND	2.392E-04	2.392E-04	ND	ND	F	F
N-Nitroso-di-n-propylamine	ND	ND	ND	1.418E-04	1.418E-04	ND	ND	F	F
Acetophenone	4.185E-04	4.185E-04	2.708E-04	1.489E-04	1.489E-04	1.55	2.81	D	C
N-Nitrosomorpholine	ND	ND	ND	4.537E-04	4.537E-04	ND	ND	F	F
N-Nitrosopyrrolidine	ND	ND	ND	6.006E-04	6.006E-04	ND	ND	F	F
Hexachloroethane	ND	ND	ND	2.493E-04	2.493E-04	ND	ND	F	F
Nitrobenzene	ND	ND	ND	4.497E-04	4.497E-04	ND	ND	F	F
N-Nitrosopiperidine	ND	ND	ND	3.679E-04	3.679E-04	ND	ND	F	F
Isophorone	ND	ND	ND	1.080E-04	1.080E-04	ND	ND	F	F
2,4-Dimethylphenol	ND	ND	ND	1.701E-04	1.701E-04	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	2.705E-04	2.705E-04	ND	ND	F	F
bis(2-Chloroethoxy)methane	ND	ND	ND	1.973E-04	1.973E-04	ND	ND	F	F
Benzoic acid	ND	ND	ND	1.847E-02	1.847E-02	ND	ND	F	F
2,4-Dichlorophenol	ND	ND	ND	2.473E-04	2.473E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	1.781E-04	1.781E-04	ND	ND	F	F
Naphthalene	6.085E-04	6.085E-04	2.995E-04	2.256E-04	2.256E-04	2.03	2.70	C	C
p-Chloroaniline	ND	ND	ND	1.625E-04	1.625E-04	ND	ND	F	F
2,6-Dichlorophenol	ND	ND	ND	1.736E-04	1.736E-04	ND	ND	F	F
Hexachloropropene	ND	ND	ND	2.851E-04	2.851E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	2.574E-04	2.574E-04	ND	ND	F	F
Dimethylphenethylamine	ND	ND	ND	1.030E-02	1.030E-02	ND	ND	F	F
N-Nitroso-di-n-butylamine	ND	ND	ND	1.887E-04	1.887E-04	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
4-Chloro-3-methylphenol	ND	ND	ND	2.861E-04	2.861E-04	ND	ND	F	F
Safrole	ND	ND	ND	3.588E-04	3.588E-04	ND	ND	F	F
2-Methylnaphthalene	2.645E-04	2.645E-04	ND	1.812E-04	1.812E-04	10.00	1.46	A	D
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	2.756E-04	2.756E-04	ND	ND	F	F
Hexachlorocyclopentadiene	ND	ND	ND	5.602E-03	5.602E-03	ND	ND	F	F
2,4,6-Trichlorophenol	ND	ND	ND	3.184E-04	3.184E-04	ND	ND	F	F
2,4,5-Trichlorophenol	ND	ND	ND	2.705E-04	2.705E-04	ND	ND	F	F
Isosafrole	ND	ND	ND	5.450E-04	5.450E-04	ND	ND	F	F
2-Chloronaphthalene	ND	ND	ND	2.846E-04	2.846E-04	ND	ND	F	F
2-Nitroaniline	ND	ND	ND	1.807E-04	1.807E-04	ND	ND	F	F
1,4-Naphthoquinone	ND	ND	ND	5.047E-04	5.047E-04	ND	ND	F	F
Dimethylphthalate	ND	ND	ND	1.469E-04	1.469E-04	ND	ND	F	F
1,3-Dinitrobenzene	ND	ND	ND	4.224E-04	4.224E-04	ND	ND	F	F
2,6-Dinitrotoluene	ND	ND	ND	3.553E-04	3.553E-04	ND	ND	F	F
Acenaphthylene	ND	ND	ND	1.650E-04	1.650E-04	ND	ND	F	F
3-Nitroaniline	ND	ND	ND	4.446E-04	4.446E-04	ND	ND	F	F
4-Nitrophenol	ND	ND	ND	1.549E-02	1.549E-02	ND	ND	F	F
2,4-Dinitrophenol	ND	ND	ND	1.590E-02	1.590E-02	ND	ND	F	F
Acenaphthene	ND	ND	ND	1.817E-04	1.817E-04	ND	ND	F	F
2,4-Dinitrotoluene	ND	ND	ND	2.246E-04	2.246E-04	ND	ND	F	F
Dibenzofuran	ND	ND	ND	1.231E-04	1.231E-04	ND	ND	F	F
Pentachlorobenzene	ND	ND	ND	3.401E-04	3.401E-04	ND	ND	F	F
1-Naphthylamine	ND	ND	ND	8.882E-04	8.882E-04	ND	ND	F	F
2-Naphthylamine	ND	ND	ND	7.873E-04	7.873E-04	ND	ND	F	F
2,3,4,6-Tetrachlorophenol	ND	ND	ND	3.603E-04	3.603E-04	ND	ND	F	F
Diethylphthalate	2.019E-03	2.019E-03	3.475E-04	1.312E-04	1.312E-04	5.81	15.39	B	A
4-Chlorophenylphenyl ether	ND	ND	ND	1.428E-04	1.428E-04	ND	ND	F	F
Fluorene	ND	ND	ND	1.716E-04	1.716E-04	ND	ND	F	F
5-Nitro-o-toluidine	ND	ND	ND	1.832E-04	1.832E-04	ND	ND	F	F
4-Nitroaniline	ND	ND	ND	3.911E-04	3.911E-04	ND	ND	F	F
4,6-Dinitro-2-methylphenol	ND	ND	ND	1.373E-02	1.373E-02	ND	ND	F	F
Diphenylamine/N-NitrosoDPA	ND	ND	ND	1.857E-04	1.857E-04	ND	ND	F	F
sym-Trinitrobenzene	ND	ND	ND	6.308E-04	6.308E-04	ND	ND	F	F
Diallate	ND	ND	ND	2.397E-04	2.397E-04	ND	ND	F	F
Phenacetin	ND	ND	ND	1.130E-04	1.130E-04	ND	ND	F	F
4-Bromophenylphenyl ether	ND	ND	ND	3.477E-04	3.477E-04	ND	ND	F	F
Hexachlorobenzene	ND	ND	ND	1.872E-04	1.872E-04	ND	ND	F	F
4-Aminobiphenyl	ND	ND	ND	1.045E-03	1.045E-03	ND	ND	F	F
Pronamide	ND	ND	ND	1.297E-04	1.297E-04	ND	ND	F	F
Pentachlorophenol	ND	ND	ND	1.453E-02	1.453E-02	ND	ND	F	F
Pentachloronitrobenzene	ND	ND	ND	6.763E-04	6.763E-04	ND	ND	F	F
Phenanthrene	ND	ND	ND	3.079E-04	3.079E-04	ND	ND	F	F
Anthracene	ND	ND	ND	1.847E-04	1.847E-04	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Carbazole	ND	ND	ND	1.236E-04	1.236E-04	ND	ND	F	F
Di-n-butylphthalate	9.726E-04	9.726E-04	1.357E-03	8.579E-05	8.579E-05	0.72	11.34	F	A
4-Nitroquinoline-1-oxide	ND	ND	ND	1.136E-02	1.136E-02	ND	ND	F	F
Methapyrilene	ND	ND	ND	1.045E-02	1.045E-02	ND	ND	F	F
Fluoranthene	ND	ND	ND	1.822E-04	1.822E-04	ND	ND	F	F
Benzidine	ND	ND	ND	6.763E-03	6.763E-03	ND	ND	F	F
Pyrene	ND	ND	ND	2.503E-04	2.503E-04	ND	ND	F	F
p-Dimethylaminoazobenzene	ND	ND	ND	1.857E-04	1.857E-04	ND	ND	F	F
Chlorobenzilate	ND	ND	ND	2.584E-04	2.584E-04	ND	ND	F	F
Kepone	ND	ND	ND	9.488E-03	9.488E-03	ND	ND	F	F
Butylbenzylphthalate	ND	ND	ND	1.035E-04	1.035E-04	ND	ND	F	F
3,3'-Dimethylbenzidine	ND	ND	ND	9.993E-04	9.993E-04	ND	ND	F	F
2-Acetylaminofluorene	ND	ND	ND	1.575E-04	1.575E-04	ND	ND	F	F
bis(2-Ethylhexyl)phthalate	ND	ND	ND	6.157E-04	6.157E-04	ND	ND	F	F
3,3'-Dichlorobenzidine	ND	ND	ND	1.691E-04	1.691E-04	ND	ND	F	F
Benz(a)anthracene	ND	ND	ND	2.281E-04	2.281E-04	ND	ND	F	F
Chrysene	ND	ND	ND	2.463E-04	2.463E-04	ND	ND	F	F
Di-n-octylphthalate	ND	ND	ND	1.575E-04	1.575E-04	ND	ND	F	F
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	2.327E-04	2.327E-04	ND	ND	F	F
Benzo(b)fluoranthene (a)	ND	ND	ND	1.403E-04	1.403E-04	ND	ND	F	F
Benzo(k)fluoranthene (a)	ND	ND	ND	2.932E-04	2.932E-04	ND	ND	F	F
Benz(a)pyrene	ND	ND	ND	1.660E-04	1.660E-04	ND	ND	F	F
3-Methylcholanthrene	ND	ND	ND	5.905E-04	5.905E-04	ND	ND	F	F
Indeno(1,2,3-cd)pyrene	ND	ND	ND	1.105E-04	1.105E-04	ND	ND	F	F
Dibenz(a,h)anthracene	ND	ND	ND	1.241E-04	1.241E-04	ND	ND	F	F
Benzo(g,h,i)perylene	ND	ND	ND	1.191E-04	1.191E-04	ND	ND	F	F

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Pyridine	79	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2-Picoline	93	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Phenol	94	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Aniline	93	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Pentachloroethane	202	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2-Methylphenol	108	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
o-Toluidine	107	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Acetophenone	120	0.084	4.185E-04	2.708E-04	1.477E-04	0.8575	1.723E-04	34,209	3.679E-07	1	3.679E-07
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Hexachloroethane	237	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Nitrobenzene	123	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Isophorone	138	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Benzoic acid	122	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Naphthalene	128	0.114	6.085E-04	2.995E-04	3.089E-04	0.8575	3.603E-04	34,209	7.694E-07	1	7.694E-07
p-Chloroaniline	128	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Hexachloropropene	249	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Safrole	162	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2-Methylnaphthalene	142	0.045	2.645E-04	ND	2.645E-04	0.8575	3.085E-04	34,209	6.588E-07	1	6.588E-07
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Isosafrole	162	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Acenaphthylene	152	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Acenaphthene	154	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Dibenzofuran	168	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Diethylphthalate	222	0.219	2.019E-03	3.475E-04	1.672E-03	0.8575	1.950E-03	34,209	4.164E-06	1	4.164E-06
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Fluorene	166	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Diallate	270	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Phenacetin	179	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Pronamide	228	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Phenanthrene	178	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Anthracene	178	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Carbazole	167	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Di-n-butylphthalate	278	0.084	9.726E-04	1.357E-03	-3.843E-04	0.8575	ND	34,209	ND	1	ND
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Methapyrilene	261	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Fluoranthene	202	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Benzidine	184	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Pyrene	202	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Kepone	491	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Butylbenzylphthalate	312	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR GREEN PARACHUTE SIGNAL FLARE TEST (31 MARCH 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
bis(2-Ethylhexyl)phthalate	391	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Chrysene	228	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.8575	ND	34,209	ND	1	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

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WHITE PARACHUTE SIGNAL FLARE

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TABLE A-1. AEC MUNITION ITEM INPUT DATA SHEET (1 APRIL 1998)
Munition Item: White Parachute Signal Flare
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	349.2	424.4	NA	NA	NA	NA	386.78
PM_{10}	148.4	161.7	NA	NA	NA	NA	155.02
Metals	349.2	424.4	NA	NA	NA	NA	386.78
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	69.1	59.6	NA	NA	NA	NA	64.37
HCl/Cl_2	29.0	23.0	NA	NA	NA	NA	26.01
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	75.5	73.5	NA	NA	NA	NA	74.50
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	51.0	49.5	NA	NA	NA	NA	50.25
HCl/Cl_2 (NaOH)	39.0	41.5	NA	NA	NA	NA	40.25

Sample Weight Gain:	Run No. 1		Run No. 2		Run No. 3		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.9331	0.9397	NA	NA	NA	NA	0.9364
PM_{10}	0.3170	0.3629	NA	NA	NA	NA	0.3400

Dilution Correction Factors:	Run No. 1	Run No. 2	Run No. 3	Average
TSP	0.8681	NA	NA	0.8681
PM_{10}	0.9168	NA	NA	0.9168
Metals	0.8681	NA	NA	0.8681
VOCs	0.9104	NA	NA	0.9104
SVOCs	0.8191	NA	NA	0.8191
HCl/Cl_2	0.8191	NA	NA	0.8191
Energetics	NA	NA	NA	NA
Dioxin/Furan	0.8191	NA	NA	0.8191
Residue	NA	NA	NA	NA
CEM	0.8445	NA	NA	0.8445

	Run No. 1	Run No. 2	Run No. 3	Average
Initial Plume Volume (m^3)	949.19	NA	NA	949.19
Net Explosive Weight (g)	128.23	NA	NA	128.23

TABLE A-2. AEC BACKGROUND INPUT DATA SHEET (1 APRIL 1998)
Munition Item: White Parachute Signal Flare
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	WP - Background		Reagent Blank		Field Blank		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	1360.6	NA	NA	NA	NA	NA	1360.64
PM_{10}	1008.5	NA	NA	NA	NA	NA	1008.45
Metals	1360.6	NA	NA	NA	NA	NA	1360.64
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	117.9	NA	NA	NA	NA	NA	117.90
HCl/Cl_2	29.9	NA	NA	NA	NA	NA	29.93
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	156.5	NA	NA	NA	NA	NA	156.49
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	WP - Background		Reagent Blank		Field Blank		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	42.5	NA	107.2	NA	45.3	NA	42.50
HCl/Cl_2 (NaOH)	37.0	NA	92.0	NA	41.5	NA	37.00
HCl/Cl_2 (H_2O)	NA	NA	100.0	NA	NA	NA	#DIV/0!

Sample Weight Gain:	WP - Background		Reagent Blank		Field Blank		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	0.0015	NA	-0.0026	NA	-0.0037	NA	0.0015
PM_{10}	0.0027	NA	-0.0002	NA	-0.0029	NA	0.0027

TABLE A-3. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS DATA EVALUATION FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate									
TSP	8.628E+01	8.628E+01	3.893E-02	ND	ND	2216.29	10.00	A	A
PM_{10}	7.736E+01	7.736E+01	9.455E-02	ND	ND	818.22	10.00	A	A
Hydrogen Chloride (HCl)/Chlorine (Cl_2)									
HCl	ND	ND	ND	7.694E-02	7.471E-02	ND	ND	F	F
Cl_2	6.767E-02	6.767E-02	1.380E-02	1.711E-03	1.602E-03	4.90	42.24	C	A
Dioxin/Furan									
Dioxin TEQ (a)	5.012E-10	5.012E-10	1.512E-10	ND	ND	3.31	10.00	C	A
Continuous Emissions Monitoring (CEM) System									
Carbon Monoxide (CO)	2.159E+00	2.159E+00	2.190E-01	ND	ND	9.86	10.00	B	A
Nitrogen Oxide (NOx)	2.667E+00	2.667E+00	1.668E-01	ND	ND	15.99	10.00	A	A
HCl	4.143E-01	4.143E-01	4.187E-01	ND	ND	0.99	10.00	F	A
Carbon Dioxide (CO_2)	6.630E+02	6.630E+02	6.598E+02	ND	ND	1.00	10.00	D	A
Sulfur Dioxide (SO_2)	6.342E-02	6.342E-02	1.801E-03	ND	ND	35.22	10.00	A	A
Particulate-phase Metals									
Aluminum	1.064E-02	1.064E-02	NA (b)	2.231E-03	1.932E-03	NA (b)	5.51	NA (b)	B
Antimony	7.467E-04	7.467E-04	NA (b)	3.206E-04	2.779E-04	NA (b)	2.69	NA (b)	C
Arsenic	ND	ND	NA (b)	2.197E-04	1.907E-04	NA (b)	ND	NA (b)	F
Barium	4.227E-02	4.227E-02	NA (b)	2.445E-05	2.120E-05	NA (b)	1993.66	NA (b)	A
Beryllium	1.897E-05	1.897E-05	NA (b)	1.359E-05	1.180E-05	NA (b)	1.61	NA (b)	D
Cadmium	5.957E-05	5.957E-05	NA (b)	2.710E-05	2.360E-05	NA (b)	2.52	NA (b)	C
Chromium	3.570E-03	3.570E-03	NA (b)	4.796E-05	4.164E-05	NA (b)	85.75	NA (b)	A
Cobalt	1.231E-04	1.231E-04	NA (b)	4.796E-05	4.164E-05	NA (b)	2.96	NA (b)	C
Copper	3.630E-03	3.630E-03	NA (b)	1.180E-04	1.017E-04	NA (b)	35.68	NA (b)	A
Lead	2.607E-03	2.607E-03	NA (b)	1.813E-04	1.573E-04	NA (b)	16.57	NA (b)	A
Magnesium	1.144E+01	1.144E+01	NA (b)	4.685E-04	4.070E-04	NA (b)	28100.79	NA (b)	A
Manganese	1.497E-02	1.497E-02	NA (b)	2.078E-05	1.804E-05	NA (b)	829.69	NA (b)	A
Nickel	4.400E-04	4.400E-04	NA (b)	7.327E-05	6.361E-05	NA (b)	6.92	NA (b)	B
Phosphorus	5.157E-03	5.157E-03	NA (b)	5.147E-04	4.471E-04	NA (b)	11.53	NA (b)	A
Selenium	ND	ND	NA (b)	1.744E-04	1.513E-04	NA (b)	ND	NA (b)	F
Silver	ND	ND	NA (b)	3.257E-05	2.830E-05	NA (b)	ND	NA (b)	F
Thallium	ND	ND	NA (b)	4.129E-04	3.582E-04	NA (b)	ND	NA (b)	F
Zinc	2.344E-03	2.344E-03	NA (b)	3.916E-04	3.403E-04	NA (b)	6.89	NA (b)	B
Mercury	1.982E-05	1.982E-05	NA (b)	4.514E-07	4.514E-07	NA (b)	43.91	NA (b)	A

a
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD
b
Insufficient material to analyze

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-4. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 1 DATA FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (a), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate											
TSP	-	-	8.628E+01	3.893E-02	8.624E+01	0.8681	9.935E+01	33,520	2.079E-01	1	2.079E-01
PM_{10}	-	-	7.736E+01	9.455E-02	7.727E+01	0.9168	8.428E+01	33,520	1.764E-01	1	1.764E-01
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Cl_2 (b)	71	22.944	6.767E-02	1.380E-02	5.387E-02	0.8191	6.577E-02	33,520	1.376E-04	1	1.376E-04
Dioxin/Furan											
Dioxin TEQ (c)	-	-	5.012E-10	1.512E-10	3.500E-10	0.8191	4.273E-10	33,520	8.942E-13	1	8.942E-13
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	1853.316	2.159E+00	2.190E-01	1.940E+00	0.8445	2.297E+00	33,520	4.807E-03	1	4.807E-03
Nitrogen Oxide (NOx)	46	1393.578	2.667E+00	1.668E-01	2.500E+00	0.8445	2.960E+00	33,520	6.195E-03	1	6.195E-03
HCl (b)	36	276.610	4.143E-01	4.187E-01	-4.482E-03	0.8445	ND	33,520	ND	1	ND
Carbon Dioxide (CO_2)	44	362189.800	6.630E+02	6.598E+02	3.108E+00	0.8445	3.681E+00	33,520	7.702E-03	1	7.702E-03
Sulfur Dioxide (SO_2)	64	23.819	6.342E-02	1.801E-03	6.161E-02	0.8445	7.296E-02	33,520	1.527E-04	1	1.527E-04
Particulate-phase Metals											
Aluminum	27	9.476	1.064E-02	NA (d)	1.064E-02	0.8681	1.226E-02	33,520	2.566E-05	1	2.566E-05
Antimony	122	0.147	7.467E-04	NA (d)	7.467E-04	0.8681	8.601E-04	33,520	1.800E-06	1	1.800E-06
Arsenic	75	ND	ND	NA (d)	ND	0.8681	ND	33,520	ND	1	ND
Barium	137	7.417	4.227E-02	NA (d)	4.227E-02	0.8681	4.869E-02	33,520	1.019E-04	1	1.019E-04
Beryllium	9	0.051	1.897E-05	NA (d)	1.897E-05	0.8681	2.185E-05	33,520	4.573E-08	1	4.573E-08
Cadmium	112	0.013	5.957E-05	NA (d)	5.957E-05	0.8681	6.862E-05	33,520	1.436E-07	1	1.436E-07
Chromium	52	1.651	3.570E-03	NA (d)	3.570E-03	0.8681	4.113E-03	33,520	8.607E-06	1	8.607E-06
Cobalt	59	0.050	1.231E-04	NA (d)	1.231E-04	0.8681	1.418E-04	33,520	2.967E-07	1	2.967E-07
Copper	64	1.363	3.630E-03	NA (d)	3.630E-03	0.8681	4.181E-03	33,520	8.750E-06	1	8.750E-06
Lead	207	0.303	2.607E-03	NA (d)	2.607E-03	0.8681	3.003E-03	33,520	6.285E-06	1	6.285E-06
Magnesium	24	11454.365	1.144E+01	NA (d)	1.144E+01	0.8681	1.317E+01	33,520	2.757E-02	1	2.757E-02
Manganese	55	6.542	1.497E-02	NA (d)	1.497E-02	0.8681	1.724E-02	33,520	3.608E-05	1	3.608E-05
Nickel	59	0.179	4.400E-04	NA (d)	4.400E-04	0.8681	5.069E-04	33,520	1.061E-06	1	1.061E-06
Phosphorus	31	3.999	5.157E-03	NA (d)	5.157E-03	0.8681	5.941E-03	33,520	1.243E-05	1	1.243E-05
Selenium	79	ND	ND	NA (d)	ND	0.8681	ND	33,520	ND	1	ND
Silver	108	ND	ND	NA (d)	ND	0.8681	ND	33,520	ND	1	ND
Thallium	204	ND	ND	NA (d)	ND	0.8681	ND	33,520	ND	1	ND
Zinc	65	0.867	2.344E-03	NA (d)	2.344E-03	0.8681	2.700E-03	33,520	5.649E-06	1	5.649E-06
Mercury	201	0.002	1.982E-05	NA (d)	1.982E-05	0.8681	2.283E-05	33,520	4.778E-08	1	4.778E-08

a
Estimated from tracer data as presented in Volume IV.
b
HCl/Cl_2 levels were too low to be reliably measured.
c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.
d
Insufficient material to analyze.

TABLE A-5. AEC - VOC DATA EVALUATION FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Total Nonmethane Hydrocarbons (TNMHC)									
TNMHC	1.344E-01	1.344E-01	9.740E-02	1.000E-04	1.000E-04	1.38	1343.50	D	A
Volatile Organic Compounds (VOCs)									
Ethane	4.000E-03	4.000E-03	3.100E-03	1.000E-04	1.000E-04	1.29	40.00	D	A
Ethylene	1.195E-02	1.195E-02	2.800E-03	1.000E-04	1.000E-04	4.27	119.50	C	A
Acetylene	7.300E-03	7.300E-03	4.500E-03	1.000E-04	1.000E-04	1.62	73.00	D	A
Propane	1.750E-03	1.750E-03	1.500E-03	1.000E-04	1.000E-04	1.17	17.50	D	A
Propene	4.500E-03	4.500E-03	1.300E-03	1.000E-04	1.000E-04	3.46	45.00	C	A
i-Butane	3.800E-03	3.800E-03	3.400E-03	1.000E-04	1.000E-04	1.12	38.00	D	A
i-Butene	8.500E-04	8.500E-04	5.000E-04	1.000E-04	1.000E-04	1.70	8.50	D	B
1-Butene	7.500E-04	7.500E-04	2.000E-04	1.000E-04	1.000E-04	3.75	7.50	C	B
1,3-Butadiene	7.500E-04	7.500E-04	2.000E-04	1.000E-04	1.000E-04	3.75	7.50	C	B
n-Butane	1.650E-03	1.650E-03	1.800E-03	1.000E-04	1.000E-04	0.92	16.50	F	A
trans-2-Butene	1.150E-03	1.150E-03	2.000E-04	1.000E-04	1.000E-04	5.75	11.50	B	A
2,2-Dimethylpropane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Butene	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
3-Methyl-1-butene	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.000E-04	1.00	1.00	D	D
i-Pentane	3.500E-03	3.500E-03	3.800E-03	1.000E-04	1.000E-04	0.92	35.00	F	A
1-Pentene	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
2-Methyl-1-butene	2.500E-04	2.500E-04	1.000E-04	1.000E-04	1.000E-04	2.50	2.50	C	C
n-Pentane	2.850E-03	2.850E-03	3.200E-03	1.000E-04	1.000E-04	0.89	28.50	F	A
Isoprene	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
trans-2-Pentene	2.000E-04	2.000E-04	1.000E-04	1.000E-04	1.000E-04	2.00	2.00	C	C
cis-2-Pentene	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-butene	ND	ND	2.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylbutane	4.000E-04	4.000E-04	4.000E-04	1.000E-04	1.000E-04	1.00	4.00	D	C
Cyclopentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
4-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Cyclopentane	2.000E-04	2.000E-04	3.000E-04	1.000E-04	1.000E-04	0.67	2.00	F	C
2,3-Dimethylbutane	1.050E-03	1.050E-03	1.100E-03	1.000E-04	1.000E-04	0.95	10.50	F	A
cis-4-Methyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylpentane	2.800E-03	2.800E-03	4.000E-03	1.000E-04	1.000E-04	0.70	28.00	F	A
3-Methylpentane	2.000E-04	2.000E-04	2.000E-03	1.000E-04	1.000E-04	0.10	2.00	F	C
2-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
1-Hexene	3.000E-04	3.000E-04	ND	1.000E-04	1.000E-04	10.00	3.00	A	C
n-Hexane	2.800E-03	2.800E-03	2.900E-03	1.000E-04	1.000E-04	0.97	28.00	F	A
trans-2-Hexene	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-pentene	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Hexene	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclopentane	1.300E-03	1.300E-03	1.200E-03	1.000E-04	1.000E-04	1.08	13.00	D	A
2,4-Dimethylpentane	2.000E-03	2.000E-03	1.400E-03	1.000E-04	1.000E-04	1.43	20.00	D	A

TABLE A-5. AEC - VOC DATA EVALUATION FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Benzene	7.500E-03	7.500E-03	3.400E-03	1.000E-04	1.000E-04	2.21	75.00	C	A
Cyclohexane	8.000E-04	8.000E-04	1.000E-03	1.000E-04	1.000E-04	0.80	8.00	F	B
2-Methylhexane	1.150E-03	1.150E-03	1.100E-03	1.000E-04	1.000E-04	1.05	11.50	D	A
2,3-Dimethylpentane	3.800E-03	3.800E-03	3.800E-03	1.000E-04	1.000E-04	1.00	38.00	D	A
3-Methylhexane	1.300E-03	1.300E-03	1.400E-03	1.000E-04	1.000E-04	0.93	13.00	F	A
2,2,4-Trimethylpentane	7.350E-03	7.350E-03	7.400E-03	1.000E-04	1.000E-04	0.99	73.50	F	A
n-Heptane	1.100E-03	1.100E-03	1.100E-03	1.000E-04	1.000E-04	1.00	11.00	D	A
2,4,4-Trimethyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclohexane	7.000E-04	7.000E-04	8.000E-04	1.000E-04	1.000E-04	0.88	7.00	F	B
2,4,4-Trimethyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,5-Dimethylhexane	5.000E-04	5.000E-04	5.000E-04	1.000E-04	1.000E-04	1.00	5.00	D	B
2,4-Dimethylhexane	8.000E-04	8.000E-04	8.000E-04	1.000E-04	1.000E-04	1.00	8.00	D	B
2,3,4-Trimethylpentane	1.600E-03	1.600E-03	1.600E-03	1.000E-04	1.000E-04	1.00	16.00	D	A
Toluene	8.550E-03	8.550E-03	7.800E-03	1.000E-04	1.000E-04	1.10	85.50	D	A
2,3-Dimethylhexane	6.000E-04	6.000E-04	5.000E-04	1.000E-04	1.000E-04	1.20	6.00	D	B
2-Methylheptane	3.500E-04	3.500E-04	3.000E-04	1.000E-04	1.000E-04	1.17	3.50	D	C
3-Ethylhexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylheptane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2,4-Trimethylhexane	4.000E-04	4.000E-04	4.000E-04	1.000E-04	1.000E-04	1.00	4.00	D	C
n-Octane	3.000E-04	3.000E-04	3.000E-04	1.000E-04	1.000E-04	1.00	3.00	D	C
Ethylcyclohexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Ethylbenzene	1.050E-03	1.050E-03	8.000E-04	1.000E-04	1.000E-04	1.31	10.50	D	A
m-Xylene & p-Xylene	3.950E-03	3.950E-03	3.500E-03	1.000E-04	1.000E-04	1.13	39.50	D	A
Styrene	6.500E-04	6.500E-04	5.000E-04	1.000E-04	1.000E-04	1.30	6.50	D	B
o-Xylene	1.350E-03	1.350E-03	1.100E-03	1.000E-04	1.000E-04	1.23	13.50	D	A
n-Nonane	3.000E-04	3.000E-04	1.000E-04	1.000E-04	1.000E-04	3.00	3.00	C	C
i-Propylbenzene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Propylbenzene	3.000E-04	3.000E-04	2.000E-04	1.000E-04	1.000E-04	1.50	3.00	D	C
p-Ethyltoluene	8.500E-04	8.500E-04	7.000E-04	1.000E-04	1.000E-04	1.21	8.50	D	B
m-Ethyltoluene	4.500E-04	4.500E-04	3.000E-04	1.000E-04	1.000E-04	1.50	4.50	D	C
1,3,5-Trimethylbenzene	4.500E-04	4.500E-04	4.000E-04	1.000E-04	1.000E-04	1.13	4.50	D	C
o-Ethyltoluene	4.000E-04	4.000E-04	2.000E-04	1.000E-04	1.000E-04	2.00	4.00	C	C
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.200E-03	1.200E-03	1.000E-03	1.000E-04	1.000E-04	1.20	12.00	D	A
n-Decane	2.500E-04	2.500E-04	1.000E-04	1.000E-04	1.000E-04	2.50	2.50	C	C
alpha-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
beta-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
delta 3-Carene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
d-Limonene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
MTBE	1.800E-03	1.800E-03	1.800E-03	1.000E-04	1.000E-04	1.00	18.00	D	A
ETBE	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Dichlorodifluoromethane	1.815E-03	1.815E-03	1.432E-03	4.992E-04	4.992E-04	1.27	3.64	D	C
Methylchloride	ND	ND	ND	2.080E-04	2.080E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Dichlorotetrafluoroethane	ND	ND	ND	7.114E-04	7.114E-04	ND	ND	F	F
Chloroethene	ND	ND	ND	2.621E-04	2.621E-04	ND	ND	F	F
1,3-Butadiene	7.628E-04	7.628E-04	2.034E-04	2.246E-04	2.246E-04	3.75	3.40	C	C
Methylbromide	ND	ND	ND	3.952E-04	3.952E-04	ND	ND	F	F
Ethylchloride	ND	ND	ND	2.683E-04	2.683E-04	ND	ND	F	F
Trichloromonofluoromethane	2.580E-03	2.580E-03	2.612E-03	5.699E-04	5.699E-04	0.99	4.53	F	C
Vinylidenechloride	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Methylenechloride	3.336E-03	3.336E-03	1.287E-03	3.536E-04	3.536E-04	2.59	9.43	C	B
Allylchloride	ND	ND	ND	3.182E-04	3.182E-04	ND	ND	F	F
1,1,2-Trichloro-1,2,2-trifluoroethane	8.791E-04	8.791E-04	8.801E-04	7.821E-04	7.821E-04	1.00	1.12	F	D
1,1-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
1,2-Dichloroethene	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Chloroform	ND	ND	ND	4.950E-04	4.950E-04	ND	ND	F	F
1,2-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
Methylchloroform	3.886E-04	3.886E-04	3.547E-04	5.533E-04	5.533E-04	1.10	0.70	D	F
Benzene	7.628E-03	7.628E-03	3.458E-03	3.245E-04	3.245E-04	2.21	23.51	C	A
Carbontetrachloride	8.334E-04	8.334E-04	7.438E-04	6.406E-04	6.406E-04	1.12	1.30	D	D
1,2-Dichloropropane	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Trichloroethylene	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
cis 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
trans 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
1,1,2-Trichloroethane	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
Toluene	8.696E-03	8.696E-03	7.934E-03	3.827E-04	3.827E-04	1.10	22.72	D	A
1,2-Dibromoethane	ND	ND	ND	7.821E-04	7.821E-04	ND	ND	F	F
Perchloroethylene	ND	ND	ND	6.906E-04	6.906E-04	ND	ND	F	F
Chlorobenzene	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Ethylbenzene	1.612E-03	1.612E-03	1.228E-03	6.656E-04	6.656E-04	1.31	2.42	D	C
m&p-Xylene	3.607E-03	3.607E-03	3.585E-03	4.410E-04	4.410E-04	1.01	8.18	D	B
Styrene	2.194E-04	2.194E-04	ND	4.326E-04	4.326E-04	10.00	0.51	A	F
1,1,2,2-Tetrachloroethane	ND	ND	ND	6.989E-04	6.989E-04	ND	ND	F	F
o-Xylene	1.373E-03	1.373E-03	1.119E-03	4.410E-04	4.410E-04	1.23	3.11	D	C
p-Ethyltoluene	5.570E-04	5.570E-04	5.604E-04	4.992E-04	4.992E-04	0.99	1.12	F	D
1,3,5-Trimethylbenzene	2.870E-04	2.870E-04	2.845E-04	4.992E-04	4.992E-04	1.01	0.57	D	F
1,2,4-Trimethylbenzene	9.466E-04	9.466E-04	9.399E-04	4.992E-04	4.992E-04	1.01	1.90	D	D
Benzylchloride	ND	ND	ND	5.283E-04	5.283E-04	ND	ND	F	F
m-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
p-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
o-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	7.530E-04	7.530E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	1.086E-03	1.086E-03	ND	ND	F	F
Phenylacetylene	ND	ND	ND	4.243E-04	4.243E-04	ND	ND	F	F
Indane	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2,3-Dihydro-1-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2,3-Dihydro-4-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F
Naphthalene	9.064E-04	9.064E-04	4.279E-04	5.325E-04	5.325E-04	2.12	1.70	C	D
2-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
1-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
Cyanogen	ND	ND	ND	2.163E-04	2.163E-04	ND	ND	F	F
Methylnitrite	4.281E-04	4.281E-04	ND	2.538E-04	2.538E-04	10.00	1.69	A	D
Acetonitrile	7.547E-04	7.547E-04	ND	1.706E-04	1.706E-04	10.00	4.42	A	C
Acrylonitrile	8.593E-04	8.593E-04	ND	2.205E-04	2.205E-04	10.00	3.90	A	C
Nitromethane	8.485E-04	8.485E-04	ND	2.538E-04	2.538E-04	10.00	3.34	A	C
Propanenitrile	ND	ND	ND	2.288E-04	2.288E-04	ND	ND	F	F
2-Methylpropanenitrile	ND	ND	ND	2.870E-04	2.870E-04	ND	ND	F	F
Pentanenitrile	ND	ND	ND	3.453E-04	3.453E-04	ND	ND	F	F
Hexanenitrile	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Benzonitrile	3.458E-04	3.458E-04	ND	4.285E-04	4.285E-04	10.00	0.81	A	F
2-Nitrophenol	ND	ND	ND	5.782E-04	5.782E-04	ND	ND	F	F
Acrolein	5.040E-04	5.040E-04	ND	2.330E-04	2.330E-04	10.00	2.16	A	C
Acetone	1.063E-02	1.063E-02	8.348E-03	2.330E-04	2.330E-04	1.27	45.64	D	A
1-Hydroxy-2-propanone	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
Furan	1.599E-04	1.599E-04	ND	2.829E-04	2.829E-04	10.00	0.57	A	F
2-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
2-Methylpropanal	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
1-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
Methacrolein	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
Methyl-vinyl Ketone	ND	ND	ND	2.912E-04	2.912E-04	ND	ND	F	F
MTBE	1.734E-03	1.734E-03	1.677E-03	3.661E-04	3.661E-04	1.03	4.74	D	C
2,3-Butanedione	ND	ND	ND	3.578E-04	3.578E-04	ND	ND	F	F
Butanal	ND	ND	3.764E-04	2.995E-04	2.995E-04	ND	ND	F	F
2-Butanone	1.882E-03	1.882E-03	1.053E-03	2.995E-04	2.995E-04	1.79	6.28	D	B
2-Methyl-1,3-dioxolane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2-Methylfuran	ND	ND	ND	3.411E-04	3.411E-04	ND	ND	F	F
Tetrahydrofuran	ND	ND	ND	2.995E-04	2.995E-04	ND	ND	F	F
trans-2-Butenal	1.821E-04	1.821E-04	ND	2.912E-04	2.912E-04	10.00	0.63	A	F
Acetic Acid	1.453E-03	1.453E-03	1.211E-03	2.496E-04	2.496E-04	1.20	5.82	D	B
1-Butanol	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
2-Pentanone	5.631E-04	5.631E-04	ND	3.578E-04	3.578E-04	10.00	1.57	A	D
Pentanal	8.153E-04	8.153E-04	1.785E-03	3.578E-04	3.578E-04	0.46	2.28	F	C
1,4-Dioxane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
Methyl Methacrylate	ND	ND	ND	4.160E-04	4.160E-04	ND	ND	F	F
Cyclopentanone	ND	ND	ND	3.494E-04	3.494E-04	ND	ND	F	F
Hexanal	9.454E-04	9.454E-04	1.397E-03	4.160E-04	4.160E-04	0.68	2.27	F	C
2-Furaldehyde	2.995E-04	2.995E-04	ND	3.994E-04	3.994E-04	10.00	0.75	A	F
Cyclohexanone	ND	ND	ND	4.077E-04	4.077E-04	ND	ND	F	F
Heptanal	7.979E-04	7.979E-04	7.488E-04	4.742E-04	4.742E-04	1.07	1.68	D	D

TABLE A-5. AEC - VOC DATA EVALUATION FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2-Butoxyethanol	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
Benzaldehyde	1.870E-03	1.870E-03	8.702E-04	4.410E-04	4.410E-04	2.15	4.24	C	C
6-Methyl-5-hepten-2-one	ND	ND	9.276E-04	5.242E-04	5.242E-04	ND	ND	F	F
Octanal	1.915E-03	1.915E-03	1.799E-03	5.325E-04	5.325E-04	1.06	3.60	D	C
Benzofuran	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2-Ethyl-1-hexanol	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
Acetophonone	3.121E-04	3.121E-04	ND	4.992E-04	4.992E-04	10.00	0.63	A	F
Nonanal	2.796E-03	2.796E-03	2.754E-03	5.907E-04	5.907E-04	1.02	4.73	D	C
Decanal	1.863E-03	1.863E-03	1.907E-03	6.490E-04	6.490E-04	0.98	2.87	F	C
Carbonyl Sulfide	2.983E-04	2.983E-04	1.934E-04	2.496E-04	2.496E-04	1.54	1.20	D	D
Carbon Disulfide	9.263E-03	9.263E-03	5.646E-04	3.162E-04	3.162E-04	16.41	29.30	A	A
Thiophene	2.820E-04	2.820E-04	ND	3.494E-04	3.494E-04	10.00	0.81	A	F
Dimethyldisulfide	ND	ND	ND	3.910E-04	3.910E-04	ND	ND	F	F

a
Compounds in bold represent duplicate values.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	1.344E-01	9.740E-02	3.695E-02	0.9104	4.059E-02	33,520	8.493E-05	1	8.493E-05
Volatile Organic Compounds (VOCs)											
Ethane	30	3.205	4.000E-03	3.100E-03	9.000E-04	0.9104	9.886E-04	33,520	2.069E-06	1	2.069E-06
Ethylene	28	10.259	1.195E-02	2.800E-03	9.150E-03	0.9104	1.005E-02	33,520	2.103E-05	1	2.103E-05
Acetylene	26	6.749	7.300E-03	4.500E-03	2.800E-03	0.9104	3.076E-03	33,520	6.436E-06	1	6.436E-06
Propane	44	0.956	1.750E-03	1.500E-03	2.500E-04	0.9104	2.746E-04	33,520	5.746E-07	1	5.746E-07
Propene	42	2.576	4.500E-03	1.300E-03	3.200E-03	0.9104	3.515E-03	33,520	7.355E-06	1	7.355E-06
i-Butane	58	1.575	3.800E-03	3.400E-03	4.000E-04	0.9104	4.394E-04	33,520	9.194E-07	1	9.194E-07
i-Butene	56	0.365	8.500E-04	5.000E-04	3.500E-04	0.9104	3.844E-04	33,520	8.045E-07	1	8.045E-07
1-Butene	56	0.322	7.500E-04	2.000E-04	5.500E-04	0.9104	6.041E-04	33,520	1.264E-06	1	1.264E-06
1,3-Butadiene	54	0.334	7.500E-04	2.000E-04	5.500E-04	0.9104	6.041E-04	33,520	1.264E-06	1	1.264E-06
n-Butane	58	0.684	1.650E-03	1.800E-03	-1.500E-04	0.9104	ND	33,520	ND	1	ND
trans-2-Butene	56	0.494	1.150E-03	2.000E-04	9.500E-04	0.9104	1.043E-03	33,520	2.184E-06	1	2.184E-06
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
cis-2-Butene	56	0.086	2.000E-04	1.000E-04	1.000E-04	0.9104	1.098E-04	33,520	2.299E-07	1	2.299E-07
3-Methyl-1-butene	70	0.034	1.000E-04	1.000E-04	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
i-Pentane	72	1.169	3.500E-03	3.800E-03	-3.000E-04	0.9104	ND	33,520	ND	1	ND
1-Pentene	70	0.069	2.000E-04	1.000E-04	1.000E-04	0.9104	1.098E-04	33,520	2.299E-07	1	2.299E-07
2-Methyl-1-butene	70	0.086	2.500E-04	1.000E-04	1.500E-04	0.9104	1.648E-04	33,520	3.448E-07	1	3.448E-07
n-Pentane	72	0.952	2.850E-03	3.200E-03	-3.500E-04	0.9104	ND	33,520	ND	1	ND
Isoprene	68	ND	ND	1.000E-04	ND	0.9104	ND	33,520	ND	1	ND
trans-2-Pentene	70	0.069	2.000E-04	1.000E-04	1.000E-04	0.9104	1.098E-04	33,520	2.299E-07	1	2.299E-07
cis-2-Pentene	70	ND	ND	1.000E-04	ND	0.9104	ND	33,520	ND	1	ND
2-Methyl-2-butene	70	ND	ND	2.000E-04	ND	0.9104	ND	33,520	ND	1	ND
2,2-Dimethylbutane	86	0.112	4.000E-04	4.000E-04	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
Cyclopentene	68	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Cyclopentane	70	0.069	2.000E-04	3.000E-04	-1.000E-04	0.9104	ND	33,520	ND	1	ND
2,3-Dimethylbutane	86	0.293	1.050E-03	1.100E-03	-5.000E-05	0.9104	ND	33,520	ND	1	ND
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2-Methylpentane	86	0.783	2.800E-03	4.000E-03	-1.200E-03	0.9104	ND	33,520	ND	1	ND
3-Methylpentane	86	0.056	2.000E-04	2.000E-03	-1.800E-03	0.9104	ND	33,520	ND	1	ND
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
1-Hexene	84	0.086	3.000E-04	ND	3.000E-04	0.9104	3.295E-04	33,520	6.896E-07	1	6.896E-07
n-Hexane	86	0.783	2.800E-03	2.900E-03	-1.000E-04	0.9104	ND	33,520	ND	1	ND
trans-2-Hexene	84	ND	ND	1.000E-04	ND	0.9104	ND	33,520	ND	1	ND
2-Methyl-2-pentene	84	ND	ND	1.000E-04	ND	0.9104	ND	33,520	ND	1	ND
cis-2-Hexene	84	ND	ND	1.000E-04	ND	0.9104	ND	33,520	ND	1	ND
Methylcyclopentane	84	0.372	1.300E-03	1.200E-03	1.000E-04	0.9104	1.098E-04	33,520	2.299E-07	1	2.299E-07
2,4-Dimethylpentane	100	0.481	2.000E-03	1.400E-03	6.000E-04	0.9104	6.591E-04	33,520	1.379E-06	1	1.379E-06
Benzene	78	2.311	7.500E-03	3.400E-03	4.100E-03	0.9104	4.504E-03	33,520	9.424E-06	1	9.424E-06
Cyclohexane	84	0.229	8.000E-04	1.000E-03	-2.000E-04	0.9104	ND	33,520	ND	1	ND
2-Methylhexane	100	0.276	1.150E-03	1.100E-03	5.000E-05	0.9104	5.492E-05	33,520	1.149E-07	1	1.149E-07
2,3-Dimethylpentane	100	0.913	3.800E-03	3.800E-03	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
3-Methylhexane	100	0.313	1.300E-03	1.400E-03	-1.000E-04	0.9104	ND	33,520	ND	1	ND
2,2,4-Trimethylpentane	114	1.550	7.350E-03	7.400E-03	-5.000E-05	0.9104	ND	33,520	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
n-Heptane	100	0.264	1.100E-03	1.100E-03	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Methylcyclohexane	98	0.172	7.000E-04	8.000E-04	-1.000E-04	0.9104	ND	33,520	ND	1	ND
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2,5-Dimethylhexane	114	0.105	5.000E-04	5.000E-04	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
2,4-Dimethylhexane	114	0.169	8.000E-04	8.000E-04	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
2,3,4-Trimethylpentane	114	0.337	1.600E-03	1.600E-03	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
Toluene	92	2.234	8.550E-03	7.800E-03	7.500E-04	0.9104	8.238E-04	33,520	1.724E-06	1	1.724E-06
2,3-Dimethylhexane	114	0.127	6.000E-04	5.000E-04	1.000E-04	0.9104	1.098E-04	33,520	2.299E-07	1	2.299E-07
2-Methylheptane	111	0.076	3.500E-04	3.000E-04	5.000E-05	0.9104	5.492E-05	33,520	1.149E-07	1	1.149E-07
3-Ethylhexane	114	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2,2,4-Trimethylhexane	128	0.075	4.000E-04	4.000E-04	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
n-Octane	114	0.063	3.000E-04	3.000E-04	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
Ethylcyclohexane	112	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Ethylbenzene	160	0.158	1.050E-03	8.000E-04	2.500E-04	0.9104	2.746E-04	33,520	5.746E-07	1	5.746E-07
m-Xylene & p-Xylene	106	0.896	3.950E-03	3.500E-03	4.500E-04	0.9104	4.943E-04	33,520	1.034E-06	1	1.034E-06
Styrene	104	0.150	6.500E-04	5.000E-04	1.500E-04	0.9104	1.648E-04	33,520	3.448E-07	1	3.448E-07
o-Xylene	106	0.306	1.350E-03	1.100E-03	2.500E-04	0.9104	2.746E-04	33,520	5.746E-07	1	5.746E-07
n-Nonane	128	0.056	3.000E-04	1.000E-04	2.000E-04	0.9104	2.197E-04	33,520	4.597E-07	1	4.597E-07
i-Propylbenzene	120	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
n-Propylbenzene	120	0.060	3.000E-04	2.000E-04	1.000E-04	0.9104	1.098E-04	33,520	2.299E-07	1	2.299E-07
p-Ethyltoluene	120	0.170	8.500E-04	7.000E-04	1.500E-04	0.9104	1.648E-04	33,520	3.448E-07	1	3.448E-07
m-Ethyltoluene	120	0.090	4.500E-04	3.000E-04	1.500E-04	0.9104	1.648E-04	33,520	3.448E-07	1	3.448E-07
1,3,5-Trimethylbenzene	120	0.090	4.500E-04	4.000E-04	5.000E-05	0.9104	5.492E-05	33,520	1.149E-07	1	1.149E-07
o-Ethyltoluene	120	0.080	4.000E-04	2.000E-04	2.000E-04	0.9104	2.197E-04	33,520	4.597E-07	1	4.597E-07
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.240	1.200E-03	1.000E-03	2.000E-04	0.9104	2.197E-04	33,520	4.597E-07	1	4.597E-07
n-Decane	142	0.042	2.500E-04	1.000E-04	1.500E-04	0.9104	1.648E-04	33,520	3.448E-07	1	3.448E-07
alpha-Pinene	136	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
beta-Pinene	136	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
delta 3-Carene	136	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
d-Limonene	136	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
MTBE	88	0.492	1.800E-03	1.800E-03	0.000E+00	0.9104	0.000E+00	33,520	0.000E+00	1	0.000E+00
ETBE	102	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Dichlorodifluoromethane	120	0.364	1.815E-03	1.432E-03	3.829E-04	0.9104	4.205E-04	33,520	8.800E-07	1	8.800E-07
Methylchloride	50	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Chloroethene	63	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
1,3-Butadiene	54	0.340	7.628E-04	2.034E-04	5.594E-04	0.9104	6.145E-04	33,520	1.286E-06	1	1.286E-06
Methylbromide	95	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Trichloromonofluoromethane	137	0.453	2.580E-03	2.612E-03	-3.174E-05	0.9104	ND	33,520	ND	1	ND
Vinylidenechloride	97	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Methylenechloride	85	0.943	3.336E-03	1.287E-03	2.049E-03	0.9104	2.250E-03	33,520	4.709E-06	1	4.709E-06
Allylchloride	76.5	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.112	8.791E-04	8.801E-04	-1.038E-06	0.9104	ND	33,520	ND	1	ND
1,1-Dichloroethane	99	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
1,2-Dichloroethene	97	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Chloroform	119	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
1,2-Dichloroethane	99	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Methylchloroform	133	0.070	3.886E-04	3.547E-04	3.393E-05	0.9104	3.727E-05	33,520	7.800E-08	1	7.800E-08
Benzene	78	2.351	7.628E-03	3.458E-03	4.170E-03	0.9104	4.581E-03	33,520	9.586E-06	1	9.586E-06
Carbontetrachloride	154	0.130	8.334E-04	7.438E-04	8.958E-05	0.9104	9.840E-05	33,520	2.059E-07	1	2.059E-07
1,2-Dichloropropane	113	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Trichloroethylene	133	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Toluene	92	2.272	8.696E-03	7.934E-03	7.628E-04	0.9104	8.379E-04	33,520	1.753E-06	1	1.753E-06
1,2-Dibromoethane	188	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Perchloroethylene	166	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Chlorobenzene	113	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Ethylbenzene	160	0.242	1.612E-03	1.228E-03	3.838E-04	0.9104	4.216E-04	33,520	8.822E-07	1	8.822E-07
m&p-Xylene	106	0.818	3.607E-03	3.585E-03	2.120E-05	0.9104	2.329E-05	33,520	4.873E-08	1	4.873E-08
Styrene	104	0.051	2.194E-04	ND	2.194E-04	0.9104	2.410E-04	33,520	5.044E-07	1	5.044E-07
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
o-Xylene	106	0.311	1.373E-03	1.119E-03	2.543E-04	0.9104	2.793E-04	33,520	5.845E-07	1	5.845E-07
p-Ethyltoluene	120	0.112	5.570E-04	5.604E-04	-3.483E-06	0.9104	ND	33,520	ND	1	ND
1,3,5-Trimethylbenzene	120	0.057	2.870E-04	2.845E-04	2.544E-06	0.9104	2.794E-06	33,520	5.847E-09	1	5.847E-09
1,2,4-Trimethylbenzene	120	0.190	9.466E-04	9.399E-04	6.666E-06	0.9104	7.322E-06	33,520	1.532E-08	1	1.532E-08
Benzylchloride	127	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Phenylacetylene	102	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Indane	118	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2,3-Dihydro-1-methyl-1H-indene	132	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2,3-Dihydro-4-methyl-1H-indene	132	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Naphthalene	128	0.170	9.064E-04	4.279E-04	4.785E-04	0.9104	5.256E-04	33,520	1.100E-06	1	1.100E-06
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
1-Methylnaphthalene	142	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Cyanogen	52	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Methylnitrite	61	0.169	4.281E-04	ND	4.281E-04	0.9104	4.702E-04	33,520	9.841E-07	1	9.841E-07
Acetonitrile	41	0.442	7.547E-04	ND	7.547E-04	0.9104	8.289E-04	33,520	1.735E-06	1	1.735E-06
Acrylonitrile	53	0.390	8.593E-04	ND	8.593E-04	0.9104	9.439E-04	33,520	1.975E-06	1	1.975E-06
Nitromethane	61	0.334	8.485E-04	ND	8.485E-04	0.9104	9.320E-04	33,520	1.950E-06	1	1.950E-06
Propanenitrile	55	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Pentanenitrile	83	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Hexanenitrile	97	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Benzonitrile	103	0.081	3.458E-04	ND	3.458E-04	0.9104	3.798E-04	33,520	7.948E-07	1	7.948E-07
2-Nitrophenol	139	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Acrolein	56	0.216	5.040E-04	ND	5.040E-04	0.9104	5.536E-04	33,520	1.158E-06	1	1.158E-06
Acetone	56	4.564	1.063E-02	8.348E-03	2.284E-03	0.9104	2.509E-03	33,520	5.251E-06	1	5.251E-06
1-Hydroxy-2-propanone	74	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Furan	68	0.057	1.599E-04	ND	1.599E-04	0.9104	1.756E-04	33,520	3.676E-07	1	3.676E-07
2-Propanol	60	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2-Methylpropanal	74	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
1-Propanol	60	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Methacrolein	70	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Methyl-vinyl Ketone	70	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
MTBE	88	0.474	1.734E-03	1.677E-03	5.727E-05	0.9104	6.290E-05	33,520	1.316E-07	1	1.316E-07
2,3-Butanedione	86	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Butanal	72	ND	ND	3.764E-04	ND	0.9104	ND	33,520	ND	1	ND
2-Butanone	72	0.628	1.882E-03	1.053E-03	8.284E-04	0.9104	9.099E-04	33,520	1.904E-06	1	1.904E-06
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2-Methylfuran	82	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Tetrahydrofuran	72	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
trans-2-Butenal	70	0.063	1.821E-04	ND	1.821E-04	0.9104	2.000E-04	33,520	4.185E-07	1	4.185E-07
Acetic Acid	60	0.582	1.453E-03	1.211E-03	2.412E-04	0.9104	2.649E-04	33,520	5.544E-07	1	5.544E-07
1-Butanol	74	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2-Pentanone	86	0.157	5.631E-04	ND	5.631E-04	0.9104	6.185E-04	33,520	1.294E-06	1	1.294E-06
Pentanal	86	0.228	8.153E-04	1.785E-03	-9.692E-04	0.9104	ND	33,520	ND	1	ND
1,4-Dioxane	88	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Cyclopentanone	84	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Hexanal	100	0.227	9.454E-04	1.397E-03	-4.518E-04	0.9104	ND	33,520	ND	1	ND
2-Furaldehyde	96	0.075	2.995E-04	ND	2.995E-04	0.9104	3.289E-04	33,520	6.883E-07	1	6.883E-07
Cyclohexanone	98	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Heptanal	114	0.168	7.979E-04	7.488E-04	4.904E-05	0.9104	5.387E-05	33,520	1.127E-07	1	1.127E-07
2-Butoxyethanol	118	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Benzaldehyde	106	0.424	1.870E-03	8.702E-04	1.000E-03	0.9104	1.099E-03	33,520	2.299E-06	1	2.299E-06
6-Methyl-5-hepten-2-one	126	ND	ND	9.276E-04	ND	0.9104	ND	33,520	ND	1	ND
Octanal	128	0.360	1.915E-03	1.799E-03	1.166E-04	0.9104	1.281E-04	33,520	2.681E-07	1	2.681E-07
Benzofuran	118	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND
Acetophonone	120	0.063	3.121E-04	ND	3.121E-04	0.9104	3.428E-04	33,520	7.174E-07	1	7.174E-07
Nonanal	142	0.473	2.796E-03	2.754E-03	4.201E-05	0.9104	4.614E-05	33,520	9.655E-08	1	9.655E-08
Decanal	156	0.287	1.863E-03	1.907E-03	-4.368E-05	0.9104	ND	33,520	ND	1	ND
Carbonyl Sulfide	60	0.120	2.983E-04	1.934E-04	1.049E-04	0.9104	1.152E-04	33,520	2.410E-07	1	2.410E-07
Carbon Disulfide	76	2.930	9.263E-03	5.646E-04	8.699E-03	0.9104	9.555E-03	33,520	1.999E-05	1	1.999E-05
Thiophene	84	0.081	2.820E-04	ND	2.820E-04	0.9104	3.098E-04	33,520	6.483E-07	1	6.483E-07
Dimethyldisulfide	94	ND	ND	ND	ND	0.9104	ND	33,520	ND	1	ND

a
Compounds in bold represent duplicate values.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-7. AEC - SVOC DATA EVALUATION FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate/Vapor-phase SVOCs									
N-Nitrosodimethylamine	ND	ND	ND	1.909E-04	1.909E-04	ND	ND	F	F
Pyridine	ND	ND	ND	5.596E-04	5.596E-04	ND	ND	F	F
2-Picoline	ND	ND	ND	5.815E-04	5.815E-04	ND	ND	F	F
Methyl methanesulfonate	ND	ND	ND	2.200E-04	2.200E-04	ND	ND	F	F
N-Nitrosomethylethylamine	ND	ND	ND	4.367E-04	4.367E-04	ND	ND	F	F
N-Nitrosodiethylamine	ND	ND	ND	4.663E-04	4.663E-04	ND	ND	F	F
Ethyl methanesulfonate	ND	ND	ND	2.145E-04	2.145E-04	ND	ND	F	F
Phenol	ND	ND	ND	1.372E-04	1.372E-04	ND	ND	F	F
Aniline	ND	ND	ND	2.189E-04	2.189E-04	ND	ND	F	F
bis(2-Chloroethyl)ether	ND	ND	ND	1.712E-04	1.712E-04	ND	ND	F	F
Pentachloroethane	ND	ND	ND	3.956E-04	3.956E-04	ND	ND	F	F
2-Chlorophenol	ND	ND	ND	8.723E-05	8.723E-05	ND	ND	F	F
1,3-Dichlorobenzene	ND	ND	ND	1.684E-04	1.684E-04	ND	ND	F	F
1,4-Dichlorobenzene	ND	ND	ND	3.379E-04	3.379E-04	ND	ND	F	F
Benzyl alcohol	ND	ND	ND	3.824E-04	3.824E-04	ND	ND	F	F
2-Methylphenol	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
1,2-Dichlorobenzene	ND	ND	ND	2.447E-04	2.447E-04	ND	ND	F	F
bis(2-Chloroisopropyl)ether	ND	ND	ND	2.063E-04	2.063E-04	ND	ND	F	F
o-Toluidine	ND	ND	ND	2.173E-04	2.173E-04	ND	ND	F	F
4-Methylphenol/3-Methylphenol	ND	ND	ND	2.600E-04	2.600E-04	ND	ND	F	F
N-Nitroso-di-n-propylamine	ND	ND	ND	1.542E-04	1.542E-04	ND	ND	F	F
Acetophenone	5.510E-04	5.510E-04	2.708E-04	1.618E-04	1.618E-04	2.03	3.40	C	C
N-Nitrosomorpholine	ND	ND	ND	4.932E-04	4.932E-04	ND	ND	F	F
N-Nitrosopyrrolidine	ND	ND	ND	6.529E-04	6.529E-04	ND	ND	F	F
Hexachloroethane	ND	ND	ND	2.710E-04	2.710E-04	ND	ND	F	F
Nitrobenzene	ND	ND	ND	4.888E-04	4.888E-04	ND	ND	F	F
N-Nitrosopiperidine	ND	ND	ND	3.999E-04	3.999E-04	ND	ND	F	F
Isophorone	ND	ND	ND	1.174E-04	1.174E-04	ND	ND	F	F
2,4-Dimethylphenol	ND	ND	ND	1.849E-04	1.849E-04	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	2.941E-04	2.941E-04	ND	ND	F	F
bis(2-Chloroethoxy)methane	ND	ND	ND	2.145E-04	2.145E-04	ND	ND	F	F
Benzoic acid	ND	ND	ND	2.008E-02	2.008E-02	ND	ND	F	F
2,4-Dichlorophenol	ND	ND	ND	2.688E-04	2.688E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	1.937E-04	1.937E-04	ND	ND	F	F
Naphthalene	4.426E-04	4.426E-04	2.995E-04	2.452E-04	2.452E-04	1.48	1.80	D	D
p-Chloroaniline	ND	ND	ND	1.767E-04	1.767E-04	ND	ND	F	F
2,6-Dichlorophenol	ND	ND	ND	1.887E-04	1.887E-04	ND	ND	F	F
Hexachloropropene	ND	ND	ND	3.100E-04	3.100E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	2.798E-04	2.798E-04	ND	ND	F	F
Dimethylphenethylamine	ND	ND	ND	1.119E-02	1.119E-02	ND	ND	F	F
N-Nitroso-di-n-butylamine	ND	ND	ND	2.052E-04	2.052E-04	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
4-Chloro-3-methylphenol	ND	ND	ND	3.111E-04	3.111E-04	ND	ND	F	F
Safrole	ND	ND	ND	3.901E-04	3.901E-04	ND	ND	F	F
2-Methylnaphthalene	ND	ND	ND	1.970E-04	1.970E-04	ND	ND	F	F
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	2.995E-04	2.995E-04	ND	ND	F	F
Hexachlorocyclopentadiene	ND	ND	ND	6.090E-03	6.090E-03	ND	ND	F	F
2,4,6-Trichlorophenol	ND	ND	ND	3.462E-04	3.462E-04	ND	ND	F	F
2,4,5-Trichlorophenol	ND	ND	ND	2.941E-04	2.941E-04	ND	ND	F	F
Isosafrole	ND	ND	ND	5.925E-04	5.925E-04	ND	ND	F	F
2-Chloronaphthalene	ND	ND	ND	3.094E-04	3.094E-04	ND	ND	F	F
2-Nitroaniline	ND	ND	ND	1.964E-04	1.964E-04	ND	ND	F	F
1,4-Naphthoquinone	ND	ND	ND	5.486E-04	5.486E-04	ND	ND	F	F
Dimethylphthalate	ND	ND	ND	1.596E-04	1.596E-04	ND	ND	F	F
1,3-Dinitrobenzene	ND	ND	ND	4.592E-04	4.592E-04	ND	ND	F	F
2,6-Dinitrotoluene	ND	ND	ND	3.862E-04	3.862E-04	ND	ND	F	F
Acenaphthylene	ND	ND	ND	1.794E-04	1.794E-04	ND	ND	F	F
3-Nitroaniline	ND	ND	ND	4.833E-04	4.833E-04	ND	ND	F	F
4-Nitrophenol	ND	ND	ND	1.684E-02	1.684E-02	ND	ND	F	F
2,4-Dinitrophenol	ND	ND	ND	1.728E-02	1.728E-02	ND	ND	F	F
Acenaphthene	ND	ND	ND	1.975E-04	1.975E-04	ND	ND	F	F
2,4-Dinitrotoluene	ND	ND	ND	2.441E-04	2.441E-04	ND	ND	F	F
Dibenzofuran	ND	ND	ND	1.339E-04	1.339E-04	ND	ND	F	F
Pentachlorobenzene	ND	ND	ND	3.698E-04	3.698E-04	ND	ND	F	F
1-Naphthylamine	ND	ND	ND	9.656E-04	9.656E-04	ND	ND	F	F
2-Naphthylamine	ND	ND	ND	8.558E-04	8.558E-04	ND	ND	F	F
2,3,4,6-Tetrachlorophenol	ND	ND	ND	3.917E-04	3.917E-04	ND	ND	F	F
Diethylphthalate	5.907E-04	5.907E-04	3.475E-04	1.426E-04	1.426E-04	1.70	4.14	D	C
4-Chlorophenylphenyl ether	ND	ND	ND	1.553E-04	1.553E-04	ND	ND	F	F
Fluorene	ND	ND	ND	1.865E-04	1.865E-04	ND	ND	F	F
5-Nitro-o-toluidine	ND	ND	ND	1.991E-04	1.991E-04	ND	ND	F	F
4-Nitroaniline	ND	ND	ND	4.252E-04	4.252E-04	ND	ND	F	F
4,6-Dinitro-2-methylphenol	ND	ND	ND	1.492E-02	1.492E-02	ND	ND	F	F
Diphenylamine/N-NitrosoDPA	ND	ND	ND	2.019E-04	2.019E-04	ND	ND	F	F
sym-Trinitrobenzene	ND	ND	ND	6.858E-04	6.858E-04	ND	ND	F	F
Diallate	ND	ND	ND	2.606E-04	2.606E-04	ND	ND	F	F
Phenacetin	ND	ND	ND	1.229E-04	1.229E-04	ND	ND	F	F
4-Bromophenylphenyl ether	ND	ND	ND	3.780E-04	3.780E-04	ND	ND	F	F
Hexachlorobenzene	ND	ND	ND	2.035E-04	2.035E-04	ND	ND	F	F
4-Aminobiphenyl	ND	ND	ND	1.136E-03	1.136E-03	ND	ND	F	F
Pronamide	ND	ND	ND	1.410E-04	1.410E-04	ND	ND	F	F
Pentachlorophenol	ND	ND	ND	1.580E-02	1.580E-02	ND	ND	F	F
Pentachloronitrobenzene	ND	ND	ND	7.351E-04	7.351E-04	ND	ND	F	F
Phenanthrene	ND	ND	ND	3.347E-04	3.347E-04	ND	ND	F	F
Anthracene	ND	ND	ND	2.008E-04	2.008E-04	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Carbazole	ND	ND	ND	1.344E-04	1.344E-04	ND	ND	F	F
Di-n-butylphthalate	3.134E-03	3.134E-03	1.357E-03	9.326E-05	9.326E-05	2.31	33.61	C	A
4-Nitroquinoline-1-oxide	ND	ND	ND	1.234E-02	1.234E-02	ND	ND	F	F
Methapyrilene	ND	ND	ND	1.136E-02	1.136E-02	ND	ND	F	F
Fluoranthene	ND	ND	ND	1.981E-04	1.981E-04	ND	ND	F	F
Benzidine	ND	ND	ND	7.351E-03	7.351E-03	ND	ND	F	F
Pyrene	ND	ND	ND	2.721E-04	2.721E-04	ND	ND	F	F
p-Dimethylaminoazobenzene	ND	ND	ND	2.019E-04	2.019E-04	ND	ND	F	F
Chlorobenzilate	ND	ND	ND	2.809E-04	2.809E-04	ND	ND	F	F
Kepone	ND	ND	ND	1.031E-02	1.031E-02	ND	ND	F	F
Butylbenzylphthalate	ND	ND	ND	1.125E-04	1.125E-04	ND	ND	F	F
3,3'-Dimethylbenzidine	ND	ND	ND	1.086E-03	1.086E-03	ND	ND	F	F
2-Acetylaminofluorene	ND	ND	ND	1.712E-04	1.712E-04	ND	ND	F	F
bis(2-Ethylhexyl)phthalate	ND	ND	ND	6.693E-04	6.693E-04	ND	ND	F	F
3,3'-Dichlorobenzidine	ND	ND	ND	1.838E-04	1.838E-04	ND	ND	F	F
Benz(a)anthracene	ND	ND	ND	2.480E-04	2.480E-04	ND	ND	F	F
Chrysene	ND	ND	ND	2.677E-04	2.677E-04	ND	ND	F	F
Di-n-octylphthalate	ND	ND	ND	1.712E-04	1.712E-04	ND	ND	F	F
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	2.529E-04	2.529E-04	ND	ND	F	F
Benzo(b)fluoranthene (a)	ND	ND	ND	1.525E-04	1.525E-04	ND	ND	F	F
Benzo(k)fluoranthene (a)	ND	ND	ND	3.187E-04	3.187E-04	ND	ND	F	F
Benz(a)pyrene	ND	ND	ND	1.805E-04	1.805E-04	ND	ND	F	F
3-Methylcholanthrene	ND	ND	ND	6.419E-04	6.419E-04	ND	ND	F	F
Indeno(1,2,3-cd)pyrene	ND	ND	ND	1.201E-04	1.201E-04	ND	ND	F	F
Dibenz(a,h)anthracene	ND	ND	ND	1.350E-04	1.350E-04	ND	ND	F	F
Benzo(g,h,i)perylene	ND	ND	ND	1.295E-04	1.295E-04	ND	ND	F	F

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Pyridine	79	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2-Picoline	93	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Phenol	94	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Aniline	93	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Pentachloroethane	202	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2-Methylphenol	108	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
o-Toluidine	107	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Acetophenone	120	0.110	5.510E-04	2.708E-04	2.802E-04	0.8191	3.421E-04	33,520	7.159E-07	1	7.159E-07
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Hexachloroethane	237	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Nitrobenzene	123	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Isophorone	138	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Benzoic acid	122	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Naphthalene	128	0.083	4.426E-04	2.995E-04	1.431E-04	0.8191	1.747E-04	33,520	3.655E-07	1	3.655E-07
p-Chloroaniline	128	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Hexachloropropene	249	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Safrole	162	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2-Methylnaphthalene	142	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Isosafrole	162	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Acenaphthylene	152	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Acenaphthene	154	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Dibenzofuran	168	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Diethylphthalate	222	0.064	5.907E-04	3.475E-04	2.433E-04	0.8191	2.970E-04	33,520	6.216E-07	1	6.216E-07
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Fluorene	166	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Diallate	270	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Phenacetin	179	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Pronamide	228	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Phenanthrene	178	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Anthracene	178	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Carbazole	167	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Di-n-butylphthalate	278	0.271	3.134E-03	1.357E-03	1.778E-03	0.8191	2.170E-03	33,520	4.541E-06	1	4.541E-06
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Methapyrilene	261	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Fluoranthene	202	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Benzidine	184	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Pyrene	202	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Kepone	491	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Butylbenzylphthalate	312	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR WHITE PARACHUTE SIGNAL FLARE TEST (1 APRIL 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
bis(2-Ethylhexyl)phthalate	391	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Chrysene	228	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.8191	ND	33,520	ND	1	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

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155 MM ILLUMINATION ROUND

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TABLE A-1. AEC MUNITION ITEM INPUT DATA SHEET (1 APRIL 1998)
Munition Item: 155mm Illumination Round
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	49.5	63.6	NA	NA	NA	NA	56.53
PM_{10}	42.3	43.9	NA	NA	NA	NA	43.09
Metals	49.5	63.6	NA	NA	NA	NA	56.53
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	10.7	9.7	NA	NA	NA	NA	10.18
HCl/Cl_2	32.3	22.1	NA	NA	NA	NA	27.20
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	13.9	13.0	NA	NA	NA	NA	13.45
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	Run No. 1		Run No. 2		Run No. 3		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	49.5	39.0	NA	NA	NA	NA	44.25
HCl/Cl_2 (NaOH)	34.0	43.0	NA	NA	NA	NA	38.50

Sample Weight Gain:	Run No. 1		Run No. 2		Run No. 3		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	1.3018	2.5131	NA	NA	NA	NA	1.9075
PM_{10}	2.1325	1.9271	NA	NA	NA	NA	2.0298

Dilution Correction Factors:	Run No. 1	Run No. 2	Run No. 3	Average
TSP	0.9389	NA	NA	0.9389
PM_{10}	0.9435	NA	NA	0.9435
Metals	0.9389	NA	NA	0.9389
VOCs	0.9264	NA	NA	0.9264
SVOCs	0.9299	NA	NA	0.9299
HCl/Cl_2	0.9299	NA	NA	0.9299
Energetics	NA	NA	NA	NA
Dioxin/Furan	0.9299	NA	NA	0.9299
Residue	NA	NA	NA	NA
CEM	0.8676	NA	NA	0.8676

	Run No. 1	Run No. 2	Run No. 3	Average
Initial Plume Volume (m^3)	951.86	NA	NA	951.86
Net Explosive Weight (g)	2777.35	NA	NA	2777.35

TABLE A-2. AEC BACKGROUND INPUT DATA SHEET (1 APRIL 1998)
Munition Item: 155mm Illumination Round
Created by: Radian International LLC

No. of Runs = 1

Sample Volumes:	IR - Background		Reagent Blank		Field Blank		Average (ft^3)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	1354.9	NA	NA	NA	NA	NA	1354.93
PM_{10}	1021.0	NA	NA	NA	NA	NA	1020.97
Metals	1354.9	NA	NA	NA	NA	NA	1354.93
VOCs	NA	NA	NA	NA	NA	NA	NA
SVOCs	121.2	NA	NA	NA	NA	NA	121.22
HCl/Cl_2	29.3	NA	NA	NA	NA	NA	29.27
Energetics	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furan	112.7	NA	NA	NA	NA	NA	112.73
Residue	NA	NA	NA	NA	NA	NA	NA
CEM	NA	NA	NA	NA	NA	NA	NA

Sample Volumes:	IR - Background		Reagent Blank		Field Blank		Average (mL)
	Train A	Train B	Train A	Train B	Train A	Train B	
HCl/Cl_2 (H_2SO_4)	48.0	NA	107.2	NA	45.3	NA	48.00
HCl/Cl_2 (NaOH)	39.0	NA	92.0	NA	41.5	NA	39.00
HCl/Cl_2 (H_2O)	NA	NA	100.0	NA	NA	NA	NA

Sample Weight Gain:	IR - Background		Reagent Blank		Field Blank		Average (g)
	Train A	Train B	Train A	Train B	Train A	Train B	
TSP	-0.0010	NA	-0.0026	NA	-0.0037	NA	-0.0010
PM_{10}	-0.0005	NA	-0.0002	NA	-0.0029	NA	-0.0005

TABLE A-3. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS DATA EVALUATION FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate									
TSP	1.163E+03	1.163E+03	ND	ND	ND	10.00	10.00	A	A
PM_{10}	1.666E+03	1.666E+03	ND	ND	ND	10.00	10.00	A	A
Hydrogen Chloride (HCl)/Chlorine (Cl_2)									
HCl	ND	ND	ND	7.145E-02	5.623E-02	ND	ND	F	F
Cl_2	2.472E-02	2.472E-02	3.022E-02	1.701E-03	1.338E-03	0.82	18.48	F	A
Dioxin/Furan									
Dioxin TEQ (a)	3.694E-09	3.694E-09	1.484E-10	ND	ND	24.89	10.00	A	A
Continuous Emissions Monitoring (CEM) System									
Carbon Monoxide (CO)	1.026E+01	1.026E+01	2.826E-01	ND	ND	36.31	10.00	A	A
Nitrogen Oxide (NOx)	3.619E+01	3.619E+01	1.737E-02	ND	ND	2083.59	10.00	A	A
HCl	4.549E-01	4.549E-01	3.844E-01	ND	ND	1.18	10.00	D	A
Carbon Dioxide (CO_2)	1.358E+03	1.358E+03	6.581E+02	ND	ND	2.06	10.00	C	A
Sulfur Dioxide (SO_2)	1.064E+00	1.064E+00	7.430E-04	ND	ND	1431.89	10.00	A	A
Particulate-phase Metals									
Aluminum	1.960E-01	1.960E-01	NA (b)	2.741E-02	2.431E-02	NA (b)	8.06	NA (b)	B
Antimony	1.150E-02	1.150E-02	NA (b)	3.945E-03	3.492E-03	NA (b)	3.29	NA (b)	C
Arsenic	ND	ND	NA (b)	2.705E-03	2.395E-03	NA (b)	ND	NA (b)	F
Barium	2.121E-01	2.121E-01	NA (b)	3.003E-04	2.657E-04	NA (b)	797.99	NA (b)	A
Beryllium	1.384E-04	1.384E-04	NA (b)	1.668E-04	1.478E-04	NA (b)	0.94	NA (b)	F
Cadmium	4.037E-02	4.037E-02	NA (b)	3.337E-04	2.955E-04	NA (b)	136.58	NA (b)	A
Chromium	3.776E-03	3.776E-03	NA (b)	5.899E-04	5.220E-04	NA (b)	7.24	NA (b)	B
Cobalt	1.028E-03	1.028E-03	NA (b)	5.899E-04	5.220E-04	NA (b)	1.97	NA (b)	D
Copper	4.130E-02	4.130E-02	NA (b)	1.442E-03	1.287E-03	NA (b)	32.09	NA (b)	A
Lead	3.188E-02	3.188E-02	NA (b)	2.228E-03	1.966E-03	NA (b)	16.21	NA (b)	A
Magnesium	7.880E+01	7.880E+01	NA (b)	5.768E-03	5.100E-03	NA (b)	15450.57	NA (b)	A
Manganese	2.958E-02	2.958E-02	NA (b)	2.562E-04	2.264E-04	NA (b)	130.63	NA (b)	A
Nickel	5.043E-03	5.043E-03	NA (b)	9.021E-04	7.984E-04	NA (b)	6.32	NA (b)	B
Phosphorus	3.234E-02	3.234E-02	NA (b)	6.340E-03	5.613E-03	NA (b)	5.76	NA (b)	B
Selenium	ND	ND	NA (b)	2.145E-03	1.907E-03	NA (b)	ND	NA (b)	F
Silver	ND	ND	NA (b)	4.004E-04	3.551E-04	NA (b)	ND	NA (b)	F
Thallium	ND	ND	NA (b)	5.077E-03	4.493E-03	NA (b)	ND	NA (b)	F
Zinc	6.297E-01	6.297E-01	NA (b)	4.826E-03	4.266E-03	NA (b)	147.59	NA (b)	A
Mercury	9.773E-06	9.773E-06	NA (b)	7.222E-06	6.793E-06	NA (b)	1.44	NA (b)	D

a
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD
b
Insufficient material to analyze

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-4. AEC - TSP, PM_{10}, HCl/Cl_2, DIOXIN/FURAN, CO, CO_2, NOx, SO_2, AND METALS RUN NO. 1 DATA FOR 155 mm ILLUMINATION ROUND (1 APRIL 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (a), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate											
TSP	-	-	1.163E+03	ND	1.163E+03	0.9389	1.238E+03	33,614	2.598E+00	1	2.598E+00
PM_{10}	-	-	1.666E+03	ND	1.666E+03	0.9435	1.766E+03	33,614	3.705E+00	1	3.705E+00
Hydrogen Chloride (HCl)/Chlorine (Cl_2)											
HCl (b)	36	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Cl_2 (b)	71	8.381	2.472E-02	3.022E-02	-5.504E-03	0.9299	ND	33,614	ND	1	ND
Dioxin/Furan											
Dioxin TEQ (c)	-	-	3.694E-09	1.484E-10	3.545E-09	0.9299	3.812E-09	33,614	8.001E-12	1	8.001E-12
Continuous Emissions Monitoring (CEM) System											
Carbon Monoxide (CO)	28	8811.353	1.026E+01	2.826E-01	9.981E+00	0.8676	1.150E+01	33,614	2.414E-02	1	2.414E-02
Nitrogen Oxide (NOx)	46	18912.740	3.619E+01	1.737E-02	3.617E+01	0.8676	4.169E+01	33,614	8.750E-02	1	8.750E-02
HCl (b)	36	303.724	4.549E-01	3.844E-01	7.047E-02	0.8676	8.122E-02	33,614	1.704E-04	1	1.704E-04
Carbon Dioxide (CO_2)	44	742183.700	1.358E+03	6.581E+02	7.004E+02	0.8676	8.073E+02	33,614	1.694E+00	1	1.694E+00
Sulfur Dioxide (SO_2)	64	399.578	1.064E+00	7.430E-04	1.063E+00	0.8676	1.225E+00	33,614	2.571E-03	1	2.571E-03
Particulate-phase Metals											
Aluminum	27	174.501	1.960E-01	NA (d)	1.960E-01	0.9389	2.088E-01	33,614	4.381E-04	1	4.381E-04
Antimony	122	2.265	1.150E-02	NA (d)	1.150E-02	0.9389	1.224E-02	33,614	2.570E-05	1	2.570E-05
Arsenic	75	ND	ND	NA (d)	ND	0.9389	ND	33,614	ND	1	ND
Barium	137	37.209	2.121E-01	NA (d)	2.121E-01	0.9389	2.259E-01	33,614	4.740E-04	1	4.740E-04
Beryllium	9	0.370	1.384E-04	NA (d)	1.384E-04	0.9389	1.474E-04	33,614	3.094E-07	1	3.094E-07
Cadmium	112	8.664	4.037E-02	NA (d)	4.037E-02	0.9389	4.299E-02	33,614	9.022E-05	1	9.022E-05
Chromium	52	1.746	3.776E-03	NA (d)	3.776E-03	0.9389	4.022E-03	33,614	8.441E-06	1	8.441E-06
Cobalt	59	0.419	1.028E-03	NA (d)	1.028E-03	0.9389	1.094E-03	33,614	2.297E-06	1	2.297E-06
Copper	64	15.511	4.130E-02	NA (d)	4.130E-02	0.9389	4.398E-02	33,614	9.230E-05	1	9.230E-05
Lead	207	3.702	3.188E-02	NA (d)	3.188E-02	0.9389	3.395E-02	33,614	7.125E-05	1	7.125E-05
Magnesium	24	78931.244	7.880E+01	NA (d)	7.880E+01	0.9389	8.393E+01	33,614	1.761E-01	1	1.761E-01
Manganese	55	12.927	2.958E-02	NA (d)	2.958E-02	0.9389	3.150E-02	33,614	6.611E-05	1	6.611E-05
Nickel	59	2.055	5.043E-03	NA (d)	5.043E-03	0.9389	5.371E-03	33,614	1.127E-05	1	1.127E-05
Phosphorus	31	25.081	3.234E-02	NA (d)	3.234E-02	0.9389	3.445E-02	33,614	7.229E-05	1	7.229E-05
Selenium	79	ND	ND	NA (d)	ND	0.9389	ND	33,614	ND	1	ND
Silver	108	ND	ND	NA (d)	ND	0.9389	ND	33,614	ND	1	ND
Thallium	204	ND	ND	NA (d)	ND	0.9389	ND	33,614	ND	1	ND
Zinc	65	232.864	6.297E-01	NA (d)	6.297E-01	0.9389	6.706E-01	33,614	1.407E-03	1	1.407E-03
Mercury	201	0.001	9.773E-06	NA (d)	9.773E-06	0.9389	1.041E-05	33,614	2.184E-08	1	2.184E-08

a
Estimated from tracer data as presented in Volume IV.
b
HCl/Cl_2 levels were too low to be reliably measured.
c
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD. Presence questionable - reported at similar levels in samples and blanks.
d
Insufficient material to analyze.

TABLE A-5. AEC - VOC DATA EVALUATION FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Total Nonmethane Hydrocarbons (TNMHC)									
TNMHC	7.089E-01	7.089E-01	3.620E-02	1.000E-04	1.000E-04	19.58	7089.00	A	A
Volatile Organic Compounds (VOCs)									
Ethane	5.550E-03	5.550E-03	2.500E-03	1.000E-04	1.000E-04	2.22	55.50	C	A
Ethylene	1.243E-01	1.243E-01	2.000E-04	1.000E-04	1.000E-04	621.50	1243.00	A	A
Acetylene	1.140E-01	1.140E-01	7.000E-04	1.000E-04	1.000E-04	162.86	1140.00	A	A
Propane	1.745E-02	1.745E-02	8.000E-04	1.000E-04	1.000E-04	21.81	174.50	A	A
Propene	1.885E-02	1.885E-02	ND	1.000E-04	1.000E-04	10.00	188.50	A	A
i-Butane	7.500E-04	7.500E-04	1.000E-04	1.000E-04	1.000E-04	7.50	7.50	B	B
i-Butene	1.070E-02	1.070E-02	ND	1.000E-04	1.000E-04	10.00	107.00	A	A
1-Butene	8.750E-03	8.750E-03	ND	1.000E-04	1.000E-04	10.00	87.50	A	A
1,3-Butadiene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Butane	3.600E-03	3.600E-03	4.000E-04	1.000E-04	1.000E-04	9.00	36.00	B	A
trans-2-Butene	3.700E-03	3.700E-03	ND	1.000E-04	1.000E-04	10.00	37.00	A	A
2,2-Dimethylpropane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Butene	1.550E-03	1.550E-03	ND	1.000E-04	1.000E-04	10.00	15.50	A	A
3-Methyl-1-butene	4.000E-04	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
i-Pentane	1.000E-03	1.000E-03	5.000E-04	1.000E-04	1.000E-04	2.00	10.00	C	A
1-Pentene	3.500E-03	3.500E-03	ND	1.000E-04	1.000E-04	10.00	35.00	A	A
2-Methyl-1-butene	1.400E-03	1.400E-03	ND	1.000E-04	1.000E-04	10.00	14.00	A	A
n-Pentane	1.700E-03	1.700E-03	6.000E-04	1.000E-04	1.000E-04	2.83	17.00	C	A
Isoprene	ND	ND	2.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
trans-2-Pentene	5.500E-04	5.500E-04	ND	1.000E-04	1.000E-04	10.00	5.50	A	B
cis-2-Pentene	4.000E-04	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
2-Methyl-2-butene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylbutane	ND	ND	1.000E-04	1.000E-04	1.000E-04	ND	ND	F	F
Cyclopentene	1.800E-03	1.800E-03	ND	1.000E-04	1.000E-04	10.00	18.00	A	A
4-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Cyclopentane	5.000E-04	5.000E-04	1.000E-04	1.000E-04	1.000E-04	5.00	5.00	B	B
2,3-Dimethylbutane	4.000E-04	4.000E-04	4.000E-04	1.000E-04	1.000E-04	1.00	4.00	D	C
cis-4-Methyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methylpentane	1.300E-03	1.300E-03	8.000E-04	1.000E-04	1.000E-04	1.63	13.00	D	A
3-Methylpentane	1.200E-03	1.200E-03	7.000E-04	1.000E-04	1.000E-04	1.71	12.00	D	A
2-Methyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
1-Hexene	4.950E-03	4.950E-03	ND	1.000E-04	1.000E-04	10.00	49.50	A	A
n-Hexane	1.950E-03	1.950E-03	8.000E-04	1.000E-04	1.000E-04	2.44	19.50	C	A
trans-2-Hexene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2-Methyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
cis-2-Hexene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclopentane	7.000E-04	7.000E-04	4.000E-04	1.000E-04	1.000E-04	1.75	7.00	D	B
2,4-Dimethylpentane	1.150E-03	1.150E-03	9.000E-04	1.000E-04	1.000E-04	1.28	11.50	D	A

TABLE A-5. AEC - VOC DATA EVALUATION FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Benzene	4.770E-02	4.770E-02	1.100E-03	1.000E-04	1.000E-04	43.36	477.00	A	A
Cyclohexane	7.000E-04	7.000E-04	2.000E-04	1.000E-04	1.000E-04	3.50	7.00	C	B
2-Methylhexane	6.000E-04	6.000E-04	4.000E-04	1.000E-04	1.000E-04	1.50	6.00	D	B
2,3-Dimethylpentane	2.100E-03	2.100E-03	1.900E-03	1.000E-04	1.000E-04	1.11	21.00	D	A
3-Methylhexane	9.000E-04	9.000E-04	4.000E-04	1.000E-04	1.000E-04	2.25	9.00	C	B
2,2,4-Trimethylpentane	5.500E-03	5.500E-03	3.700E-03	1.000E-04	1.000E-04	1.49	55.00	D	A
n-Heptane	1.100E-03	1.100E-03	3.000E-04	1.000E-04	1.000E-04	3.67	11.00	C	A
2,4,4-Trimethyl-1-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Methylcyclohexane	1.100E-03	1.100E-03	2.000E-04	1.000E-04	1.000E-04	5.50	11.00	B	A
2,4,4-Trimethyl-2-pentene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,5-Dimethylhexane	4.500E-04	4.500E-04	3.000E-04	1.000E-04	1.000E-04	1.50	4.50	D	C
2,4-Dimethylhexane	7.500E-04	7.500E-04	4.000E-04	1.000E-04	1.000E-04	1.88	7.50	D	B
2,3,4-Trimethylpentane	1.050E-03	1.050E-03	9.000E-04	1.000E-04	1.000E-04	1.17	10.50	D	A
Toluene	1.360E-02	1.360E-02	3.000E-03	1.000E-04	1.000E-04	4.53	136.00	C	A
2,3-Dimethylhexane	2.000E-04	2.000E-04	4.000E-04	1.000E-04	1.000E-04	0.50	2.00	F	C
2-Methylheptane	3.000E-04	3.000E-04	1.000E-04	1.000E-04	1.000E-04	3.00	3.00	C	C
3-Ethylhexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2-Dimethylheptane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
2,2,4-Trimethylhexane	1.000E-03	1.000E-03	2.000E-04	1.000E-04	1.000E-04	5.00	10.00	B	A
n-Octane	6.000E-04	6.000E-04	1.000E-04	1.000E-04	1.000E-04	6.00	6.00	B	B
Ethylcyclohexane	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Ethylbenzene	2.100E-03	2.100E-03	3.000E-04	1.000E-04	1.000E-04	7.00	21.00	B	A
m-Xylene & p-Xylene	3.300E-03	3.300E-03	1.400E-03	1.000E-04	1.000E-04	2.36	33.00	C	A
Styrene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
o-Xylene	2.450E-03	2.450E-03	5.000E-04	1.000E-04	1.000E-04	4.90	24.50	C	A
n-Nonane	6.000E-04	6.000E-04	ND	1.000E-04	1.000E-04	10.00	6.00	A	B
i-Propylbenzene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
n-Propylbenzene	7.500E-04	7.500E-04	2.000E-04	1.000E-04	1.000E-04	3.75	7.50	C	B
p-Ethyltoluene	3.400E-03	3.400E-03	3.000E-04	1.000E-04	1.000E-04	11.33	34.00	A	A
m-Ethyltoluene	8.000E-04	8.000E-04	2.000E-04	1.000E-04	1.000E-04	4.00	8.00	C	B
1,3,5-Trimethylbenzene	1.050E-03	1.050E-03	2.000E-04	1.000E-04	1.000E-04	5.25	10.50	B	A
o-Ethyltoluene	7.000E-04	7.000E-04	1.000E-04	1.000E-04	1.000E-04	7.00	7.00	B	B
1,2,4-Trimethylbenzene & sec-Butylbenzene	3.650E-03	3.650E-03	4.000E-04	1.000E-04	1.000E-04	9.13	36.50	B	A
n-Decane	4.000E-04	4.000E-04	ND	1.000E-04	1.000E-04	10.00	4.00	A	C
alpha-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
beta-Pinene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
delta 3-Carene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
d-Limonene	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
MTBE	7.000E-04	7.000E-04	7.000E-04	1.000E-04	1.000E-04	1.00	7.00	D	B
ETBE	ND	ND	ND	1.000E-04	1.000E-04	ND	ND	F	F
Dichlorodifluoromethane	1.579E-03	1.579E-03	1.507E-03	4.992E-04	4.992E-04	1.05	3.16	D	C
Methylchloride	ND	ND	ND	2.080E-04	2.080E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Dichlorotetrafluoroethane	ND	ND	ND	7.114E-04	7.114E-04	ND	ND	F	F
Chloroethene	ND	ND	ND	2.621E-04	2.621E-04	ND	ND	F	F
1,3-Butadiene	ND	ND	ND	2.246E-04	2.246E-04	ND	ND	F	F
Methylbromide	ND	ND	ND	3.952E-04	3.952E-04	ND	ND	F	F
Ethylchloride	ND	ND	ND	2.683E-04	2.683E-04	ND	ND	F	F
Trichloromonofluoromethane	2.526E-03	2.526E-03	2.515E-03	5.699E-04	5.699E-04	1.00	4.43	D	C
Vinylidenechloride	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Methylenechloride	7.081E-01	7.081E-01	2.044E-03	3.536E-04	3.536E-04	346.35	2002.42	A	A
Allylchloride	ND	ND	ND	3.182E-04	3.182E-04	ND	ND	F	F
1,1,2-Trichloro-1,2,2-trifluoroethane	8.568E-04	8.568E-04	8.583E-04	7.821E-04	7.821E-04	1.00	1.10	F	D
1,1-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
1,2-Dichloroethene	ND	ND	ND	4.035E-04	4.035E-04	ND	ND	F	F
Chloroform	ND	ND	ND	4.950E-04	4.950E-04	ND	ND	F	F
1,2-Dichloroethane	ND	ND	ND	4.118E-04	4.118E-04	ND	ND	F	F
Methylchloroform	3.655E-04	3.655E-04	3.777E-04	5.533E-04	5.533E-04	0.97	0.66	F	F
Benzene	4.852E-02	4.852E-02	1.119E-03	3.245E-04	3.245E-04	43.36	149.52	A	A
Carbontetrachloride	8.473E-04	8.473E-04	7.746E-04	6.406E-04	6.406E-04	1.09	1.32	D	D
1,2-Dichloropropane	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Trichloroethylene	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
cis 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
trans 1,3-Dichloro-1-propene	ND	ND	ND	4.618E-04	4.618E-04	ND	ND	F	F
1,1,2-Trichloroethane	ND	ND	ND	5.533E-04	5.533E-04	ND	ND	F	F
Toluene	1.383E-02	1.383E-02	3.051E-03	3.827E-04	3.827E-04	4.53	36.14	C	A
1,2-Dibromoethane	ND	ND	ND	7.821E-04	7.821E-04	ND	ND	F	F
Perchloroethylene	ND	ND	ND	6.906E-04	6.906E-04	ND	ND	F	F
Chlorobenzene	ND	ND	ND	4.701E-04	4.701E-04	ND	ND	F	F
Ethylbenzene	3.224E-03	3.224E-03	4.606E-04	6.656E-04	6.656E-04	7.00	4.84	B	C
m&p-Xylene	3.197E-03	3.197E-03	1.321E-03	4.410E-04	4.410E-04	2.42	7.25	C	B
Styrene	ND	ND	ND	4.326E-04	4.326E-04	ND	ND	F	F
1,1,2,2-Tetrachloroethane	ND	ND	ND	6.989E-04	6.989E-04	ND	ND	F	F
o-Xylene	2.492E-03	2.492E-03	5.086E-04	4.410E-04	4.410E-04	4.90	5.65	C	B
p-Ethyltoluene	4.888E-04	4.888E-04	ND	4.992E-04	4.992E-04	10.00	0.98	A	F
1,3,5-Trimethylbenzene	2.760E-04	2.760E-04	ND	4.992E-04	4.992E-04	10.00	0.55	A	F
1,2,4-Trimethylbenzene	9.123E-04	9.123E-04	4.522E-04	4.992E-04	4.992E-04	2.02	1.83	C	D
Benzylchloride	ND	ND	ND	5.283E-04	5.283E-04	ND	ND	F	F
m-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
p-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
o-Dichlorobenzene	ND	ND	ND	6.115E-04	6.115E-04	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	7.530E-04	7.530E-04	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	1.086E-03	1.086E-03	ND	ND	F	F
Phenylacetylene	2.300E-03	2.300E-03	ND	4.243E-04	4.243E-04	10.00	5.42	A	B
Indane	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2,3-Dihydro-1-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F

TABLE A-5. AEC - VOC DATA EVALUATION FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2,3-Dihydro-4-methyl-1H-indene	ND	ND	ND	5.491E-04	5.491E-04	ND	ND	F	F
Naphthalene	9.705E-03	9.705E-03	3.067E-04	5.325E-04	5.325E-04	31.64	18.23	A	A
2-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
1-Methylnaphthalene	ND	ND	ND	5.907E-04	5.907E-04	ND	ND	F	F
Cyanogen	ND	ND	ND	2.163E-04	2.163E-04	ND	ND	F	F
Methylnitrite	4.934E-03	4.934E-03	ND	2.538E-04	2.538E-04	10.00	19.44	A	A
Acetonitrile	1.137E-02	1.137E-02	ND	1.706E-04	1.706E-04	10.00	66.69	A	A
Acrylonitrile	9.319E-03	9.319E-03	ND	2.205E-04	2.205E-04	10.00	42.27	A	A
Nitromethane	5.091E-03	5.091E-03	ND	2.538E-04	2.538E-04	10.00	20.06	A	A
Propanenitrile	2.143E-03	2.143E-03	ND	2.288E-04	2.288E-04	10.00	9.37	A	B
2-Methylpropanenitrile	ND	ND	ND	2.870E-04	2.870E-04	ND	ND	F	F
Pentanenitrile	2.369E-03	2.369E-03	ND	3.453E-04	3.453E-04	10.00	6.86	A	B
Hexanenitrile	2.798E-03	2.798E-03	ND	4.035E-04	4.035E-04	10.00	6.93	A	B
Benzonitrile	6.814E-03	6.814E-03	ND	4.285E-04	4.285E-04	10.00	15.90	A	A
2-Nitrophenol	8.901E-04	8.901E-04	ND	5.782E-04	5.782E-04	10.00	1.54	A	D
Acrolein	1.283E-02	1.283E-02	ND	2.330E-04	2.330E-04	10.00	55.06	A	A
Acetone	6.430E-02	6.430E-02	7.235E-03	2.330E-04	2.330E-04	8.89	276.01	B	A
1-Hydroxy-2-propanone	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
Furan	2.073E-03	2.073E-03	ND	2.829E-04	2.829E-04	10.00	7.33	A	B
2-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
2-Methylpropanal	2.207E-03	2.207E-03	ND	3.078E-04	3.078E-04	10.00	7.17	A	B
1-Propanol	ND	ND	ND	2.496E-04	2.496E-04	ND	ND	F	F
Methacrolein	2.238E-03	2.238E-03	ND	2.912E-04	2.912E-04	10.00	7.69	A	B
Methyl-vinyl Ketone	1.426E-03	1.426E-03	ND	2.912E-04	2.912E-04	10.00	4.90	A	C
MTBE	6.468E-04	6.468E-04	5.544E-04	3.661E-04	3.661E-04	1.17	1.77	D	D
2,3-Butanedione	ND	ND	ND	3.578E-04	3.578E-04	ND	ND	F	F
Butanal	1.530E-03	1.530E-03	ND	2.995E-04	2.995E-04	10.00	5.11	A	B
2-Butanone	7.749E-03	7.749E-03	7.941E-04	2.995E-04	2.995E-04	9.76	25.87	B	A
2-Methyl-1,3-dioxolane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
2-Methylfuran	ND	ND	ND	3.411E-04	3.411E-04	ND	ND	F	F
Tetrahydrofuran	2.440E-04	2.440E-04	ND	2.995E-04	2.995E-04	10.00	0.81	A	F
trans-2-Butenal	1.474E-03	1.474E-03	ND	2.912E-04	2.912E-04	10.00	5.06	A	B
Acetic Acid	5.240E-03	5.240E-03	1.105E-03	2.496E-04	2.496E-04	4.74	20.99	C	A
1-Butanol	ND	ND	ND	3.078E-04	3.078E-04	ND	ND	F	F
2-Pentanone	1.577E-03	1.577E-03	ND	3.578E-04	3.578E-04	10.00	4.41	A	C
Pentanal	4.933E-03	4.933E-03	1.610E-03	3.578E-04	3.578E-04	3.06	13.79	C	A
1,4-Dioxane	ND	ND	ND	3.661E-04	3.661E-04	ND	ND	F	F
Methyl Methacrylate	ND	ND	ND	4.160E-04	4.160E-04	ND	ND	F	F
Cyclopentanone	7.454E-02	7.454E-02	ND	3.494E-04	3.494E-04	10.00	213.30	A	A
Hexanal	1.607E-03	1.607E-03	1.206E-03	4.160E-04	4.160E-04	1.33	3.86	D	C
2-Furaldehyde	1.348E-02	1.348E-02	ND	3.994E-04	3.994E-04	10.00	33.75	A	A
Cyclohexanone	ND	ND	ND	4.077E-04	4.077E-04	ND	ND	F	F
Heptanal	1.567E-03	1.567E-03	9.731E-04	4.742E-04	4.742E-04	1.61	3.30	D	C

TABLE A-5. AEC - VOC DATA EVALUATION FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound (a)	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
2-Butoxyethanol	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
Benzaldehyde	8.789E-03	8.789E-03	6.469E-04	4.410E-04	4.410E-04	13.59	19.93	A	A
6-Methyl-5-hepten-2-one	ND	ND	4.461E-04	5.242E-04	5.242E-04	ND	ND	F	F
Octanal	1.990E-03	1.990E-03	1.464E-03	5.325E-04	5.325E-04	1.36	3.74	D	C
Benzofuran	ND	ND	ND	4.909E-04	4.909E-04	ND	ND	F	F
2-Ethyl-1-hexanol	ND	ND	ND	4.992E-04	4.992E-04	ND	ND	F	F
Acetophonone	1.797E-03	1.797E-03	ND	4.992E-04	4.992E-04	10.00	3.60	A	C
Nonanal	2.728E-03	2.728E-03	2.037E-03	5.907E-04	5.907E-04	1.34	4.62	D	C
Decanal	3.168E-03	3.168E-03	2.172E-03	6.490E-04	6.490E-04	1.46	4.88	D	C
Carbonyl Sulfide	1.697E-03	1.697E-03	1.588E-04	2.496E-04	2.496E-04	10.68	6.80	A	B
Carbon Disulfide	2.962E-02	2.962E-02	1.418E-03	3.162E-04	3.162E-04	20.88	93.68	A	A
Thiophene	1.321E-03	1.321E-03	ND	3.494E-04	3.494E-04	10.00	3.78	A	C
Dimethyldisulfide	ND	ND	ND	3.910E-04	3.910E-04	ND	ND	F	F

a
Compounds in bold represent duplicate values.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Total Nonmethane Hydrocarbons (TNMHC)											
TNMHC	-	-	7.089E-01	3.620E-02	6.727E-01	0.9264	7.261E-01	33,614	1.524E-03	1	1.524E-03
Volatile Organic Compounds (VOCs)											
Ethane	30	4.447	5.550E-03	2.500E-03	3.050E-03	0.9264	3.292E-03	33,614	6.909E-06	1	6.909E-06
Ethylene	28	106.714	1.243E-01	2.000E-04	1.241E-01	0.9264	1.340E-01	33,614	2.811E-04	1	2.811E-04
Acetylene	26	105.399	1.140E-01	7.000E-04	1.133E-01	0.9264	1.223E-01	33,614	2.567E-04	1	2.567E-04
Propane	44	9.533	1.745E-02	8.000E-04	1.665E-02	0.9264	1.797E-02	33,614	3.772E-05	1	3.772E-05
Propene	42	10.789	1.885E-02	ND	1.885E-02	0.9264	2.035E-02	33,614	4.270E-05	1	4.270E-05
i-Butane	58	0.311	7.500E-04	1.000E-04	6.500E-04	0.9264	7.016E-04	33,614	1.472E-06	1	1.472E-06
i-Butene	56	4.593	1.070E-02	ND	1.070E-02	0.9264	1.155E-02	33,614	2.424E-05	1	2.424E-05
1-Butene	56	3.756	8.750E-03	ND	8.750E-03	0.9264	9.445E-03	33,614	1.982E-05	1	1.982E-05
1,3-Butadiene	54	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
n-Butane	58	1.492	3.600E-03	4.000E-04	3.200E-03	0.9264	3.454E-03	33,614	7.249E-06	1	7.249E-06
trans-2-Butene	56	1.588	3.700E-03	ND	3.700E-03	0.9264	3.994E-03	33,614	8.381E-06	1	8.381E-06
2,2-Dimethylpropane	72	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
cis-2-Butene	56	0.665	1.550E-03	ND	1.550E-03	0.9264	1.673E-03	33,614	3.511E-06	1	3.511E-06
3-Methyl-1-butene	70	0.137	4.000E-04	ND	4.000E-04	0.9264	4.318E-04	33,614	9.061E-07	1	9.061E-07
i-Pentane	72	0.334	1.000E-03	5.000E-04	5.000E-04	0.9264	5.397E-04	33,614	1.133E-06	1	1.133E-06
1-Pentene	70	1.202	3.500E-03	ND	3.500E-03	0.9264	3.778E-03	33,614	7.928E-06	1	7.928E-06
2-Methyl-1-butene	70	0.481	1.400E-03	ND	1.400E-03	0.9264	1.511E-03	33,614	3.171E-06	1	3.171E-06
n-Pentane	72	0.568	1.700E-03	6.000E-04	1.100E-03	0.9264	1.187E-03	33,614	2.492E-06	1	2.492E-06
Isoprene	68	ND	ND	2.000E-04	ND	0.9264	ND	33,614	ND	1	ND
trans-2-Pentene	70	0.189	5.500E-04	ND	5.500E-04	0.9264	5.937E-04	33,614	1.246E-06	1	1.246E-06
cis-2-Pentene	70	0.137	4.000E-04	ND	4.000E-04	0.9264	4.318E-04	33,614	9.061E-07	1	9.061E-07
2-Methyl-2-butene	70	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2,2-Dimethylbutane	86	ND	ND	1.000E-04	ND	0.9264	ND	33,614	ND	1	ND
Cyclopentene	68	0.636	1.800E-03	ND	1.800E-03	0.9264	1.943E-03	33,614	4.077E-06	1	4.077E-06
4-Methyl-1-pentene	84	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Cyclopentane	70	0.172	5.000E-04	1.000E-04	4.000E-04	0.9264	4.318E-04	33,614	9.061E-07	1	9.061E-07
2,3-Dimethylbutane	86	0.112	4.000E-04	4.000E-04	-5.421E-20	0.9264	ND	33,614	ND	1	ND
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2-Methylpentane	86	0.363	1.300E-03	8.000E-04	5.000E-04	0.9264	5.397E-04	33,614	1.133E-06	1	1.133E-06
3-Methylpentane	86	0.335	1.200E-03	7.000E-04	5.000E-04	0.9264	5.397E-04	33,614	1.133E-06	1	1.133E-06
2-Methyl-1-pentene	84	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
1-Hexene	84	1.417	4.950E-03	ND	4.950E-03	0.9264	5.343E-03	33,614	1.121E-05	1	1.121E-05
n-Hexane	86	0.545	1.950E-03	8.000E-04	1.150E-03	0.9264	1.241E-03	33,614	2.605E-06	1	2.605E-06
trans-2-Hexene	84	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
cis-2-Hexene	84	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Methylcyclopentane	84	0.200	7.000E-04	4.000E-04	3.000E-04	0.9264	3.238E-04	33,614	6.796E-07	1	6.796E-07
2,4-Dimethylpentane	100	0.276	1.150E-03	9.000E-04	2.500E-04	0.9264	2.699E-04	33,614	5.663E-07	1	5.663E-07
Benzene	78	14.700	4.770E-02	1.100E-03	4.660E-02	0.9264	5.030E-02	33,614	1.056E-04	1	1.056E-04
Cyclohexane	84	0.200	7.000E-04	2.000E-04	5.000E-04	0.9264	5.397E-04	33,614	1.133E-06	1	1.133E-06
2-Methylhexane	100	0.144	6.000E-04	4.000E-04	2.000E-04	0.9264	2.159E-04	33,614	4.530E-07	1	4.530E-07
2,3-Dimethylpentane	100	0.505	2.100E-03	1.900E-03	2.000E-04	0.9264	2.159E-04	33,614	4.530E-07	1	4.530E-07
3-Methylhexane	100	0.216	9.000E-04	4.000E-04	5.000E-04	0.9264	5.397E-04	33,614	1.133E-06	1	1.133E-06
2,2,4-Trimethylpentane	114	1.160	5.500E-03	3.700E-03	1.800E-03	0.9264	1.943E-03	33,614	4.077E-06	1	4.077E-06

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
n-Heptane	100	0.264	1.100E-03	3.000E-04	8.000E-04	0.9264	8.636E-04	33,614	1.812E-06	1	1.812E-06
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Methylcyclohexane	98	0.270	1.100E-03	2.000E-04	9.000E-04	0.9264	9.715E-04	33,614	2.039E-06	1	2.039E-06
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2,5-Dimethylhexane	114	0.095	4.500E-04	3.000E-04	1.500E-04	0.9264	1.619E-04	33,614	3.398E-07	1	3.398E-07
2,4-Dimethylhexane	114	0.158	7.500E-04	4.000E-04	3.500E-04	0.9264	3.778E-04	33,614	7.928E-07	1	7.928E-07
2,3,4-Trimethylpentane	114	0.221	1.050E-03	9.000E-04	1.500E-04	0.9264	1.619E-04	33,614	3.398E-07	1	3.398E-07
Toluene	92	3.554	1.360E-02	3.000E-03	1.060E-02	0.9264	1.144E-02	33,614	2.401E-05	1	2.401E-05
2,3-Dimethylhexane	114	0.042	2.000E-04	4.000E-04	-2.000E-04	0.9264	ND	33,614	ND	1	ND
2-Methylheptane	111	0.065	3.000E-04	1.000E-04	2.000E-04	0.9264	2.159E-04	33,614	4.530E-07	1	4.530E-07
3-Ethylhexane	114	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2,2,4-Trimethylhexane	128	0.188	1.000E-03	2.000E-04	8.000E-04	0.9264	8.636E-04	33,614	1.812E-06	1	1.812E-06
n-Octane	114	0.127	6.000E-04	1.000E-04	5.000E-04	0.9264	5.397E-04	33,614	1.133E-06	1	1.133E-06
Ethylcyclohexane	112	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Ethylbenzene	160	0.316	2.100E-03	3.000E-04	1.800E-03	0.9264	1.943E-03	33,614	4.077E-06	1	4.077E-06
m-Xylene & p-Xylene	106	0.748	3.300E-03	1.400E-03	1.900E-03	0.9264	2.051E-03	33,614	4.304E-06	1	4.304E-06
Styrene	104	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
o-Xylene	106	0.556	2.450E-03	5.000E-04	1.950E-03	0.9264	2.105E-03	33,614	4.417E-06	1	4.417E-06
n-Nonane	128	0.113	6.000E-04	ND	6.000E-04	0.9264	6.477E-04	33,614	1.359E-06	1	1.359E-06
i-Propylbenzene	120	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
n-Propylbenzene	120	0.150	7.500E-04	2.000E-04	5.500E-04	0.9264	5.937E-04	33,614	1.246E-06	1	1.246E-06
p-Ethyltoluene	120	0.681	3.400E-03	3.000E-04	3.100E-03	0.9264	3.346E-03	33,614	7.022E-06	1	7.022E-06
m-Ethyltoluene	120	0.160	8.000E-04	2.000E-04	6.000E-04	0.9264	6.477E-04	33,614	1.359E-06	1	1.359E-06
1,3,5-Trimethylbenzene	120	0.210	1.050E-03	2.000E-04	8.500E-04	0.9264	9.175E-04	33,614	1.925E-06	1	1.925E-06
o-Ethyltoluene	120	0.140	7.000E-04	1.000E-04	6.000E-04	0.9264	6.477E-04	33,614	1.359E-06	1	1.359E-06
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.731	3.650E-03	4.000E-04	3.250E-03	0.9264	3.508E-03	33,614	7.362E-06	1	7.362E-06
n-Decane	142	0.068	4.000E-04	ND	4.000E-04	0.9264	4.318E-04	33,614	9.061E-07	1	9.061E-07
alpha-Pinene	136	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
beta-Pinene	136	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
delta 3-Carene	136	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
d-Limonene	136	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
MTBE	88	0.191	7.000E-04	7.000E-04	0.000E+00	0.9264	0.000E+00	33,614	0.000E+00	1	0.000E+00
ETBE	102	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Dichlorodifluoromethane	120	0.316	1.579E-03	1.507E-03	7.131E-05	0.9264	7.697E-05	33,614	1.615E-07	1	1.615E-07
Methylchloride	50	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Dichlorotetrafluoroethane	171	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Chloroethene	63	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
1,3-Butadiene	54	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Methylbromide	95	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Ethylchloride	64.5	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Trichloromonofluoromethane	137	0.443	2.526E-03	2.515E-03	1.156E-05	0.9264	1.247E-05	33,614	2.618E-08	1	2.618E-08
Vinylidenechloride	97	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Methylenechloride	85	200.242	7.081E-01	2.044E-03	7.060E-01	0.9264	7.621E-01	33,614	1.599E-03	1	1.599E-03
Allylchloride	76.5	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188	0.110	8.568E-04	8.583E-04	-1.520E-06	0.9264	ND	33,614	ND	1	ND
1,1-Dichloroethane	99	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
1,2-Dichloroethene	97	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Chloroform	119	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
1,2-Dichloroethane	99	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Methylchloroform	133	0.066	3.655E-04	3.777E-04	-1.214E-05	0.9264	ND	33,614	ND	1	ND
Benzene	78	14.952	4.852E-02	1.119E-03	4.740E-02	0.9264	5.116E-02	33,614	1.074E-04	1	1.074E-04
Carbontetrachloride	154	0.132	8.473E-04	7.746E-04	7.277E-05	0.9264	7.855E-05	33,614	1.648E-07	1	1.648E-07
1,2-Dichloropropane	113	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Trichloroethylene	133	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
cis 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
trans 1,3-Dichloro-1-propene	111	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
1,1,2-Trichloroethane	133	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Toluene	92	3.614	1.383E-02	3.051E-03	1.078E-02	0.9264	1.164E-02	33,614	2.442E-05	1	2.442E-05
1,2-Dibromoethane	188	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Perchloroethylene	166	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Chlorobenzene	113	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Ethylbenzene	160	0.484	3.224E-03	4.606E-04	2.763E-03	0.9264	2.983E-03	33,614	6.260E-06	1	6.260E-06
m&p-Xylene	106	0.725	3.197E-03	1.321E-03	1.876E-03	0.9264	2.025E-03	33,614	4.250E-06	1	4.250E-06
Styrene	104	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
1,1,2,2-Tetrachloroethane	168	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
o-Xylene	106	0.565	2.492E-03	5.086E-04	1.983E-03	0.9264	2.141E-03	33,614	4.493E-06	1	4.493E-06
p-Ethyltoluene	120	0.098	4.888E-04	ND	4.888E-04	0.9264	5.276E-04	33,614	1.107E-06	1	1.107E-06
1,3,5-Trimethylbenzene	120	0.055	2.760E-04	ND	2.760E-04	0.9264	2.979E-04	33,614	6.252E-07	1	6.252E-07
1,2,4-Trimethylbenzene	120	0.183	9.123E-04	4.522E-04	4.601E-04	0.9264	4.966E-04	33,614	1.042E-06	1	1.042E-06
Benzylchloride	127	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
m-Dichlorobenzene	147	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
p-Dichlorobenzene	147	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
o-Dichlorobenzene	147	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Phenylacetylene	102	0.542	2.300E-03	ND	2.300E-03	0.9264	2.482E-03	33,614	5.209E-06	1	5.209E-06
Indane	118	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2,3-Dihydro-1-methyl-1H-indene	132	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2,3-Dihydro-4-methyl-1H-indene	132	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Naphthalene	128	1.823	9.705E-03	3.067E-04	9.398E-03	0.9264	1.014E-02	33,614	2.129E-05	1	2.129E-05
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
1-Methylnaphthalene	142	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Cyanogen	52	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Methylnitrite	61	1.944	4.934E-03	ND	4.934E-03	0.9264	5.326E-03	33,614	1.118E-05	1	1.118E-05
Acetonitrile	41	6.669	1.137E-02	ND	1.137E-02	0.9264	1.228E-02	33,614	2.577E-05	1	2.577E-05
Acrylonitrile	53	4.227	9.319E-03	ND	9.319E-03	0.9264	1.006E-02	33,614	2.111E-05	1	2.111E-05
Nitromethane	61	2.006	5.091E-03	ND	5.091E-03	0.9264	5.496E-03	33,614	1.153E-05	1	1.153E-05
Propanenitrile	55	0.937	2.143E-03	ND	2.143E-03	0.9264	2.313E-03	33,614	4.855E-06	1	4.855E-06
2-Methylpropanenitrile	69	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Pentanenitrile	83	0.686	2.369E-03	ND	2.369E-03	0.9264	2.557E-03	33,614	5.366E-06	1	5.366E-06
Hexanenitrile	97	0.693	2.798E-03	ND	2.798E-03	0.9264	3.020E-03	33,614	6.338E-06	1	6.338E-06
Benzonitrile	103	1.590	6.814E-03	ND	6.814E-03	0.9264	7.356E-03	33,614	1.544E-05	1	1.544E-05
2-Nitrophenol	139	0.154	8.901E-04	ND	8.901E-04	0.9264	9.608E-04	33,614	2.016E-06	1	2.016E-06
Acrolein	56	5.506	1.283E-02	ND	1.283E-02	0.9264	1.385E-02	33,614	2.906E-05	1	2.906E-05
Acetone	56	27.601	6.430E-02	7.235E-03	5.707E-02	0.9264	6.160E-02	33,614	1.293E-04	1	1.293E-04
1-Hydroxy-2-propanone	74	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Furan	68	0.733	2.073E-03	ND	2.073E-03	0.9264	2.238E-03	33,614	4.697E-06	1	4.697E-06
2-Propanol	60	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND

TABLE A-6. AEC - VOC RUN NO. 1 DATA FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound (a)	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m³	Background - Concentration, mg/m³	Background Corrected Concentration - Run 1, mg/m³	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m³	Initial Plume Volume, ft³	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2-Methylpropanal	74	0.717	2.207E-03	ND	2.207E-03	0.9264	2.382E-03	33,614	4.999E-06	1	4.999E-06
1-Propanol	60	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Methacrolein	70	0.769	2.238E-03	ND	2.238E-03	0.9264	2.416E-03	33,614	5.070E-06	1	5.070E-06
Methyl-vinyl Ketone	70	0.490	1.426E-03	ND	1.426E-03	0.9264	1.539E-03	33,614	3.230E-06	1	3.230E-06
MTBE	88	0.177	6.468E-04	5.544E-04	9.242E-05	0.9264	9.976E-05	33,614	2.093E-07	1	2.093E-07
2,3-Butanedione	86	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Butanal	72	0.511	1.530E-03	ND	1.530E-03	0.9264	1.651E-03	33,614	3.465E-06	1	3.465E-06
2-Butanone	72	2.587	7.749E-03	7.941E-04	6.955E-03	0.9264	7.508E-03	33,614	1.576E-05	1	1.576E-05
2-Methyl-1,3-dioxolane	88	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2-Methylfuran	82	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Tetrahydrofuran	72	0.081	2.440E-04	ND	2.440E-04	0.9264	2.634E-04	33,614	5.528E-07	1	5.528E-07
trans-2-Butenal	70	0.506	1.474E-03	ND	1.474E-03	0.9264	1.591E-03	33,614	3.340E-06	1	3.340E-06
Acetic Acid	60	2.099	5.240E-03	1.105E-03	4.135E-03	0.9264	4.463E-03	33,614	9.366E-06	1	9.366E-06
1-Butanol	74	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2-Pentanone	86	0.441	1.577E-03	ND	1.577E-03	0.9264	1.703E-03	33,614	3.573E-06	1	3.573E-06
Pentanal	86	1.379	4.933E-03	1.610E-03	3.322E-03	0.9264	3.586E-03	33,614	7.526E-06	1	7.526E-06
1,4-Dioxane	88	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Methyl Methacrylate	100	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Cyclopentanone	84	21.330	7.454E-02	ND	7.454E-02	0.9264	8.046E-02	33,614	1.688E-04	1	1.688E-04
Hexanal	100	0.386	1.607E-03	1.206E-03	4.008E-04	0.9264	4.327E-04	33,614	9.080E-07	1	9.080E-07
2-Furaldehyde	96	3.375	1.348E-02	ND	1.348E-02	0.9264	1.455E-02	33,614	3.053E-05	1	3.053E-05
Cyclohexanone	98	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Heptanal	114	0.330	1.567E-03	9.731E-04	5.939E-04	0.9264	6.411E-04	33,614	1.345E-06	1	1.345E-06
2-Butoxyethanol	118	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Benzaldehyde	106	1.993	8.789E-03	6.469E-04	8.143E-03	0.9264	8.789E-03	33,614	1.844E-05	1	1.844E-05
6-Methyl-5-hepten-2-one	126	ND	ND	4.461E-04	ND	0.9264	ND	33,614	ND	1	ND
Octanal	128	0.374	1.990E-03	1.464E-03	5.266E-04	0.9264	5.684E-04	33,614	1.193E-06	1	1.193E-06
Benzofuran	118	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
2-Ethyl-1-hexanol	120	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND
Acetophonone	120	0.360	1.797E-03	ND	1.797E-03	0.9264	1.940E-03	33,614	4.071E-06	1	4.071E-06
Nonanal	142	0.462	2.728E-03	2.037E-03	6.902E-04	0.9264	7.450E-04	33,614	1.563E-06	1	1.563E-06
Decanal	156	0.488	3.168E-03	2.172E-03	9.964E-04	0.9264	1.076E-03	33,614	2.257E-06	1	2.257E-06
Carbonyl Sulfide	60	0.680	1.697E-03	1.588E-04	1.538E-03	0.9264	1.660E-03	33,614	3.484E-06	1	3.484E-06
Carbon Disulfide	76	9.368	2.962E-02	1.418E-03	2.820E-02	0.9264	3.044E-02	33,614	6.388E-05	1	6.388E-05
Thiophene	84	0.378	1.321E-03	ND	1.321E-03	0.9264	1.425E-03	33,614	2.991E-06	1	2.991E-06
Dimethyldisulfide	94	ND	ND	ND	ND	0.9264	ND	33,614	ND	1	ND

a
Compounds in bold represent duplicate values.
b
Estimated from tracer data as presented in Volume IV.

TABLE A-7. AEC - SVOC DATA EVALUATION FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Particulate/Vapor-phase SVOCs									
N-Nitrosodimethylamine	ND	ND	ND	1.207E-03	1.207E-03	ND	ND	F	F
Pyridine	ND	ND	ND	3.538E-03	3.538E-03	ND	ND	F	F
2-Picoline	ND	ND	ND	3.677E-03	3.677E-03	ND	ND	F	F
Methyl methanesulfonate	ND	ND	ND	1.391E-03	1.391E-03	ND	ND	F	F
N-Nitrosomethylethylamine	ND	ND	ND	2.761E-03	2.761E-03	ND	ND	F	F
N-Nitrosodiethylamine	ND	ND	ND	2.949E-03	2.949E-03	ND	ND	F	F
Ethyl methanesulfonate	ND	ND	ND	1.356E-03	1.356E-03	ND	ND	F	F
Phenol	ND	ND	ND	8.673E-04	8.673E-04	ND	ND	F	F
Aniline	ND	ND	ND	1.384E-03	1.384E-03	ND	ND	F	F
bis(2-Chloroethyl)ether	ND	ND	ND	1.082E-03	1.082E-03	ND	ND	F	F
Pentachloroethane	ND	ND	ND	2.501E-03	2.501E-03	ND	ND	F	F
2-Chlorophenol	ND	ND	ND	5.516E-04	5.516E-04	ND	ND	F	F
1,3-Dichlorobenzene	ND	ND	ND	1.065E-03	1.065E-03	ND	ND	F	F
1,4-Dichlorobenzene	ND	ND	ND	2.137E-03	2.137E-03	ND	ND	F	F
Benzyl alcohol	ND	ND	ND	2.418E-03	2.418E-03	ND	ND	F	F
2-Methylphenol	ND	ND	ND	1.946E-03	1.946E-03	ND	ND	F	F
1,2-Dichlorobenzene	ND	ND	ND	1.547E-03	1.547E-03	ND	ND	F	F
bis(2-Chloroisopropyl)ether	ND	ND	ND	1.304E-03	1.304E-03	ND	ND	F	F
o-Toluidine	ND	ND	ND	1.374E-03	1.374E-03	ND	ND	F	F
4-Methylphenol/3-Methylphenol	ND	ND	ND	1.644E-03	1.644E-03	ND	ND	F	F
N-Nitroso-di-n-propylamine	ND	ND	ND	9.748E-04	9.748E-04	ND	ND	F	F
Acetophenone	2.883E-03	2.883E-03	2.071E-04	1.023E-03	1.023E-03	13.92	2.82	A	C
N-Nitrosomorpholine	ND	ND	ND	3.119E-03	3.119E-03	ND	ND	F	F
N-Nitrosopyrrolidine	ND	ND	ND	4.128E-03	4.128E-03	ND	ND	F	F
Hexachloroethane	ND	ND	ND	1.714E-03	1.714E-03	ND	ND	F	F
Nitrobenzene	ND	ND	ND	3.091E-03	3.091E-03	ND	ND	F	F
N-Nitrosopiperidine	ND	ND	ND	2.529E-03	2.529E-03	ND	ND	F	F
Isophorone	ND	ND	ND	7.424E-04	7.424E-04	ND	ND	F	F
2,4-Dimethylphenol	ND	ND	ND	1.169E-03	1.169E-03	ND	ND	F	F
2-Nitrophenol	ND	ND	ND	1.859E-03	1.859E-03	ND	ND	F	F
bis(2-Chloroethoxy)methane	ND	ND	ND	1.356E-03	1.356E-03	ND	ND	F	F
Benzoic acid	ND	ND	ND	1.270E-01	1.270E-01	ND	ND	F	F
2,4-Dichlorophenol	ND	ND	ND	1.700E-03	1.700E-03	ND	ND	F	F
1,2,4-Trichlorobenzene	ND	ND	ND	1.225E-03	1.225E-03	ND	ND	F	F
Naphthalene	5.579E-03	5.579E-03	ND	1.551E-03	1.551E-03	10.00	3.60	A	C
p-Chloroaniline	ND	ND	ND	1.117E-03	1.117E-03	ND	ND	F	F
2,6-Dichlorophenol	ND	ND	ND	1.193E-03	1.193E-03	ND	ND	F	F
Hexachloropropene	ND	ND	ND	1.960E-03	1.960E-03	ND	ND	F	F
Hexachlorobutadiene	ND	ND	ND	1.769E-03	1.769E-03	ND	ND	F	F
Dimethylphenethylamine	ND	ND	ND	7.077E-02	7.077E-02	ND	ND	F	F
N-Nitroso-di-n-butylamine	ND	ND	ND	1.297E-03	1.297E-03	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound	Average Concentration - Run 1, mg/m³	Average Concentration - Run 1, mg/m³	Average Background - Concentration, mg/m³	Average Maximum Detection Limit - Concentration, mg/m³	Average Minimum Detection Limit - Concentration, mg/m³	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
4-Chloro-3-methylphenol	ND	ND	ND	1.967E-03	1.967E-03	ND	ND	F	F
Safrole	ND	ND	ND	2.466E-03	2.466E-03	ND	ND	F	F
2-Methylnaphthalene	ND	ND	ND	1.245E-03	1.245E-03	ND	ND	F	F
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	1.894E-03	1.894E-03	ND	ND	F	F
Hexachlorocyclopentadiene	ND	ND	ND	3.851E-02	3.851E-02	ND	ND	F	F
2,4,6-Trichlorophenol	ND	ND	ND	2.189E-03	2.189E-03	ND	ND	F	F
2,4,5-Trichlorophenol	ND	ND	ND	1.859E-03	1.859E-03	ND	ND	F	F
Isosafrole	ND	ND	ND	3.747E-03	3.747E-03	ND	ND	F	F
2-Chloronaphthalene	ND	ND	ND	1.957E-03	1.957E-03	ND	ND	F	F
2-Nitroaniline	ND	ND	ND	1.242E-03	1.242E-03	ND	ND	F	F
1,4-Naphthoquinone	ND	ND	ND	3.469E-03	3.469E-03	ND	ND	F	F
Dimethylphthalate	ND	ND	ND	1.009E-03	1.009E-03	ND	ND	F	F
1,3-Dinitrobenzene	ND	ND	ND	2.904E-03	2.904E-03	ND	ND	F	F
2,6-Dinitrotoluene	ND	ND	ND	2.442E-03	2.442E-03	ND	ND	F	F
Acenaphthylene	ND	ND	ND	1.134E-03	1.134E-03	ND	ND	F	F
3-Nitroaniline	ND	ND	ND	3.056E-03	3.056E-03	ND	ND	F	F
4-Nitrophenol	ND	ND	ND	1.065E-01	1.065E-01	ND	ND	F	F
2,4-Dinitrophenol	ND	ND	ND	1.093E-01	1.093E-01	ND	ND	F	F
Acenaphthene	ND	ND	ND	1.249E-03	1.249E-03	ND	ND	F	F
2,4-Dinitrotoluene	ND	ND	ND	1.544E-03	1.544E-03	ND	ND	F	F
Dibenzofuran	ND	ND	ND	8.464E-04	8.464E-04	ND	ND	F	F
Pentachlorobenzene	ND	ND	ND	2.338E-03	2.338E-03	ND	ND	F	F
1-Naphthylamine	ND	ND	ND	6.105E-03	6.105E-03	ND	ND	F	F
2-Naphthylamine	ND	ND	ND	5.412E-03	5.412E-03	ND	ND	F	F
2,3,4,6-Tetrachlorophenol	ND	ND	ND	2.477E-03	2.477E-03	ND	ND	F	F
Diethylphthalate	1.776E-03	1.776E-03	1.381E-04	9.019E-04	9.019E-04	12.86	1.97	A	D
4-Chlorophenylphenyl ether	ND	ND	ND	9.817E-04	9.817E-04	ND	ND	F	F
Fluorene	ND	ND	ND	1.179E-03	1.179E-03	ND	ND	F	F
5-Nitro-o-toluidine	ND	ND	ND	1.259E-03	1.259E-03	ND	ND	F	F
4-Nitroaniline	ND	ND	ND	2.688E-03	2.688E-03	ND	ND	F	F
4,6-Dinitro-2-methylphenol	ND	ND	ND	9.436E-02	9.436E-02	ND	ND	F	F
Diphenylamine/N-NitrosoDPA	ND	ND	ND	1.277E-03	1.277E-03	ND	ND	F	F
sym-Trinitrobenzene	ND	ND	ND	4.336E-03	4.336E-03	ND	ND	F	F
Diallate	ND	ND	ND	1.648E-03	1.648E-03	ND	ND	F	F
Phenacetin	ND	ND	ND	7.771E-04	7.771E-04	ND	ND	F	F
4-Bromophenylphenyl ether	ND	ND	ND	2.390E-03	2.390E-03	ND	ND	F	F
Hexachlorobenzene	ND	ND	ND	1.287E-03	1.287E-03	ND	ND	F	F
4-Aminobiphenyl	ND	ND	ND	7.181E-03	7.181E-03	ND	ND	F	F
Pronamide	ND	ND	ND	8.915E-04	8.915E-04	ND	ND	F	F
Pentachlorophenol	ND	ND	ND	9.991E-02	9.991E-02	ND	ND	F	F
Pentachloronitrobenzene	ND	ND	ND	4.648E-03	4.648E-03	ND	ND	F	F
Phenanthrene	ND	ND	ND	2.116E-03	2.116E-03	ND	ND	F	F
Anthracene	ND	ND	ND	1.270E-03	1.270E-03	ND	ND	F	F

TABLE A-7. AEC - SVOC DATA EVALUATION FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound	Average Concentration - Run 1, mg/m^3	Average Concentration - Run 1, mg/m^3	Average Background - Concentration, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3	Background Evaluation Criteria	Minimum Detection Limit Evaluation Criteria	Background Evaluation Notes	Minimum Detection Limit Evaluation Notes
Carbazole	ND	ND	ND	8.499E-04	8.499E-04	ND	ND	F	F
Di-n-butylphthalate	4.077E-03	4.077E-03	7.691E-04	5.897E-04	5.897E-04	5.30	6.91	B	B
4-Nitroquinoline-1-oxide	ND	ND	ND	7.805E-02	7.805E-02	ND	ND	F	F
Methapyrilene	ND	ND	ND	7.181E-02	7.181E-02	ND	ND	F	F
Fluoranthene	ND	ND	ND	1.252E-03	1.252E-03	ND	ND	F	F
Benzidine	ND	ND	ND	4.648E-02	4.648E-02	ND	ND	F	F
Pyrene	ND	ND	ND	1.721E-03	1.721E-03	ND	ND	F	F
p-Dimethylaminoazobenzene	ND	ND	ND	1.277E-03	1.277E-03	ND	ND	F	F
Chlorobenzilate	ND	ND	ND	1.776E-03	1.776E-03	ND	ND	F	F
Kepone	ND	ND	ND	6.522E-02	6.522E-02	ND	ND	F	F
Butylbenzylphthalate	3.028E-03	3.028E-03	ND	7.111E-04	7.111E-04	10.00	4.26	A	C
3,3'-Dimethylbenzidine	ND	ND	ND	6.869E-03	6.869E-03	ND	ND	F	F
2-Acetylaminofluorene	ND	ND	ND	1.082E-03	1.082E-03	ND	ND	F	F
bis(2-Ethylhexyl)phthalate	ND	ND	ND	4.232E-03	4.232E-03	ND	ND	F	F
3,3'-Dichlorobenzidine	ND	ND	ND	1.162E-03	1.162E-03	ND	ND	F	F
Benz(a)anthracene	ND	ND	ND	1.568E-03	1.568E-03	ND	ND	F	F
Chrysene	ND	ND	ND	1.693E-03	1.693E-03	ND	ND	F	F
Di-n-octylphthalate	ND	ND	ND	1.082E-03	1.082E-03	ND	ND	F	F
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	1.599E-03	1.599E-03	ND	ND	F	F
Benzo(b)fluoranthene (a)	ND	ND	ND	9.644E-04	9.644E-04	ND	ND	F	F
Benzo(k)fluoranthene (a)	ND	ND	ND	2.015E-03	2.015E-03	ND	ND	F	F
Benz(a)pyrene	ND	ND	ND	1.141E-03	1.141E-03	ND	ND	F	F
3-Methylcholanthrene	ND	ND	ND	4.059E-03	4.059E-03	ND	ND	F	F
Indeno(1,2,3-cd)pyrene	ND	ND	ND	7.597E-04	7.597E-04	ND	ND	F	F
Dibenz(a,h)anthracene	ND	ND	ND	8.534E-04	8.534E-04	ND	ND	F	F
Benzo(g,h,i)perylene	ND	ND	ND	8.187E-04	8.187E-04	ND	ND	F	F

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

A = Identified as a contaminant (greater than or equal to 10 times background or minimum MQL)
B = Likely contaminant (less than 10 and greater than or equal to 5 times background or minimum MQL)
C = Probable contaminant (less than 5 and greater than or equal to 2 times background or minimum MQL)
D = Measured, but accuracy or presence questionable (less than 2 and greater than or equal to 1 times background or minimum MQL)
F = Not considered a contaminant (less than 1 times background or minimum MQL)

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
Particulate/Vapor-phase SVOCs											
N-Nitrosodimethylamine	74	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Pyridine	79	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2-Picoline	93	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Methyl methanesulfonate	110	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
N-Nitrosomethylethylamine	88	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
N-Nitrosodiethylamine	102	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Ethyl methanesulfonate	124	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Phenol	94	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Aniline	93	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
bis(2-Chloroethyl)ether	143	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Pentachloroethane	202	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2-Chlorophenol	129	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
1,3-Dichlorobenzene	147	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
1,4-Dichlorobenzene	147	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Benzyl alcohol	108	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2-Methylphenol	108	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
1,2-Dichlorobenzene	147	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
bis(2-Chloroisopropyl)ether	171	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
o-Toluidine	107	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
4-Methylphenol/3-Methylphenol	108	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
N-Nitroso-di-n-propylamine	130	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Acetophenone	120	0.577	2.883E-03	2.071E-04	2.675E-03	0.9299	2.877E-03	33,614	6.038E-06	1	6.038E-06
N-Nitrosomorpholine	116	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
N-Nitrosopyrrolidine	100	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Hexachloroethane	237	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Nitrobenzene	123	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
N-Nitrosopiperidine	114	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Isophorone	138	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2,4-Dimethylphenol	122	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2-Nitrophenol	139	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
bis(2-Chloroethoxy)methane	173	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Benzoic acid	122	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2,4-Dichlorophenol	163	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
1,2,4-Trichlorobenzene	181	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Naphthalene	128	1.048	5.579E-03	ND	5.579E-03	0.9299	5.999E-03	33,614	1.259E-05	1	1.259E-05
p-Chloroaniline	128	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2,6-Dichlorophenol	163	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Hexachloropropene	249	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Hexachlorobutadiene	261	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Dimethylphenethylamine	149	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
N-Nitroso-di-n-butylamine	158	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
4-Chloro-3-methylphenol	143	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Safrole	162	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2-Methylnaphthalene	142	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
1,2,4,5-Tetrachlorobenzene	216	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Hexachlorocyclopentadiene	273	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2,4,6-Trichlorophenol	197	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
2,4,5-Trichlorophenol	197	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Isosafrole	162	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2-Chloronaphthalene	163	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2-Nitroaniline	138	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
1,4-Naphthoquinone	158	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Dimethylphthalate	194	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
1,3-Dinitrobenzene	168	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2,6-Dinitrotoluene	182	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Acenaphthylene	152	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
3-Nitroaniline	138	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
4-Nitrophenol	139	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2,4-Dinitrophenol	184	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Acenaphthene	154	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2,4-Dinitrotoluene	182	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Dibenzofuran	168	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Pentachlorobenzene	250	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
1-Naphthylamine	143	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2-Naphthylamine	143	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2,3,4,6-Tetrachlorophenol	232	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Diethylphthalate	222	0.192	1.776E-03	1.381E-04	1.638E-03	0.9299	1.762E-03	33,614	3.697E-06	1	3.697E-06
4-Chlorophenylphenyl ether	205	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Fluorene	166	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
5-Nitro-o-toluidine	152	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
4-Nitroaniline	138	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
4,6-Dinitro-2-methylphenol	198	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Diphenylamine/N-NitrosoDPA	169	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
sym-Trinitrobenzene	213	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Diallate	270	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Phenacetin	179	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
4-Bromophenylphenyl ether	249	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Hexachlorobenzene	285	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
4-Aminobiphenyl	169	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Pronamide	228	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Pentachlorophenol	266	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Pentachloronitrobenzene	295	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Phenanthrene	178	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Anthracene	178	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Carbazole	167	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Di-n-butylphthalate	278	0.353	4.077E-03	7.691E-04	3.308E-03	0.9299	3.557E-03	33,614	7.465E-06	1	7.465E-06
4-Nitroquinoline-1-oxide	190	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Methapyrilene	261	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Fluoranthene	202	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Benzidine	184	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Pyrene	202	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
p-Dimethylaminoazobenzene	225	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Chlorobenzilate	325	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Kepone	491	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Butylbenzylphthalate	312	0.233	3.028E-03	ND	3.028E-03	0.9299	3.256E-03	33,614	6.833E-06	1	6.833E-06
3,3'-Dimethylbenzidine	212	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
2-Acetylaminofluorene	223	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND

TABLE A-8. AEC - SVOC RUN NO. 1 DATA FOR 155 mm ILLUMINATION ROUND TEST (1 APRIL 1998)

Compound	Molecular Weight	Average Concentration - Run 1, ppbv	Average Concentration - Run 1, mg/m^3	Background - Concentration, mg/m^3	Background Corrected Concentration - Run 1, mg/m^3	Dilution Correction Factor (b), %	Corrected Concentration - Run 1, mg/m^3	Initial Plume Volume, ft^3	Sample Total Material - Run 1, lb	Number of Items	Corrected Emission Factor - Run 1, lb/item
bis(2-Ethylhexyl)phthalate	391	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
3,3'-Dichlorobenzidine	253	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Benz(a)anthracene	228	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Chrysene	228	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Di-n-octylphthalate	391	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
7,12-Dimethylbenz(a)anthracene	256	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Benzo(b)fluoranthene (a)	252	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Benzo(k)fluoranthene (a)	252	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Benz(a)pyrene	252	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
3-Methylcholanthrene	268	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Indeno(1,2,3-cd)pyrene	276	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Dibenz(a,h)anthracene	278	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND
Benzo(g,h,i)perylene	276	ND	ND	ND	ND	0.9299	ND	33,614	ND	1	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.
b
Estimated from tracer data as presented in Volume IV.

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APPENDIX II-B. DILUTION CORRECTION FACTOR DATA

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Table B-1. Fraction of Initial Plume Sampled for TSP and Metals Data

Run No.	Date	NEW (lb)	OGI Data				Sampling Train Data				
			Initial Conditions		Equation[a]						
			Tracer Conc. (ppt)	Plume Volume (m^3)	"C"	"a"	Sampling Duration (min)	Start Time (min)	Stop Time (min)	Avg. Tracer Conc. (ppt)	Percent Plume Sampled
BT-2	28-Mar-98	0.22	353	1026.43	353	-0.0156	25	0	25	293	82.81%
FA-1	28-Mar-98	0.19	476	960.17	476	-0.0165	30	0	30	376	78.87%
FA-2	28-Mar-98	0.19	467	976.90	467	-0.0114	30	0	30	396	84.69%
HG-1	30-Mar-98	0.32	431	1057.41	431	-0.0131	10	0	10	404	93.73%
HG-2	30-Mar-98	0.32	431	1009.29	451	-0.0130	10	0	10	423	93.77%
GB-1	30-Mar-98	0.28	452	1008.68	452	-0.0126	10	0	10	424	93.96%
GB-2	30-Mar-98	0.42	469	976.11	469	-0.0119	5	0	5	455	97.08%
GS-1	31-Mar-98	1.67	467	979.83	467	-0.0082	29	1	30	412	88.27%
GP-1	31-Mar-98	0.32	472	968.70	472	-0.0089	20	5	25	414	87.62%
WP-2	01-Apr-98	0.28	482	949.19	482	-0.0116	15	5	20	418	86.61%
IR-1	01-Apr-98	6.12	480	951.86	480	-0.0097	3	5	8	451	93.89%

[a]The equation represents the best-fit linear regression of the measured tracer concentration over the sampling duration. Detailed data is provided in the VOC analytical data in Volume IV.

NEW = Net Explosive Weight
OGI = Oregon Graduate Institute
ppt = parts per trillion
TSP = Total Suspended Particulates

Table B-2. Fraction of Initial Plume Sampled for PM_{10} Data

Run No.	Date	NEW (lb)	OGI Data				Sampling Train Data				
			Initial Conditions		Equation[a]						
			Tracer Conc. (ppt)	Plume Volume (m^3)	"C"	"a"	Sampling Duration (min)	Start Time (min)	Stop Time (min)	Avg. Tracer Conc. (ppt)	Percent Plume Sampled
BT-2	28-Mar-98	0.22	353	1026.43	353	-0.0156	10	0	10	327	92.59%
FA-1	28-Mar-98	0.19	476	960.17	476	-0.0165	10	0	10	439	92.19%
FA-2	28-Mar-98	0.19	467	976.90	467	-0.0114	20	0	20	418	89.42%
HG-1	30-Mar-98	0.32	431	1057.41	431	-0.0131	5	0	5	417	96.80%
HG-2	30-Mar-98	0.32	451	1009.29	451	-0.0130	5	0	5	437	96.82%
GB-1	30-Mar-98	0.28	452	1008.68	452	-0.0126	4	0	4	440	97.52%
GB-2	30-Mar-98	0.42	469	976.11	469	-0.0119	2	0	2	463	98.82%
GS-1	31-Mar-98	1.67	467	979.83	467	-0.0082	14	1	15	437	93.70%
GP-1	31-Mar-98	0.32	472	968.70	472	-0.0089	10	5	15	432	91.51%
WP-2	01-Apr-98	0.28	482	949.19	482	-0.0116	5	5	10	442	91.68%
IR-1	01-Apr-98	6.12	480	951.86	480	-0.0097	2	5	7	453	94.35%

[a]The equation represents the best-fit linear regression of the measured tracer concentration over the sampling duration. Detailed data is provided in the VOC analytical data in Volume IV.

NEW = Net Weight Explosive
OGI = Oregon Graduate Institute
PM_{10} = Particulate matter less than 10 microns
ppt = parts per trillion

Table B-3. Fraction of Initial Plume Sampled for SVOC, HCl/Cl_2, and Dioxin/Furan Data

Run No.	Date	NEW (lb)	OGI Data				Sampling Train Data				
			Initial Conditions		Equation[a]						
			Tracer Conc. (ppt)	Plume Volume (m^3)	"C"	"a"	Sampling Duration (min)	Start Time (min)	Stop Time (min)	Avg. Tracer Conc. (ppt)	Percent Plume Sampled
BT-2	28-Mar-98	0.22	353	1026.43	353	-0.0156	25	0	25	293	82.81%
FA-1	28-Mar-98	0.19	476	960.17	476	-0.0165	30	0	30	376	78.87%
FA-2	28-Mar-98	0.19	467	976.90	467	-0.0114	30	0	30	396	84.69%
HG-1	30-Mar-98	0.32	431	1057.41	431	-0.0131	20	0	20	379	87.97%
HG-2	30-Mar-98	0.32	451	1009.29	451	-0.0130	15	0	15	410	90.85%
GB-1	30-Mar-98	0.28	452	1008.68	452	-0.0126	15	0	15	412	91.12%
GB-2	30-Mar-98	0.42	469	976.11	469	-0.0119	10	0	10	442	94.28%
GS-1	31-Mar-98	1.67	467	979.83	467	-0.0082	29	1	30	412	88.27%
GP-1	31-Mar-98	0.32	472	968.70	472	-0.0089	25	5	30	405	85.75%
WP-2	01-Apr-98	0.28	482	949.19	482	-0.0116	25	5	30	395	81.91%
IR-1	01-Apr-98	6.12	480	951.86	480	-0.0097	5	5	10	447	92.99%

[a]The equation represents the best-fit linear regression of the measured tracer concentration over the sampling duration. Detailed data is provided in the VOC analytical data in Volume IV.

Cl_2 = Chlorine
HCl = Hydrogen Chloride
NEW = Net Explosive Weight
OGI = Oregon Graduate Institute
ppt = parts per trillion
SVOC = Semivolatile Organic Compound

Table B-4. Fraction of Initial Plume Sampled for CEM Data

Run No.	Date	NEW (lb)	OGI Data				Sampling Train Data				
			Initial Conditions		Equation[a]						
			Tracer Conc. (ppt)	Plume Volume (m^3)	"C"	"a"	Sampling Duration (min)	Start Time (min)	Stop Time (min)	Avg. Tracer Conc. (ppt)	Percent Plume Sampled
BT-2	28-Mar-98	0.22	353	1026.43	353	-0.0156	25	0	25	293	82.81%
FA-1	28-Mar-98	0.19	476	960.17	476	-0.0165	30	0	30	376	78.87%
FA-2	28-Mar-98	0.19	467	976.90	467	-0.0114	30	0	30	396	84.69%
HG-1	30-Mar-98	0.32	431	1057.41	431	-0.0131	30	0	30	356	82.69%
HG-2	30-Mar-98	0.32	451	1009.29	451	-0.0130	30	0	30	374	82.81%
GB-1	30-Mar-98	0.28	452	1008.68	452	-0.0126	30	0	30	376	83.27%
GB-2	30-Mar-98	0.42	469	976.11	469	-0.0119	30	0	30	394	84.10%
GS-1	31-Mar-98	1.67	467	979.83	467	-0.0082	30	0	30	414	88.65%
GP-1	31-Mar-98	0.32	472	968.70	472	-0.0089	30	0	30	415	87.76%
WP-2	01-Apr-98	0.28	482	949.19	482	-0.0116	30	0	30	407	84.45%
IR-1	01-Apr-98	6.12	480	951.86	480	-0.0097	30	0	30	471	86.76%

[a]The equation represents the best-fit linear regression of the measured tracer concentration over the sampling duration. Detailed data is provided in the VOC analytical data in Volume IV.

CEM = Continuous Emissions Monitoring
NEW = Net Explosive Weight
OGI = Oregon Graduate Institute
ppt = parts per trillion

Table B-5. Fraction of Initial Plume Sampled for VOC Data

Run No.	Date	NEW (lb)	OGI Data				Sampling Train Data	
			Initial Conditions		Equation[a]			
			Tracer Conc. (ppt)	Plume Volume (m^3)	"C"	"a"	Tracer Conc. (ppt)	Percent Plume Sampled
BT-2	28-Mar-98	0.22	353	1026.43	353	-0.0156	324	91.53%
FA-1	28-Mar-98	0.19	476	960.17	476	-0.0165	432	90.71%
FA-2	28-Mar-98	0.19	467	976.90	467	-0.0114	434	92.90%
HG-1	30-Mar-98	0.32	431	1057.41	431	-0.0131	398	92.36%
HG-2	30-Mar-98	0.32	451	1009.29	451	-0.0130	421	93.30%
GB-1	30-Mar-98	0.28	452	1008.68	452	-0.0126	419	92.78%
GB-2	30-Mar-98	0.42	469	976.11	469	-0.0119	437	93.23%
GS-1	31-Mar-98	1.67	467	979.83	467	-0.0082	448	95.95%
GP-1	31-Mar-98	0.32	472	968.70	472	-0.0089	446	94.29%
WP-2	01-Apr-98	0.28	482	949.19	482	-0.0116	439	91.04%
IR-1	01-Apr-98	6.12	480	951.86	480	-0.0097	445	92.64%

[a]The equation represents the best-fit linear regression of the measured tracer concentration over the sampling duration. Detailed data is provided in the VOC analytical data in Volume IV.

NEW = Net Explosive Weight
OGI = Oregon Graduate Institute
ppt = parts per trillion
VOC = Volatile Organic Compound

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RADIAN INTERNATIONAL LLC

CALCULATION SHEET

Calc. No. 1

Signature William L. McCarter Date 10/21/98 Checked John Carson Date 10/22/98
Project AEC Phase I Emissions Characterization Job No. 655257.05
Subject Dilution Correction Factor Sample Calculation

Purpose
To determine the percent plume sampled for concentration correction factor.

Example
Decay Equation For Simulator Flash Artillery M110 Run No. 1: $y = 476.26e^{-0.0165x}$

C =	476.26	Initial Tracer Concentration (y-intercept)
a =	-0.0165	(slope of regression line)
Start Time (min) [A] =	0	
Stop Time (min) [B] =	30	
Sample Duration (min) [D] =	30	

Methodology
1. The methodology consists of determining the average concentration by integrating the decay equation over the sample duration.
2. The methodology calculates the average tracer concentration for the appropriate sample duration.
3. Knowing the initial concentration and the average concentration, the percent plumed sampled is then calculated from that ratio:

Average tracer concentration = $C / a [(e^{A*a} - e^{B*a}) / D]$

= **376**

Percent Plume Sample = Average tracer concentration / C * 100

= **78.87**

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APPENDIX II-C. TSP/PM_{10} DATA RESULTS

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SIMULATOR BOOBY TRAP FLASH M117

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TABLE C-1. AEC - TSP and PM_{10} FOR BT TEST (28 MARCH 1998)

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Concentration, mg/m^3	Average Concentration (a), mg/m^3
DPG-451	Run 1 Train A TSP filter	0.6549	3.263E+01	3.056E+01
DPG-452	Run 1 Train B TSP filter	0.6869	2.850E+01	
DPG-461	Run 1 Train A PM_{10} filter	0.3199	3.639E+01	3.639E+01
DPG-462	Run 1 Train B PM_{10} filter	0.3557	DATA VOID	

a
Average concentration calculated for each run.

AEC = Army Environmental Center
BT = Booby Trap Flash

TABLE C-2. AEC - BACKGROUND, REAGENT AND FIELD BLANKS

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Average Concentration, mg/m^3
DPG-441	BT Background TSP filter	0.0035	8.255E-02
DPG-442	BT Background PM_{10} filter	0.0032	1.144E-01
DPG-951	Reagent Blank TSP filter	-0.0026	ND
DPG-961	Reagent Blank PM_{10} filter	-0.0002	ND
DPG-900/941	Field Blank TSP filter	-0.0037	ND
DPG-901/942	Field Blank PM_{10} filter	-0.0029	ND

AEC = Army Environmental Center

BT = Booby Trap Flash

SIMULATOR FLASH ARTILLERY M110

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TABLE C-1. AEC - TSP and PM_{10} FOR FA TEST (28 MARCH 1998)

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Concentration, mg/m^3	Average Concentration (a), mg/m^3
DPG-301	Run 1 Train A TSP filter	0.5860	2.316E+01	2.124E+01
DPG-302	Run 1 Train B TSP filter	0.5801	1.933E+01	
DPG-311	Run 1 Train A PM_{10} filter	0.2466	2.875E+01	2.875E+01
DPG-312	Run 1 Train B PM_{10} filter	0.2688	DATA VOID	
DPG-351	Run 2 Train A TSP filter	0.4906	1.939E+01	1.754E+01
DPG-352	Run 2 Train B TSP filter	0.4712	1.570E+01	
DPG-361	Run 2 Train A PM_{10} filter	0.3003	3.501E+01	3.501E+01
DPG-362	Run 2 Train B PM_{10} filter	0.3362	DATA VOID	

a
Average concentration calculated for each run.

AEC = Army Environmental Center
FA = Simulator Flash Artillery

TABLE C-2. AEC - BACKGROUND, REAGENT AND FIELD BLANKS

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Average Concentration, mg/m^3
DPG-341	FA Background TSP filter	-0.0001	-2.672E-03
DPG-342	FA Background PM_{10} filter	0.0005	1.793E-02
DPG-951	Reagent Blank TSP filter	-0.0026	ND
DPG-961	Reagent Blank PM_{10} filter	-0.0002	ND
DPG-900/941	Field Blank TSP filter	-0.0037	ND
DPG-901/942	Field Blank PM_{10} filter	-0.0029	ND

AEC = Army Environmental Center

FA = Simulator Flash Artillery

SIMULATOR HAND GRENADE

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TABLE C-1. AEC - TSP and PM_{10} FOR HG TEST (30 MARCH 1998)

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Concentration, mg/m^3	Average Concentration (a), mg/m^3
DPG-201	Run 1 Train A TSP filter	0.9240	1.291E+02	1.183E+02
DPG-202	Run 1 Train B TSP filter	0.9317	1.075E+02	
DPG-211	Run 1 Train A PM_{10} filter	0.5243	1.340E+02	1.402E+02
DPG-212	Run 1 Train B PM_{10} filter	0.5491	1.464E+02	
DPG-251	Run 2 Train A TSP filter	1.2870	1.798E+02	1.665E+02
DPG-252	Run 2 Train B TSP filter	1.3282	1.532E+02	
DPG-261	Run 2 Train A PM_{10} filter	0.7267	1.858E+02	1.954E+02
DPG-262	Run 2 Train B PM_{10} filter	0.7687	2.050E+02	

a
Average concentration calculated for each run.

AEC = Army Environmental Center
HG = Simulator Hand Grenade

TABLE C-2. AEC - BACKGROUND, REAGENT AND FIELD BLANKS

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Average Concentration, mg/m^3
DPG-241	HG Background TSP filter	-0.0025	-6.288E-02
DPG-242	HG Background PM_{10} filter	-0.0238	-8.049E-01
DPG-951	Reagent Blank TSP filter	-0.0026	ND
DPG-961	Reagent Blank PM_{10} filter	-0.0002	ND
DPG-900/941	Field Blank TSP filter	-0.0037	ND
DPG-901/942	Field Blank PM_{10} filter	-0.0029	ND

AEC = Army Environmental Center

HG = Simulator Hand Grenade

SIMULATOR GROUND BURST

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TABLE C-1. AEC - TSP and PM_{10} FOR GB TEST (30 MARCH 1998)

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Concentration, mg/m^3	Average Concentration (a), mg/m^3
DPG-101	Run 1 Train A TSP filter	0.9579	1.127E+02	1.041E+02
DPG-102	Run 1 Train B TSP filter	0.9814	9.546E+01	
DPG-111	Run 1 Train A PM_{10} filter	0.4100	1.123E+02	1.259E+02
DPG-112	Run 1 Train B PM_{10} filter	0.4609	1.395E+02	
DPG-151	Run 2 Train A TSP filter	0.8747	1.029E+02	9.407E+01
DPG-152	Run 2 Train B TSP filter	0.8766	8.527E+01	
DPG-161	Run 2 Train A PM_{10} filter	0.3817	1.045E+02	1.103E+02
DPG-162	Run 2 Train B PM_{10} filter	0.3837	1.161E+02	

a
Average concentration calculated for each run.

AEC = Army Environmental Center
GB = Simulator Ground Burst

TABLE C-2. AEC - BACKGROUND, REAGENT AND FIELD BLANKS

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Average Concentration, mg/m^3
DPG-241	HG Background TSP filter	-0.0025	-6.288E-02
DPG-242	HG Background PM_{10} filter	-0.0238	-8.049E-01
DPG-951	Reagent Blank TSP filter	-0.0026	ND
DPG-961	Reagent Blank PM_{10} filter	-0.0002	ND
DPG-900/941	Field Blank TSP filter	-0.0037	ND
DPG-901/942	Field Blank PM_{10} filter	-0.0029	ND

AEC = Army Environmental Center

GREEN STAR CLUSTER

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TABLE C-1. AEC - TSP and PM_{10} FOR GS TEST (31 MARCH 1998)

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Concentration, mg/m^3	Average Concentration (a), mg/m^3
DPG-801	Run 1 Train A TSP filter	0.6996	3.399E+01	3.072E+01
DPG-802	Run 1 Train B TSP filter	0.7025	2.745E+01	
DPG-811	Run 1 Train A PM_{10} filter	0.3056	2.474E+01	2.762E+01
DPG-812	Run 1 Train B PM_{10} filter	0.3914	3.049E+01	

a
Average concentration calculated for each run.

AEC = Army Environmental Center
GS = Green Star Cluster

TABLE C-2. AEC - BACKGROUND, REAGENT AND FIELD BLANKS

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Average Concentration, mg/m^3
DPG-741	WP Background TSP filter	0.0015	3.893E-02
DPG-742	WP Background PM_{10} filter	0.0027	9.455E-02
DPG-951	Reagent Blank TSP filter	-0.0026	ND
DPG-961	Reagent Blank PM_{10} filter	-0.0002	ND
DPG-900/941	Field Blank TSP filter	-0.0037	ND
DPG-901/942	Field Blank PM_{10} filter	-0.0029	ND

AEC = Army Environmental Center

GREEN PARACHUTE SIGNAL FLARE

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TABLE C-1. AEC - TSP and PM_{10} FOR GP TEST (31 MARCH 1998)

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Concentration, mg/m^3	Average Concentration (a), mg/m^3
DPG-601	Run 1 Train A TSP filter	0.8734	6.058E+01	5.503E+01
DPG-602	Run 1 Train B TSP filter	0.8782	4.948E+01	
DPG-611	Run 1 Train A PM_{10} filter	0.3787	4.418E+01	4.859E+01
DPG-612	Run 1 Train B PM_{10} filter	0.4867	5.300E+01	

a
Average concentration calculated for each run.

AEC = Army Environmental Center
GP = Green Parachute Signal Flare

TABLE C-2. AEC - BACKGROUND, REAGENT AND FIELD BLANKS

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Average Concentration, mg/m^3
DPG-741	WP Background TSP filter	0.0015	3.893E-02
DPG-742	WP Background PM_{10} filter	0.0027	9.455E-02
DPG-951	Reagent Blank TSP filter	-0.0026	ND
DPG-961	Reagent Blank PM_{10} filter	-0.0002	ND
DPG-900/941	Field Blank TSP filter	-0.0037	ND
DPG-901/942	Field Blank PM_{10} filter	-0.0029	ND

AEC = Army Environmental Center

WHITE PARACHUTE SIGNAL FLARE

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TABLE C-1. AEC - TSP and PM_{10} FOR WP TEST (1 APRIL 1998)

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Concentration, mg/m^3	Average Concentration (a), mg/m^3
DPG-751	Run 1 Train A TSP filter	0.9331	9.437E+01	8.628E+01
DPG-752	Run 1 Train B TSP filter	0.9397	7.819E+01	
DPG-761	Run 1 Train A PM_{10} filter	0.3170	7.545E+01	7.736E+01
DPG-762	Run 1 Train B PM_{10} filter	0.3629	7.928E+01	

a
Average concentration calculated for each run.

AEC = Army Environmental Center
WP = White Parachute Signal Flare

TABLE C-2. AEC - BACKGROUND, REAGENT AND FIELD BLANKS

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Average Concentration, mg/m^3
DPG-741	WP Background TSP filter	0.0015	3.893E-02
DPG-742	WP Background PM_{10} filter	0.0027	9.455E-02
DPG-951	Reagent Blank TSP filter	-0.0026	ND
DPG-961	Reagent Blank PM_{10} filter	-0.0002	ND
DPG-900/941	Field Blank TSP filter	-0.0037	ND
DPG-901/942	Field Blank PM_{10} filter	-0.0029	ND

AEC = Army Environmental Center

WP = White Parachute Signal Flare

155 MM ILLUMINATION ROUND

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TABLE C-1. AEC - TSP and PM_{10} FOR IR TEST (1 APRIL 1998)

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Concentration, mg/m^3	Average Concentration (a), mg/m^3
DPG-501	Run 1 Train A TSP filter	1.3018	9.291E+02	1.163E+03
DPG-502	Run 1 Train B TSP filter	2.5131	1.396E+03	
DPG-511	Run 1 Train A PM_{10} filter	2.1325	1.780E+03	1.666E+03
DPG-512	Run 1 Train B PM_{10} filter	1.9271	1.552E+03	

a
Average concentration calculated for each run.

AEC = Army Environmental Center
IR = 155mm Illumination Round

TABLE C-2. AEC - BACKGROUND, REAGENT AND FIELD BLANKS

Particulates Analysis of the Air Sample - 40 CFR 50 Appendix B; sample collected on filter

PM_{10} Analysis of the Air Sample - 40 CFR 50 Appendix J; sample collected on filter

Analyzed by: Radian International LLC

Sample ID Number	Sample	Weight Gain, g	Average Concentration, mg/m^3
DPG-541	IR Background TSP filter	-0.0010	ND
DPG-542	IR Background PM_{10} filter	-0.0005	ND
DPG-951	Reagent Blank TSP filter	-0.0026	ND
DPG-961	Reagent Blank PM_{10} filter	-0.0002	ND
DPG-900/941	Field Blank TSP filter	-0.0037	ND
DPG-901/942	Field Blank PM_{10} filter	-0.0029	ND

AEC = Army Environmental Center

IR = 155mm Illumination Round

APPENDIX II-D. METALS DATA RESULTS

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SIMULATOR BOOBY TRAP FLASH M117

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TABLE D-1. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, mg/kg (a)	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, mg/kg (a)	Run 1 Train B -Detection Limit, mg/kg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Aluminum	2940	65.7	9.592E-02	2800	66.2	7.979E-02	8.785E-02
Antimony	269000	4.63	8.777E+00	279000	4.66	7.950E+00	8.363E+00
Arsenic	536	3.08	1.749E-02	557	3.11	1.587E-02	1.668E-02
Barium	41.3	0.296	1.347E-03	51.4	0.298	1.465E-03	1.406E-03
Beryllium	0.355	1.46	ND	0.684	1.47	ND	ND
Cadmium	2.17	0.386	7.080E-05	2.11	0.389	6.013E-05	6.546E-05
Chromium	44.1	0.771	1.439E-03	48.8	0.777	1.391E-03	1.415E-03
Cobalt	2.73	0.745	8.907E-05	2.91	0.75	8.292E-05	8.600E-05
Copper	459	3.36	1.498E-02	498	3.38	1.419E-02	1.458E-02
Lead	698	3.06	2.277E-02	722	3.08	2.057E-02	2.167E-02
Magnesium	45500	5.88	1.485E+00	75600	5.92	2.154E+00	1.819E+00
Manganese	128	0.28	4.176E-03	131	0.282	3.733E-03	3.955E-03
Nickel	7.92	1.6	2.584E-04	8.16	1.61	2.325E-04	2.455E-04
Phosphorus	7300	7.39	2.382E-01	7530	7.45	2.146E-01	2.264E-01
Selenium	5.86	2.8	1.912E-04	5.91	2.82	1.684E-04	1.798E-04
Silver	11.5	1.14	3.752E-04	11.7	1.15	3.334E-04	3.543E-04
Thallium	ND	4.4	ND	ND	4.44	ND	ND
Zinc	308	4.1	1.005E-02	307	4.13	8.748E-03	9.399E-03
Mercury (b)	ND	ND	ND	ND	ND	ND	ND

a
Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.
b
Analytical data not available for analysis.

TABLE D-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, mg/kg (a)	Background - Detection Limit, mg/kg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, mg/kg	Reagent Blank - Detection Limit, mg/kg	Field Blank - Amount Detected, mg/kg	Field Blank - Detection Limit, mg/kg
Aluminum	ND	38.9	ND	ND	38.9	ND	38.9
Antimony	ND	2.74	ND	ND	2.74	ND	2.74
Arsenic	ND	1.83	ND	ND	1.83	ND	1.83
Barium	ND	0.175	ND	ND	0.175	ND	0.175
Beryllium	ND	0.866	ND	ND	0.866	ND	0.866
Cadmium	ND	0.229	ND	ND	0.229	ND	0.229
Chromium	ND	0.457	ND	ND	0.457	ND	0.457
Cobalt	ND	0.441	ND	ND	0.441	ND	0.441
Copper	ND	1.99	ND	ND	1.99	ND	1.99
Lead	ND	1.81	ND	ND	1.81	ND	1.81
Magnesium	ND	3.48	ND	ND	3.48	ND	3.48
Manganese	ND	0.166	ND	ND	0.166	ND	0.166
Nickel	ND	0.948	ND	ND	0.948	ND	0.948
Phosphorus	ND	4.38	ND	ND	4.38	ND	4.38
Selenium	ND	1.66	ND	ND	1.66	ND	1.66
Silver	ND	0.675	ND	ND	0.675	ND	0.675
Thallium	ND	2.61	ND	ND	2.61	ND	2.61
Zinc	ND	2.43	ND	ND	2.43	ND	2.43
Mercury	ND	0.0171	ND	ND	0.0171	ND	0.0171

a
Insignificant particulate loading occurred and no particulate phase metals were derived.

TABLE D-3. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train B -Detection Limit, mg/kg	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Aluminum	65.7	66.2	2.011E-03	1.995E-03
Antimony	4.63	4.66	1.415E-04	1.406E-04
Arsenic	3.08	3.11	9.446E-05	9.355E-05
Barium	0.296	0.298	9.051E-06	8.990E-06
Beryllium	1.46	1.47	4.465E-05	4.434E-05
Cadmium	0.386	0.389	1.181E-05	1.172E-05
Chromium	0.771	0.777	2.360E-05	2.342E-05
Cobalt	0.745	0.75	2.278E-05	2.263E-05
Copper	3.36	3.38	1.027E-04	1.021E-04
Lead	3.06	3.08	9.355E-05	9.294E-05
Magnesium	5.88	5.92	1.798E-04	1.786E-04
Manganese	0.28	0.282	8.565E-06	8.504E-06
Nickel	1.6	1.61	4.890E-05	4.860E-05
Phosphorus	7.39	7.45	2.263E-04	2.245E-04
Selenium	2.8	2.82	8.565E-05	8.504E-05
Silver	1.14	1.15	3.493E-05	3.462E-05
Thallium	4.4	4.44	1.349E-04	1.336E-04
Zinc	4.1	4.13	1.254E-04	1.245E-04
Mercury	ND	ND	0.000E+00	0.000E+00

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SIMULATOR FLASH ARTILLERY M110

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TABLE D-1. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, mg/kg (a)	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, mg/kg (a)	Run 1 Train B -Detection Limit, mg/kg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Aluminum	5330	57.4	1.234E-01	4500	57.4	8.698E-02	1.052E-01
Antimony	1010	4.05	2.339E-02	971	4.05	1.877E-02	2.108E-02
Arsenic	2.56	2.69	ND	1.37	2.7	ND	ND
Barium	57900	0.258	1.341E+00	57700	0.259	1.115E+00	1.228E+00
Beryllium	0.504	1.28	ND	0.434	1.28	ND	ND
Cadmium	4.05	0.337	9.379E-05	3.82	0.337	7.384E-05	8.381E-05
Chromium	140	0.673	3.242E-03	139	0.674	2.687E-03	2.964E-03
Cobalt	16.1	0.65	3.728E-04	15.6	0.651	3.015E-04	3.372E-04
Copper	1330	2.93	3.080E-02	1330	2.93	2.571E-02	2.825E-02
Lead	186	2.68	4.307E-03	187	2.68	3.615E-03	3.961E-03
Magnesium	343000	5.14	7.943E+00	341000	5.14	6.591E+00	7.267E+00
Manganese	201	0.244	4.655E-03	201	0.244	3.885E-03	4.270E-03
Nickel	7.51	1.4	1.739E-04	6.73	1.4	1.301E-04	1.520E-04
Phosphorus	87.1	6.46	2.017E-03	85.1	6.46	1.645E-03	1.831E-03
Selenium	ND	2.45	ND	1.49	2.45	ND	ND
Silver	0.823	0.996	ND	0.638	0.997	ND	ND
Thallium	2.03	3.85	ND	ND	3.85	ND	ND
Zinc	258	3.58	5.975E-03	257	3.58	4.968E-03	5.471E-03
Mercury (b)	ND	ND	ND	ND	ND	ND	ND

a
Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.
b
Analytical data not available for analysis.

TABLE D-2. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, mg/kg (a)	Run 2 Train A -Detection Limit, mg/kg	Run 2 Train A - Concentration, mg/m^3	Run 2 Train B - Amount Detected, mg/kg (a)	Run 2 Train B -Detection Limit, mg/kg	Run 2 Train B - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
Aluminum	7960	81.1	1.419E-01	5520	80	7.808E-02	1.100E-01
Antimony	574	5.72	1.023E-02	581	5.64	8.218E-03	9.225E-03
Arsenic	2.2	3.81	ND	2.31	3.76	ND	ND
Barium	71300	0.365	1.271E+00	66800	0.36	9.449E-01	1.108E+00
Beryllium	0.814	1.81	ND	0.938	1.78	ND	ND
Cadmium	8.16	0.477	1.455E-04	7.72	0.47	1.092E-04	1.273E-04
Chromium	198	0.952	3.529E-03	153	0.94	2.164E-03	2.847E-03
Cobalt	20.6	0.92	3.672E-04	19.5	0.907	2.758E-04	3.215E-04
Copper	1470	4.15	2.620E-02	1480	4.09	2.093E-02	2.357E-02
Lead	213	3.78	3.797E-03	216	3.73	3.055E-03	3.426E-03
Magnesium	267000	7.26	4.759E+00	163000	7.17	2.306E+00	3.532E+00
Manganese	279	0.345	4.973E-03	271	0.341	3.833E-03	4.403E-03
Nickel	12.3	1.98	2.192E-04	13	1.95	1.839E-04	2.016E-04
Phosphorus	153	9.13	2.727E-03	144	9.01	2.037E-03	2.382E-03
Selenium	ND	3.46	ND	ND	3.42	ND	ND
Silver	0.989	1.41	ND	0.691	1.39	ND	ND
Thallium	1.41	5.44	ND	3.81	5.37	ND	ND
Zinc	377	5.07	6.720E-03	399	5	5.644E-03	6.182E-03
Mercury (b)	ND	ND	ND	ND	ND	ND	ND

a
Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.
b
Analytical data not available for analysis.

TABLE D-3. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, mg/kg (a)	Background - Detection Limit, mg/kg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, mg/kg	Reagent Blank - Detection Limit, mg/kg	Field Blank - Amount Detected, mg/kg	Field Blank - Detection Limit, mg/kg
Aluminum	ND	38.9	ND	ND	38.9	ND	38.9
Antimony	ND	2.74	ND	ND	2.74	ND	2.74
Arsenic	ND	1.83	ND	ND	1.83	ND	1.83
Barium	ND	0.175	ND	ND	0.175	ND	0.175
Beryllium	ND	0.866	ND	ND	0.866	ND	0.866
Cadmium	ND	0.229	ND	ND	0.229	ND	0.229
Chromium	ND	0.457	ND	ND	0.457	ND	0.457
Cobalt	ND	0.441	ND	ND	0.441	ND	0.441
Copper	ND	1.99	ND	ND	1.99	ND	1.99
Lead	ND	1.81	ND	ND	1.81	ND	1.81
Magnesium	ND	3.48	ND	ND	3.48	ND	3.48
Manganese	ND	0.166	ND	ND	0.166	ND	0.166
Nickel	ND	0.948	ND	ND	0.948	ND	0.948
Phosphorus	ND	4.38	ND	ND	4.38	ND	4.38
Selenium	ND	1.66	ND	ND	1.66	ND	1.66
Silver	ND	0.675	ND	ND	0.675	ND	0.675
Thallium	ND	2.61	ND	ND	2.61	ND	2.61
Zinc	ND	2.43	ND	ND	2.43	ND	2.43
Mercury	ND	0.0171	ND	ND	0.0171	ND	0.0171

a
Insignificant particulate loading occurred and no particulate phase metals were derived.

TABLE D-4. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train B -Detection Limit, mg/kg	Run 2 Train A -Detection Limit, mg/kg	Run 2 Train B -Detection Limit, mg/kg	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Aluminum	57.4	57.4	81.1	80	1.486E-03	1.052E-03
Antimony	4.05	4.05	5.72	5.64	1.048E-04	7.420E-05
Arsenic	2.69	2.7	3.81	3.76	6.980E-05	4.928E-05
Barium	0.258	0.259	0.365	0.36	6.687E-06	4.727E-06
Beryllium	1.28	1.28	1.81	1.78	3.316E-05	2.345E-05
Cadmium	0.337	0.337	0.477	0.47	8.739E-06	6.174E-06
Chromium	0.673	0.674	0.952	0.94	1.744E-05	1.233E-05
Cobalt	0.65	0.651	0.92	0.907	1.685E-05	1.191E-05
Copper	2.93	2.93	4.15	4.09	7.603E-05	5.368E-05
Lead	2.68	2.68	3.78	3.73	6.925E-05	4.910E-05
Magnesium	5.14	5.14	7.26	7.17	1.330E-04	9.417E-05
Manganese	0.244	0.244	0.345	0.341	6.320E-06	4.470E-06
Nickel	1.4	1.4	1.98	1.95	3.627E-05	2.565E-05
Phosphorus	6.46	6.46	9.13	9.01	1.673E-04	1.183E-04
Selenium	2.45	2.45	3.46	3.42	6.339E-05	4.488E-05
Silver	0.996	0.997	1.41	1.39	2.583E-05	1.825E-05
Thallium	3.85	3.85	5.44	5.37	9.966E-05	7.053E-05
Zinc	3.58	3.58	5.07	5	9.288E-05	6.559E-05
Mercury	ND	ND	ND	ND	0.000E+00	0.000E+00

SIMULATOR HAND GRENADE

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TABLE D-1. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, mg/kg (a)	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, mg/kg (a)	Run 1 Train B -Detection Limit, mg/kg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Aluminum	77100	21.5	9.953E+00	110000	23.8	1.182E+01	1.089E+01
Antimony	121	3.09	1.562E-02	131	3.41	1.408E-02	1.485E-02
Arsenic	2.16	2.12	2.788E-04	2.92	2.34	3.138E-04	2.963E-04
Barium	236	0.235	3.047E-02	324	0.26	3.481E-02	3.264E-02
Beryllium	0.671	0.131	8.662E-05	0.309	0.145	3.320E-05	5.991E-05
Cadmium	1.65	0.262	2.130E-04	1.88	0.289	2.020E-04	2.075E-04
Chromium	3.9	0.462	5.035E-04	5.31	0.511	5.706E-04	5.370E-04
Cobalt	2.81	0.462	3.627E-04	2.89	0.511	3.105E-04	3.366E-04
Copper	103	1.13	1.330E-02	114	1.25	1.225E-02	1.277E-02
Lead	12.9	1.74	1.665E-03	12.4	1.93	1.332E-03	1.499E-03
Magnesium	94300	4.52	1.217E+01	131000	5	1.408E+01	1.312E+01
Manganese	102	0.201	1.317E-02	113	0.222	1.214E-02	1.265E-02
Nickel	9.38	0.706	1.211E-03	9.9	0.781	1.064E-03	1.137E-03
Phosphorus	94.1	4.96	1.215E-02	102	5.49	1.096E-02	1.155E-02
Selenium	1.36	1.68	ND	0.0579	1.86	ND	ND
Silver	ND	0.314	ND	ND	0.347	ND	ND
Thallium	ND	3.98	ND	ND	4.4	ND	ND
Zinc	78.4	3.78	1.012E-02	81.5	4.18	8.757E-03	9.439E-03
Mercury	0.00806	0.00919	ND	0.0147	0.00838	1.580E-06	1.580E-06

a

Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.

TABLE D-2. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, mg/kg (a)	Run 2 Train A -Detection Limit, mg/kg	Run 2 Train A - Concentration, mg/m^3	Run 2 Train B - Amount Detected, mg/kg (a)	Run 2 Train B -Detection Limit, mg/kg	Run 2 Train B - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
Aluminum	81100	15.5	1.465E+01	128000	22.5	1.988E+01	1.727E+01
Antimony	205	2.23	3.704E-02	216	3.23	3.356E-02	3.530E-02
Arsenic	1.91	1.53	3.451E-04	2.83	2.22	4.396E-04	3.924E-04
Barium	344	0.17	6.215E-02	454	0.247	7.053E-02	6.634E-02
Beryllium	0.227	0.0945	4.101E-05	0.183	0.137	2.843E-05	3.472E-05
Cadmium	1.93	0.189	3.487E-04	2.57	0.274	3.992E-04	3.740E-04
Chromium	4.84	0.334	8.745E-04	7.74	0.484	1.202E-03	1.038E-03
Cobalt	2.65	0.334	4.788E-04	3.53	0.484	5.484E-04	5.136E-04
Copper	194	0.819	3.505E-02	209	1.19	3.247E-02	3.376E-02
Lead	12.2	1.26	2.204E-03	12.4	1.83	1.926E-03	2.065E-03
Magnesium	96900	3.26	1.751E+01	149000	4.73	2.315E+01	2.033E+01
Manganese	111	0.145	2.006E-02	116	0.21	1.802E-02	1.904E-02
Nickel	10.8	0.51	1.951E-03	12.7	0.74	1.973E-03	1.962E-03
Phosphorus	166	3.59	2.999E-02	164	5.2	2.548E-02	2.773E-02
Selenium	ND	1.22	ND	2.17	1.76	3.371E-04	3.371E-04
Silver	ND	0.227	ND	ND	0.329	ND	ND
Thallium	0.227	2.87	ND	2.05	4.16	ND	ND
Zinc	132	2.73	2.385E-02	137	3.95	2.128E-02	2.257E-02
Mercury	0.0157	0.00425	2.837E-06	0.018	0.0038	2.796E-06	2.816E-06

a
Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.

TABLE D-3. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, mg/kg (a)	Background - Detection Limit, mg/kg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, mg/kg	Reagent Blank - Detection Limit, mg/kg	Field Blank - Amount Detected, mg/kg	Field Blank - Detection Limit, mg/kg
Aluminum	ND	38.9	ND	ND	38.9	ND	38.9
Antimony	ND	2.74	ND	ND	2.74	ND	2.74
Arsenic	ND	1.83	ND	ND	1.83	ND	1.83
Barium	ND	0.175	ND	ND	0.175	ND	0.175
Beryllium	ND	0.866	ND	ND	0.866	ND	0.866
Cadmium	ND	0.229	ND	ND	0.229	ND	0.229
Chromium	ND	0.457	ND	ND	0.457	ND	0.457
Cobalt	ND	0.441	ND	ND	0.441	ND	0.441
Copper	ND	1.99	ND	ND	1.99	ND	1.99
Lead	ND	1.81	ND	ND	1.81	ND	1.81
Magnesium	ND	3.48	ND	ND	3.48	ND	3.48
Manganese	ND	0.166	ND	ND	0.166	ND	0.166
Nickel	ND	0.948	ND	ND	0.948	ND	0.948
Phosphorus	ND	4.38	ND	ND	4.38	ND	4.38
Selenium	ND	1.66	ND	ND	1.66	ND	1.66
Silver	ND	0.675	ND	ND	0.675	ND	0.675
Thallium	ND	2.61	ND	ND	2.61	ND	2.61
Zinc	ND	2.43	ND	ND	2.43	ND	2.43
Mercury	ND	0.0171	ND	ND	0.0171	ND	0.0171

a
Insignificant particulate loading occurred and no particulate phase metals were derived.

TABLE D-4. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train B -Detection Limit, mg/kg	Run 2 Train A -Detection Limit, mg/kg	Run 2 Train B -Detection Limit, mg/kg	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Aluminum	21.5	23.8	15.5	22.5	3.378E-03	2.200E-03
Antimony	3.09	3.41	2.23	3.23	4.840E-04	3.165E-04
Arsenic	2.12	2.34	1.53	2.22	3.321E-04	2.171E-04
Barium	0.235	0.26	0.17	0.247	3.690E-05	2.413E-05
Beryllium	0.131	0.145	0.0945	0.137	2.058E-05	1.341E-05
Cadmium	0.262	0.289	0.189	0.274	4.102E-05	2.682E-05
Chromium	0.462	0.511	0.334	0.484	7.252E-05	4.740E-05
Cobalt	0.462	0.511	0.334	0.484	7.252E-05	4.740E-05
Copper	1.13	1.25	0.819	1.19	1.774E-04	1.162E-04
Lead	1.74	1.93	1.26	1.83	2.739E-04	1.788E-04
Magnesium	4.52	5	0.145	0.21	7.096E-04	2.058E-05
Manganese	0.201	0.222	0.145	0.21	3.151E-05	2.058E-05
Nickel	0.706	0.781	0.51	0.74	1.108E-04	7.238E-05
Phosphorus	4.96	5.49	3.59	5.2	7.792E-04	5.095E-04
Selenium	1.68	1.86	1.22	1.76	2.640E-04	1.732E-04
Silver	0.314	0.347	0.227	0.329	4.925E-05	3.222E-05
Thallium	3.98	4.4	2.87	4.16	6.245E-04	4.073E-04
Zinc	3.78	4.18	2.73	3.95	5.933E-04	3.875E-04
Mercury	0.00919	0.00838	0.00425	0.0038	1.304E-06	5.393E-07

SIMULATOR GROUND BURST

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TABLE D-1. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, mg/kg (a)	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, mg/kg (a)	Run 1 Train B -Detection Limit, mg/kg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Aluminum	56800	25.6	6.399E+00	124000	21.5	1.184E+01	9.118E+00
Antimony	115	3.67	1.296E-02	126	3.08	1.203E-02	1.249E-02
Arsenic	2.32	2.52	ND	2.42	2.12	2.310E-04	2.310E-04
Barium	203	0.28	2.287E-02	274	0.235	2.616E-02	2.451E-02
Beryllium	0.394	0.156	4.439E-05	0.131	0.131	1.251E-05	2.845E-05
Cadmium	1.57	0.311	1.769E-04	1.87	0.261	1.785E-04	1.777E-04
Chromium	4.02	0.55	4.529E-04	5.97	0.462	5.699E-04	5.114E-04
Cobalt	2.43	0.55	2.738E-04	3.99	0.462	3.809E-04	3.273E-04
Copper	167	1.35	1.881E-02	187	1.13	1.785E-02	1.833E-02
Lead	21	2.07	2.366E-03	22.5	1.74	2.148E-03	2.257E-03
Magnesium	78300	5.37	8.821E+00	141000	4.51	1.346E+01	1.114E+01
Manganese	216	0.239	2.433E-02	252	0.2	2.406E-02	2.420E-02
Nickel	11.2	0.84	1.262E-03	11.7	0.706	1.117E-03	1.189E-03
Phosphorus	386	5.9	4.349E-02	392	4.96	3.742E-02	4.045E-02
Selenium	ND	2	ND	0.131	1.68	ND	ND
Silver	ND	0.373	ND	ND	0.314	ND	ND
Thallium	0.591	4.73	ND	0.732	3.97	ND	ND
Zinc	139	4.49	1.566E-02	143	3.77	1.365E-02	1.466E-02
Mercury	0.0663	0.00548	7.469E-06	0.0647	0.00559	6.176E-06	6.823E-06

a
Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.

TABLE D-2. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, mg/kg (a)	Run 2 Train A -Detection Limit, mg/kg	Run 2 Train A - Concentration, mg/m^3	Run 2 Train B - Amount Detected, mg/kg (a)	Run 2 Train B -Detection Limit, mg/kg	Run 2 Train B - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
Aluminum	116000	24	2.757E+01	128000	25.3	2.414E+01	2.586E+01
Antimony	177	3.45	4.206E-02	187	3.63	3.527E-02	3.867E-02
Arsenic	1.42	2.37	ND	2.37	2.49	ND	ND
Barium	404	0.263	9.601E-02	476	0.277	8.978E-02	9.290E-02
Beryllium	0.283	0.146	6.725E-05	0.246	0.154	4.640E-05	5.683E-05
Cadmium	2.64	0.293	6.274E-04	2.37	0.308	4.470E-04	5.372E-04
Chromium	7.4	0.517	1.759E-03	8.74	0.544	1.649E-03	1.704E-03
Cobalt	3.31	0.517	7.866E-04	3.86	0.544	7.281E-04	7.573E-04
Copper	259	1.27	6.155E-02	267	1.33	5.036E-02	5.596E-02
Lead	24.2	1.95	5.751E-03	24.6	2.05	4.640E-03	5.196E-03
Magnesium	138000	5.05	3.280E+01	148000	5.32	2.792E+01	3.036E+01
Manganese	194	0.224	4.610E-02	194	0.236	3.659E-02	4.135E-02
Nickel	12.8	0.79	3.042E-03	12.1	0.832	2.282E-03	2.662E-03
Phosphorus	364	5.55	8.650E-02	363	5.84	6.847E-02	7.749E-02
Selenium	ND	1.88	ND	1.3	1.98	ND	ND
Silver	ND	0.351	ND	ND	0.37	ND	ND
Thallium	1.27	4.45	ND	0.524	4.68	ND	ND
Zinc	204	4.22	4.848E-02	182	4.45	3.433E-02	4.140E-02
Mercury	0.158	0.00792	3.755E-05	0.114	0.00731	2.150E-05	2.953E-05

a
Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.

TABLE D-3. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, mg/kg (a)	Background - Detection Limit, mg/kg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, mg/kg	Reagent Blank - Detection Limit, mg/kg	Field Blank - Amount Detected, mg/kg	Field Blank - Detection Limit, mg/kg
Aluminum	ND	38.9	ND	ND	38.9	ND	38.9
Antimony	ND	2.74	ND	ND	2.74	ND	2.74
Arsenic	ND	1.83	ND	ND	1.83	ND	1.83
Barium	ND	0.175	ND	ND	0.175	ND	0.175
Beryllium	ND	0.866	ND	ND	0.866	ND	0.866
Cadmium	ND	0.229	ND	ND	0.229	ND	0.229
Chromium	ND	0.457	ND	ND	0.457	ND	0.457
Cobalt	ND	0.441	ND	ND	0.441	ND	0.441
Copper	ND	1.99	ND	ND	1.99	ND	1.99
Lead	ND	1.81	ND	ND	1.81	ND	1.81
Magnesium	ND	3.48	ND	ND	3.48	ND	3.48
Manganese	ND	0.166	ND	ND	0.166	ND	0.166
Nickel	ND	0.948	ND	ND	0.948	ND	0.948
Phosphorus	ND	4.38	ND	ND	4.38	ND	4.38
Selenium	ND	1.66	ND	ND	1.66	ND	1.66
Silver	ND	0.675	ND	ND	0.675	ND	0.675
Thallium	ND	2.61	ND	ND	2.61	ND	2.61
Zinc	ND	2.43	ND	ND	2.43	ND	2.43
Mercury	ND	0.0171	ND	ND	0.0171	ND	0.0171

a

Insignificant particulate loading occurred and no particulate phase metals were derived.

TABLE D-4. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train B -Detection Limit, mg/kg	Run 2 Train A -Detection Limit, mg/kg	Run 2 Train B -Detection Limit, mg/kg	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Aluminum	25.6	21.5	24	25.3	3.485E-03	2.927E-03
Antimony	3.67	3.08	3.45	3.63	4.996E-04	4.193E-04
Arsenic	2.52	2.12	2.37	2.49	3.430E-04	2.886E-04
Barium	0.28	0.235	0.263	0.277	3.812E-05	3.199E-05
Beryllium	0.156	0.131	0.146	0.154	2.124E-05	1.783E-05
Cadmium	0.311	0.261	0.293	0.308	4.234E-05	3.553E-05
Chromium	0.55	0.462	0.517	0.544	7.487E-05	6.289E-05
Cobalt	0.55	0.462	0.517	0.544	7.487E-05	6.289E-05
Copper	1.35	1.13	1.27	1.33	1.838E-04	1.538E-04
Lead	2.07	1.74	1.95	2.05	2.818E-04	2.369E-04
Magnesium	5.37	4.51	5.05	5.32	7.310E-04	6.139E-04
Manganese	0.239	0.2	0.224	0.236	3.253E-05	2.723E-05
Nickel	0.84	0.706	0.79	0.832	1.143E-04	9.611E-05
Phosphorus	5.9	4.96	5.55	5.84	8.032E-04	6.752E-04
Selenium	2	1.68	1.88	1.98	2.723E-04	2.287E-04
Silver	0.373	0.314	0.351	0.37	5.078E-05	4.274E-05
Thallium	4.73	3.97	4.45	4.68	6.439E-04	5.404E-04
Zinc	4.49	3.77	4.22	4.45	6.112E-04	5.132E-04
Mercury	0.00548	0.00559	0.00792	0.00731	1.078E-06	7.460E-07

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TABLE D-1. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, mg/kg (a)	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, mg/kg (a)	Run 1 Train B -Detection Limit, mg/kg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Aluminum	329	22.9	1.118E-02	329	25.4	9.030E-03	1.011E-02
Antimony	15.8	3.29	5.371E-04	18.7	3.65	5.133E-04	5.252E-04
Arsenic	0.251	2.26	ND	1.98	2.5	ND	ND
Barium	14800	0.251	5.031E-01	18900	0.278	5.187E-01	5.109E-01
Beryllium	0.251	0.139	8.532E-06	0.196	0.154	5.380E-06	6.956E-06
Cadmium	1.06	0.279	3.603E-05	1.18	0.309	3.239E-05	3.421E-05
Chromium	84	0.492	2.855E-03	88.6	0.546	2.432E-03	2.643E-03
Cobalt	8.99	0.492	3.056E-04	11.7	0.546	3.211E-04	3.134E-04
Copper	123	1.21	4.181E-03	134	1.34	3.678E-03	3.929E-03
Lead	25.2	1.86	8.566E-04	26.8	2.06	7.356E-04	7.961E-04
Magnesium	99500	4.81	3.382E+00	104000	5.33	2.854E+00	3.118E+00
Manganese	208	0.214	7.070E-03	223	0.237	6.121E-03	6.595E-03
Nickel	5.81	0.752	1.975E-04	7.3	0.834	2.004E-04	1.989E-04
Phosphorus	80.4	5.28	2.733E-03	86	5.86	2.360E-03	2.547E-03
Selenium	ND	1.79	ND	ND	1.99	ND	ND
Silver	ND	0.334	ND	ND	0.371	ND	ND
Thallium	ND	4.23	ND	ND	4.7	ND	ND
Zinc	218	4.02	7.410E-03	231	4.46	6.340E-03	6.875E-03
Mercury	0.0946	0.0102	3.216E-06	0.125	0.0356	3.431E-06	3.323E-06

a
Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.

TABLE D-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, mg/kg (a)	Background - Detection Limit, mg/kg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, mg/kg	Reagent Blank - Detection Limit, mg/kg	Field Blank - Amount Detected, mg/kg	Field Blank - Detection Limit, mg/kg
Aluminum	ND	38.9	ND	ND	38.9	ND	38.9
Antimony	ND	2.74	ND	ND	2.74	ND	2.74
Arsenic	ND	1.83	ND	ND	1.83	ND	1.83
Barium	ND	0.175	ND	ND	0.175	ND	0.175
Beryllium	ND	0.866	ND	ND	0.866	ND	0.866
Cadmium	ND	0.229	ND	ND	0.229	ND	0.229
Chromium	ND	0.457	ND	ND	0.457	ND	0.457
Cobalt	ND	0.441	ND	ND	0.441	ND	0.441
Copper	ND	1.99	ND	ND	1.99	ND	1.99
Lead	ND	1.81	ND	ND	1.81	ND	1.81
Magnesium	ND	3.48	ND	ND	3.48	ND	3.48
Manganese	ND	0.166	ND	ND	0.166	ND	0.166
Nickel	ND	0.948	ND	ND	0.948	ND	0.948
Phosphorus	ND	4.38	ND	ND	4.38	ND	4.38
Selenium	ND	1.66	ND	ND	1.66	ND	1.66
Silver	ND	0.675	ND	ND	0.675	ND	0.675
Thallium	ND	2.61	ND	ND	2.61	ND	2.61
Zinc	ND	2.43	ND	ND	2.43	ND	2.43
Mercury	ND	0.0171	ND	ND	0.0171	ND	0.0171

a
Insignificant particulate loading occurred and no particulate phase metals were derived.

TABLE D-3. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train B -Detection Limit, mg/kg	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Aluminum	22.9	25.4	7.712E-04	6.953E-04
Antimony	3.29	3.65	1.108E-04	9.990E-05
Arsenic	2.26	2.5	7.591E-05	6.862E-05
Barium	0.251	0.278	8.441E-06	7.621E-06
Beryllium	0.139	0.154	4.676E-06	4.221E-06
Cadmium	0.279	0.309	9.382E-06	8.471E-06
Chromium	0.492	0.546	1.658E-05	1.494E-05
Cobalt	0.492	0.546	1.658E-05	1.494E-05
Copper	1.21	1.34	4.069E-05	3.674E-05
Lead	1.86	2.06	6.255E-05	5.648E-05
Magnesium	4.81	5.33	1.618E-04	1.460E-04
Manganese	0.214	0.237	7.196E-06	6.498E-06
Nickel	0.752	0.834	2.532E-05	2.283E-05
Phosphorus	5.28	5.86	1.779E-04	1.603E-04
Selenium	1.79	1.99	6.042E-05	5.435E-05
Silver	0.334	0.371	1.126E-05	1.014E-05
Thallium	4.23	4.7	1.427E-04	1.284E-04
Zinc	4.02	4.46	1.354E-04	1.221E-04
Mercury	0.0102	0.0356	1.081E-06	3.097E-07

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GREEN PARACHUTE SIGNAL FLARE

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TABLE D-1. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, mg/kg (a)	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, mg/kg (a)	Run 1 Train B -Detection Limit, mg/kg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Aluminum	664	17.4	4.022E-02	734	22.9	3.632E-02	3.827E-02
Antimony	9.41	2.49	5.700E-04	8.05	3.29	3.983E-04	4.842E-04
Arsenic	1.13	1.71	ND	1.16	2.26	ND	ND
Barium	54400	0.19	3.295E+00	76300	0.251	3.775E+00	3.535E+00
Beryllium	0.106	0.106	6.421E-06	0.14	0.14	6.927E-06	6.674E-06
Cadmium	8.66	0.211	5.246E-04	8.6	0.279	4.255E-04	4.751E-04
Chromium	54	0.373	3.271E-03	54.5	0.493	2.697E-03	2.984E-03
Cobalt	22.8	0.373	1.381E-03	32.4	0.493	1.603E-03	1.492E-03
Copper	100	0.915	6.058E-03	106	1.21	5.245E-03	5.651E-03
Lead	1.9	1.41	1.151E-04	5.3	1.86	2.622E-04	1.887E-04
Magnesium	205000	3.65	1.242E+01	199000	4.82	9.846E+00	1.113E+01
Manganese	85.1	0.162	5.155E-03	84.1	0.214	4.161E-03	4.658E-03
Nickel	4.14	0.57	2.508E-04	3.54	0.753	1.752E-04	2.130E-04
Phosphorus	89.6	4.01	5.428E-03	84.7	5.29	4.191E-03	4.809E-03
Selenium	ND	1.36	ND	ND	1.8	ND	ND
Silver	ND	0.254	ND	ND	0.335	ND	ND
Thallium	ND	3.21	ND	ND	4.24	ND	ND
Zinc	27.4	3.05	1.660E-03	27.8	4.03	1.375E-03	1.518E-03
Mercury	0.122	0.00792	7.391E-06	0.0771	0.00814	3.815E-06	5.603E-06

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Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.

TABLE D-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, mg/kg (a)	Background - Detection Limit, mg/kg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, mg/kg	Reagent Blank - Detection Limit, mg/kg	Field Blank - Amount Detected, mg/kg	Field Blank - Detection Limit, mg/kg
Aluminum	ND	38.9	ND	ND	38.9	ND	38.9
Antimony	ND	2.74	ND	ND	2.74	ND	2.74
Arsenic	ND	1.83	ND	ND	1.83	ND	1.83
Barium	ND	0.175	ND	ND	0.175	ND	0.175
Beryllium	ND	0.866	ND	ND	0.866	ND	0.866
Cadmium	ND	0.229	ND	ND	0.229	ND	0.229
Chromium	ND	0.457	ND	ND	0.457	ND	0.457
Cobalt	ND	0.441	ND	ND	0.441	ND	0.441
Copper	ND	1.99	ND	ND	1.99	ND	1.99
Lead	ND	1.81	ND	ND	1.81	ND	1.81
Magnesium	ND	3.48	ND	ND	3.48	ND	3.48
Manganese	ND	0.166	ND	ND	0.166	ND	0.166
Nickel	ND	0.948	ND	ND	0.948	ND	0.948
Phosphorus	ND	4.38	ND	ND	4.38	ND	4.38
Selenium	ND	1.66	ND	ND	1.66	ND	1.66
Silver	ND	0.675	ND	ND	0.675	ND	0.675
Thallium	ND	2.61	ND	ND	2.61	ND	2.61
Zinc	ND	2.43	ND	ND	2.43	ND	2.43
Mercury	ND	0.0171	ND	ND	0.0171	ND	0.0171

a

Insignificant particulate loading occurred and no particulate phase metals were derived.

TABLE D-3. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train B -Detection Limit, mg/kg	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Aluminum	17.4	22.9	1.247E-03	9.475E-04
Antimony	2.49	3.29	1.792E-04	1.356E-04
Arsenic	1.71	2.26	1.231E-04	9.312E-05
Barium	0.19	0.251	1.367E-05	1.035E-05
Beryllium	0.106	0.14	7.623E-06	5.772E-06
Cadmium	0.211	0.279	1.519E-05	1.149E-05
Chromium	0.373	0.493	2.685E-05	2.031E-05
Cobalt	0.373	0.493	2.685E-05	2.031E-05
Copper	0.915	1.21	6.589E-05	4.982E-05
Lead	1.41	1.86	1.013E-04	7.678E-05
Magnesium	3.65	4.82	2.625E-04	1.988E-04
Manganese	0.162	0.214	1.165E-05	8.821E-06
Nickel	0.57	0.753	4.100E-05	3.104E-05
Phosphorus	4.01	5.29	2.881E-04	2.184E-04
Selenium	1.36	1.8	9.802E-05	7.406E-05
Silver	0.254	0.335	1.824E-05	1.383E-05
Thallium	3.21	4.24	2.309E-04	1.748E-04
Zinc	3.05	4.03	2.194E-04	1.661E-04
Mercury	0.00792	0.00814	4.433E-07	4.313E-07

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WHITE PARACHUTE SIGNAL FLARE

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TABLE D-1. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, mg/kg (a)	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, mg/kg (a)	Run 1 Train B -Detection Limit, mg/kg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Aluminum	193	26.1	1.821E-02	39.3	22.6	3.073E-03	1.064E-02
Antimony	7.82	3.75	7.380E-04	9.66	3.25	7.554E-04	7.467E-04
Arsenic	ND	2.57	ND	1.5	2.23	ND	ND
Barium	581	0.286	5.483E-02	380	0.248	2.971E-02	4.227E-02
Beryllium	0.201	0.159	1.897E-05	0.119	0.138	ND	1.897E-05
Cadmium	0.646	0.317	6.096E-05	0.744	0.276	5.818E-05	5.957E-05
Chromium	52.3	0.561	4.936E-03	28.2	0.487	2.205E-03	3.570E-03
Cobalt	1.44	0.561	1.359E-04	1.41	0.487	1.103E-04	1.231E-04
Copper	40.8	1.38	3.850E-03	43.6	1.19	3.409E-03	3.630E-03
Lead	29.9	2.12	2.822E-03	30.6	1.84	2.393E-03	2.607E-03
Magnesium	189000	5.48	1.784E+01	64400	4.76	5.036E+00	1.144E+01
Manganese	178	0.243	1.680E-02	168	0.211	1.314E-02	1.497E-02
Nickel	5.34	0.857	5.039E-04	4.81	0.744	3.761E-04	4.400E-04
Phosphorus	60	6.02	5.662E-03	59.5	5.23	4.653E-03	5.157E-03
Selenium	0.307	2.04	ND	0.441	1.77	ND	ND
Silver	ND	0.381	ND	ND	0.331	ND	ND
Thallium	0.698	4.83	ND	ND	4.19	ND	ND
Zinc	26.3	4.58	2.482E-03	28.2	3.98	2.205E-03	2.344E-03
Mercury	0.314	0.00528	2.963E-05	0.128	0.00528	1.001E-05	1.982E-05

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Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.

TABLE D-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, mg/kg (a)	Background - Detection Limit, mg/kg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, mg/kg	Reagent Blank - Detection Limit, mg/kg	Field Blank - Amount Detected, mg/kg	Field Blank - Detection Limit, mg/kg
Aluminum	ND	38.9	ND	ND	38.9	ND	38.9
Antimony	ND	2.74	ND	ND	2.74	ND	2.74
Arsenic	ND	1.83	ND	ND	1.83	ND	1.83
Barium	ND	0.175	ND	ND	0.175	ND	0.175
Beryllium	ND	0.866	ND	ND	0.866	ND	0.866
Cadmium	ND	0.229	ND	ND	0.229	ND	0.229
Chromium	ND	0.457	ND	ND	0.457	ND	0.457
Cobalt	ND	0.441	ND	ND	0.441	ND	0.441
Copper	ND	1.99	ND	ND	1.99	ND	1.99
Lead	ND	1.81	ND	ND	1.81	ND	1.81
Magnesium	ND	3.48	ND	ND	3.48	ND	3.48
Manganese	ND	0.166	ND	ND	0.166	ND	0.166
Nickel	ND	0.948	ND	ND	0.948	ND	0.948
Phosphorus	ND	4.38	ND	ND	4.38	ND	4.38
Selenium	ND	1.66	ND	ND	1.66	ND	1.66
Silver	ND	0.675	ND	ND	0.675	ND	0.675
Thallium	ND	2.61	ND	ND	2.61	ND	2.61
Zinc	ND	2.43	ND	ND	2.43	ND	2.43
Mercury	ND	0.0171	ND	ND	0.0171	ND	0.0171

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Insignificant particulate loading occurred and no particulate phase metals were derived.

TABLE D-3. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train B -Detection Limit, mg/kg	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Aluminum	26.1	22.6	2.231E-03	1.932E-03
Antimony	3.75	3.25	3.206E-04	2.779E-04
Arsenic	2.57	2.23	2.197E-04	1.907E-04
Barium	0.286	0.248	2.445E-05	2.120E-05
Beryllium	0.159	0.138	1.359E-05	1.180E-05
Cadmium	0.317	0.276	2.710E-05	2.360E-05
Chromium	0.561	0.487	4.796E-05	4.164E-05
Cobalt	0.561	0.487	4.796E-05	4.164E-05
Copper	1.38	1.19	1.180E-04	1.017E-04
Lead	2.12	1.84	1.813E-04	1.573E-04
Magnesium	5.48	4.76	4.685E-04	4.070E-04
Manganese	0.243	0.211	2.078E-05	1.804E-05
Nickel	0.857	0.744	7.327E-05	6.361E-05
Phosphorus	6.02	5.23	5.147E-04	4.471E-04
Selenium	2.04	1.77	1.744E-04	1.513E-04
Silver	0.381	0.331	3.257E-05	2.830E-05
Thallium	4.83	4.19	4.129E-04	3.582E-04
Zinc	4.58	3.98	3.916E-04	3.403E-04
Mercury	0.00528	0.00528	4.514E-07	4.514E-07

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155 MM ILLUMINATION ROUND

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TABLE D-1. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, mg/kg (a)	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, mg/kg (a)	Run 1 Train B -Detection Limit, mg/kg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Aluminum	186	20.4	1.728E-01	157	23	2.192E-01	1.960E-01
Antimony	8.82	2.93	8.195E-03	10.6	3.31	1.480E-02	1.150E-02
Arsenic	0.604	2.01	ND	1.02	2.27	ND	ND
Barium	174	0.223	1.617E-01	188	0.252	2.625E-01	2.121E-01
Beryllium	0.149	0.124	1.384E-04	0.112	0.14	ND	1.384E-04
Cadmium	34.6	0.248	3.215E-02	34.8	0.28	4.858E-02	4.037E-02
Chromium	2.87	0.438	2.667E-03	3.5	0.495	4.886E-03	3.776E-03
Cobalt	1.13	0.438	1.050E-03	0.72	0.495	1.005E-03	1.028E-03
Copper	35.7	1.08	3.317E-02	35.4	1.21	4.942E-02	4.130E-02
Lead	27.6	1.65	2.564E-02	27.3	1.87	3.811E-02	3.188E-02
Magnesium	62500	4.28	5.807E+01	71300	4.84	9.954E+01	7.880E+01
Manganese	24.3	0.19	2.258E-02	26.2	0.215	3.658E-02	2.958E-02
Nickel	4.47	0.67	4.153E-03	4.25	0.757	5.933E-03	5.043E-03
Phosphorus	25.9	4.71	2.406E-02	29.1	5.32	4.063E-02	3.234E-02
Selenium	0.62	1.6	ND	ND	1.8	ND	ND
Silver	ND	0.298	ND	ND	0.336	ND	ND
Thallium	1.94	3.77	ND	ND	4.26	ND	ND
Zinc	538	3.58	4.999E-01	544	4.05	7.595E-01	6.297E-01
Mercury	0.00426	0.00606	ND	0.007	0.0057	9.773E-06	9.773E-06

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Metals data for results with no dilution (i.e., dilution factor equal to 1) were used to calculate emission factors.

TABLE D-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, mg/kg (a)	Background - Detection Limit, mg/kg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, mg/kg	Reagent Blank - Detection Limit, mg/kg	Field Blank - Amount Detected, mg/kg	Field Blank - Detection Limit, mg/kg
Aluminum	ND	38.9	ND	ND	38.9	ND	38.9
Antimony	ND	2.74	ND	ND	2.74	ND	2.74
Arsenic	ND	1.83	ND	ND	1.83	ND	1.83
Barium	ND	0.175	ND	ND	0.175	ND	0.175
Beryllium	ND	0.866	ND	ND	0.866	ND	0.866
Cadmium	ND	0.229	ND	ND	0.229	ND	0.229
Chromium	ND	0.457	ND	ND	0.457	ND	0.457
Cobalt	ND	0.441	ND	ND	0.441	ND	0.441
Copper	ND	1.99	ND	ND	1.99	ND	1.99
Lead	ND	1.81	ND	ND	1.81	ND	1.81
Magnesium	ND	3.48	ND	ND	3.48	ND	3.48
Manganese	ND	0.166	ND	ND	0.166	ND	0.166
Nickel	ND	0.948	ND	ND	0.948	ND	0.948
Phosphorus	ND	4.38	ND	ND	4.38	ND	4.38
Selenium	ND	1.66	ND	ND	1.66	ND	1.66
Silver	ND	0.675	ND	ND	0.675	ND	0.675
Thallium	ND	2.61	ND	ND	2.61	ND	2.61
Zinc	ND	2.43	ND	ND	2.43	ND	2.43
Mercury	ND	0.0171	ND	ND	0.0171	ND	0.0171

a
Insignificant particulate loading occurred and no particulate phase metals were derived.

TABLE D-3. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
Particulate-phase Metals Analysis of the TSP Samples - Method 6010A/7470; samples collected via TSP filter and filter digested according to 40 CFR 60 Method 29
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, mg/kg	Run 1 Train B -Detection Limit, mg/kg	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Aluminum	20.4	23	2.741E-02	2.431E-02
Antimony	2.93	3.31	3.945E-03	3.492E-03
Arsenic	2.01	2.27	2.705E-03	2.395E-03
Barium	0.223	0.252	3.003E-04	2.657E-04
Beryllium	0.124	0.14	1.668E-04	1.478E-04
Cadmium	0.248	0.28	3.337E-04	2.955E-04
Chromium	0.438	0.495	5.899E-04	5.220E-04
Cobalt	0.438	0.495	5.899E-04	5.220E-04
Copper	1.08	1.21	1.442E-03	1.287E-03
Lead	1.65	1.87	2.228E-03	1.966E-03
Magnesium	4.28	4.84	5.768E-03	5.100E-03
Manganese	0.19	0.215	2.562E-04	2.264E-04
Nickel	0.67	0.757	9.021E-04	7.984E-04
Phosphorus	4.71	5.32	6.340E-03	5.613E-03
Selenium	1.6	1.8	2.145E-03	1.907E-03
Silver	0.298	0.336	4.004E-04	3.551E-04
Thallium	3.77	4.26	5.077E-03	4.493E-03
Zinc	3.58	4.05	4.826E-03	4.266E-03
Mercury	0.00606	0.0057	7.222E-06	6.793E-06

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APPENDIX II-E. VOC AND TRACER DATA RESULTS

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SIMULATOR BOOBY TRAP FLASH M117

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TABLE E-1. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
TNMHC	100.10	1.001E-01	81.30	8.130E-02	9.070E-02
Ethane	3.30	3.300E-03	3.30	3.300E-03	3.300E-03
Ethylene	8.20	8.200E-03	8.30	8.300E-03	8.250E-03
Acetylene	12.50	1.250E-02	12.60	1.260E-02	1.255E-02
Propane	1.30	1.300E-03	1.30	1.300E-03	1.300E-03
Propene	2.20	2.200E-03	2.00	2.000E-03	2.100E-03
i-Butane	0.30	3.000E-04	0.20	2.000E-04	2.500E-04
i-Butene	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
1-Butene	0.40	4.000E-04	0.50	5.000E-04	4.500E-04
1,3-Butadiene	0.90	9.000E-04	0.90	9.000E-04	9.000E-04
n-Butane	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
trans-2-Butene	1.30	1.300E-03	1.10	1.100E-03	1.200E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
3-Methyl-1-butene	ND	ND	ND	ND	ND
i-Pentane	0.90	9.000E-04	0.90	9.000E-04	9.000E-04
1-Pentene	ND	ND	ND	ND	ND
2-Methyl-1-butene	ND	ND	ND	ND	ND
n-Pentane	0.80	8.000E-04	0.80	8.000E-04	8.000E-04
Isoprene	ND	ND	ND	ND	ND
trans-2-Pentene	ND	ND	ND	ND	ND
cis-2-Pentene	ND	ND	ND	ND	ND
2-Methyl-2-butene	ND	ND	ND	ND	ND
2,2-Dimethylbutane	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
Cyclopentene	ND	ND	ND	ND	ND
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	ND	ND	ND	ND	ND
2,3-Dimethylbutane	0.70	7.000E-04	0.50	5.000E-04	6.000E-04
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	1.20	1.200E-03	1.10	1.100E-03	1.150E-03
3-Methylpentane	0.90	9.000E-04	0.80	8.000E-04	8.500E-04
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	ND	ND	ND	ND	ND
n-Hexane	1.20	1.200E-03	1.20	1.200E-03	1.200E-03
trans-2-Hexene	ND	ND	ND	ND	ND
2-Methyl-2-pentene	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND
Methylcyclopentane	0.50	5.000E-04	0.50	5.000E-04	5.000E-04
2,4-Dimethylpentane	1.20	1.200E-03	1.30	1.300E-03	1.250E-03
Benzene	4.70	4.700E-03	4.80	4.800E-03	4.750E-03

TABLE E-1. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
Cyclohexane	0.30	3.000E-04	0.30	3.000E-04	3.000E-04
2-Methylhexane	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
2,3-Dimethylpentane	2.30	2.300E-03	2.30	2.300E-03	2.300E-03
3-Methylhexane	0.50	5.000E-04	0.60	6.000E-04	5.500E-04
2,2,4-Trimethylpentane	4.40	4.400E-03	4.50	4.500E-03	4.450E-03
n-Heptane	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	0.30	3.000E-04	0.30	3.000E-04	3.000E-04
2,4-Dimethylhexane	0.50	5.000E-04	0.40	4.000E-04	4.500E-04
2,3,4-Trimethylpentane	0.90	9.000E-04	0.90	9.000E-04	9.000E-04
Toluene	3.00	3.000E-03	3.00	3.000E-03	3.000E-03
2,3-Dimethylhexane	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
2-Methylheptane	0.30	3.000E-04	0.20	2.000E-04	2.500E-04
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	0.30	3.000E-04	0.30	3.000E-04	3.000E-04
n-Octane	0.20	2.000E-04	0.10	1.000E-04	1.500E-04
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
m-Xylene & p-Xylene	0.70	7.000E-04	1.10	1.100E-03	9.000E-04
Styrene	0.80	8.000E-04	0.60	6.000E-04	7.000E-04
o-Xylene	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
n-Nonane	0.60	6.000E-04	0.40	4.000E-04	5.000E-04
i-Propylbenzene	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND
p-Ethyltoluene	ND	ND	ND	ND	ND
m-Ethyltoluene	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND
o-Ethyltoluene	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene & sec-Butylbenzene	0.40	4.000E-04	0.20	2.000E-04	3.000E-04
n-Decane	ND	ND	ND	ND	ND
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	1.10	1.100E-03	1.10	1.100E-03	1.100E-03
ETBE	ND	ND	ND	ND	ND

TABLE E-2. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
Dichlorodifluoromethane	0.254	-	0.355	-	3.045E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	0.057	-	0.056	-	5.692E-02
1,3-Butadiene	0.408	-	0.408	-	4.075E-01
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.428	-	0.443	-	4.355E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	1.623	-	1.674	-	1.649E+00
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.108	-	0.112	-	1.101E-01
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.068	-	0.068	-	6.814E-02
Benzene	1.473	-	1.505	-	1.489E+00
Carbontetrachloride	0.116	-	0.125	-	1.205E-01
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	0.797	-	0.797	-	7.973E-01
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	0.092	-	0.092	-	9.226E-02
m&p-Xylene	0.200	-	0.172	-	1.859E-01
Styrene	0.087	-	0.085	-	8.601E-02
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	0.092	-	0.092	-	9.226E-02
p-Ethyltoluene	ND	-	ND	-	ND
1,3,5-Trimethylbenzene	ND	-	ND	-	ND
1,2,4-Trimethylbenzene	0.079	-	0.051	-	6.520E-02
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	0.059	-	0.055	-	5.712E-02
Indane	ND	-	ND	-	ND
2,3-Dihydro-1-methyl-1H-indene	ND	-	ND	-	ND
2,3-Dihydro-4-methyl-1H-indene	ND	-	ND	-	ND
Naphthalene	0.167	-	0.102	-	1.344E-01
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	0.240	-	0.247	-	2.434E-01
Acetonitrile	0.211	-	0.192	-	2.017E-01
Acrylonitrile	0.137	-	0.134	-	1.354E-01
Nitromethane	0.228	-	0.314	-	2.708E-01
Propanenitrile	ND	-	ND	-	ND
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	0.053	-	0.055	-	5.374E-02
2-Nitrophenol	ND	-	ND	-	ND
Acrolein	0.753	-	0.856	-	8.046E-01
Acetone	2.650	-	3.059	-	2.855E+00
1-Hydroxy-2-propanone	ND	-	ND	-	ND
Furan	ND	-	0.063	-	6.290E-02
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	ND	-	ND	-	ND
Methyl-vinyl Ketone	ND	-	ND	-	ND
MTBE	0.282	-	0.283	-	2.825E-01
2,3-Butanedione	ND	-	ND	-	ND
Butanal	0.116	-	0.146	-	1.311E-01
2-Butanone	0.550	-	0.497	-	5.234E-01
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	0.135	-	0.138	-	1.366E-01
Acetic Acid	1.155	-	1.114	-	1.134E+00
1-Butanol	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
2-Pentanone	ND	-	0.084	-	8.356E-02
Pentanal	0.360	-	0.560	-	4.599E-01
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	ND	-	ND	-	ND
Hexanal	0.262	-	0.377	-	3.196E-01
2-Furaldehyde	0.310	-	0.344	-	3.273E-01
Cyclohexanone	0.056	-	0.054	-	5.483E-02
Heptanal	0.218	-	0.328	-	2.727E-01
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	0.460	-	0.573	-	5.164E-01
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	0.478	-	0.689	-	5.831E-01
Benzofuran	ND	-	ND	-	ND
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	0.074	-	0.075	-	7.444E-02
Nonanal	0.704	-	0.957	-	8.304E-01
Decanal	0.497	-	0.923	-	7.098E-01
Carbonyl Sulfide	0.136	-	0.182	-	1.592E-01
Carbon Disulfide	10.820	-	11.069	-	1.094E+01
Thiophene	0.121	-	0.117	-	1.187E-01
Dimethyldisulfide	ND	-	ND	-	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
TNMHC	-	46.00	4.600E-02	4.600E-02
Ethane	30	6.50	6.500E-03	6.500E-03
Ethylene	28	2.60	2.600E-03	2.600E-03
Acetylene	26	3.20	3.200E-03	3.200E-03
Propane	44	2.60	2.600E-03	2.600E-03
Propene	42	3.10	3.100E-03	3.100E-03
i-Butane	58	0.40	4.000E-04	4.000E-04
i-Butene	56	0.80	8.000E-04	8.000E-04
1-Butene	56	1.30	1.300E-03	1.300E-03
1,3-Butadiene	54	0.20	2.000E-04	2.000E-04
n-Butane	58	1.10	1.100E-03	1.100E-03
trans-2-Butene	56	0.20	2.000E-04	2.000E-04
2,2-Dimethylpropane	72	ND	ND	ND
cis-2-Butene	56	0.20	2.000E-04	2.000E-04
3-Methyl-1-butene	70	0.10	1.000E-04	1.000E-04
i-Pentane	72	0.50	5.000E-04	5.000E-04
1-Pentene	70	ND	ND	ND
2-Methyl-1-butene	70	0.30	3.000E-04	3.000E-04
n-Pentane	72	0.50	5.000E-04	5.000E-04
Isoprene	68	0.10	1.000E-04	1.000E-04
trans-2-Pentene	70	0.10	1.000E-04	1.000E-04
cis-2-Pentene	70	ND	ND	ND
2-Methyl-2-butene	70	ND	ND	ND
2,2-Dimethylbutane	86	0.40	4.000E-04	4.000E-04
Cyclopentene	68	ND	ND	ND
4-Methyl-1-pentene	84	ND	ND	ND
Cyclopentane	70	0.10	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.10	1.000E-04	1.000E-04
cis-4-Methyl-2-pentene	84	ND	ND	ND
2-Methylpentane	86	0.30	3.000E-04	3.000E-04
3-Methylpentane	86	0.10	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	ND	ND	ND
1-Hexene	84	ND	ND	ND
n-Hexane	86	0.20	2.000E-04	2.000E-04
trans-2-Hexene	84	ND	ND	ND
2-Methyl-2-pentene	84	ND	ND	ND
cis-2-Hexene	84	ND	ND	ND
Methylcyclopentane	84	0.20	2.000E-04	2.000E-04
2,4-Dimethylpentane	100	0.10	1.000E-04	1.000E-04

TABLE E-3. AEC - BACKGROUND RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzene	78	0.70	7.000E-04	7.000E-04
Cyclohexane	84	0.40	4.000E-04	4.000E-04
2-Methylhexane	100	0.10	1.000E-04	1.000E-04
2,3-Dimethylpentane	100	0.20	2.000E-04	2.000E-04
3-Methylhexane	100	0.40	4.000E-04	4.000E-04
2,2,4-Trimethylpentane	114	0.50	5.000E-04	5.000E-04
n-Heptane	100	0.20	2.000E-04	2.000E-04
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND
Methylcyclohexane	98	0.10	1.000E-04	1.000E-04
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND
2,5-Dimethylhexane	114	ND	ND	ND
2,4-Dimethylhexane	114	ND	ND	ND
2,3,4-Trimethylpentane	114	0.10	1.000E-04	1.000E-04
Toluene	92	0.80	8.000E-04	8.000E-04
2,3-Dimethylhexane	114	ND	ND	ND
2-Methylheptane	111	ND	ND	ND
3-Ethylhexane	114	ND	ND	ND
2,2-Dimethylheptane	128	ND	ND	ND
2,2,4-Trimethylhexane	128	ND	ND	ND
n-Octane	114	0.10	1.000E-04	1.000E-04
Ethylcyclohexane	112	ND	ND	ND
Ethylbenzene	160	0.20	2.000E-04	2.000E-04
m-Xylene & p-Xylene	106	0.40	4.000E-04	4.000E-04
Styrene	104	ND	ND	ND
o-Xylene	106	0.20	2.000E-04	2.000E-04
n-Nonane	128	ND	ND	ND
i-Propylbenzene	120	ND	ND	ND
n-Propylbenzene	120	ND	ND	ND
p-Ethyltoluene	120	ND	ND	ND
m-Ethyltoluene	120	ND	ND	ND
1,3,5-Trimethylbenzene	120	ND	ND	ND
o-Ethyltoluene	120	ND	ND	ND
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.10	1.000E-04	1.000E-04
n-Decane	142	ND	ND	ND
alpha-Pinene	136	ND	ND	ND
beta-Pinene	136	ND	ND	ND
delta 3-Carene	136	ND	ND	ND
d-Limonene	136	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
MTBE	88	0.40	4.000E-04	4.000E-04
ETBE	102.0	ND	ND	ND
Dichlorodifluoromethane	120.0	0.07	3.698E-04	3.698E-04
Methylchloride	50.0	ND	ND	ND
Dichlorotetrafluoroethane	171.0	ND	ND	ND
Chloroethene	63.0	ND	ND	ND
1,3-Butadiene	54.0	0.09	2.034E-04	2.034E-04
Methylbromide	95.0	ND	ND	ND
Ethylchloride	64.5	ND	ND	ND
Trichloromonofluoromethane	137.0	ND	ND	ND
Vinylidenechloride	97.0	ND	ND	ND
Methylenechloride	85.0	0.14	4.948E-04	4.948E-04
Allylchloride	76.5	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.11	8.561E-04	8.561E-04
1,1-Dichloroethane	99.0	ND	ND	ND
1,2-Dichloroethene	97.0	ND	ND	ND
Chloroform	119.0	ND	ND	ND
1,2-Dichloroethane	99.0	ND	ND	ND
Methylchloroform	133.0	0.06	3.374E-04	3.374E-04
Benzene	78.0	0.22	7.120E-04	7.120E-04
Carbontetrachloride	154.0	0.10	6.288E-04	6.288E-04
1,2-Dichloropropane	113.0	ND	ND	ND
Trichloroethylene	133.0	ND	ND	ND
cis 1,3-Dichloro-1-propene	111.0	ND	ND	ND
trans 1,3-Dichloro-1-propene	111.0	ND	ND	ND
1,1,2-Trichloroethane	133.0	ND	ND	ND
Toluene	92.0	0.21	8.137E-04	8.137E-04
1,2-Dibromoethane	188.0	ND	ND	ND
Perchloroethylene	166.0	ND	ND	ND
Chlorobenzene	113.0	ND	ND	ND
Ethylbenzene	160.0	ND	ND	ND
m&p-Xylene	106.0	0.08	3.658E-04	3.658E-04
Styrene	104.0	ND	ND	ND
1,1,2,2-Tetrachloroethane	168.0	ND	ND	ND
o-Xylene	106.0	ND	ND	ND
p-Ethyltoluene	120.0	ND	ND	ND
1,3,5-Trimethylbenzene	120.0	ND	ND	ND
1,2,4-Trimethylbenzene	120.0	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzylchloride	127.0	ND	ND	ND
m-Dichlorobenzene	147.0	ND	ND	ND
p-Dichlorobenzene	147.0	ND	ND	ND
o-Dichlorobenzene	147.0	ND	ND	ND
1,2,4-Trichlorobenzene	181.0	ND	ND	ND
Hexachlorobutadiene	261.0	ND	ND	ND
Phenylacetylene	102.0	ND	ND	ND
Indane	118.0	ND	ND	ND
2,3-Dihydro-1-methyl-1H-indene	132.0	ND	ND	ND
2,3-Dihydro-4-methyl-1H-indene	132.0	ND	ND	ND
Naphthalene	128.0	ND	ND	ND
2-Methylnaphthalene	142.0	ND	ND	ND
1-Methylnaphthalene	142.0	ND	ND	ND
Cyanogen	52	ND	ND	ND
Methylnitrite	61.0	ND	ND	ND
Acetonitrile	41.0	ND	ND	ND
Acrylonitrile	53.0	ND	ND	ND
Nitromethane	61.0	ND	ND	ND
Propanenitrile	55.0	ND	ND	ND
2-Methylpropanenitrile	69.0	ND	ND	ND
Pentanenitrile	83.0	ND	ND	ND
Hexanenitrile	97.0	ND	ND	ND
Benzonitrile	103.0	ND	ND	ND
2-Nitrophenol	139.0	ND	ND	ND
Acrolein	56.0	ND	ND	ND
Acetone	56.0	2.30	5.352E-03	5.352E-03
1-Hydroxy-2-propanone	74.0	ND	ND	ND
Furan	68.0	ND	ND	ND
2-Propanol	60.0	ND	ND	ND
2-Methylpropanal	74.0	ND	ND	ND
1-Propanol	60.0	ND	ND	ND
Methacrolein	70.0	ND	ND	ND
Methyl-vinyl Ketone	70.0	ND	ND	ND
MTBE	88.0	0.05	1.839E-04	1.839E-04
2,3-Butanedione	86.0	ND	ND	ND
Butanal	72.0	0.11	3.210E-04	3.210E-04
2-Butanone	72.0	0.29	8.692E-04	8.692E-04
2-Methyl-1,3-dioxolane	88.0	ND	ND	ND
2-Methylfuran	82.0	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Tetrahydrofuran	72.0	ND	ND	ND
trans-2-Butenal	70.0	ND	ND	ND
Acetic Acid	60.0	0.33	8.137E-04	8.137E-04
1-Butanol	74.0	ND	ND	ND
2-Pentanone	86.0	0.07	2.374E-04	2.374E-04
Pentanal	86.0	0.37	1.306E-03	1.306E-03
1,4-Dioxane	88.0	ND	ND	ND
Methyl Methacrylate	100.0	ND	ND	ND
Cyclopentanone	84.0	ND	ND	ND
Hexanal	100.0	0.24	9.985E-04	9.985E-04
2-Furaldehyde	96.0	0.10	4.095E-04	4.095E-04
Cyclohexanone	98.0	ND	ND	ND
Heptanal	114.0	0.18	8.661E-04	8.661E-04
2-Butoxyethanol	118.0	ND	ND	ND
Benzaldehyde	106.0	0.26	1.153E-03	1.153E-03
6-Methyl-5-hepten-2-one	126.0	ND	ND	ND
Octanal	128.0	0.41	2.207E-03	2.207E-03
Benzofuran	118.0	ND	ND	ND
2-Ethyl-1-hexanol	120.0	ND	ND	ND
Acetophonone	120.0	ND	ND	ND
Nonanal	142.0	0.49	2.870E-03	2.870E-03
Decanal	156.0	0.49	3.192E-03	3.192E-03
Carbonyl Sulfide	60.0	0.10	2.525E-04	2.525E-04
Carbon Disulfide	76.0	0.36	1.143E-03	1.143E-03
Thiophene	84.0	ND	ND	ND
Dimethyldisulfide	94.0	ND	ND	ND

TABLE E-4. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
TNMHC	-	0.1	1.000E-04	1.000E-04	1.000E-04
Ethane	30	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylene	28	0.1	1.000E-04	1.000E-04	1.000E-04
Acetylene	26	0.1	1.000E-04	1.000E-04	1.000E-04
Propane	44	0.1	1.000E-04	1.000E-04	1.000E-04
Propene	42	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1,3-Butadiene	54	0.1	1.000E-04	1.000E-04	1.000E-04
n-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylpropane	72	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
i-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
1-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
n-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
Isoprene	68	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentene	68	0.1	1.000E-04	1.000E-04	1.000E-04
4-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentane	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
cis-4-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
1-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
n-Hexane	86	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclopentane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
Benzene	78	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclohexane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04

TABLE E-4. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
n-Heptane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-1-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclohexane	98	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-2-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
2,5-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,3,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Toluene	92	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylheptane	111	0.1	1.000E-04	1.000E-04	1.000E-04
3-Ethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylheptane	128	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylhexane	128	0.1	1.000E-04	1.000E-04	1.000E-04
n-Octane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylcyclohexane	112	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylbenzene	160	0.1	1.000E-04	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
Styrene	104	0.1	1.000E-04	1.000E-04	1.000E-04
o-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
n-Nonane	128	0.1	1.000E-04	1.000E-04	1.000E-04
i-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
p-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
m-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
o-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Decane	142	0.1	1.000E-04	1.000E-04	1.000E-04
alpha-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
beta-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
delta 3-Carene	136	0.1	1.000E-04	1.000E-04	1.000E-04
d-Limonene	136	0.1	1.000E-04	1.000E-04	1.000E-04
MTBE	88	0.1	1.000E-04	1.000E-04	1.000E-04
ETBE	102.0	0.1	1.000E-04	1.000E-04	1.000E-04
Dichlorodifluoromethane	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Methylchloride	50.0	0.1	2.080E-04	2.080E-04	2.080E-04
Dichlorotetrafluoroethane	171.0	0.1	7.114E-04	7.114E-04	7.114E-04

TABLE E-4. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Chloroethene	63.0	0.1	2.621E-04	2.621E-04	2.621E-04
1,3-Butadiene	54.0	0.1	2.246E-04	2.246E-04	2.246E-04
Methylbromide	95.0	0.1	3.952E-04	3.952E-04	3.952E-04
Ethylchloride	64.5	0.1	2.683E-04	2.683E-04	2.683E-04
Trichloromonofluoromethane	137.0	0.1	5.699E-04	5.699E-04	5.699E-04
Vinylidenechloride	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Methylenechloride	85.0	0.1	3.536E-04	3.536E-04	3.536E-04
Allylchloride	76.5	0.1	3.182E-04	3.182E-04	3.182E-04
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
1,1-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
1,2-Dichloroethene	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Chloroform	119.0	0.1	4.950E-04	4.950E-04	4.950E-04
1,2-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
Methylchloroform	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Benzene	78.0	0.1	3.245E-04	3.245E-04	3.245E-04
Carbontetrachloride	154.0	0.1	6.406E-04	6.406E-04	6.406E-04
1,2-Dichloropropane	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Trichloroethylene	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
cis 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
trans 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
1,1,2-Trichloroethane	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Toluene	92.0	0.1	3.827E-04	3.827E-04	3.827E-04
1,2-Dibromoethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
Perchloroethylene	166.0	0.1	6.906E-04	6.906E-04	6.906E-04
Chlorobenzene	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Ethylbenzene	160.0	0.1	6.656E-04	6.656E-04	6.656E-04
m&p-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
Styrene	104.0	0.1	4.326E-04	4.326E-04	4.326E-04
1,1,2,2-Tetrachloroethane	168.0	0.1	6.989E-04	6.989E-04	6.989E-04
o-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
p-Ethyltoluene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,3,5-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,2,4-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Benzylchloride	127.0	0.1	5.283E-04	5.283E-04	5.283E-04
m-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
p-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
o-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
1,2,4-Trichlorobenzene	181.0	0.1	7.530E-04	7.530E-04	7.530E-04
Hexachlorobutadiene	261.0	0.1	1.086E-03	1.086E-03	1.086E-03
Phenylacetylene	102.0	0.1	4.243E-04	4.243E-04	4.243E-04
Indane	118.0	0.1	4.909E-04	4.909E-04	4.909E-04

TABLE E-4. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dihydro-1-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
2,3-Dihydro-4-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
Naphthalene	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
2-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
1-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Cyanogen	52	0.1	2.163E-04	2.163E-04	2.163E-04
Methylnitrite	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Acetonitrile	41.0	0.1	1.706E-04	1.706E-04	1.706E-04
Acrylonitrile	53.0	0.1	2.205E-04	2.205E-04	2.205E-04
Nitromethane	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Propanenitrile	55.0	0.1	2.288E-04	2.288E-04	2.288E-04
2-Methylpropanenitrile	69.0	0.1	2.870E-04	2.870E-04	2.870E-04
Pentanenitrile	83.0	0.1	3.453E-04	3.453E-04	3.453E-04
Hexanenitrile	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Benzonitrile	103.0	0.1	4.285E-04	4.285E-04	4.285E-04
2-Nitrophenol	139.0	0.1	5.782E-04	5.782E-04	5.782E-04
Acrolein	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
Acetone	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
1-Hydroxy-2-propanone	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
Furan	68.0	0.1	2.829E-04	2.829E-04	2.829E-04
2-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
2-Methylpropanal	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
1-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Methacrolein	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Methyl-vinyl Ketone	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
MTBE	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2,3-Butanedione	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Butanal	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Butanone	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Methyl-1,3-dioxolane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2-Methylfuran	82.0	0.1	3.411E-04	3.411E-04	3.411E-04
Tetrahydrofuran	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
trans-2-Butenal	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Acetic Acid	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
1-Butanol	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
2-Pentanone	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Pentanal	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
1,4-Dioxane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
Methyl Methacrylate	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
Cyclopentanone	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Hexanal	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
2-Furaldehyde	96.0	0.1	3.994E-04	3.994E-04	3.994E-04

TABLE E-4. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Cyclohexanone	98.0	0.1	4.077E-04	4.077E-04	4.077E-04
Heptanal	114.0	0.1	4.742E-04	4.742E-04	4.742E-04
2-Butoxyethanol	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
Benzaldehyde	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
6-Methyl-5-hepten-2-one	126.0	0.1	5.242E-04	5.242E-04	5.242E-04
Octanal	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
Benzofuran	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
2-Ethyl-1-hexanol	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Acetophonone	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Nonanal	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Decanal	156.0	0.1	6.490E-04	6.490E-04	6.490E-04
Carbonyl Sulfide	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Carbon Disulfide	76.0	0.1	3.162E-04	3.162E-04	3.162E-04
Thiophene	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Dimethyldisulfide	94.0	0.1	3.910E-04	3.910E-04	3.910E-04

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SIMULATOR FLASH ARTILLERY M110

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TABLE E-1. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3 (a)	Run 1 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 1, mg/m^3
TNMHC	3019.50	3.020E+00	ND	ND	3.020E+00
Ethane	1.60	1.600E-03	ND	ND	1.600E-03
Ethylene	22.20	2.220E-02	ND	ND	2.220E-02
Acetylene	8.00	8.000E-03	ND	ND	8.000E-03
Propane	0.50	5.000E-04	ND	ND	5.000E-04
Propene	9.60	9.600E-03	ND	ND	9.600E-03
i-Butane	3.50	3.500E-03	ND	ND	3.500E-03
i-Butene	6.70	6.700E-03	ND	ND	6.700E-03
1-Butene	2.30	2.300E-03	ND	ND	2.300E-03
1,3-Butadiene	2.00	2.000E-03	ND	ND	2.000E-03
n-Butane	20.50	2.050E-02	ND	ND	2.050E-02
trans-2-Butene	1.70	1.700E-03	ND	ND	1.700E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.50	5.000E-04	ND	ND	5.000E-04
3-Methyl-1-butene	0.40	4.000E-04	ND	ND	4.000E-04
i-Pentane	124.10	1.241E-01	ND	ND	1.241E-01
1-Pentene	0.80	8.000E-04	ND	ND	8.000E-04
2-Methyl-1-butene	1.40	1.400E-03	ND	ND	1.400E-03
n-Pentane	127.30	1.273E-01	ND	ND	1.273E-01
Isoprene	0.10	1.000E-04	ND	ND	1.000E-04
trans-2-Pentene	0.90	9.000E-04	ND	ND	9.000E-04
cis-2-Pentene	0.50	5.000E-04	ND	ND	5.000E-04
2-Methyl-2-butene	0.40	4.000E-04	ND	ND	4.000E-04
2,2-Dimethylbutane	11.20	1.120E-02	ND	ND	1.120E-02
Cyclopentene	0.40	4.000E-04	ND	ND	4.000E-04
4-Methyl-1-pentene	0.40	4.000E-04	ND	ND	4.000E-04
Cyclopentane	10.50	1.050E-02	ND	ND	1.050E-02
2,3-Dimethylbutane	25.00	2.500E-02	ND	ND	2.500E-02
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	125.60	1.256E-01	ND	ND	1.256E-01
3-Methylpentane	89.00	8.900E-02	ND	ND	8.900E-02
2-Methyl-1-pentene	0.70	7.000E-04	ND	ND	7.000E-04
1-Hexene	0.40	4.000E-04	ND	ND	4.000E-04
n-Hexane	143.80	1.438E-01	ND	ND	1.438E-01
trans-2-Hexene	0.70	7.000E-04	ND	ND	7.000E-04
2-Methyl-2-pentene	0.40	4.000E-04	ND	ND	4.000E-04
cis-2-Hexene	0.40	4.000E-04	ND	ND	4.000E-04
Methylcyclopentane	53.80	5.380E-02	ND	ND	5.380E-02
2,4-Dimethylpentane	14.90	1.490E-02	ND	ND	1.490E-02
Benzene	123.30	1.233E-01	ND	ND	1.233E-01
Cyclohexane	63.50	6.350E-02	ND	ND	6.350E-02
2-Methylhexane	73.50	7.350E-02	ND	ND	7.350E-02

TABLE E-1. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3 (a)	Run 1 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 1, mg/m^3
2,3-Dimethylpentane	26.80	2.680E-02	ND	ND	2.680E-02
3-Methylhexane	82.50	8.250E-02	ND	ND	8.250E-02
2,2,4-Trimethylpentane	25.20	2.520E-02	ND	ND	2.520E-02
n-Heptane	106.90	1.069E-01	ND	ND	1.069E-01
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	109.80	1.098E-01	ND	ND	1.098E-01
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	9.90	9.900E-03	ND	ND	9.900E-03
2,4-Dimethylhexane	12.70	1.270E-02	ND	ND	1.270E-02
2,3,4-Trimethylpentane	4.00	4.000E-03	ND	ND	4.000E-03
Toluene	250.40	2.504E-01	ND	ND	2.504E-01
2,3-Dimethylhexane	6.40	6.400E-03	ND	ND	6.400E-03
2-Methylheptane	33.40	3.340E-02	ND	ND	3.340E-02
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	2.00	2.000E-03	ND	ND	2.000E-03
n-Octane	38.40	3.840E-02	ND	ND	3.840E-02
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	74.50	7.450E-02	ND	ND	7.450E-02
m-Xylene & p-Xylene	208.70	2.087E-01	ND	ND	2.087E-01
Styrene	2.10	2.100E-03	ND	ND	2.100E-03
o-Xylene	128.60	1.286E-01	ND	ND	1.286E-01
n-Nonane	8.70	8.700E-03	ND	ND	8.700E-03
i-Propylbenzene	2.60	2.600E-03	ND	ND	2.600E-03
n-Propylbenzene	16.80	1.680E-02	ND	ND	1.680E-02
p-Ethyltoluene	68.00	6.800E-02	ND	ND	6.800E-02
m-Ethyltoluene	31.00	3.100E-02	ND	ND	3.100E-02
1,3,5-Trimethylbenzene	42.80	4.280E-02	ND	ND	4.280E-02
o-Ethyltoluene	20.10	2.010E-02	ND	ND	2.010E-02
1,2,4-Trimethylbenzene & sec-Butylbenzene	106.60	1.066E-01	ND	ND	1.066E-01
n-Decane	2.40	2.400E-03	ND	ND	2.400E-03
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	135.10	1.351E-01	ND	ND	1.351E-01
ETBE	ND	ND	ND	ND	ND

a
Only one sample canister was collected and analyzed for this ordnance.

TABLE E-2. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv (a)	Run 1 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 1, ppbv
Dichlorodifluoromethane	0.629	-	ND	-	6.293E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	9.056	-	ND	-	9.056E+00
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.410	-	ND	-	4.097E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	3.358	-	ND	-	3.358E+00
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.086	-	ND	-	8.608E-02
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	ND	-	ND	-	ND
Benzene	386.498	-	ND	-	3.865E+02
Carbontetrachloride	0.076	-	ND	-	7.646E-02
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	665.465	-	ND	-	6.655E+02
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	7.060	-	ND	-	7.060E+00
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	171.842	-	ND	-	1.718E+02
m&p-Xylene	481.334	-	ND	-	4.813E+02
Styrene	ND	-	ND	-	ND
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	296.629	-	ND	-	2.966E+02
p-Ethyltoluene	92.273	-	ND	-	9.227E+01
1,3,5-Trimethylbenzene	88.816	-	ND	-	8.882E+01
1,2,4-Trimethylbenzene	171.076	-	ND	-	1.711E+02
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv (a)	Run 1 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 1, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	ND	-	ND	-	ND
Indane	38.608	-	ND	-	3.861E+01
2,3-Dihydro-1-methyl-1H-indene	10.064	-	ND	-	1.006E+01
2,3-Dihydro-4-methyl-1H-indene	12.908	-	ND	-	1.291E+01
Naphthalene	17.218	-	ND	-	1.722E+01
2-Methylnaphthalene	1.572	-	ND	-	1.572E+00
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	12.133	-	ND	-	1.213E+01
Acetonitrile	ND	-	ND	-	ND
Acrylonitrile	ND	-	ND	-	ND
Nitromethane	2.148	-	ND	-	2.148E+00
Propanenitrile	ND	-	ND	-	ND
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	ND	-	ND	-	ND
2-Nitrophenol	ND	-	ND	-	ND
Acrolein	3.308	-	ND	-	3.308E+00
Acetone	ND	-	ND	-	ND
1-Hydroxy-2-propanone	ND	-	ND	-	ND
Furan	ND	-	ND	-	ND
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	ND	-	ND	-	ND
Methyl-vinyl Ketone	ND	-	ND	-	ND
MTBE	375.330	-	ND	-	3.753E+02
2,3-Butanedione	ND	-	ND	-	ND
Butanal	ND	-	ND	-	ND
2-Butanone	4.063	-	ND	-	4.063E+00
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	ND	-	ND	-	ND
Acetic Acid	10.372	-	ND	-	1.037E+01
1-Butanol	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv (a)	Run 1 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 1, ppbv
2-Pentanone	ND	-	ND	-	ND
Pentanal	ND	-	ND	-	ND
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	ND	-	ND	-	ND
Hexanal	ND	-	ND	-	ND
2-Furaldehyde	ND	-	ND	-	ND
Cyclohexanone	ND	-	ND	-	ND
Heptanal	1.611	-	ND	-	1.611E+00
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	9.252	-	ND	-	9.252E+00
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	3.860	-	ND	-	3.860E+00
Benzofuran	ND	-	ND	-	ND
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	ND	-	ND	-	ND
Nonanal	5.043	-	ND	-	5.043E+00
Decanal	4.321	-	ND	-	4.321E+00
Carbonyl Sulfide	0.957	-	ND	-	9.565E-01
Carbon Disulfide	1.638	-	ND	-	1.638E+00
Thiophene	ND	-	ND	-	ND
Dimethyldisulfide	ND	-	ND	-	ND

a
Only one sample canister was collected and analyzed for this ordnance.

TABLE E-3. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ug/m^3	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ug/m^3 (a)	Run 2 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 2, mg/m^3
TNMHC	1515.30	1.515E+00	ND	ND	1.515E+00
Ethane	1.50	1.500E-03	ND	ND	1.500E-03
Ethylene	18.70	1.870E-02	ND	ND	1.870E-02
Acetylene	7.60	7.600E-03	ND	ND	7.600E-03
Propane	1.00	1.000E-03	ND	ND	1.000E-03
Propene	9.00	9.000E-03	ND	ND	9.000E-03
i-Butane	2.80	2.800E-03	ND	ND	2.800E-03
i-Butene	5.10	5.100E-03	ND	ND	5.100E-03
1-Butene	2.30	2.300E-03	ND	ND	2.300E-03
1,3-Butadiene	1.70	1.700E-03	ND	ND	1.700E-03
n-Butane	10.80	1.080E-02	ND	ND	1.080E-02
trans-2-Butene	1.50	1.500E-03	ND	ND	1.500E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.50	5.000E-04	ND	ND	5.000E-04
3-Methyl-1-butene	0.40	4.000E-04	ND	ND	4.000E-04
i-Pentane	40.70	4.070E-02	ND	ND	4.070E-02
1-Pentene	0.80	8.000E-04	ND	ND	8.000E-04
2-Methyl-1-butene	0.90	9.000E-04	ND	ND	9.000E-04
n-Pentane	40.90	4.090E-02	ND	ND	4.090E-02
Isoprene	0.10	1.000E-04	ND	ND	1.000E-04
trans-2-Pentene	0.60	6.000E-04	ND	ND	6.000E-04
cis-2-Pentene	0.30	3.000E-04	ND	ND	3.000E-04
2-Methyl-2-butene	0.50	5.000E-04	ND	ND	5.000E-04
2,2-Dimethylbutane	3.60	3.600E-03	ND	ND	3.600E-03
Cyclopentene	0.30	3.000E-04	ND	ND	3.000E-04
4-Methyl-1-pentene	0.20	2.000E-04	ND	ND	2.000E-04
Cyclopentane	3.40	3.400E-03	ND	ND	3.400E-03
2,3-Dimethylbutane	8.20	8.200E-03	ND	ND	8.200E-03
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	43.20	4.320E-02	ND	ND	4.320E-02
3-Methylpentane	30.20	3.020E-02	ND	ND	3.020E-02
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	ND	ND	ND	ND	ND
n-Hexane	56.60	5.660E-02	ND	ND	5.660E-02
trans-2-Hexene	0.40	4.000E-04	ND	ND	4.000E-04
2-Methyl-2-pentene	0.50	5.000E-04	ND	ND	5.000E-04
cis-2-Hexene	0.20	2.000E-04	ND	ND	2.000E-04
Methylcyclopentane	19.50	1.950E-02	ND	ND	1.950E-02
2,4-Dimethylpentane	5.60	5.600E-03	ND	ND	5.600E-03
Benzene	51.40	5.140E-02	ND	ND	5.140E-02
Cyclohexane	24.00	2.400E-02	ND	ND	2.400E-02
2-Methylhexane	33.10	3.310E-02	ND	ND	3.310E-02

TABLE E-3. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ug/m^3	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ug/m^3 (a)	Run 2 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 2, mg/m^3
2,3-Dimethylpentane	7.30	7.300E-03	ND	ND	7.300E-03
3-Methylhexane	33.30	3.330E-02	ND	ND	3.330E-02
2,2,4-Trimethylpentane	7.40	7.400E-03	ND	ND	7.400E-03
n-Heptane	44.60	4.460E-02	ND	ND	4.460E-02
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	44.40	4.440E-02	ND	ND	4.440E-02
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	5.90	5.900E-03	ND	ND	5.900E-03
2,4-Dimethylhexane	5.50	5.500E-03	ND	ND	5.500E-03
2,3,4-Trimethylpentane	1.90	1.900E-03	ND	ND	1.900E-03
Toluene	194.60	1.946E-01	ND	ND	1.946E-01
2,3-Dimethylhexane	2.90	2.900E-03	ND	ND	2.900E-03
2-Methylheptane	15.30	1.530E-02	ND	ND	1.530E-02
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	2.20	2.200E-03	ND	ND	2.200E-03
n-Octane	17.50	1.750E-02	ND	ND	1.750E-02
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	37.90	3.790E-02	ND	ND	3.790E-02
m-Xylene & p-Xylene	106.40	1.064E-01	ND	ND	1.064E-01
Styrene	1.30	1.300E-03	ND	ND	1.300E-03
o-Xylene	68.90	6.890E-02	ND	ND	6.890E-02
n-Nonane	4.70	4.700E-03	ND	ND	4.700E-03
i-Propylbenzene	1.40	1.400E-03	ND	ND	1.400E-03
n-Propylbenzene	9.40	9.400E-03	ND	ND	9.400E-03
p-Ethyltoluene	38.70	3.870E-02	ND	ND	3.870E-02
m-Ethyltoluene	17.70	1.770E-02	ND	ND	1.770E-02
1,3,5-Trimethylbenzene	25.30	2.530E-02	ND	ND	2.530E-02
o-Ethyltoluene	11.60	1.160E-02	ND	ND	1.160E-02
1,2,4-Trimethylbenzene & sec-Butylbenzene	63.00	6.300E-02	ND	ND	6.300E-02
n-Decane	1.40	1.400E-03	ND	ND	1.400E-03
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	44.90	4.490E-02	ND	ND	4.490E-02
ETBE	ND	ND	ND	ND	ND

a
Only one sample canister was collected and analyzed for this ordnance.

TABLE E-4. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ppbv	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ppbv (a)	Run 2 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 2, ppbv
Dichlorodifluoromethane	0.332	-	ND	-	3.319E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	7.697	-	ND	-	7.697E+00
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.385	-	ND	-	3.848E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	1.555	-	ND	-	1.555E+00
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.083	-	ND	-	8.275E-02
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.058	-	ND	-	5.768E-02
Benzene	161.119	-	ND	-	1.611E+02
Carbontetrachloride	0.096	-	ND	-	9.647E-02
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	517.171	-	ND	-	5.172E+02
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	87.420	-	ND	-	8.742E+01
m&p-Xylene	245.350	-	ND	-	2.453E+02
Styrene	2.925	-	ND	-	2.925E+00
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	158.925	-	ND	-	1.589E+02
p-Ethyltoluene	50.543	-	ND	-	5.054E+01
1,3,5-Trimethylbenzene	48.623	-	ND	-	4.862E+01
1,2,4-Trimethylbenzene	98.307	-	ND	-	9.831E+01
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-4. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ppbv	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ppbv (a)	Run 2 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 2, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	ND	-	ND	-	ND
Indane	22.461	-	ND	-	2.246E+01
2,3-Dihydro-1-methyl-1H-indene	7.046	-	ND	-	7.046E+00
2,3-Dihydro-4-methyl-1H-indene	8.704	-	ND	-	8.704E+00
Naphthalene	9.298	-	ND	-	9.298E+00
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	15.955	-	ND	-	1.596E+01
Acetonitrile	ND	-	ND	-	ND
Acrylonitrile	ND	-	ND	-	ND
Nitromethane	2.179	-	ND	-	2.179E+00
Propanenitrile	ND	-	ND	-	ND
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	ND	-	ND	-	ND
2-Nitrophenol	ND	-	ND	-	ND
Acrolein	3.198	-	ND	-	3.198E+00
Acetone	9.242	-	ND	-	9.242E+00
1-Hydroxy-2-propanone	ND	-	ND	-	ND
Furan	ND	-	ND	-	ND
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	ND	-	ND	-	ND
Methyl-vinyl Ketone	ND	-	ND	-	ND
MTBE	124.505	-	ND	-	1.245E+02
2,3-Butanedione	ND	-	ND	-	ND
Butanal	ND	-	ND	-	ND
2-Butanone	2.704	-	ND	-	2.704E+00
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	ND	-	ND	-	ND
Acetic Acid	6.623	-	ND	-	6.623E+00
1-Butanol	ND	-	ND	-	ND

TABLE E-4. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ppbv	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ppbv (a)	Run 2 Sample 2 - Amount Detected, mg/m^3 (a)	Average Concentration - Run 2, ppbv
2-Pentanone	ND	-	ND	-	ND
Pentanal	ND	-	ND	-	ND
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	ND	-	ND	-	ND
Hexanal	ND	-	ND	-	ND
2-Furaldehyde	ND	-	ND	-	ND
Cyclohexanone	ND	-	ND	-	ND
Heptanal	1.056	-	ND	-	1.056E+00
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	9.610	-	ND	-	9.610E+00
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	2.426	-	ND	-	2.426E+00
Benzofuran	ND	-	ND	-	ND
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	ND	-	ND	-	ND
Nonanal	2.928	-	ND	-	2.928E+00
Decanal	1.786	-	ND	-	1.786E+00
Carbonyl Sulfide	1.032	-	ND	-	1.032E+00
Carbon Disulfide	3.752	-	ND	-	3.752E+00
Thiophene	ND	-	ND	-	ND
Dimethyldisulfide	ND	-	ND	-	ND

a
Only one sample canister was collected and analyzed for this ordnance.

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
TNMHC	-	39.90	3.990E-02	312.00	3.120E-01	1.760E-01
Ethane	30	2.30	2.300E-03	2.30	2.300E-03	2.300E-03
Ethylene	28	0.40	4.000E-04	0.20	2.000E-04	3.000E-04
Acetylene	26	0.80	8.000E-04	0.70	7.000E-04	7.500E-04
Propane	44	1.00	1.000E-03	1.00	1.000E-03	1.000E-03
Propene	42	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
i-Butane	58	0.40	4.000E-04	0.20	2.000E-04	3.000E-04
i-Butene	56	ND	ND	0.10	1.000E-04	1.000E-04
1-Butene	56	ND	ND	0.10	1.000E-04	1.000E-04
1,3-Butadiene	54	ND	ND	ND	ND	ND
n-Butane	58	0.50	5.000E-04	0.50	5.000E-04	5.000E-04
trans-2-Butene	56	ND	ND	ND	ND	ND
2,2-Dimethylpropane	72	ND	ND	ND	ND	ND
cis-2-Butene	56	ND	ND	ND	ND	ND
3-Methyl-1-butene	70	ND	ND	ND	ND	ND
i-Pentane	72	1.00	1.000E-03	1.50	1.500E-03	1.250E-03
1-Pentene	70	ND	ND	ND	ND	ND
2-Methyl-1-butene	70	ND	ND	ND	ND	ND
n-Pentane	72	0.90	9.000E-04	1.70	1.700E-03	1.300E-03
Isoprene	68	ND	ND	ND	ND	ND
trans-2-Pentene	70	ND	ND	ND	ND	ND
cis-2-Pentene	70	ND	ND	ND	ND	ND
2-Methyl-2-butene	70	ND	ND	ND	ND	ND
2,2-Dimethylbutane	86	0.10	1.000E-04	0.20	2.000E-04	1.500E-04
Cyclopentene	68	ND	ND	ND	ND	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	ND
Cyclopentane	70	0.10	1.000E-04	0.20	2.000E-04	1.500E-04
2,3-Dimethylbutane	86	0.40	4.000E-04	0.50	5.000E-04	4.500E-04
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	ND
2-Methylpentane	86	1.00	1.000E-03	2.50	2.500E-03	1.750E-03
3-Methylpentane	86	0.70	7.000E-04	2.10	2.100E-03	1.400E-03
2-Methyl-1-pentene	84	ND	ND	ND	ND	ND
1-Hexene	84	ND	ND	ND	ND	ND
n-Hexane	86	0.80	8.000E-04	4.40	4.400E-03	2.600E-03
trans-2-Hexene	84	ND	ND	ND	ND	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	ND
cis-2-Hexene	84	ND	ND	ND	ND	ND
Methylcyclopentane	84	0.40	4.000E-04	1.90	1.900E-03	1.150E-03
2,4-Dimethylpentane	100	0.80	8.000E-04	0.70	7.000E-04	7.500E-04
Benzene	78	1.10	1.100E-03	5.10	5.100E-03	3.100E-03
Cyclohexane	84	0.20	2.000E-04	2.20	2.200E-03	1.200E-03
2-Methylhexane	100	0.40	4.000E-04	3.10	3.100E-03	1.750E-03
2,3-Dimethylpentane	100	1.60	1.600E-03	1.50	1.500E-03	1.550E-03
3-Methylhexane	100	0.40	4.000E-04	3.50	3.500E-03	1.950E-03
2,2,4-Trimethylpentane	114	3.00	3.000E-03	1.30	1.300E-03	2.150E-03
n-Heptane	100	0.40	4.000E-04	4.90	4.900E-03	2.650E-03

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	ND
Methylcyclohexane	98	0.20	2.000E-04	4.70	4.700E-03	2.450E-03
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	ND
2,5-Dimethylhexane	114	0.20	2.000E-04	0.70	7.000E-04	4.500E-04
2,4-Dimethylhexane	114	0.30	3.000E-04	0.60	6.000E-04	4.500E-04
2,3,4-Trimethylpentane	114	0.60	6.000E-04	0.40	4.000E-04	5.000E-04
Toluene	92	2.20	2.200E-03	35.60	3.560E-02	1.890E-02
2,3-Dimethylhexane	114	0.30	3.000E-04	0.40	4.000E-04	3.500E-04
2-Methylheptane	111	0.10	1.000E-04	1.40	1.400E-03	7.500E-04
3-Ethylhexane	114	ND	ND	ND	ND	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	128	0.10	1.000E-04	1.00	1.000E-03	5.500E-04
n-Octane	114	0.10	1.000E-04	2.10	2.100E-03	1.100E-03
Ethylcyclohexane	112	ND	ND	ND	ND	ND
Ethylbenzene	160	0.30	3.000E-04	7.80	7.800E-03	4.050E-03
m-Xylene & p-Xylene	106	1.10	1.100E-03	32.10	3.210E-02	1.660E-02
Styrene	104	0.10	1.000E-04	0.30	3.000E-04	2.000E-04
o-Xylene	106	0.40	4.000E-04	17.80	1.780E-02	9.100E-03
n-Nonane	128	ND	ND	1.00	1.000E-03	1.000E-03
i-Propylbenzene	120	ND	ND	ND	ND	ND
n-Propylbenzene	120	0.20	2.000E-04	3.20	3.200E-03	1.700E-03
p-Ethyltoluene	120	0.30	3.000E-04	14.80	1.480E-02	7.550E-03
m-Ethyltoluene	120	0.10	1.000E-04	6.90	6.900E-03	3.500E-03
1,3,5-Trimethylbenzene	120	0.10	1.000E-04	9.90	9.900E-03	5.000E-03
o-Ethyltoluene	120	0.10	1.000E-04	4.80	4.800E-03	2.450E-03
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.40	4.000E-04	31.00	3.100E-02	1.570E-02
n-Decane	142	ND	ND	0.50	5.000E-04	5.000E-04
alpha-Pinene	136	ND	ND	ND	ND	ND
beta-Pinene	136	ND	ND	ND	ND	ND
delta 3-Carene	136	ND	ND	ND	ND	ND
d-Limonene	136	ND	ND	ND	ND	ND
MTBE	88	0.70	7.000E-04	3.60	3.600E-03	2.150E-03
ETBE	102.0	ND	ND	ND	ND	ND
Dichlorodifluoromethane	120.0	0.36	1.773E-03	0.22	1.095E-03	1.434E-03
Methylchloride	50.0	ND	ND	ND	ND	ND
Dichlorotetrafluoroethane	171.0	ND	ND	ND	ND	ND
Chloroethene	63.0	ND	ND	ND	ND	ND
1,3-Butadiene	54.0	ND	ND	ND	ND	ND
Methylbromide	95.0	ND	ND	ND	ND	ND
Ethylchloride	64.5	ND	ND	ND	ND	ND
Trichloromonofluoromethane	137.0	0.45	2.554E-03	0.43	2.457E-03	2.506E-03
Vinylidenechloride	97.0	ND	ND	ND	ND	ND
Methylenechloride	85.0	0.09	3.173E-04	0.46	1.638E-03	9.779E-04
Allylchloride	76.5	ND	ND	ND	ND	ND

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.11	8.593E-04	0.10	7.990E-04	8.291E-04
1,1-Dichloroethane	99.0	ND	ND	ND	ND	ND
1,2-Dichloroethene	97.0	ND	ND	ND	ND	ND
Chloroform	119.0	ND	ND	ND	ND	ND
1,2-Dichloroethane	99.0	ND	ND	ND	ND	ND
Methylchloroform	133.0	0.07	3.795E-04	0.06	3.328E-04	3.562E-04
Benzene	78.0	0.34	1.119E-03	1.60	5.187E-03	3.153E-03
Carbontetrachloride	154.0	0.13	8.153E-04	0.11	7.023E-04	7.588E-04
1,2-Dichloropropane	113.0	ND	ND	ND	ND	ND
Trichloroethylene	133.0	ND	ND	ND	ND	ND
cis 1,3-Dichloro-1-propene	111.0	ND	ND	ND	ND	ND
trans 1,3-Dichloro-1-propene	111.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.0	ND	ND	ND	ND	ND
Toluene	92.0	0.58	2.238E-03	9.46	3.621E-02	1.922E-02
1,2-Dibromoethane	188.0	ND	ND	ND	ND	ND
Perchloroethylene	166.0	ND	ND	ND	ND	ND
Chlorobenzene	113.0	ND	ND	ND	ND	ND
Ethylbenzene	160.0	0.07	4.606E-04	1.80	1.198E-02	6.218E-03
m&p-Xylene	106.0	0.20	9.025E-04	7.40	3.263E-02	1.677E-02
Styrene	104.0	ND	ND	0.06	2.439E-04	2.439E-04
1,1,2,2-Tetrachloroethane	168.0	ND	ND	ND	ND	ND
o-Xylene	106.0	0.09	4.068E-04	4.11	1.810E-02	9.256E-03
p-Ethyltoluene	120.0	ND	ND	3.35	1.673E-02	1.673E-02
1,3,5-Trimethylbenzene	120.0	ND	ND	1.53	7.637E-03	7.637E-03
1,2,4-Trimethylbenzene	120.0	0.07	3.690E-04	6.01	3.000E-02	1.519E-02
Benzylchloride	127.0	ND	ND	ND	ND	ND
m-Dichlorobenzene	147.0	ND	ND	ND	ND	ND
p-Dichlorobenzene	147.0	ND	ND	ND	ND	ND
o-Dichlorobenzene	147.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	261.0	ND	ND	ND	ND	ND
Phenylacetylene	102.0	ND	ND	0.16	6.579E-04	6.579E-04
Indane	118.0	ND	ND	1.27	6.217E-03	6.217E-03
2,3-Dihydro-1-methyl-1H-indene	132.0	ND	ND	0.68	3.747E-03	3.747E-03
2,3-Dihydro-4-methyl-1H-indene	132.0	ND	ND	0.89	4.893E-03	4.893E-03
Naphthalene	128.0	ND	ND	1.47	7.803E-03	7.803E-03
2-Methylnaphthalene	142.0	ND	ND	0.48	2.818E-03	2.818E-03
1-Methylnaphthalene	142.0	ND	ND	0.19	1.102E-03	1.102E-03
Cyanogen	52	ND	ND	ND	ND	ND
Methylnitrite	61.0	ND	ND	ND	ND	ND
Acetonitrile	41.0	ND	ND	ND	ND	ND
Acrylonitrile	53.0	ND	ND	ND	ND	ND
Nitromethane	61.0	0.33	8.363E-04	ND	ND	8.363E-04
Propanenitrile	55.0	ND	ND	ND	ND	ND
2-Methylpropanenitrile	69.0	ND	ND	ND	ND	ND

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
Pentanenitrile	83.0	ND	ND	ND	ND	ND
Hexanenitrile	97.0	ND	ND	ND	ND	ND
Benzonitrile	103.0	ND	ND	ND	ND	ND
2-Nitrophenol	139.0	ND	ND	ND	ND	ND
Acrolein	56.0	ND	ND	ND	ND	ND
Acetone	56.0	1.61	3.761E-03	2.82	6.577E-03	5.169E-03
1-Hydroxy-2-propanone	74.0	ND	ND	ND	ND	ND
Furan	68.0	ND	ND	ND	ND	ND
2-Propanol	60.0	ND	ND	ND	ND	ND
2-Methylpropanal	74.0	ND	ND	ND	ND	ND
1-Propanol	60.0	ND	ND	ND	ND	ND
Methacrolein	70.0	ND	ND	ND	ND	ND
Methyl-vinyl Ketone	70.0	ND	ND	ND	ND	ND
MTBE	88.0	0.19	6.867E-04	1.00	3.675E-03	2.181E-03
2,3-Butanedione	86.0	ND	ND	ND	ND	ND
Butanal	72.0	0.09	2.764E-04	0.07	2.138E-04	2.451E-04
2-Butanone	72.0	0.26	7.666E-04	0.25	7.549E-04	7.607E-04
2-Methyl-1,3-dioxolane	88.0	ND	ND	ND	ND	ND
2-Methylfuran	82.0	ND	ND	ND	ND	ND
Tetrahydrofuran	72.0	ND	ND	ND	ND	ND
trans-2-Butenal	70.0	ND	ND	ND	ND	ND
Acetic Acid	60.0	0.42	1.057E-03	0.88	2.198E-03	1.627E-03
1-Butanol	74.0	ND	ND	ND	ND	ND
2-Pentanone	86.0	ND	ND	ND	ND	ND
Pentanal	86.0	0.35	1.240E-03	0.30	1.078E-03	1.159E-03
1,4-Dioxane	88.0	ND	ND	ND	ND	ND
Methyl Methacrylate	100.0	ND	ND	ND	ND	ND
Cyclopentanone	84.0	ND	ND	ND	ND	ND
Hexanal	100.0	0.24	9.786E-04	0.31	1.307E-03	1.143E-03
2-Furaldehyde	96.0	ND	ND	ND	ND	ND
Cyclohexanone	98.0	ND	ND	ND	ND	ND
Heptanal	114.0	0.20	9.400E-04	0.23	1.114E-03	1.027E-03
2-Butoxyethanol	118.0	ND	ND	ND	ND	ND
Benzaldehyde	106.0	0.35	1.535E-03	0.50	2.201E-03	1.868E-03
6-Methyl-5-hepten-2-one	126.0	0.13	6.854E-04	ND	ND	6.854E-04
Octanal	128.0	0.38	2.034E-03	0.50	2.664E-03	2.349E-03
Benzofuran	118.0	ND	ND	ND	ND	ND
2-Ethyl-1-hexanol	120.0	ND	ND	ND	ND	ND
Acetophonone	120.0	ND	ND	ND	ND	ND
Nonanal	142.0	0.55	3.225E-03	0.83	4.928E-03	4.077E-03
Decanal	156.0	0.25	1.629E-03	0.51	3.296E-03	2.462E-03
Carbonyl Sulfide	60.0	0.11	2.742E-04	0.11	2.621E-04	2.681E-04
Carbon Disulfide	76.0	0.19	5.880E-04	0.19	5.883E-04	5.882E-04
Thiophene	84.0	ND	ND	ND	ND	ND
Dimethyldisulfide	94.0	ND	ND	ND	ND	ND

TABLE E-6. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
TNMHC	-	0.1	1.000E-04	1.000E-04	1.000E-04
Ethane	30	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylene	28	0.1	1.000E-04	1.000E-04	1.000E-04
Acetylene	26	0.1	1.000E-04	1.000E-04	1.000E-04
Propane	44	0.1	1.000E-04	1.000E-04	1.000E-04
Propene	42	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1,3-Butadiene	54	0.1	1.000E-04	1.000E-04	1.000E-04
n-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylpropane	72	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
i-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
1-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
n-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
Isoprene	68	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentene	68	0.1	1.000E-04	1.000E-04	1.000E-04
4-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentane	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
cis-4-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
1-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
n-Hexane	86	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclopentane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
Benzene	78	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclohexane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04

TABLE E-6. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
n-Heptane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-1-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclohexane	98	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-2-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
2,5-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,3,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Toluene	92	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylheptane	111	0.1	1.000E-04	1.000E-04	1.000E-04
3-Ethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylheptane	128	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylhexane	128	0.1	1.000E-04	1.000E-04	1.000E-04
n-Octane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylcyclohexane	112	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylbenzene	160	0.1	1.000E-04	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
Styrene	104	0.1	1.000E-04	1.000E-04	1.000E-04
o-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
n-Nonane	128	0.1	1.000E-04	1.000E-04	1.000E-04
i-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
p-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
m-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
o-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Decane	142	0.1	1.000E-04	1.000E-04	1.000E-04
alpha-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
beta-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
delta 3-Carene	136	0.1	1.000E-04	1.000E-04	1.000E-04
d-Limonene	136	0.1	1.000E-04	1.000E-04	1.000E-04
MTBE	88	0.1	1.000E-04	1.000E-04	1.000E-04
ETBE	102.0	0.1	1.000E-04	1.000E-04	1.000E-04
Dichlorodifluoromethane	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Methylchloride	50.0	0.1	2.080E-04	2.080E-04	2.080E-04
Dichlorotetrafluoroethane	171.0	0.1	7.114E-04	7.114E-04	7.114E-04
Chloroethene	63.0	0.1	2.621E-04	2.621E-04	2.621E-04

TABLE E-6. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
1,3-Butadiene	54.0	0.1	2.246E-04	2.246E-04	2.246E-04
Methylbromide	95.0	0.1	3.952E-04	3.952E-04	3.952E-04
Ethylchloride	64.5	0.1	2.683E-04	2.683E-04	2.683E-04
Trichloromonofluoromethane	137.0	0.1	5.699E-04	5.699E-04	5.699E-04
Vinylidenechloride	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Methylenechloride	85.0	0.1	3.536E-04	3.536E-04	3.536E-04
Allylchloride	76.5	0.1	3.182E-04	3.182E-04	3.182E-04
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
1,1-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
1,2-Dichloroethene	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Chloroform	119.0	0.1	4.950E-04	4.950E-04	4.950E-04
1,2-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
Methylchloroform	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Benzene	78.0	0.1	3.245E-04	3.245E-04	3.245E-04
Carbontetrachloride	154.0	0.1	6.406E-04	6.406E-04	6.406E-04
1,2-Dichloropropane	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Trichloroethylene	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
cis 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
trans 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
1,1,2-Trichloroethane	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Toluene	92.0	0.1	3.827E-04	3.827E-04	3.827E-04
1,2-Dibromoethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
Perchloroethylene	166.0	0.1	6.906E-04	6.906E-04	6.906E-04
Chlorobenzene	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Ethylbenzene	160.0	0.1	6.656E-04	6.656E-04	6.656E-04
m&p-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
Styrene	104.0	0.1	4.326E-04	4.326E-04	4.326E-04
1,1,2,2-Tetrachloroethane	168.0	0.1	6.989E-04	6.989E-04	6.989E-04
o-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
p-Ethyltoluene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,3,5-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,2,4-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Benzylchloride	127.0	0.1	5.283E-04	5.283E-04	5.283E-04
m-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
p-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
o-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
1,2,4-Trichlorobenzene	181.0	0.1	7.530E-04	7.530E-04	7.530E-04
Hexachlorobutadiene	261.0	0.1	1.086E-03	1.086E-03	1.086E-03
Phenylacetylene	102.0	0.1	4.243E-04	4.243E-04	4.243E-04
Indane	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
2,3-Dihydro-1-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04

TABLE E-6. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dihydro-4-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
Naphthalene	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
2-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
1-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Cyanogen	52	0.1	2.163E-04	2.163E-04	2.163E-04
Methylnitrite	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Acetonitrile	41.0	0.1	1.706E-04	1.706E-04	1.706E-04
Acrylonitrile	53.0	0.1	2.205E-04	2.205E-04	2.205E-04
Nitromethane	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Propanenitrile	55.0	0.1	2.288E-04	2.288E-04	2.288E-04
2-Methylpropanenitrile	69.0	0.1	2.870E-04	2.870E-04	2.870E-04
Pentanenitrile	83.0	0.1	3.453E-04	3.453E-04	3.453E-04
Hexanenitrile	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Benzonitrile	103.0	0.1	4.285E-04	4.285E-04	4.285E-04
2-Nitrophenol	139.0	0.1	5.782E-04	5.782E-04	5.782E-04
Acrolein	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
Acetone	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
1-Hydroxy-2-propanone	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
Furan	68.0	0.1	2.829E-04	2.829E-04	2.829E-04
2-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
2-Methylpropanal	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
1-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Methacrolein	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Methyl-vinyl Ketone	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
MTBE	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2,3-Butanedione	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Butanal	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Butanone	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Methyl-1,3-dioxolane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2-Methylfuran	82.0	0.1	3.411E-04	3.411E-04	3.411E-04
Tetrahydrofuran	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
trans-2-Butenal	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Acetic Acid	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
1-Butanol	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
2-Pentanone	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Pentanal	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
1,4-Dioxane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
Methyl Methacrylate	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
Cyclopentanone	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Hexanal	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
2-Furaldehyde	96.0	0.1	3.994E-04	3.994E-04	3.994E-04
Cyclohexanone	98.0	0.1	4.077E-04	4.077E-04	4.077E-04

TABLE E-6. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Heptanal	114.0	0.1	4.742E-04	4.742E-04	4.742E-04
2-Butoxyethanol	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
Benzaldehyde	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
6-Methyl-5-hepten-2-one	126.0	0.1	5.242E-04	5.242E-04	5.242E-04
Octanal	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
Benzofuran	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
2-Ethyl-1-hexanol	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Acetophonone	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Nonanal	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Decanal	156.0	0.1	6.490E-04	6.490E-04	6.490E-04
Carbonyl Sulfide	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Carbon Disulfide	76.0	0.1	3.162E-04	3.162E-04	3.162E-04
Thiophene	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Dimethyldisulfide	94.0	0.1	3.910E-04	3.910E-04	3.910E-04

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TABLE E-1. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
TNMHC	64.30	6.430E-02	ND	ND	6.430E-02
Ethane	5.00	5.000E-03	ND	ND	5.000E-03
Ethylene	8.30	8.300E-03	ND	ND	8.300E-03
Acetylene	9.00	9.000E-03	ND	ND	9.000E-03
Propane	2.20	2.200E-03	ND	ND	2.200E-03
Propene	2.90	2.900E-03	ND	ND	2.900E-03
i-Butane	0.30	3.000E-04	ND	ND	3.000E-04
i-Butene	0.20	2.000E-04	ND	ND	2.000E-04
1-Butene	0.40	4.000E-04	ND	ND	4.000E-04
1,3-Butadiene	0.20	2.000E-04	ND	ND	2.000E-04
n-Butane	0.80	8.000E-04	ND	ND	8.000E-04
trans-2-Butene	0.50	5.000E-04	ND	ND	5.000E-04
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.10	1.000E-04	ND	ND	1.000E-04
3-Methyl-1-butene	ND	ND	ND	ND	ND
i-Pentane	0.50	5.000E-04	ND	ND	5.000E-04
1-Pentene	ND	ND	ND	ND	ND
2-Methyl-1-butene	ND	ND	ND	ND	ND
n-Pentane	0.30	3.000E-04	ND	ND	3.000E-04
Isoprene	ND	ND	ND	ND	ND
trans-2-Pentene	ND	ND	ND	ND	ND
cis-2-Pentene	ND	ND	ND	ND	ND
2-Methyl-2-butene	ND	ND	ND	ND	ND
2,2-Dimethylbutane	ND	ND	ND	ND	ND
Cyclopentene	ND	ND	ND	ND	ND
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	ND	ND	ND	ND	ND
2,3-Dimethylbutane	ND	ND	ND	ND	ND
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	0.20	2.000E-04	ND	ND	2.000E-04
3-Methylpentane	ND	ND	ND	ND	ND
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	ND	ND	ND	ND	ND
n-Hexane	0.20	2.000E-04	ND	ND	2.000E-04
trans-2-Hexene	ND	ND	ND	ND	ND
2-Methyl-2-pentene	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND
Methylcyclopentane	0.10	1.000E-04	ND	ND	1.000E-04
2,4-Dimethylpentane	0.10	1.000E-04	ND	ND	1.000E-04
Benzene	2.10	2.100E-03	ND	ND	2.100E-03

TABLE E-1. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
Cyclohexane	ND	ND	ND	ND	ND
2-Methylhexane	ND	ND	ND	ND	ND
2,3-Dimethylpentane	ND	ND	ND	ND	ND
3-Methylhexane	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.50	5.000E-04	ND	ND	5.000E-04
n-Heptane	ND	ND	ND	ND	ND
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	ND	ND	ND	ND	ND
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	ND	ND	ND	ND	ND
2,4-Dimethylhexane	ND	ND	ND	ND	ND
2,3,4-Trimethylpentane	ND	ND	ND	ND	ND
Toluene	1.30	1.300E-03	ND	ND	1.300E-03
2,3-Dimethylhexane	ND	ND	ND	ND	ND
2-Methylheptane	ND	ND	ND	ND	ND
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	ND	ND	ND	ND	ND
n-Octane	0.10	1.000E-04	ND	ND	1.000E-04
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	0.30	3.000E-04	ND	ND	3.000E-04
m-Xylene & p-Xylene	0.80	8.000E-04	ND	ND	8.000E-04
Styrene	0.40	4.000E-04	ND	ND	4.000E-04
o-Xylene	0.40	4.000E-04	ND	ND	4.000E-04
n-Nonane	0.20	2.000E-04	ND	ND	2.000E-04
i-Propylbenzene	ND	ND	ND	ND	ND
n-Propylbenzene	0.10	1.000E-04	ND	ND	1.000E-04
p-Ethyltoluene	0.50	5.000E-04	ND	ND	5.000E-04
m-Ethyltoluene	0.30	3.000E-04	ND	ND	3.000E-04
1,3,5-Trimethylbenzene	0.40	4.000E-04	ND	ND	4.000E-04
o-Ethyltoluene	0.40	4.000E-04	ND	ND	4.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	0.90	9.000E-04	ND	ND	9.000E-04
n-Decane	0.20	2.000E-04	ND	ND	2.000E-04
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	ND	ND	ND	ND	ND
ETBE	ND	ND	ND	ND	ND

TABLE E-2. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
Dichlorodifluoromethane	0.297	-	ND	-	2.974E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	0.091	-	ND	-	9.056E-02
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.427	-	ND	-	4.272E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	2.552	-	ND	-	2.552E+00
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.097	-	ND	-	9.684E-02
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.063	-	ND	-	6.326E-02
Benzene	0.658	-	ND	-	6.583E-01
Carbontetrachloride	0.116	-	ND	-	1.160E-01
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	0.345	-	ND	-	3.455E-01
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	0.069	-	ND	-	6.920E-02
m&p-Xylene	0.220	-	ND	-	2.203E-01
Styrene	ND	-	ND	-	ND
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	0.092	-	ND	-	9.226E-02
p-Ethyltoluene	0.062	-	ND	-	6.230E-02
1,3,5-Trimethylbenzene	ND	-	ND	-	ND
1,2,4-Trimethylbenzene	0.155	-	ND	-	1.546E-01
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	ND	-	ND	-	ND
Indane	ND	-	ND	-	ND
2,3-Dihydro-1-methyl-1H-indene	ND	-	ND	-	ND
2,3-Dihydro-4-methyl-1H-indene	ND	-	ND	-	ND
Naphthalene	0.184	-	ND	-	1.842E-01
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	0.419	-	ND	-	4.186E-01
Acetonitrile	0.052	-	ND	-	5.232E-02
Acrylonitrile	0.443	-	ND	-	4.432E-01
Nitromethane	0.409	-	ND	-	4.088E-01
Propanenitrile	ND	-	ND	-	ND
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	ND	-	ND	-	ND
2-Nitrophenol	ND	-	ND	-	ND
Acrolein	0.852	-	ND	-	8.521E-01
Acetone	2.649	-	ND	-	2.649E+00
1-Hydroxy-2-propanone	1.565	-	ND	-	1.565E+00
Furan	0.118	-	ND	-	1.181E-01
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	ND	-	ND	-	ND
Methyl-vinyl Ketone	0.098	-	ND	-	9.775E-02
MTBE	ND	-	ND	-	ND
2,3-Butanedione	ND	-	ND	-	ND
Butanal	0.088	-	ND	-	8.806E-02
2-Butanone	0.441	-	ND	-	4.414E-01
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	0.097	-	ND	-	9.713E-02
Acetic Acid	0.888	-	ND	-	8.882E-01
1-Butanol	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
2-Pentanone	ND	-	ND	-	ND
Pentanal	0.229	-	ND	-	2.289E-01
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	ND	-	ND	-	ND
Hexanal	0.139	-	ND	-	1.395E-01
2-Furaldehyde	0.410	-	ND	-	4.100E-01
Cyclohexanone	ND	-	ND	-	ND
Heptanal	0.126	-	ND	-	1.258E-01
2-Butoxyethanol	0.141	-	ND	-	1.408E-01
Benzaldehyde	0.488	-	ND	-	4.882E-01
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	0.243	-	ND	-	2.433E-01
Benzofuran	ND	-	ND	-	ND
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	0.074	-	ND	-	7.361E-02
Nonanal	0.321	-	ND	-	3.206E-01
Decanal	0.298	-	ND	-	2.979E-01
Carbonyl Sulfide	0.172	-	ND	-	1.716E-01
Carbon Disulfide	23.388	-	ND	-	2.339E+01
Thiophene	0.097	-	ND	-	9.708E-02
Dimethyldisulfide	ND	-	ND	-	ND

TABLE E-3. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ug/m^3	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ug/m^3	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, mg/m^3
TNMHC	118.90	1.189E-01	ND	ND	1.189E-01
Ethane	6.40	6.400E-03	ND	ND	6.400E-03
Ethylene	17.20	1.720E-02	ND	ND	1.720E-02
Acetylene	16.90	1.690E-02	ND	ND	1.690E-02
Propane	2.60	2.600E-03	ND	ND	2.600E-03
Propene	5.70	5.700E-03	ND	ND	5.700E-03
i-Butane	0.60	6.000E-04	ND	ND	6.000E-04
i-Butene	1.30	1.300E-03	ND	ND	1.300E-03
1-Butene	0.60	6.000E-04	ND	ND	6.000E-04
1,3-Butadiene	0.30	3.000E-04	ND	ND	3.000E-04
n-Butane	0.90	9.000E-04	ND	ND	9.000E-04
trans-2-Butene	1.00	1.000E-03	ND	ND	1.000E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.20	2.000E-04	ND	ND	2.000E-04
3-Methyl-1-butene	ND	ND	ND	ND	ND
i-Pentane	0.40	4.000E-04	ND	ND	4.000E-04
1-Pentene	ND	ND	ND	ND	ND
2-Methyl-1-butene	0.10	1.000E-04	ND	ND	1.000E-04
n-Pentane	0.40	4.000E-04	ND	ND	4.000E-04
Isoprene	ND	ND	ND	ND	ND
trans-2-Pentene	ND	ND	ND	ND	ND
cis-2-Pentene	ND	ND	ND	ND	ND
2-Methyl-2-butene	ND	ND	ND	ND	ND
2,2-Dimethylbutane	ND	ND	ND	ND	ND
Cyclopentene	ND	ND	ND	ND	ND
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	ND	ND	ND	ND	ND
2,3-Dimethylbutane	ND	ND	ND	ND	ND
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	0.20	2.000E-04	ND	ND	2.000E-04
3-Methylpentane	ND	ND	ND	ND	ND
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	ND	ND	ND	ND	ND
n-Hexane	0.20	2.000E-04	ND	ND	2.000E-04
trans-2-Hexene	ND	ND	ND	ND	ND
2-Methyl-2-pentene	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND
Methylcyclopentane	0.10	1.000E-04	ND	ND	1.000E-04
2,4-Dimethylpentane	0.10	1.000E-04	ND	ND	1.000E-04
Benzene	3.80	3.800E-03	ND	ND	3.800E-03

TABLE E-3. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ug/m^3	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ug/m^3	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, mg/m^3
Cyclohexane	ND	ND	ND	ND	ND
2-Methylhexane	ND	ND	ND	ND	ND
2,3-Dimethylpentane	ND	ND	ND	ND	ND
3-Methylhexane	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.70	7.000E-04	ND	ND	7.000E-04
n-Heptane	0.20	2.000E-04	ND	ND	2.000E-04
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	ND	ND	ND	ND	ND
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	ND	ND	ND	ND	ND
2,4-Dimethylhexane	ND	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.10	1.000E-04	ND	ND	1.000E-04
Toluene	1.90	1.900E-03	ND	ND	1.900E-03
2,3-Dimethylhexane	ND	ND	ND	ND	ND
2-Methylheptane	ND	ND	ND	ND	ND
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	ND	ND	ND	ND	ND
n-Octane	ND	ND	ND	ND	ND
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	0.50	5.000E-04	ND	ND	5.000E-04
m-Xylene & p-Xylene	0.80	8.000E-04	ND	ND	8.000E-04
Styrene	ND	ND	ND	ND	ND
o-Xylene	0.70	7.000E-04	ND	ND	7.000E-04
n-Nonane	0.50	5.000E-04	ND	ND	5.000E-04
i-Propylbenzene	ND	ND	ND	ND	ND
n-Propylbenzene	0.10	1.000E-04	ND	ND	1.000E-04
p-Ethyltoluene	0.50	5.000E-04	ND	ND	5.000E-04
m-Ethyltoluene	0.30	3.000E-04	ND	ND	3.000E-04
1,3,5-Trimethylbenzene	0.40	4.000E-04	ND	ND	4.000E-04
o-Ethyltoluene	0.30	3.000E-04	ND	ND	3.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.10	1.100E-03	ND	ND	1.100E-03
n-Decane	ND	ND	ND	ND	ND
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	ND	ND	ND	ND	ND
ETBE	ND	ND	ND	ND	ND

TABLE E-4. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ppbv	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ppbv	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, ppbv
Dichlorodifluoromethane	0.189	-	ND	-	1.894E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	0.136	-	ND	-	1.358E-01
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.429	-	ND	-	4.294E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	1.316	-	ND	-	1.316E+00
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.107	-	ND	-	1.069E-01
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.065	-	ND	-	6.452E-02
Benzene	1.191	-	ND	-	1.191E+00
Carbontetrachloride	0.123	-	ND	-	1.229E-01
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	0.505	-	ND	-	5.049E-01
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	0.115	-	ND	-	1.153E-01
m&p-Xylene	0.248	-	ND	-	2.481E-01
Styrene	ND	-	ND	-	ND
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	0.161	-	ND	-	1.615E-01
p-Ethyltoluene	0.063	-	ND	-	6.350E-02
1,3,5-Trimethylbenzene	ND	-	ND	-	ND
1,2,4-Trimethylbenzene	0.146	-	ND	-	1.465E-01
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-4. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ppbv	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ppbv	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	ND	-	ND	-	ND
Indane	ND	-	ND	-	ND
2,3-Dihydro-1-methyl-1H-indene	ND	-	ND	-	ND
2,3-Dihydro-4-methyl-1H-indene	ND	-	ND	-	ND
Naphthalene	0.185	-	ND	-	1.849E-01
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	0.693	-	ND	-	6.931E-01
Acetonitrile	0.091	-	ND	-	9.069E-02
Acrylonitrile	ND	-	ND	-	ND
Nitromethane	0.552	-	ND	-	5.520E-01
Propanenitrile	0.058	-	ND	-	5.785E-02
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	ND	-	ND	-	ND
2-Nitrophenol	ND	-	ND	-	ND
Acrolein	1.522	-	ND	-	1.522E+00
Acetone	4.953	-	ND	-	4.953E+00
1-Hydroxy-2-propanone	0.088	-	ND	-	8.825E-02
Furan	0.258	-	ND	-	2.583E-01
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	ND	-	ND	-	ND
Methyl-vinyl Ketone	0.167	-	ND	-	1.671E-01
MTBE	ND	-	ND	-	ND
2,3-Butanedione	ND	-	ND	-	ND
Butanal	0.085	-	ND	-	8.459E-02
2-Butanone	0.653	-	ND	-	6.530E-01
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	0.148	-	ND	-	1.478E-01
Acetic Acid	0.704	-	ND	-	7.041E-01
1-Butanol	ND	-	ND	-	ND

TABLE E-4. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ppbv	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ppbv	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, ppbv
2-Pentanone	0.080	-	ND	-	8.004E-02
Pentanal	0.263	-	ND	-	2.630E-01
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	ND	-	ND	-	ND
Hexanal	0.119	-	ND	-	1.191E-01
2-Furaldehyde	0.647	-	ND	-	6.472E-01
Cyclohexanone	ND	-	ND	-	ND
Heptanal	0.113	-	ND	-	1.127E-01
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	0.484	-	ND	-	4.842E-01
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	0.210	-	ND	-	2.104E-01
Benzofuran	0.073	-	ND	-	7.296E-02
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	0.054	-	ND	-	5.432E-02
Nonanal	0.220	-	ND	-	2.202E-01
Decanal	0.171	-	ND	-	1.712E-01
Carbonyl Sulfide	0.182	-	ND	-	1.825E-01
Carbon Disulfide	33.234	-	ND	-	3.323E+01
Thiophene	0.148	-	ND	-	1.479E-01
Dimethyldisulfide	ND	-	ND	-	ND

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
TNMHC	-	21.50	2.150E-02	24.70	2.470E-02	2.310E-02
Ethane	30	2.20	2.200E-03	3.60	3.600E-03	2.900E-03
Ethylene	28	0.20	2.000E-04	0.10	1.000E-04	1.500E-04
Acetylene	26	1.00	1.000E-03	0.90	9.000E-04	9.500E-04
Propane	44	2.00	2.000E-03	1.80	1.800E-03	1.900E-03
Propene	42	0.10	1.000E-04	ND	ND	1.000E-04
i-Butane	58	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
i-Butene	56	ND	ND	ND	ND	ND
1-Butene	56	ND	ND	ND	ND	ND
1,3-Butadiene	54	ND	ND	ND	ND	ND
n-Butane	58	0.80	8.000E-04	0.90	9.000E-04	8.500E-04
trans-2-Butene	56	ND	ND	ND	ND	ND
2,2-Dimethylpropane	72	ND	ND	ND	ND	ND
cis-2-Butene	56	ND	ND	ND	ND	ND
3-Methyl-1-butene	70	ND	ND	ND	ND	ND
i-Pentane	72	0.30	3.000E-04	0.30	3.000E-04	3.000E-04
1-Pentene	70	ND	ND	ND	ND	ND
2-Methyl-1-butene	70	ND	ND	ND	ND	ND
n-Pentane	72	0.30	3.000E-04	0.30	3.000E-04	3.000E-04
Isoprene	68	0.20	2.000E-04	ND	ND	2.000E-04
trans-2-Pentene	70	ND	ND	ND	ND	ND
cis-2-Pentene	70	ND	ND	ND	ND	ND
2-Methyl-2-butene	70	ND	ND	ND	ND	ND
2,2-Dimethylbutane	86	ND	ND	0.40	4.000E-04	4.000E-04
Cyclopentene	68	ND	ND	ND	ND	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	ND
Cyclopentane	70	ND	ND	ND	ND	ND
2,3-Dimethylbutane	86	ND	ND	ND	ND	ND
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	ND
2-Methylpentane	86	0.20	2.000E-04	0.10	1.000E-04	1.500E-04
3-Methylpentane	86	ND	ND	0.10	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	ND	ND	ND	ND	ND
1-Hexene	84	ND	ND	ND	ND	ND
n-Hexane	86	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
trans-2-Hexene	84	ND	ND	ND	ND	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	ND
cis-2-Hexene	84	ND	ND	ND	ND	ND
Methylcyclopentane	84	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
Benzene	78	0.50	5.000E-04	0.60	6.000E-04	5.500E-04
Cyclohexane	84	0.10	1.000E-04	ND	ND	1.000E-04
2-Methylhexane	100	0.10	1.000E-04	ND	ND	1.000E-04
2,3-Dimethylpentane	100	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
3-Methylhexane	100	0.20	2.000E-04	0.30	3.000E-04	2.500E-04
2,2,4-Trimethylpentane	114	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
n-Heptane	100	0.10	1.000E-04	0.10	1.000E-04	1.000E-04

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
2,4,4-Trimethyl-1-pentene	112	0.20	2.000E-04	ND	ND	2.000E-04
Methylcyclohexane	98	ND	ND	ND	ND	ND
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	ND
2,5-Dimethylhexane	114	ND	ND	ND	ND	ND
2,4-Dimethylhexane	114	ND	ND	ND	ND	ND
2,3,4-Trimethylpentane	114	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
Toluene	92	0.50	5.000E-04	0.50	5.000E-04	5.000E-04
2,3-Dimethylhexane	114	ND	ND	ND	ND	ND
2-Methylheptane	111	ND	ND	ND	ND	ND
3-Ethylhexane	114	ND	ND	ND	ND	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	128	ND	ND	ND	ND	ND
n-Octane	114	0.10	1.000E-04	ND	ND	1.000E-04
Ethylcyclohexane	112	ND	ND	ND	ND	ND
Ethylbenzene	160	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.60	6.000E-04	0.50	5.000E-04	5.500E-04
Styrene	104	ND	ND	ND	ND	ND
o-Xylene	106	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
n-Nonane	128	0.10	1.000E-04	ND	ND	1.000E-04
i-Propylbenzene	120	ND	ND	ND	ND	ND
n-Propylbenzene	120	0.10	1.000E-04	ND	ND	1.000E-04
p-Ethyltoluene	120	0.30	3.000E-04	ND	ND	3.000E-04
m-Ethyltoluene	120	0.10	1.000E-04	ND	ND	1.000E-04
1,3,5-Trimethylbenzene	120	0.20	2.000E-04	ND	ND	2.000E-04
o-Ethyltoluene	120	0.10	1.000E-04	ND	ND	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.20	2.000E-04	0.40	4.000E-04	3.000E-04
n-Decane	142	0.10	1.000E-04	ND	ND	1.000E-04
alpha-Pinene	136	ND	ND	ND	ND	ND
beta-Pinene	136	ND	ND	ND	ND	ND
delta 3-Carene	136	ND	ND	ND	ND	ND
d-Limonene	136	ND	ND	ND	ND	ND
MTBE	88	ND	ND	ND	ND	ND
ETBE	102.0	ND	ND	ND	ND	ND
Dichlorodifluoromethane	120.0	0.28	1.379E-03	0.10	5.226E-04	9.510E-04
Methylchloride	50.0	ND	ND	ND	ND	ND
Dichlorotetrafluoroethane	171.0	ND	ND	ND	ND	ND
Chloroethene	63.0	ND	ND	ND	ND	ND
1,3-Butadiene	54.0	ND	ND	ND	ND	ND
Methylbromide	95.0	ND	ND	ND	ND	ND
Ethylchloride	64.5	ND	ND	ND	ND	ND
Trichloromonofluoromethane	137.0	0.44	2.533E-03	0.44	2.521E-03	2.527E-03
Vinylidenechloride	97.0	ND	ND	ND	ND	ND
Methylenechloride	85.0	0.27	9.447E-04	0.11	4.020E-04	6.733E-04
Allylchloride	76.5	ND	ND	ND	ND	ND

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.12	9.142E-04	0.11	8.606E-04	8.874E-04
1,1-Dichloroethane	99.0	ND	ND	ND	ND	ND
1,2-Dichloroethene	97.0	ND	ND	ND	ND	ND
Chloroform	119.0	ND	ND	ND	ND	ND
1,2-Dichloroethane	99.0	ND	ND	ND	ND	ND
Methylchloroform	133.0	0.06	3.458E-04	0.06	3.511E-04	3.485E-04
Benzene	78.0	0.16	5.086E-04	0.19	6.103E-04	5.594E-04
Carbontetrachloride	154.0	0.11	7.248E-04	0.11	7.028E-04	7.138E-04
1,2-Dichloropropane	113.0	ND	ND	ND	ND	ND
Trichloroethylene	133.0	ND	ND	ND	ND	ND
cis 1,3-Dichloro-1-propene	111.0	ND	ND	ND	ND	ND
trans 1,3-Dichloro-1-propene	111.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.0	ND	ND	ND	ND	ND
Toluene	92.0	0.13	5.086E-04	0.13	5.086E-04	5.086E-04
1,2-Dibromoethane	188.0	ND	ND	ND	ND	ND
Perchloroethylene	166.0	ND	ND	ND	ND	ND
Chlorobenzene	113.0	ND	ND	ND	ND	ND
Ethylbenzene	160.0	ND	ND	ND	ND	ND
m&p-Xylene	106.0	0.13	5.549E-04	0.10	4.541E-04	5.045E-04
Styrene	104.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	168.0	ND	ND	ND	ND	ND
o-Xylene	106.0	ND	ND	ND	ND	ND
p-Ethyltoluene	120.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	120.0	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	120.0	0.13	6.311E-04	0.09	4.490E-04	5.401E-04
Benzylchloride	127.0	ND	ND	ND	ND	ND
m-Dichlorobenzene	147.0	ND	ND	ND	ND	ND
p-Dichlorobenzene	147.0	ND	ND	ND	ND	ND
o-Dichlorobenzene	147.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	261.0	ND	ND	ND	ND	ND
Phenylacetylene	102.0	ND	ND	ND	ND	ND
Indane	118.0	ND	ND	ND	ND	ND
2,3-Dihydro-1-methyl-1H-indene	132.0	ND	ND	ND	ND	ND
2,3-Dihydro-4-methyl-1H-indene	132.0	ND	ND	ND	ND	ND
Naphthalene	128.0	0.13	6.852E-04	0.09	4.734E-04	5.793E-04
2-Methylnaphthalene	142.0	ND	ND	ND	ND	ND
1-Methylnaphthalene	142.0	ND	ND	ND	ND	ND
Cyanogen	52	ND	ND	ND	ND	ND
Methylnitrite	61.0	ND	ND	ND	ND	ND
Acetonitrile	41.0	ND	ND	ND	ND	ND
Acrylonitrile	53.0	ND	ND	ND	ND	ND
Nitromethane	61.0	ND	ND	ND	ND	ND
Propanenitrile	55.0	ND	ND	ND	ND	ND
2-Methylpropanenitrile	69.0	ND	ND	ND	ND	ND

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
Pentanenitrile	83.0	ND	ND	ND	ND	ND
Hexanenitrile	97.0	ND	ND	ND	ND	ND
Benzonitrile	103.0	ND	ND	ND	ND	ND
2-Nitrophenol	139.0	ND	ND	ND	ND	ND
Acrolein	56.0	ND	ND	ND	ND	ND
Acetone	56.0	5.05	1.177E-02	2.56	5.964E-03	8.869E-03
1-Hydroxy-2-propanone	74.0	0.37	1.136E-03	ND	ND	1.136E-03
Furan	68.0	ND	ND	ND	ND	ND
2-Propanol	60.0	6.06	1.513E-02	ND	ND	1.513E-02
2-Methylpropanal	74.0	ND	ND	ND	ND	ND
1-Propanol	60.0	ND	ND	ND	ND	ND
Methacrolein	70.0	ND	ND	ND	ND	ND
Methyl-vinyl Ketone	70.0	ND	ND	ND	ND	ND
MTBE	88.0	ND	ND	ND	ND	ND
2,3-Butanedione	86.0	ND	ND	ND	ND	ND
Butanal	72.0	0.09	2.639E-04	0.07	2.005E-04	2.322E-04
2-Butanone	72.0	0.24	7.127E-04	0.27	8.091E-04	7.609E-04
2-Methyl-1,3-dioxolane	88.0	ND	ND	ND	ND	ND
2-Methylfuran	82.0	ND	ND	ND	ND	ND
Tetrahydrofuran	72.0	ND	ND	ND	ND	ND
trans-2-Butenal	70.0	ND	ND	ND	ND	ND
Acetic Acid	60.0	1.35	3.365E-03	0.62	1.550E-03	2.458E-03
1-Butanol	74.0	ND	ND	ND	ND	ND
2-Pentanone	86.0	ND	ND	ND	ND	ND
Pentanal	86.0	0.27	9.701E-04	0.30	1.075E-03	1.022E-03
1,4-Dioxane	88.0	ND	ND	ND	ND	ND
Methyl Methacrylate	100.0	ND	ND	ND	ND	ND
Cyclopentanone	84.0	ND	ND	ND	ND	ND
Hexanal	100.0	0.14	5.910E-04	0.12	4.894E-04	5.402E-04
2-Furaldehyde	96.0	ND	ND	ND	ND	ND
Cyclohexanone	98.0	ND	ND	ND	ND	ND
Heptanal	114.0	0.16	7.495E-04	0.10	4.613E-04	6.054E-04
2-Butoxyethanol	118.0	0.20	9.842E-04	0.10	5.094E-04	7.468E-04
Benzaldehyde	106.0	0.28	1.230E-03	0.16	7.071E-04	9.684E-04
6-Methyl-5-hepten-2-one	126.0	ND	ND	0.29	1.540E-03	1.540E-03
Octanal	128.0	0.32	1.720E-03	0.14	7.641E-04	1.242E-03
Benzofuran	118.0	ND	ND	ND	ND	ND
2-Ethyl-1-hexanol	120.0	ND	ND	ND	ND	ND
Acetophonone	120.0	ND	ND	ND	ND	ND
Nonanal	142.0	0.39	2.304E-03	0.22	1.320E-03	1.812E-03
Decanal	156.0	0.42	2.755E-03	0.20	1.329E-03	2.042E-03
Carbonyl Sulfide	60.0	0.09	2.330E-04	0.05	1.251E-04	1.790E-04
Carbon Disulfide	76.0	0.19	5.899E-04	0.20	6.278E-04	6.089E-04
Thiophene	84.0	ND	ND	ND	ND	ND
Dimethyldisulfide	94.0	ND	ND	ND	ND	ND

TABLE E-6. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit - Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
TNMHC	-	0.1	1.000E-04	1.000E-04	1.000E-04
Ethane	30	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylene	28	0.1	1.000E-04	1.000E-04	1.000E-04
Acetylene	26	0.1	1.000E-04	1.000E-04	1.000E-04
Propane	44	0.1	1.000E-04	1.000E-04	1.000E-04
Propene	42	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1,3-Butadiene	54	0.1	1.000E-04	1.000E-04	1.000E-04
n-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylpropane	72	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
i-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
1-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
n-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
Isoprene	68	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentene	68	0.1	1.000E-04	1.000E-04	1.000E-04
4-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentane	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
cis-4-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
1-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
n-Hexane	86	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclopentane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
Benzene	78	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclohexane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04

TABLE E-6. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
n-Heptane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-1-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclohexane	98	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-2-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
2,5-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,3,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Toluene	92	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylheptane	111	0.1	1.000E-04	1.000E-04	1.000E-04
3-Ethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylheptane	128	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylhexane	128	0.1	1.000E-04	1.000E-04	1.000E-04
n-Octane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylcyclohexane	112	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylbenzene	160	0.1	1.000E-04	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
Styrene	104	0.1	1.000E-04	1.000E-04	1.000E-04
o-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
n-Nonane	128	0.1	1.000E-04	1.000E-04	1.000E-04
i-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
p-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
m-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
o-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Decane	142	0.1	1.000E-04	1.000E-04	1.000E-04
alpha-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
beta-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
delta 3-Carene	136	0.1	1.000E-04	1.000E-04	1.000E-04
d-Limonene	136	0.1	1.000E-04	1.000E-04	1.000E-04
MTBE	88	0.1	1.000E-04	1.000E-04	1.000E-04
ETBE	102.0	0.1	1.000E-04	1.000E-04	1.000E-04
Dichlorodifluoromethane	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Methylchloride	50.0	0.1	2.080E-04	2.080E-04	2.080E-04
Dichlorotetrafluoroethane	171.0	0.1	7.114E-04	7.114E-04	7.114E-04

TABLE E-6. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Chloroethene	63.0	0.1	2.621E-04	2.621E-04	2.621E-04
1,3-Butadiene	54.0	0.1	2.246E-04	2.246E-04	2.246E-04
Methylbromide	95.0	0.1	3.952E-04	3.952E-04	3.952E-04
Ethylchloride	64.5	0.1	2.683E-04	2.683E-04	2.683E-04
Trichloromonofluoromethane	137.0	0.1	5.699E-04	5.699E-04	5.699E-04
Vinylidenechloride	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Methylenechloride	85.0	0.1	3.536E-04	3.536E-04	3.536E-04
Allylchloride	76.5	0.1	3.182E-04	3.182E-04	3.182E-04
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
1,1-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
1,2-Dichloroethene	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Chloroform	119.0	0.1	4.950E-04	4.950E-04	4.950E-04
1,2-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
Methylchloroform	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Benzene	78.0	0.1	3.245E-04	3.245E-04	3.245E-04
Carbontetrachloride	154.0	0.1	6.406E-04	6.406E-04	6.406E-04
1,2-Dichloropropane	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Trichloroethylene	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
cis 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
trans 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
1,1,2-Trichloroethane	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Toluene	92.0	0.1	3.827E-04	3.827E-04	3.827E-04
1,2-Dibromoethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
Perchloroethylene	166.0	0.1	6.906E-04	6.906E-04	6.906E-04
Chlorobenzene	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Ethylbenzene	160.0	0.1	6.656E-04	6.656E-04	6.656E-04
m&p-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
Styrene	104.0	0.1	4.326E-04	4.326E-04	4.326E-04
1,1,2,2-Tetrachloroethane	168.0	0.1	6.989E-04	6.989E-04	6.989E-04
o-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
p-Ethyltoluene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,3,5-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,2,4-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Benzylchloride	127.0	0.1	5.283E-04	5.283E-04	5.283E-04
m-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
p-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
o-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
1,2,4-Trichlorobenzene	181.0	0.1	7.530E-04	7.530E-04	7.530E-04
Hexachlorobutadiene	261.0	0.1	1.086E-03	1.086E-03	1.086E-03
Phenylacetylene	102.0	0.1	4.243E-04	4.243E-04	4.243E-04
Indane	118.0	0.1	4.909E-04	4.909E-04	4.909E-04

TABLE E-6. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dihydro-1-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
2,3-Dihydro-4-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
Naphthalene	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
2-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
1-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Cyanogen	52	0.1	2.163E-04	2.163E-04	2.163E-04
Methylnitrite	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Acetonitrile	41.0	0.1	1.706E-04	1.706E-04	1.706E-04
Acrylonitrile	53.0	0.1	2.205E-04	2.205E-04	2.205E-04
Nitromethane	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Propanenitrile	55.0	0.1	2.288E-04	2.288E-04	2.288E-04
2-Methylpropanenitrile	69.0	0.1	2.870E-04	2.870E-04	2.870E-04
Pentanenitrile	83.0	0.1	3.453E-04	3.453E-04	3.453E-04
Hexanenitrile	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Benzonitrile	103.0	0.1	4.285E-04	4.285E-04	4.285E-04
2-Nitrophenol	139.0	0.1	5.782E-04	5.782E-04	5.782E-04
Acrolein	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
Acetone	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
1-Hydroxy-2-propanone	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
Furan	68.0	0.1	2.829E-04	2.829E-04	2.829E-04
2-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
2-Methylpropanal	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
1-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Methacrolein	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Methyl-vinyl Ketone	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
MTBE	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2,3-Butanedione	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Butanal	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Butanone	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Methyl-1,3-dioxolane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2-Methylfuran	82.0	0.1	3.411E-04	3.411E-04	3.411E-04
Tetrahydrofuran	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
trans-2-Butenal	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Acetic Acid	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
1-Butanol	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
2-Pentanone	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Pentanal	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
1,4-Dioxane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
Methyl Methacrylate	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
Cyclopentanone	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Hexanal	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
2-Furaldehyde	96.0	0.1	3.994E-04	3.994E-04	3.994E-04

TABLE E-6. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Cyclohexanone	98.0	0.1	4.077E-04	4.077E-04	4.077E-04
Heptanal	114.0	0.1	4.742E-04	4.742E-04	4.742E-04
2-Butoxyethanol	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
Benzaldehyde	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
6-Methyl-5-hepten-2-one	126.0	0.1	5.242E-04	5.242E-04	5.242E-04
Octanal	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
Benzofuran	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
2-Ethyl-1-hexanol	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Acetophonone	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Nonanal	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Decanal	156.0	0.1	6.490E-04	6.490E-04	6.490E-04
Carbonyl Sulfide	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Carbon Disulfide	76.0	0.1	3.162E-04	3.162E-04	3.162E-04
Thiophene	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Dimethyldisulfide	94.0	0.1	3.910E-04	3.910E-04	3.910E-04

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SIMULATOR GROUND BURST

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TABLE E-1. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
TNMHC	123.00	1.230E-01	ND	ND	1.230E-01
Ethane	2.90	2.900E-03	ND	ND	2.900E-03
Ethylene	24.30	2.430E-02	ND	ND	2.430E-02
Acetylene	31.80	3.180E-02	ND	ND	3.180E-02
Propane	2.30	2.300E-03	ND	ND	2.300E-03
Propene	5.20	5.200E-03	ND	ND	5.200E-03
i-Butane	0.50	5.000E-04	ND	ND	5.000E-04
i-Butene	0.30	3.000E-04	ND	ND	3.000E-04
1-Butene	0.70	7.000E-04	ND	ND	7.000E-04
1,3-Butadiene	0.70	7.000E-04	ND	ND	7.000E-04
n-Butane	0.70	7.000E-04	ND	ND	7.000E-04
trans-2-Butene	1.80	1.800E-03	ND	ND	1.800E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.10	1.000E-04	ND	ND	1.000E-04
3-Methyl-1-butene	ND	ND	ND	ND	ND
i-Pentane	0.40	4.000E-04	ND	ND	4.000E-04
1-Pentene	ND	ND	ND	ND	ND
2-Methyl-1-butene	ND	ND	ND	ND	ND
n-Pentane	0.30	3.000E-04	ND	ND	3.000E-04
Isoprene	ND	ND	ND	ND	ND
trans-2-Pentene	ND	ND	ND	ND	ND
cis-2-Pentene	ND	ND	ND	ND	ND
2-Methyl-2-butene	ND	ND	ND	ND	ND
2,2-Dimethylbutane	ND	ND	ND	ND	ND
Cyclopentene	ND	ND	ND	ND	ND
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	ND	ND	ND	ND	ND
2,3-Dimethylbutane	ND	ND	ND	ND	ND
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	0.20	2.000E-04	ND	ND	2.000E-04
3-Methylpentane	ND	ND	ND	ND	ND
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	ND	ND	ND	ND	ND
n-Hexane	0.20	2.000E-04	ND	ND	2.000E-04
trans-2-Hexene	ND	ND	ND	ND	ND
2-Methyl-2-pentene	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND
Methylcyclopentane	0.10	1.000E-04	ND	ND	1.000E-04
2,4-Dimethylpentane	0.20	2.000E-04	ND	ND	2.000E-04
Benzene	7.50	7.500E-03	ND	ND	7.500E-03

TABLE E-1. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
Cyclohexane	ND	ND	ND	ND	ND
2-Methylhexane	ND	ND	ND	ND	ND
2,3-Dimethylpentane	ND	ND	ND	ND	ND
3-Methylhexane	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.70	7.000E-04	ND	ND	7.000E-04
n-Heptane	0.20	2.000E-04	ND	ND	2.000E-04
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	ND	ND	ND	ND	ND
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	0.10	1.000E-04	ND	ND	1.000E-04
2,4-Dimethylhexane	0.10	1.000E-04	ND	ND	1.000E-04
2,3,4-Trimethylpentane	0.10	1.000E-04	ND	ND	1.000E-04
Toluene	2.00	2.000E-03	ND	ND	2.000E-03
2,3-Dimethylhexane	ND	ND	ND	ND	ND
2-Methylheptane	ND	ND	ND	ND	ND
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	ND	ND	ND	ND	ND
n-Octane	ND	ND	ND	ND	ND
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	0.50	5.000E-04	ND	ND	5.000E-04
m-Xylene & p-Xylene	1.30	1.300E-03	ND	ND	1.300E-03
Styrene	0.40	4.000E-04	ND	ND	4.000E-04
o-Xylene	0.60	6.000E-04	ND	ND	6.000E-04
n-Nonane	0.50	5.000E-04	ND	ND	5.000E-04
i-Propylbenzene	ND	ND	ND	ND	ND
n-Propylbenzene	0.20	2.000E-04	ND	ND	2.000E-04
p-Ethyltoluene	0.50	5.000E-04	ND	ND	5.000E-04
m-Ethyltoluene	0.20	2.000E-04	ND	ND	2.000E-04
1,3,5-Trimethylbenzene	0.30	3.000E-04	ND	ND	3.000E-04
o-Ethyltoluene	0.20	2.000E-04	ND	ND	2.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.00	1.000E-03	ND	ND	1.000E-03
n-Decane	0.10	1.000E-04	ND	ND	1.000E-04
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	ND	ND	ND	ND	ND
ETBE	ND	ND	ND	ND	ND

TABLE E-2. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
Dichlorodifluoromethane	0.255	-	ND	-	2.552E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	0.317	-	ND	-	3.169E-01
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.429	-	ND	-	4.291E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	3.091	-	ND	-	3.091E+00
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.104	-	ND	-	1.043E-01
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.065	-	ND	-	6.532E-02
Benzene	2.351	-	ND	-	2.351E+00
Carbontetrachloride	0.130	-	ND	-	1.301E-01
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	0.532	-	ND	-	5.315E-01
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	0.115	-	ND	-	1.153E-01
m&p-Xylene	0.292	-	ND	-	2.919E-01
Styrene	ND	-	ND	-	ND
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	0.138	-	ND	-	1.384E-01
p-Ethyltoluene	0.080	-	ND	-	8.006E-02
1,3,5-Trimethylbenzene	ND	-	ND	-	ND
1,2,4-Trimethylbenzene	0.194	-	ND	-	1.935E-01
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	0.116	-	ND	-	1.164E-01
Indane	ND	-	ND	-	ND
2,3-Dihydro-1-methyl-1H-indene	ND	-	ND	-	ND
2,3-Dihydro-4-methyl-1H-indene	ND	-	ND	-	ND
Naphthalene	0.297	-	ND	-	2.967E-01
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	0.130	-	ND	-	1.301E-01
Acetonitrile	0.112	-	ND	-	1.121E-01
Acrylonitrile	ND	-	ND	-	ND
Nitromethane	0.422	-	ND	-	4.216E-01
Propanenitrile	ND	-	ND	-	ND
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	ND	-	ND	-	ND
2-Nitrophenol	0.056	-	ND	-	5.620E-02
Acrolein	0.747	-	ND	-	7.469E-01
Acetone	4.834	-	ND	-	4.834E+00
1-Hydroxy-2-propanone	ND	-	ND	-	ND
Furan	0.080	-	ND	-	7.995E-02
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	ND	-	ND	-	ND
Methyl-vinyl Ketone	0.090	-	ND	-	8.975E-02
MTBE	ND	-	ND	-	ND
2,3-Butanedione	ND	-	ND	-	ND
Butanal	0.128	-	ND	-	1.276E-01
2-Butanone	0.582	-	ND	-	5.822E-01
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	0.122	-	ND	-	1.218E-01
Acetic Acid	0.827	-	ND	-	8.268E-01
1-Butanol	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
2-Pentanone	0.087	-	ND	-	8.662E-02
Pentanal	0.251	-	ND	-	2.513E-01
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	ND	-	ND	-	ND
Hexanal	0.127	-	ND	-	1.273E-01
2-Furaldehyde	0.342	-	ND	-	3.418E-01
Cyclohexanone	ND	-	ND	-	ND
Heptanal	0.148	-	ND	-	1.485E-01
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	0.446	-	ND	-	4.455E-01
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	0.225	-	ND	-	2.250E-01
Benzofuran	ND	-	ND	-	ND
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	0.059	-	ND	-	5.935E-02
Nonanal	0.276	-	ND	-	2.765E-01
Decanal	0.331	-	ND	-	3.315E-01
Carbonyl Sulfide	0.156	-	ND	-	1.558E-01
Carbon Disulfide	12.895	-	ND	-	1.289E+01
Thiophene	0.083	-	ND	-	8.281E-02
Dimethyldisulfide	ND	-	ND	-	ND

TABLE E-3. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ug/m^3	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ug/m^3	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, mg/m^3
TNMHC	193.00	1.930E-01	ND	ND	1.930E-01
Ethane	3.40	3.400E-03	ND	ND	3.400E-03
Ethylene	46.60	4.660E-02	ND	ND	4.660E-02
Acetylene	57.10	5.710E-02	ND	ND	5.710E-02
Propane	2.30	2.300E-03	ND	ND	2.300E-03
Propene	10.20	1.020E-02	ND	ND	1.020E-02
i-Butane	0.40	4.000E-04	ND	ND	4.000E-04
i-Butene	1.00	1.000E-03	ND	ND	1.000E-03
1-Butene	1.70	1.700E-03	ND	ND	1.700E-03
1,3-Butadiene	1.40	1.400E-03	ND	ND	1.400E-03
n-Butane	0.70	7.000E-04	ND	ND	7.000E-04
trans-2-Butene	3.50	3.500E-03	ND	ND	3.500E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.30	3.000E-04	ND	ND	3.000E-04
3-Methyl-1-butene	0.20	2.000E-04	ND	ND	2.000E-04
i-Pentane	0.50	5.000E-04	ND	ND	5.000E-04
1-Pentene	ND	ND	ND	ND	ND
2-Methyl-1-butene	ND	ND	ND	ND	ND
n-Pentane	0.50	5.000E-04	ND	ND	5.000E-04
Isoprene	ND	ND	ND	ND	ND
trans-2-Pentene	ND	ND	ND	ND	ND
cis-2-Pentene	ND	ND	ND	ND	ND
2-Methyl-2-butene	ND	ND	ND	ND	ND
2,2-Dimethylbutane	0.20	2.000E-04	ND	ND	2.000E-04
Cyclopentene	ND	ND	ND	ND	ND
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	ND	ND	ND	ND	ND
2,3-Dimethylbutane	ND	ND	ND	ND	ND
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	0.20	2.000E-04	ND	ND	2.000E-04
3-Methylpentane	ND	ND	ND	ND	ND
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	0.10	1.000E-04	ND	ND	1.000E-04
n-Hexane	0.20	2.000E-04	ND	ND	2.000E-04
trans-2-Hexene	ND	ND	ND	ND	ND
2-Methyl-2-pentene	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND
Methylcyclopentane	0.10	1.000E-04	ND	ND	1.000E-04
2,4-Dimethylpentane	0.20	2.000E-04	ND	ND	2.000E-04
Benzene	12.30	1.230E-02	ND	ND	1.230E-02

TABLE E-3. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ug/m^3	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ug/m^3	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, mg/m^3
Cyclohexane	ND	ND	ND	ND	ND
2-Methylhexane	ND	ND	ND	ND	ND
2,3-Dimethylpentane	ND	ND	ND	ND	ND
3-Methylhexane	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.80	8.000E-04	ND	ND	8.000E-04
n-Heptane	ND	ND	ND	ND	ND
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	ND	ND	ND	ND	ND
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	0.10	1.000E-04	ND	ND	1.000E-04
2,4-Dimethylhexane	0.20	2.000E-04	ND	ND	2.000E-04
2,3,4-Trimethylpentane	0.20	2.000E-04	ND	ND	2.000E-04
Toluene	3.00	3.000E-03	ND	ND	3.000E-03
2,3-Dimethylhexane	ND	ND	ND	ND	ND
2-Methylheptane	ND	ND	ND	ND	ND
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	0.20	2.000E-04	ND	ND	2.000E-04
n-Octane	0.10	1.000E-04	ND	ND	1.000E-04
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	0.50	5.000E-04	ND	ND	5.000E-04
m-Xylene & p-Xylene	1.70	1.700E-03	ND	ND	1.700E-03
Styrene	0.70	7.000E-04	ND	ND	7.000E-04
o-Xylene	0.70	7.000E-04	ND	ND	7.000E-04
n-Nonane	0.40	4.000E-04	ND	ND	4.000E-04
i-Propylbenzene	ND	ND	ND	ND	ND
n-Propylbenzene	0.10	1.000E-04	ND	ND	1.000E-04
p-Ethyltoluene	0.50	5.000E-04	ND	ND	5.000E-04
m-Ethyltoluene	0.30	3.000E-04	ND	ND	3.000E-04
1,3,5-Trimethylbenzene	0.40	4.000E-04	ND	ND	4.000E-04
o-Ethyltoluene	0.20	2.000E-04	ND	ND	2.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.30	1.300E-03	ND	ND	1.300E-03
n-Decane	ND	ND	ND	ND	ND
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	ND	ND	ND	ND	ND
ETBE	ND	ND	ND	ND	ND

TABLE E-4. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ppbv	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ppbv	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, ppbv
Dichlorodifluoromethane	0.168	-	ND	-	1.677E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	0.634	-	ND	-	6.339E-01
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.448	-	ND	-	4.481E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	1.933	-	ND	-	1.933E+00
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.115	-	ND	-	1.146E-01
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.066	-	ND	-	6.630E-02
Benzene	3.856	-	ND	-	3.856E+00
Carbontetrachloride	0.125	-	ND	-	1.250E-01
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	0.797	-	ND	-	7.973E-01
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	0.115	-	ND	-	1.153E-01
m&p-Xylene	0.363	-	ND	-	3.630E-01
Styrene	0.091	-	ND	-	9.144E-02
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	0.161	-	ND	-	1.615E-01
p-Ethyltoluene	0.097	-	ND	-	9.689E-02
1,3,5-Trimethylbenzene	0.062	-	ND	-	6.157E-02
1,2,4-Trimethylbenzene	0.160	-	ND	-	1.604E-01
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-4. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ppbv	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ppbv	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	0.218	-	ND	-	2.176E-01
Indane	ND	-	ND	-	ND
2,3-Dihydro-1-methyl-1H-indene	ND	-	ND	-	ND
2,3-Dihydro-4-methyl-1H-indene	ND	-	ND	-	ND
Naphthalene	0.410	-	ND	-	4.099E-01
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	0.286	-	ND	-	2.856E-01
Acetonitrile	0.217	-	ND	-	2.169E-01
Acrylonitrile	0.086	-	ND	-	8.553E-02
Nitromethane	0.708	-	ND	-	7.081E-01
Propanenitrile	ND	-	ND	-	ND
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	0.060	-	ND	-	5.962E-02
2-Nitrophenol	0.053	-	ND	-	5.304E-02
Acrolein	1.844	-	ND	-	1.844E+00
Acetone	6.691	-	ND	-	6.691E+00
1-Hydroxy-2-propanone	ND	-	ND	-	ND
Furan	0.215	-	ND	-	2.146E-01
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	0.070	-	ND	-	6.977E-02
Methyl-vinyl Ketone	0.192	-	ND	-	1.920E-01
MTBE	ND	-	ND	-	ND
2,3-Butanedione	ND	-	ND	-	ND
Butanal	0.111	-	ND	-	1.109E-01
2-Butanone	0.910	-	ND	-	9.104E-01
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	0.201	-	ND	-	2.009E-01
Acetic Acid	0.861	-	ND	-	8.608E-01
1-Butanol	ND	-	ND	-	ND

TABLE E-4. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 2 Sample 1 - Amount Detected, ppbv	Run 2 Sample 1 - Amount Detected, mg/m^3	Run 2 Sample 2 - Amount Detected, ppbv	Run 2 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 2, ppbv
2-Pentanone	0.139	-	ND	-	1.393E-01
Pentanal	0.338	-	ND	-	3.377E-01
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	ND	-	ND	-	ND
Hexanal	0.143	-	ND	-	1.432E-01
2-Furaldehyde	0.576	-	ND	-	5.760E-01
Cyclohexanone	ND	-	ND	-	ND
Heptanal	0.148	-	ND	-	1.484E-01
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	0.516	-	ND	-	5.162E-01
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	0.237	-	ND	-	2.370E-01
Benzofuran	0.070	-	ND	-	6.970E-02
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	0.061	-	ND	-	6.076E-02
Nonanal	0.239	-	ND	-	2.393E-01
Decanal	0.258	-	ND	-	2.576E-01
Carbonyl Sulfide	0.167	-	ND	-	1.665E-01
Carbon Disulfide	21.875	-	ND	-	2.187E+01
Thiophene	0.138	-	ND	-	1.380E-01
Dimethyldisulfide	ND	-	ND	-	ND

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
TNMHC	-	19.70	1.970E-02	23.60	2.360E-02	2.165E-02
Ethane	30	2.30	2.300E-03	3.10	3.100E-03	2.700E-03
Ethylene	28	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
Acetylene	26	0.70	7.000E-04	0.70	7.000E-04	7.000E-04
Propane	44	1.80	1.800E-03	1.50	1.500E-03	1.650E-03
Propene	42	ND	ND	ND	ND	ND
i-Butane	58	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
i-Butene	56	ND	ND	ND	ND	ND
1-Butene	56	ND	ND	ND	ND	ND
1,3-Butadiene	54	ND	ND	ND	ND	ND
n-Butane	58	0.80	8.000E-04	0.70	7.000E-04	7.500E-04
trans-2-Butene	56	ND	ND	ND	ND	ND
2,2-Dimethylpropane	72	ND	ND	ND	ND	ND
cis-2-Butene	56	ND	ND	ND	ND	ND
3-Methyl-1-butene	70	ND	ND	ND	ND	ND
i-Pentane	72	0.30	3.000E-04	0.40	4.000E-04	3.500E-04
1-Pentene	70	ND	ND	ND	ND	ND
2-Methyl-1-butene	70	ND	ND	ND	ND	ND
n-Pentane	72	0.20	2.000E-04	0.30	3.000E-04	2.500E-04
Isoprene	68	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
trans-2-Pentene	70	ND	ND	ND	ND	ND
cis-2-Pentene	70	ND	ND	ND	ND	ND
2-Methyl-2-butene	70	ND	ND	ND	ND	ND
2,2-Dimethylbutane	86	0.10	1.000E-04	ND	ND	1.000E-04
Cyclopentene	68	ND	ND	ND	ND	ND
4-Methyl-1-pentene	84	ND	ND	ND	ND	ND
Cyclopentane	70	ND	ND	ND	ND	ND
2,3-Dimethylbutane	86	ND	ND	ND	ND	ND
cis-4-Methyl-2-pentene	84	ND	ND	ND	ND	ND
2-Methylpentane	86	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
3-Methylpentane	86	0.10	1.000E-04	ND	ND	1.000E-04
2-Methyl-1-pentene	84	ND	ND	ND	ND	ND
1-Hexene	84	ND	ND	ND	ND	ND
n-Hexane	86	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
trans-2-Hexene	84	ND	ND	ND	ND	ND
2-Methyl-2-pentene	84	ND	ND	ND	ND	ND
cis-2-Hexene	84	ND	ND	ND	ND	ND
Methylcyclopentane	84	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.10	1.000E-04	ND	ND	1.000E-04
Benzene	78	0.50	5.000E-04	0.60	6.000E-04	5.500E-04
Cyclohexane	84	ND	ND	ND	ND	ND
2-Methylhexane	100	ND	ND	ND	ND	ND
2,3-Dimethylpentane	100	0.10	1.000E-04	ND	ND	1.000E-04
3-Methylhexane	100	0.20	2.000E-04	ND	ND	2.000E-04
2,2,4-Trimethylpentane	114	0.20	2.000E-04	0.50	5.000E-04	3.500E-04
n-Heptane	100	0.10	1.000E-04	ND	ND	1.000E-04

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND	ND	ND
Methylcyclohexane	98	ND	ND	ND	ND	ND
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND	ND	ND
2,5-Dimethylhexane	114	ND	ND	0.10	1.000E-04	1.000E-04
2,4-Dimethylhexane	114	ND	ND	0.10	1.000E-04	1.000E-04
2,3,4-Trimethylpentane	114	0.10	1.000E-04	ND	ND	1.000E-04
Toluene	92	0.50	5.000E-04	0.70	7.000E-04	6.000E-04
2,3-Dimethylhexane	114	ND	ND	ND	ND	ND
2-Methylheptane	111	ND	ND	ND	ND	ND
3-Ethylhexane	114	ND	ND	ND	ND	ND
2,2-Dimethylheptane	128	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	128	ND	ND	ND	ND	ND
n-Octane	114	ND	ND	ND	ND	ND
Ethylcyclohexane	112	ND	ND	ND	ND	ND
Ethylbenzene	160	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.50	5.000E-04	0.80	8.000E-04	6.500E-04
Styrene	104	ND	ND	ND	ND	ND
o-Xylene	106	0.20	2.000E-04	0.30	3.000E-04	2.500E-04
n-Nonane	128	ND	ND	ND	ND	ND
i-Propylbenzene	120	ND	ND	ND	ND	ND
n-Propylbenzene	120	ND	ND	0.10	1.000E-04	1.000E-04
p-Ethyltoluene	120	ND	ND	0.30	3.000E-04	3.000E-04
m-Ethyltoluene	120	ND	ND	0.10	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	ND	ND	0.20	2.000E-04	2.000E-04
o-Ethyltoluene	120	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.50	5.000E-04	0.60	6.000E-04	5.500E-04
n-Decane	142	ND	ND	ND	ND	ND
alpha-Pinene	136	ND	ND	ND	ND	ND
beta-Pinene	136	ND	ND	ND	ND	ND
delta 3-Carene	136	ND	ND	ND	ND	ND
d-Limonene	136	ND	ND	ND	ND	ND
MTBE	88	ND	ND	ND	ND	ND
ETBE	102.0	ND	ND	ND	ND	ND
Dichlorodifluoromethane	120.0	0.31	1.536E-03	0.26	1.290E-03	1.413E-03
Methylchloride	50.0	ND	ND	ND	ND	ND
Dichlorotetrafluoroethane	171.0	ND	ND	ND	ND	ND
Chloroethene	63.0	ND	ND	ND	ND	ND
1,3-Butadiene	54.0	ND	ND	ND	ND	ND
Methylbromide	95.0	ND	ND	ND	ND	ND
Ethylchloride	64.5	ND	ND	ND	ND	ND
Trichloromonofluoromethane	137.0	0.43	2.471E-03	0.45	2.562E-03	2.517E-03
Vinylidenechloride	97.0	ND	ND	ND	ND	ND
Methylenechloride	85.0	0.10	3.684E-04	0.08	2.704E-04	3.194E-04
Allylchloride	76.5	ND	ND	ND	ND	ND

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
1,1,2-Trichloro-1,2,2-						
trifluoroethane	188.0	0.10	8.132E-04	0.11	8.515E-04	8.324E-04
1,1-Dichloroethane	99.0	ND	ND	ND	ND	ND
1,2-Dichloroethene	97.0	ND	ND	ND	ND	ND
Chloroform	119.0	ND	ND	ND	ND	ND
1,2-Dichloroethane	99.0	ND	ND	ND	ND	ND
Methylchloroform	133.0	0.06	3.433E-04	0.07	3.608E-04	3.521E-04
Benzene	78.0	0.16	5.086E-04	0.19	6.103E-04	5.594E-04
Carbontetrachloride	154.0	0.11	7.055E-04	0.12	7.468E-04	7.262E-04
1,2-Dichloropropane	113.0	ND	ND	ND	ND	ND
Trichloroethylene	133.0	ND	ND	ND	ND	ND
cis 1,3-Dichloro-1-propene	111.0	ND	ND	ND	ND	ND
trans 1,3-Dichloro-1-propene	111.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.0	ND	ND	ND	ND	ND
Toluene	92.0	0.13	5.086E-04	0.19	7.120E-04	6.103E-04
1,2-Dibromoethane	188.0	ND	ND	ND	ND	ND
Perchloroethylene	166.0	ND	ND	ND	ND	ND
Chlorobenzene	113.0	ND	ND	ND	ND	ND
Ethylbenzene	160.0	ND	ND	ND	ND	ND
m&p-Xylene	106.0	0.11	4.827E-04	0.16	6.957E-04	5.892E-04
Styrene	104.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	168.0	ND	ND	ND	ND	ND
o-Xylene	106.0	ND	ND	0.07	3.051E-04	3.051E-04
p-Ethyltoluene	120.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	120.0	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	120.0	0.09	4.472E-04	0.12	5.753E-04	5.112E-04
Benzylchloride	127.0	ND	ND	ND	ND	ND
m-Dichlorobenzene	147.0	ND	ND	ND	ND	ND
p-Dichlorobenzene	147.0	ND	ND	ND	ND	ND
o-Dichlorobenzene	147.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	261.0	ND	ND	ND	ND	ND
Phenylacetylene	102.0	ND	ND	ND	ND	ND
Indane	118.0	ND	ND	ND	ND	ND
2,3-Dihydro-1-methyl-1H-indene	132.0	ND	ND	ND	ND	ND
2,3-Dihydro-4-methyl-1H-indene	132.0	ND	ND	ND	ND	ND
Naphthalene	128.0	0.08	4.245E-04	0.09	5.018E-04	4.632E-04
2-Methylnaphthalene	142.0	ND	ND	ND	ND	ND
1-Methylnaphthalene	142.0	ND	ND	ND	ND	ND
Cyanogen	52	ND	ND	ND	ND	ND
Methylnitrite	61.0	ND	ND	ND	ND	ND
Acetonitrile	41.0	ND	ND	ND	ND	ND
Acrylonitrile	53.0	ND	ND	ND	ND	ND
Nitromethane	61.0	ND	ND	ND	ND	ND
Propanenitrile	55.0	ND	ND	ND	ND	ND
2-Methylpropanenitrile	69.0	ND	ND	ND	ND	ND

TABLE E-5. AEC - BACKGROUND RUN NO. 1-2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Run 2 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 2 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1-2, mg/m^3
Pentanenitrile	83.0	ND	ND	ND	ND	ND
Hexanenitrile	97.0	ND	ND	ND	ND	ND
Benzonitrile	103.0	ND	ND	ND	ND	ND
2-Nitrophenol	139.0	ND	ND	ND	ND	ND
Acrolein	56.0	ND	ND	ND	ND	ND
Acetone	56.0	3.05	7.108E-03	2.35	5.477E-03	6.292E-03
1-Hydroxy-2-propanone	74.0	ND	ND	ND	ND	ND
Furan	68.0	ND	ND	ND	ND	ND
2-Propanol	60.0	ND	ND	ND	ND	ND
2-Methylpropanal	74.0	ND	ND	ND	ND	ND
1-Propanol	60.0	0.35	8.791E-04	ND	ND	8.791E-04
Methacrolein	70.0	ND	ND	ND	ND	ND
Methyl-vinyl Ketone	70.0	ND	ND	ND	ND	ND
MTBE	88.0	ND	ND	ND	ND	ND
2,3-Butanedione	86.0	ND	ND	ND	ND	ND
Butanal	72.0	0.11	3.214E-04	0.07	2.155E-04	2.684E-04
2-Butanone	72.0	ND	ND	0.29	8.793E-04	8.793E-04
2-Methyl-1,3-dioxolane	88.0	ND	ND	ND	ND	ND
2-Methylfuran	82.0	ND	ND	ND	ND	ND
Tetrahydrofuran	72.0	ND	ND	ND	ND	ND
trans-2-Butenal	70.0	ND	ND	ND	ND	ND
Acetic Acid	60.0	0.88	2.195E-03	0.48	1.200E-03	1.697E-03
1-Butanol	74.0	0.30	9.110E-04	ND	ND	9.110E-04
2-Pentanone	86.0	ND	ND	ND	ND	ND
Pentanal	86.0	0.22	7.957E-04	0.31	1.116E-03	9.559E-04
1,4-Dioxane	88.0	ND	ND	ND	ND	ND
Methyl Methacrylate	100.0	ND	ND	ND	ND	ND
Cyclopentanone	84.0	ND	ND	ND	ND	ND
Hexanal	100.0	0.08	3.526E-04	0.19	7.794E-04	5.660E-04
2-Furaldehyde	96.0	ND	ND	ND	ND	ND
Cyclohexanone	98.0	ND	ND	ND	ND	ND
Heptanal	114.0	0.07	3.273E-04	0.15	7.015E-04	5.144E-04
2-Butoxyethanol	118.0	ND	ND	ND	ND	ND
Benzaldehyde	106.0	0.16	6.918E-04	0.20	8.636E-04	7.777E-04
6-Methyl-5-hepten-2-one	126.0	ND	ND	ND	ND	ND
Octanal	128.0	0.19	1.001E-03	0.18	9.545E-04	9.778E-04
Benzofuran	118.0	ND	ND	ND	ND	ND
2-Ethyl-1-hexanol	120.0	ND	ND	ND	ND	ND
Acetophonone	120.0	ND	ND	ND	ND	ND
Nonanal	142.0	0.31	1.841E-03	0.23	1.368E-03	1.605E-03
Decanal	156.0	0.30	1.958E-03	0.11	7.454E-04	1.352E-03
Carbonyl Sulfide	60.0	0.06	1.583E-04	0.09	2.178E-04	1.881E-04
Carbon Disulfide	76.0	0.15	4.600E-04	0.14	4.467E-04	4.533E-04
Thiophene	84.0	ND	ND	ND	ND	ND
Dimethyldisulfide	94.0	ND	ND	ND	ND	ND

TABLE E-6. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
TNMHC	-	0.1	1.000E-04	1.000E-04	1.000E-04
Ethane	30	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylene	28	0.1	1.000E-04	1.000E-04	1.000E-04
Acetylene	26	0.1	1.000E-04	1.000E-04	1.000E-04
Propane	44	0.1	1.000E-04	1.000E-04	1.000E-04
Propene	42	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1,3-Butadiene	54	0.1	1.000E-04	1.000E-04	1.000E-04
n-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylpropane	72	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
i-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
1-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
n-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
Isoprene	68	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentene	68	0.1	1.000E-04	1.000E-04	1.000E-04
4-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentane	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
cis-4-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
1-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
n-Hexane	86	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclopentane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
Benzene	78	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclohexane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04

TABLE E-6. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
n-Heptane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-1-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclohexane	98	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-2-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
2,5-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,3,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Toluene	92	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylheptane	111	0.1	1.000E-04	1.000E-04	1.000E-04
3-Ethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylheptane	128	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylhexane	128	0.1	1.000E-04	1.000E-04	1.000E-04
n-Octane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylcyclohexane	112	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylbenzene	160	0.1	1.000E-04	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
Styrene	104	0.1	1.000E-04	1.000E-04	1.000E-04
o-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
n-Nonane	128	0.1	1.000E-04	1.000E-04	1.000E-04
i-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
p-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
m-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
o-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Decane	142	0.1	1.000E-04	1.000E-04	1.000E-04
alpha-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
beta-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
delta 3-Carene	136	0.1	1.000E-04	1.000E-04	1.000E-04
d-Limonene	136	0.1	1.000E-04	1.000E-04	1.000E-04
MTBE	88	0.1	1.000E-04	1.000E-04	1.000E-04
ETBE	102.0	0.1	1.000E-04	1.000E-04	1.000E-04
Dichlorodifluoromethane	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Methylchloride	50.0	0.1	2.080E-04	2.080E-04	2.080E-04
Dichlorotetrafluoroethane	171.0	0.1	7.114E-04	7.114E-04	7.114E-04

TABLE E-6. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Chloroethene	63.0	0.1	2.621E-04	2.621E-04	2.621E-04
1,3-Butadiene	54.0	0.1	2.246E-04	2.246E-04	2.246E-04
Methylbromide	95.0	0.1	3.952E-04	3.952E-04	3.952E-04
Ethylchloride	64.5	0.1	2.683E-04	2.683E-04	2.683E-04
Trichloromonofluoromethane	137.0	0.1	5.699E-04	5.699E-04	5.699E-04
Vinylidenechloride	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Methylenechloride	85.0	0.1	3.536E-04	3.536E-04	3.536E-04
Allylchloride	76.5	0.1	3.182E-04	3.182E-04	3.182E-04
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
1,1-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
1,2-Dichloroethene	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Chloroform	119.0	0.1	4.950E-04	4.950E-04	4.950E-04
1,2-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
Methylchloroform	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Benzene	78.0	0.1	3.245E-04	3.245E-04	3.245E-04
Carbontetrachloride	154.0	0.1	6.406E-04	6.406E-04	6.406E-04
1,2-Dichloropropane	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Trichloroethylene	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
cis 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
trans 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
1,1,2-Trichloroethane	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Toluene	92.0	0.1	3.827E-04	3.827E-04	3.827E-04
1,2-Dibromoethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
Perchloroethylene	166.0	0.1	6.906E-04	6.906E-04	6.906E-04
Chlorobenzene	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Ethylbenzene	160.0	0.1	6.656E-04	6.656E-04	6.656E-04
m&p-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
Styrene	104.0	0.1	4.326E-04	4.326E-04	4.326E-04
1,1,2,2-Tetrachloroethane	168.0	0.1	6.989E-04	6.989E-04	6.989E-04
o-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
p-Ethyltoluene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,3,5-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,2,4-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Benzylchloride	127.0	0.1	5.283E-04	5.283E-04	5.283E-04
m-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
p-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
o-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
1,2,4-Trichlorobenzene	181.0	0.1	7.530E-04	7.530E-04	7.530E-04
Hexachlorobutadiene	261.0	0.1	1.086E-03	1.086E-03	1.086E-03
Phenylacetylene	102.0	0.1	4.243E-04	4.243E-04	4.243E-04
Indane	118.0	0.1	4.909E-04	4.909E-04	4.909E-04

TABLE E-6. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dihydro-1-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
2,3-Dihydro-4-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
Naphthalene	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
2-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
1-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Cyanogen	52	0.1	2.163E-04	2.163E-04	2.163E-04
Methylnitrite	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Acetonitrile	41.0	0.1	1.706E-04	1.706E-04	1.706E-04
Acrylonitrile	53.0	0.1	2.205E-04	2.205E-04	2.205E-04
Nitromethane	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Propanenitrile	55.0	0.1	2.288E-04	2.288E-04	2.288E-04
2-Methylpropanenitrile	69.0	0.1	2.870E-04	2.870E-04	2.870E-04
Pentanenitrile	83.0	0.1	3.453E-04	3.453E-04	3.453E-04
Hexanenitrile	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Benzonitrile	103.0	0.1	4.285E-04	4.285E-04	4.285E-04
2-Nitrophenol	139.0	0.1	5.782E-04	5.782E-04	5.782E-04
Acrolein	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
Acetone	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
1-Hydroxy-2-propanone	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
Furan	68.0	0.1	2.829E-04	2.829E-04	2.829E-04
2-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
2-Methylpropanal	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
1-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Methacrolein	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Methyl-vinyl Ketone	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
MTBE	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2,3-Butanedione	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Butanal	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Butanone	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Methyl-1,3-dioxolane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2-Methylfuran	82.0	0.1	3.411E-04	3.411E-04	3.411E-04
Tetrahydrofuran	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
trans-2-Butenal	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Acetic Acid	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
1-Butanol	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
2-Pentanone	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Pentanal	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
1,4-Dioxane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
Methyl Methacrylate	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
Cyclopentanone	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Hexanal	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
2-Furaldehyde	96.0	0.1	3.994E-04	3.994E-04	3.994E-04

TABLE E-6. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Cyclohexanone	98.0	0.1	4.077E-04	4.077E-04	4.077E-04
Heptanal	114.0	0.1	4.742E-04	4.742E-04	4.742E-04
2-Butoxyethanol	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
Benzaldehyde	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
6-Methyl-5-hepten-2-one	126.0	0.1	5.242E-04	5.242E-04	5.242E-04
Octanal	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
Benzofuran	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
2-Ethyl-1-hexanol	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Acetophonone	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Nonanal	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Decanal	156.0	0.1	6.490E-04	6.490E-04	6.490E-04
Carbonyl Sulfide	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Carbon Disulfide	76.0	0.1	3.162E-04	3.162E-04	3.162E-04
Thiophene	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Dimethyldisulfide	94.0	0.1	3.910E-04	3.910E-04	3.910E-04

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TABLE E-1. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
TNMHC	148.60	1.486E-01	ND	ND	1.486E-01
Ethane	5.70	5.700E-03	ND	ND	5.700E-03
Ethylene	23.80	2.380E-02	ND	ND	2.380E-02
Acetylene	25.70	2.570E-02	ND	ND	2.570E-02
Propane	2.40	2.400E-03	ND	ND	2.400E-03
Propene	8.30	8.300E-03	ND	ND	8.300E-03
i-Butane	0.30	3.000E-04	ND	ND	3.000E-04
i-Butene	0.70	7.000E-04	ND	ND	7.000E-04
1-Butene	1.30	1.300E-03	ND	ND	1.300E-03
1,3-Butadiene	1.60	1.600E-03	ND	ND	1.600E-03
n-Butane	0.70	7.000E-04	ND	ND	7.000E-04
trans-2-Butene	1.40	1.400E-03	ND	ND	1.400E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.40	4.000E-04	ND	ND	4.000E-04
3-Methyl-1-butene	0.10	1.000E-04	ND	ND	1.000E-04
i-Pentane	0.50	5.000E-04	ND	ND	5.000E-04
1-Pentene	0.20	2.000E-04	ND	ND	2.000E-04
2-Methyl-1-butene	0.20	2.000E-04	ND	ND	2.000E-04
n-Pentane	0.80	8.000E-04	ND	ND	8.000E-04
Isoprene	ND	ND	ND	ND	ND
trans-2-Pentene	ND	ND	ND	ND	ND
cis-2-Pentene	ND	ND	ND	ND	ND
2-Methyl-2-butene	ND	ND	ND	ND	ND
2,2-Dimethylbutane	0.10	1.000E-04	ND	ND	1.000E-04
Cyclopentene	ND	ND	ND	ND	ND
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	ND	ND	ND	ND	ND
2,3-Dimethylbutane	0.40	4.000E-04	ND	ND	4.000E-04
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	0.70	7.000E-04	ND	ND	7.000E-04
3-Methylpentane	0.80	8.000E-04	ND	ND	8.000E-04
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	1.00	1.000E-03	ND	ND	1.000E-03
n-Hexane	0.70	7.000E-04	ND	ND	7.000E-04
trans-2-Hexene	ND	ND	ND	ND	ND
2-Methyl-2-pentene	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND
Methylcyclopentane	0.30	3.000E-04	ND	ND	3.000E-04
2,4-Dimethylpentane	0.80	8.000E-04	ND	ND	8.000E-04
Benzene	8.50	8.500E-03	ND	ND	8.500E-03

TABLE E-1. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
Cyclohexane	0.20	2.000E-04	ND	ND	2.000E-04
2-Methylhexane	ND	ND	ND	ND	ND
2,3-Dimethylpentane	ND	ND	ND	ND	ND
3-Methylhexane	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	2.90	2.900E-03	ND	ND	2.900E-03
n-Heptane	0.30	3.000E-04	ND	ND	3.000E-04
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	0.20	2.000E-04	ND	ND	2.000E-04
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	0.20	2.000E-04	ND	ND	2.000E-04
2,4-Dimethylhexane	0.30	3.000E-04	ND	ND	3.000E-04
2,3,4-Trimethylpentane	0.70	7.000E-04	ND	ND	7.000E-04
Toluene	4.30	4.300E-03	ND	ND	4.300E-03
2,3-Dimethylhexane	0.20	2.000E-04	ND	ND	2.000E-04
2-Methylheptane	ND	ND	ND	ND	ND
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	0.20	2.000E-04	ND	ND	2.000E-04
n-Octane	0.20	2.000E-04	ND	ND	2.000E-04
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	0.50	5.000E-04	ND	ND	5.000E-04
m-Xylene & p-Xylene	1.70	1.700E-03	ND	ND	1.700E-03
Styrene	0.70	7.000E-04	ND	ND	7.000E-04
o-Xylene	0.80	8.000E-04	ND	ND	8.000E-04
n-Nonane	0.40	4.000E-04	ND	ND	4.000E-04
i-Propylbenzene	ND	ND	ND	ND	ND
n-Propylbenzene	0.20	2.000E-04	ND	ND	2.000E-04
p-Ethyltoluene	1.10	1.100E-03	ND	ND	1.100E-03
m-Ethyltoluene	0.50	5.000E-04	ND	ND	5.000E-04
1,3,5-Trimethylbenzene	0.40	4.000E-04	ND	ND	4.000E-04
o-Ethyltoluene	0.40	4.000E-04	ND	ND	4.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.00	1.000E-03	ND	ND	1.000E-03
n-Decane	0.10	1.000E-04	ND	ND	1.000E-04
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	0.40	4.000E-04	ND	ND	4.000E-04
ETBE	ND	ND	ND	ND	ND

TABLE E-2. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
Dichlorodifluoromethane	0.280	-	ND	-	2.800E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	0.724	-	ND	-	7.244E-01
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.438	-	ND	-	4.377E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	11.744	-	ND	-	1.174E+01
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.107	-	ND	-	1.066E-01
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.068	-	ND	-	6.795E-02
Benzene	2.664	-	ND	-	2.664E+00
Carbontetrachloride	0.123	-	ND	-	1.234E-01
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	1.143	-	ND	-	1.143E+00
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	0.115	-	ND	-	1.153E-01
m&p-Xylene	0.408	-	ND	-	4.079E-01
Styrene	0.069	-	ND	-	6.876E-02
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	0.185	-	ND	-	1.845E-01
p-Ethyltoluene	0.078	-	ND	-	7.840E-02
1,3,5-Trimethylbenzene	0.051	-	ND	-	5.112E-02
1,2,4-Trimethylbenzene	0.172	-	ND	-	1.716E-01
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	ND	-	ND	-	ND
Indane	ND	-	ND	-	ND
2,3-Dihydro-1-methyl-1H-indene	ND	-	ND	-	ND
2,3-Dihydro-4-methyl-1H-indene	ND	-	ND	-	ND
Naphthalene	0.262	-	ND	-	2.617E-01
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	0.159	-	ND	-	1.590E-01
Acetonitrile	0.557	-	ND	-	5.570E-01
Acrylonitrile	0.862	-	ND	-	8.619E-01
Nitromethane	0.374	-	ND	-	3.740E-01
Propanenitrile	ND	-	ND	-	ND
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	0.120	-	ND	-	1.198E-01
2-Nitrophenol	ND	-	ND	-	ND
Acrolein	0.250	-	ND	-	2.503E-01
Acetone	5.285	-	ND	-	5.285E+00
1-Hydroxy-2-propanone	ND	-	ND	-	ND
Furan	0.207	-	ND	-	2.073E-01
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	ND	-	ND	-	ND
Methyl-vinyl Ketone	ND	-	ND	-	ND
MTBE	0.136	-	ND	-	1.364E-01
2,3-Butanedione	ND	-	ND	-	ND
Butanal	0.123	-	ND	-	1.235E-01
2-Butanone	0.769	-	ND	-	7.695E-01
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	0.064	-	ND	-	6.354E-02
Acetic Acid	0.761	-	ND	-	7.611E-01
1-Butanol	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
2-Pentanone	0.125	-	ND	-	1.253E-01
Pentanal	0.322	-	ND	-	3.224E-01
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	ND	-	ND	-	ND
Hexanal	0.135	-	ND	-	1.353E-01
2-Furaldehyde	0.178	-	ND	-	1.775E-01
Cyclohexanone	ND	-	ND	-	ND
Heptanal	0.145	-	ND	-	1.454E-01
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	0.441	-	ND	-	4.415E-01
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	0.190	-	ND	-	1.899E-01
Benzofuran	0.077	-	ND	-	7.735E-02
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	0.085	-	ND	-	8.534E-02
Nonanal	0.193	-	ND	-	1.929E-01
Decanal	0.135	-	ND	-	1.347E-01
Carbonyl Sulfide	0.145	-	ND	-	1.450E-01
Carbon Disulfide	2.953	-	ND	-	2.953E+00
Thiophene	0.110	-	ND	-	1.097E-01
Dimethyldisulfide	ND	-	ND	-	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
TNMHC	-	36.00	3.600E-02	3.600E-02
Ethane	30	2.80	2.800E-03	2.800E-03
Ethylene	28	0.20	2.000E-04	2.000E-04
Acetylene	26	0.80	8.000E-04	8.000E-04
Propane	44	1.30	1.300E-03	1.300E-03
Propene	42	ND	ND	ND
i-Butane	58	0.30	3.000E-04	3.000E-04
i-Butene	56	ND	ND	ND
1-Butene	56	ND	ND	ND
1,3-Butadiene	54	ND	ND	ND
n-Butane	58	0.50	5.000E-04	5.000E-04
trans-2-Butene	56	ND	ND	ND
2,2-Dimethylpropane	72	ND	ND	ND
cis-2-Butene	56	ND	ND	ND
3-Methyl-1-butene	70	ND	ND	ND
i-Pentane	72	0.80	8.000E-04	8.000E-04
1-Pentene	70	ND	ND	ND
2-Methyl-1-butene	70	ND	ND	ND
n-Pentane	72	0.80	8.000E-04	8.000E-04
Isoprene	68	ND	ND	ND
trans-2-Pentene	70	ND	ND	ND
cis-2-Pentene	70	ND	ND	ND
2-Methyl-2-butene	70	ND	ND	ND
2,2-Dimethylbutane	86	0.10	1.000E-04	1.000E-04
Cyclopentene	68	ND	ND	ND
4-Methyl-1-pentene	84	ND	ND	ND
Cyclopentane	70	0.10	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.30	3.000E-04	3.000E-04
cis-4-Methyl-2-pentene	84	ND	ND	ND
2-Methylpentane	86	0.70	7.000E-04	7.000E-04
3-Methylpentane	86	0.50	5.000E-04	5.000E-04
2-Methyl-1-pentene	84	ND	ND	ND
1-Hexene	84	ND	ND	ND
n-Hexane	86	0.70	7.000E-04	7.000E-04
trans-2-Hexene	84	ND	ND	ND
2-Methyl-2-pentene	84	ND	ND	ND
cis-2-Hexene	84	ND	ND	ND
Methylcyclopentane	84	0.30	3.000E-04	3.000E-04
2,4-Dimethylpentane	100	0.70	7.000E-04	7.000E-04

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzene	78	1.00	1.000E-03	1.000E-03
Cyclohexane	84	0.20	2.000E-04	2.000E-04
2-Methylhexane	100	0.30	3.000E-04	3.000E-04
2,3-Dimethylpentane	100	1.50	1.500E-03	1.500E-03
3-Methylhexane	100	0.40	4.000E-04	4.000E-04
2,2,4-Trimethylpentane	114	2.90	2.900E-03	2.900E-03
n-Heptane	100	0.20	2.000E-04	2.000E-04
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND
Methylcyclohexane	98	0.20	2.000E-04	2.000E-04
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND
2,5-Dimethylhexane	114	0.20	2.000E-04	2.000E-04
2,4-Dimethylhexane	114	0.40	4.000E-04	4.000E-04
2,3,4-Trimethylpentane	114	0.70	7.000E-04	7.000E-04
Toluene	92	2.20	2.200E-03	2.200E-03
2,3-Dimethylhexane	114	0.30	3.000E-04	3.000E-04
2-Methylheptane	111	0.10	1.000E-04	1.000E-04
3-Ethylhexane	114	ND	ND	ND
2,2-Dimethylheptane	128	ND	ND	ND
2,2,4-Trimethylhexane	128	0.10	1.000E-04	1.000E-04
n-Octane	114	0.10	1.000E-04	1.000E-04
Ethylcyclohexane	112	ND	ND	ND
Ethylbenzene	160	0.20	2.000E-04	2.000E-04
m-Xylene & p-Xylene	106	1.20	1.200E-03	1.200E-03
Styrene	104	ND	ND	ND
o-Xylene	106	0.40	4.000E-04	4.000E-04
n-Nonane	128	ND	ND	ND
i-Propylbenzene	120	ND	ND	ND
n-Propylbenzene	120	0.10	1.000E-04	1.000E-04
p-Ethyltoluene	120	0.30	3.000E-04	3.000E-04
m-Ethyltoluene	120	0.10	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	0.20	2.000E-04	2.000E-04
o-Ethyltoluene	120	0.10	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.60	6.000E-04	6.000E-04
n-Decane	142	0.10	1.000E-04	1.000E-04
alpha-Pinene	136	ND	ND	ND
beta-Pinene	136	ND	ND	ND
delta 3-Carene	136	ND	ND	ND
d-Limonene	136	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
MTBE	88	0.40	4.000E-04	4.000E-04
ETBE	102.0	ND	ND	ND
Dichlorodifluoromethane	120.0	0.24	1.179E-03	1.179E-03
Methylchloride	50.0	ND	ND	ND
Dichlorotetrafluoroethane	171.0	ND	ND	ND
Chloroethene	63.0	ND	ND	ND
1,3-Butadiene	54.0	ND	ND	ND
Methylbromide	95.0	ND	ND	ND
Ethylchloride	64.5	ND	ND	ND
Trichloromonofluoromethane	137.0	0.43	2.434E-03	2.434E-03
Vinylidenechloride	97.0	ND	ND	ND
Methylenechloride	85.0	0.06	2.283E-04	2.283E-04
Allylchloride	76.5	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.11	8.665E-04	8.665E-04
1,1-Dichloroethane	99.0	ND	ND	ND
1,2-Dichloroethene	97.0	ND	ND	ND
Chloroform	119.0	ND	ND	ND
1,2-Dichloroethane	99.0	ND	ND	ND
Methylchloroform	133.0	0.06	3.490E-04	3.490E-04
Benzene	78.0	0.31	1.017E-03	1.017E-03
Carbontetrachloride	154.0	0.11	6.758E-04	6.758E-04
1,2-Dichloropropane	113.0	ND	ND	ND
Trichloroethylene	133.0	ND	ND	ND
cis 1,3-Dichloro-1-propene	111.0	ND	ND	ND
trans 1,3-Dichloro-1-propene	111.0	ND	ND	ND
1,1,2-Trichloroethane	133.0	ND	ND	ND
Toluene	92.0	0.58	2.238E-03	2.238E-03
1,2-Dibromoethane	188.0	ND	ND	ND
Perchloroethylene	166.0	ND	ND	ND
Chlorobenzene	113.0	ND	ND	ND
Ethylbenzene	160.0	ND	ND	ND
m&p-Xylene	106.0	0.25	1.121E-03	1.121E-03
Styrene	104.0	ND	ND	ND
1,1,2,2-Tetrachloroethane	168.0	ND	ND	ND
o-Xylene	106.0	0.09	4.068E-04	4.068E-04
p-Ethyltoluene	120.0	ND	ND	ND
1,3,5-Trimethylbenzene	120.0	ND	ND	ND
1,2,4-Trimethylbenzene	120.0	0.11	5.425E-04	5.425E-04

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzylchloride	127.0	ND	ND	ND
m-Dichlorobenzene	147.0	ND	ND	ND
p-Dichlorobenzene	147.0	ND	ND	ND
o-Dichlorobenzene	147.0	ND	ND	ND
1,2,4-Trichlorobenzene	181.0	ND	ND	ND
Hexachlorobutadiene	261.0	ND	ND	ND
Phenylacetylene	102.0	ND	ND	ND
Indane	118.0	ND	ND	ND
2,3-Dihydro-1-methyl-1H-indene	132.0	ND	ND	ND
2,3-Dihydro-4-methyl-1H-indene	132.0	ND	ND	ND
Naphthalene	128.0	0.08	4.069E-04	4.069E-04
2-Methylnaphthalene	142.0	ND	ND	ND
1-Methylnaphthalene	142.0	ND	ND	ND
Cyanogen	52	ND	ND	ND
Methylnitrite	61.0	ND	ND	ND
Acetonitrile	41.0	ND	ND	ND
Acrylonitrile	53.0	ND	ND	ND
Nitromethane	61.0	ND	ND	ND
Propanenitrile	55.0	ND	ND	ND
2-Methylpropanenitrile	69.0	ND	ND	ND
Pentanenitrile	83.0	ND	ND	ND
Hexanenitrile	97.0	ND	ND	ND
Benzonitrile	103.0	ND	ND	ND
2-Nitrophenol	139.0	ND	ND	ND
Acrolein	56.0	ND	ND	ND
Acetone	56.0	3.82	8.894E-03	8.894E-03
1-Hydroxy-2-propanone	74.0	ND	ND	ND
Furan	68.0	ND	ND	ND
2-Propanol	60.0	ND	ND	ND
2-Methylpropanal	74.0	ND	ND	ND
1-Propanol	60.0	ND	ND	ND
Methacrolein	70.0	ND	ND	ND
Methyl-vinyl Ketone	70.0	ND	ND	ND
MTBE	88.0	0.12	4.457E-04	4.457E-04
2,3-Butanedione	86.0	ND	ND	ND
Butanal	72.0	0.10	3.055E-04	3.055E-04
2-Butanone	72.0	0.31	9.320E-04	9.320E-04
2-Methyl-1,3-dioxolane	88.0	ND	ND	ND
2-Methylfuran	82.0	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Tetrahydrofuran	72.0	ND	ND	ND
trans-2-Butenal	70.0	ND	ND	ND
Acetic Acid	60.0	0.69	1.714E-03	1.714E-03
1-Butanol	74.0	ND	ND	ND
2-Pentanone	86.0	ND	ND	ND
Pentanal	86.0	0.39	1.392E-03	1.392E-03
1,4-Dioxane	88.0	ND	ND	ND
Methyl Methacrylate	100.0	ND	ND	ND
Cyclopentanone	84.0	ND	ND	ND
Hexanal	100.0	ND	ND	ND
2-Furaldehyde	96.0	ND	ND	ND
Cyclohexanone	98.0	ND	ND	ND
Heptanal	114.0	0.17	7.930E-04	7.930E-04
2-Butoxyethanol	118.0	ND	ND	ND
Benzaldehyde	106.0	0.24	1.041E-03	1.041E-03
6-Methyl-5-hepten-2-one	126.0	0.40	2.114E-03	2.114E-03
Octanal	128.0	0.19	1.006E-03	1.006E-03
Benzofuran	118.0	ND	ND	ND
2-Ethyl-1-hexanol	120.0	ND	ND	ND
Acetophonone	120.0	ND	ND	ND
Nonanal	142.0	0.17	1.026E-03	1.026E-03
Decanal	156.0	0.14	8.777E-04	8.777E-04
Carbonyl Sulfide	60.0	0.13	3.282E-04	3.282E-04
Carbon Disulfide	76.0	0.53	1.684E-03	1.684E-03
Thiophene	84.0	ND	ND	ND
Dimethyldisulfide	94.0	ND	ND	ND

TABLE E-4. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
TNMHC	-	0.1	1.000E-04	1.000E-04	1.000E-04
Ethane	30	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylene	28	0.1	1.000E-04	1.000E-04	1.000E-04
Acetylene	26	0.1	1.000E-04	1.000E-04	1.000E-04
Propane	44	0.1	1.000E-04	1.000E-04	1.000E-04
Propene	42	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1,3-Butadiene	54	0.1	1.000E-04	1.000E-04	1.000E-04
n-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylpropane	72	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
i-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
1-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
n-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
Isoprene	68	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentene	68	0.1	1.000E-04	1.000E-04	1.000E-04
4-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentane	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
cis-4-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
1-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
n-Hexane	86	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclopentane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
Benzene	78	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclohexane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04

TABLE E-4. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
n-Heptane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-1-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclohexane	98	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-2-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
2,5-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,3,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Toluene	92	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylheptane	111	0.1	1.000E-04	1.000E-04	1.000E-04
3-Ethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylheptane	128	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylhexane	128	0.1	1.000E-04	1.000E-04	1.000E-04
n-Octane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylcyclohexane	112	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylbenzene	160	0.1	1.000E-04	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
Styrene	104	0.1	1.000E-04	1.000E-04	1.000E-04
o-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
n-Nonane	128	0.1	1.000E-04	1.000E-04	1.000E-04
i-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
p-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
m-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
o-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Decane	142	0.1	1.000E-04	1.000E-04	1.000E-04
alpha-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
beta-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
delta 3-Carene	136	0.1	1.000E-04	1.000E-04	1.000E-04
d-Limonene	136	0.1	1.000E-04	1.000E-04	1.000E-04
MTBE	88	0.1	1.000E-04	1.000E-04	1.000E-04
ETBE	102.0	0.1	1.000E-04	1.000E-04	1.000E-04
Dichlorodifluoromethane	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Methylchloride	50.0	0.1	2.080E-04	2.080E-04	2.080E-04
Dichlorotetrafluoroethane	171.0	0.1	7.114E-04	7.114E-04	7.114E-04

TABLE E-4. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Chloroethene	63.0	0.1	2.621E-04	2.621E-04	2.621E-04
1,3-Butadiene	54.0	0.1	2.246E-04	2.246E-04	2.246E-04
Methylbromide	95.0	0.1	3.952E-04	3.952E-04	3.952E-04
Ethylchloride	64.5	0.1	2.683E-04	2.683E-04	2.683E-04
Trichloromonofluoromethane	137.0	0.1	5.699E-04	5.699E-04	5.699E-04
Vinylidenechloride	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Methylenechloride	85.0	0.1	3.536E-04	3.536E-04	3.536E-04
Allylchloride	76.5	0.1	3.182E-04	3.182E-04	3.182E-04
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
1,1-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
1,2-Dichloroethene	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Chloroform	119.0	0.1	4.950E-04	4.950E-04	4.950E-04
1,2-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
Methylchloroform	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Benzene	78.0	0.1	3.245E-04	3.245E-04	3.245E-04
Carbontetrachloride	154.0	0.1	6.406E-04	6.406E-04	6.406E-04
1,2-Dichloropropane	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Trichloroethylene	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
cis 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
trans 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
1,1,2-Trichloroethane	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Toluene	92.0	0.1	3.827E-04	3.827E-04	3.827E-04
1,2-Dibromoethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
Perchloroethylene	166.0	0.1	6.906E-04	6.906E-04	6.906E-04
Chlorobenzene	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Ethylbenzene	160.0	0.1	6.656E-04	6.656E-04	6.656E-04
m&p-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
Styrene	104.0	0.1	4.326E-04	4.326E-04	4.326E-04
1,1,2,2-Tetrachloroethane	168.0	0.1	6.989E-04	6.989E-04	6.989E-04
o-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
p-Ethyltoluene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,3,5-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,2,4-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Benzylchloride	127.0	0.1	5.283E-04	5.283E-04	5.283E-04
m-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
p-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
o-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
1,2,4-Trichlorobenzene	181.0	0.1	7.530E-04	7.530E-04	7.530E-04
Hexachlorobutadiene	261.0	0.1	1.086E-03	1.086E-03	1.086E-03
Phenylacetylene	102.0	0.1	4.243E-04	4.243E-04	4.243E-04
Indane	118.0	0.1	4.909E-04	4.909E-04	4.909E-04

TABLE E-4. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dihydro-1-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
2,3-Dihydro-4-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
Naphthalene	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
2-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
1-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Cyanogen	52	0.1	2.163E-04	2.163E-04	2.163E-04
Methylnitrite	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Acetonitrile	41.0	0.1	1.706E-04	1.706E-04	1.706E-04
Acrylonitrile	53.0	0.1	2.205E-04	2.205E-04	2.205E-04
Nitromethane	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Propanenitrile	55.0	0.1	2.288E-04	2.288E-04	2.288E-04
2-Methylpropanenitrile	69.0	0.1	2.870E-04	2.870E-04	2.870E-04
Pentanenitrile	83.0	0.1	3.453E-04	3.453E-04	3.453E-04
Hexanenitrile	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Benzonitrile	103.0	0.1	4.285E-04	4.285E-04	4.285E-04
2-Nitrophenol	139.0	0.1	5.782E-04	5.782E-04	5.782E-04
Acrolein	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
Acetone	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
1-Hydroxy-2-propanone	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
Furan	68.0	0.1	2.829E-04	2.829E-04	2.829E-04
2-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
2-Methylpropanal	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
1-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Methacrolein	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Methyl-vinyl Ketone	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
MTBE	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2,3-Butanedione	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Butanal	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Butanone	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Methyl-1,3-dioxolane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2-Methylfuran	82.0	0.1	3.411E-04	3.411E-04	3.411E-04
Tetrahydrofuran	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
trans-2-Butenal	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Acetic Acid	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
1-Butanol	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
2-Pentanone	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Pentanal	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
1,4-Dioxane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
Methyl Methacrylate	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
Cyclopentanone	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Hexanal	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
2-Furaldehyde	96.0	0.1	3.994E-04	3.994E-04	3.994E-04

TABLE E-4. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Cyclohexanone	98.0	0.1	4.077E-04	4.077E-04	4.077E-04
Heptanal	114.0	0.1	4.742E-04	4.742E-04	4.742E-04
2-Butoxyethanol	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
Benzaldehyde	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
6-Methyl-5-hepten-2-one	126.0	0.1	5.242E-04	5.242E-04	5.242E-04
Octanal	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
Benzofuran	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
2-Ethyl-1-hexanol	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Acetophonone	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Nonanal	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Decanal	156.0	0.1	6.490E-04	6.490E-04	6.490E-04
Carbonyl Sulfide	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Carbon Disulfide	76.0	0.1	3.162E-04	3.162E-04	3.162E-04
Thiophene	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Dimethyldisulfide	94.0	0.1	3.910E-04	3.910E-04	3.910E-04

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GREEN PARACHUTE SIGNAL FLARE

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TABLE E-1. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
TNMHC	138.60	1.386E-01	137.30	1.373E-01	1.380E-01
Ethane	5.00	5.000E-03	5.00	5.000E-03	5.000E-03
Ethylene	26.40	2.640E-02	25.70	2.570E-02	2.605E-02
Acetylene	13.70	1.370E-02	14.10	1.410E-02	1.390E-02
Propane	1.70	1.700E-03	2.10	2.100E-03	1.900E-03
Propene	7.50	7.500E-03	7.80	7.800E-03	7.650E-03
i-Butane	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
i-Butene	0.80	8.000E-04	1.10	1.100E-03	9.500E-04
1-Butene	2.50	2.500E-03	2.20	2.200E-03	2.350E-03
1,3-Butadiene	1.80	1.800E-03	1.70	1.700E-03	1.750E-03
n-Butane	1.20	1.200E-03	1.30	1.300E-03	1.250E-03
trans-2-Butene	1.10	1.100E-03	1.10	1.100E-03	1.100E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.30	3.000E-04	0.30	3.000E-04	3.000E-04
3-Methyl-1-butene	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
i-Pentane	1.50	1.500E-03	1.50	1.500E-03	1.500E-03
1-Pentene	ND	ND	0.40	4.000E-04	4.000E-04
2-Methyl-1-butene	0.10	1.000E-04	0.20	2.000E-04	1.500E-04
n-Pentane	1.50	1.500E-03	1.80	1.800E-03	1.650E-03
Isoprene	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
trans-2-Pentene	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
cis-2-Pentene	ND	ND	0.20	2.000E-04	2.000E-04
2-Methyl-2-butene	ND	ND	0.10	1.000E-04	1.000E-04
2,2-Dimethylbutane	0.10	1.000E-04	0.30	3.000E-04	2.000E-04
Cyclopentene	ND	ND	ND	ND	ND
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	ND	ND	ND	ND	ND
2,3-Dimethylbutane	0.60	6.000E-04	0.70	7.000E-04	6.500E-04
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	1.40	1.400E-03	1.40	1.400E-03	1.400E-03
3-Methylpentane	0.30	3.000E-04	0.30	3.000E-04	3.000E-04
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	0.40	4.000E-04	0.30	3.000E-04	3.500E-04
n-Hexane	1.50	1.500E-03	1.50	1.500E-03	1.500E-03
trans-2-Hexene	ND	ND	0.10	1.000E-04	1.000E-04
2-Methyl-2-pentene	ND	ND	0.10	1.000E-04	1.000E-04
cis-2-Hexene	ND	ND	0.10	1.000E-04	1.000E-04
Methylcyclopentane	0.50	5.000E-04	0.60	6.000E-04	5.500E-04
2,4-Dimethylpentane	1.10	1.100E-03	1.10	1.100E-03	1.100E-03
Benzene	8.00	8.000E-03	8.10	8.100E-03	8.050E-03

TABLE E-1. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
Cyclohexane	0.50	5.000E-04	0.50	5.000E-04	5.000E-04
2-Methylhexane	0.80	8.000E-04	0.70	7.000E-04	7.500E-04
2,3-Dimethylpentane	2.20	2.200E-03	2.10	2.100E-03	2.150E-03
3-Methylhexane	0.80	8.000E-04	0.70	7.000E-04	7.500E-04
2,2,4-Trimethylpentane	4.10	4.100E-03	4.10	4.100E-03	4.100E-03
n-Heptane	0.70	7.000E-04	0.70	7.000E-04	7.000E-04
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	0.50	5.000E-04	0.40	4.000E-04	4.500E-04
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	0.30	3.000E-04	0.40	4.000E-04	3.500E-04
2,4-Dimethylhexane	0.50	5.000E-04	0.50	5.000E-04	5.000E-04
2,3,4-Trimethylpentane	1.00	1.000E-03	1.00	1.000E-03	1.000E-03
Toluene	5.70	5.700E-03	5.70	5.700E-03	5.700E-03
2,3-Dimethylhexane	0.30	3.000E-04	0.40	4.000E-04	3.500E-04
2-Methylheptane	0.50	5.000E-04	0.40	4.000E-04	4.500E-04
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
n-Octane	0.40	4.000E-04	0.20	2.000E-04	3.000E-04
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	0.70	7.000E-04	0.60	6.000E-04	6.500E-04
m-Xylene & p-Xylene	3.10	3.100E-03	2.60	2.600E-03	2.850E-03
Styrene	0.50	5.000E-04	0.40	4.000E-04	4.500E-04
o-Xylene	1.10	1.100E-03	1.00	1.000E-03	1.050E-03
n-Nonane	0.20	2.000E-04	0.10	1.000E-04	1.500E-04
i-Propylbenzene	ND	ND	ND	ND	ND
n-Propylbenzene	0.30	3.000E-04	0.20	2.000E-04	2.500E-04
p-Ethyltoluene	1.00	1.000E-03	1.00	1.000E-03	1.000E-03
m-Ethyltoluene	0.40	4.000E-04	0.30	3.000E-04	3.500E-04
1,3,5-Trimethylbenzene	0.50	5.000E-04	0.40	4.000E-04	4.500E-04
o-Ethyltoluene	0.40	4.000E-04	0.30	3.000E-04	3.500E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.30	1.300E-03	1.00	1.000E-03	1.150E-03
n-Decane	0.30	3.000E-04	0.10	1.000E-04	2.000E-04
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	0.70	7.000E-04	1.10	1.100E-03	9.000E-04
ETBE	ND	ND	ND	ND	ND

TABLE E-2. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
Dichlorodifluoromethane	0.266	-	0.328	-	2.968E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	0.815	-	0.770	-	7.924E-01
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.451	-	0.453	-	4.520E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	16.336	-	15.036	-	1.569E+01
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.115	-	0.111	-	1.127E-01
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.071	-	0.070	-	7.043E-02
Benzene	2.508	-	2.539	-	2.523E+00
Carbontetrachloride	0.131	-	0.130	-	1.305E-01
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	1.515	-	1.515	-	1.515E+00
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	0.161	-	0.138	-	1.499E-01
m&p-Xylene	0.680	-	0.616	-	6.483E-01
Styrene	ND	-	ND	-	ND
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	0.254	-	0.231	-	2.422E-01
p-Ethyltoluene	0.111	-	0.106	-	1.084E-01
1,3,5-Trimethylbenzene	0.069	-	0.069	-	6.906E-02
1,2,4-Trimethylbenzene	0.225	-	0.214	-	2.197E-01
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	ND	-	ND	-	ND
Indane	ND	-	ND	-	ND
2,3-Dihydro-1-methyl-1H-indene	ND	-	ND	-	ND
2,3-Dihydro-4-methyl-1H-indene	ND	-	ND	-	ND
Naphthalene	0.229	-	0.250	-	2.397E-01
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	0.163	-	0.148	-	1.556E-01
Acetonitrile	0.351	-	0.326	-	3.386E-01
Acrylonitrile	0.239	-	0.263	-	2.509E-01
Nitromethane	0.398	-	0.649	-	5.235E-01
Propanenitrile	ND	-	ND	-	ND
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	0.106	-	0.159	-	1.324E-01
2-Nitrophenol	ND	-	ND	-	ND
Acrolein	0.202	-	0.209	-	2.057E-01
Acetone	4.701	-	4.432	-	4.567E+00
1-Hydroxy-2-propanone	ND	-	ND	-	ND
Furan	0.107	-	0.121	-	1.142E-01
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	ND	-	ND	-	ND
Methyl-vinyl Ketone	ND	-	ND	-	ND
MTBE	0.281	-	0.269	-	2.752E-01
2,3-Butanedione	ND	-	ND	-	ND
Butanal	0.147	-	0.158	-	1.528E-01
2-Butanone	0.676	-	0.594	-	6.351E-01
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	0.061	-	0.061	-	6.092E-02
Acetic Acid	0.897	-	0.861	-	8.789E-01
1-Butanol	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
2-Pentanone	0.179	-	0.161	-	1.699E-01
Pentanal	0.362	-	0.436	-	3.989E-01
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	0.172	-	0.076	-	1.241E-01
Hexanal	0.160	-	0.218	-	1.893E-01
2-Furaldehyde	0.076	-	0.117	-	9.663E-02
Cyclohexanone	ND	-	ND	-	ND
Heptanal	0.151	-	0.130	-	1.406E-01
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	0.348	-	0.401	-	3.744E-01
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	0.311	-	0.258	-	2.846E-01
Benzofuran	ND	-	ND	-	ND
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	0.060	-	0.066	-	6.285E-02
Nonanal	0.429	-	0.395	-	4.121E-01
Decanal	0.411	-	0.408	-	4.099E-01
Carbonyl Sulfide	0.109	-	0.131	-	1.197E-01
Carbon Disulfide	3.251	-	2.974	-	3.112E+00
Thiophene	0.097	-	0.101	-	9.894E-02
Dimethyldisulfide	ND	-	ND	-	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
TNMHC	-	60.70	6.070E-02	6.070E-02
Ethane	30	1.90	1.900E-03	1.900E-03
Ethylene	28	0.80	8.000E-04	8.000E-04
Acetylene	26	2.80	2.800E-03	2.800E-03
Propane	44	1.40	1.400E-03	1.400E-03
Propene	42	0.70	7.000E-04	7.000E-04
i-Butane	58	0.40	4.000E-04	4.000E-04
i-Butene	56	0.40	4.000E-04	4.000E-04
1-Butene	56	0.20	2.000E-04	2.000E-04
1,3-Butadiene	54	0.20	2.000E-04	2.000E-04
n-Butane	58	1.10	1.100E-03	1.100E-03
trans-2-Butene	56	0.30	3.000E-04	3.000E-04
2,2-Dimethylpropane	72	ND	ND	ND
cis-2-Butene	56	0.10	1.000E-04	1.000E-04
3-Methyl-1-butene	70	ND	ND	ND
i-Pentane	72	1.60	1.600E-03	1.600E-03
1-Pentene	70	ND	ND	ND
2-Methyl-1-butene	70	ND	ND	ND
n-Pentane	72	1.60	1.600E-03	1.600E-03
Isoprene	68	0.20	2.000E-04	2.000E-04
trans-2-Pentene	70	ND	ND	ND
cis-2-Pentene	70	ND	ND	ND
2-Methyl-2-butene	70	ND	ND	ND
2,2-Dimethylbutane	86	0.60	6.000E-04	6.000E-04
Cyclopentene	68	ND	ND	ND
4-Methyl-1-pentene	84	ND	ND	ND
Cyclopentane	70	0.10	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.50	5.000E-04	5.000E-04
cis-4-Methyl-2-pentene	84	ND	ND	ND
2-Methylpentane	86	1.90	1.900E-03	1.900E-03
3-Methylpentane	86	1.00	1.000E-03	1.000E-03
2-Methyl-1-pentene	84	ND	ND	ND
1-Hexene	84	ND	ND	ND
n-Hexane	86	1.60	1.600E-03	1.600E-03
trans-2-Hexene	84	ND	ND	ND
2-Methyl-2-pentene	84	ND	ND	ND
cis-2-Hexene	84	ND	ND	ND
Methylcyclopentane	84	0.60	6.000E-04	6.000E-04
2,4-Dimethylpentane	100	1.00	1.000E-03	1.000E-03

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzene	78	2.30	2.300E-03	2.300E-03
Cyclohexane	84	0.60	6.000E-04	6.000E-04
2-Methylhexane	100	0.70	7.000E-04	7.000E-04
2,3-Dimethylpentane	100	2.10	2.100E-03	2.100E-03
3-Methylhexane	100	1.00	1.000E-03	1.000E-03
2,2,4-Trimethylpentane	114	4.20	4.200E-03	4.200E-03
n-Heptane	100	0.70	7.000E-04	7.000E-04
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND
Methylcyclohexane	98	0.50	5.000E-04	5.000E-04
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND
2,5-Dimethylhexane	114	0.40	4.000E-04	4.000E-04
2,4-Dimethylhexane	114	0.50	5.000E-04	5.000E-04
2,3,4-Trimethylpentane	114	1.00	1.000E-03	1.000E-03
Toluene	92	5.00	5.000E-03	5.000E-03
2,3-Dimethylhexane	114	0.40	4.000E-04	4.000E-04
2-Methylheptane	111	0.20	2.000E-04	2.000E-04
3-Ethylhexane	114	ND	ND	ND
2,2-Dimethylheptane	128	ND	ND	ND
2,2,4-Trimethylhexane	128	0.20	2.000E-04	2.000E-04
n-Octane	114	0.20	2.000E-04	2.000E-04
Ethylcyclohexane	112	ND	ND	ND
Ethylbenzene	160	0.50	5.000E-04	5.000E-04
m-Xylene & p-Xylene	106	2.50	2.500E-03	2.500E-03
Styrene	104	0.50	5.000E-04	5.000E-04
o-Xylene	106	0.90	9.000E-04	9.000E-04
n-Nonane	128	ND	ND	ND
i-Propylbenzene	120	ND	ND	ND
n-Propylbenzene	120	0.20	2.000E-04	2.000E-04
p-Ethyltoluene	120	0.60	6.000E-04	6.000E-04
m-Ethyltoluene	120	0.20	2.000E-04	2.000E-04
1,3,5-Trimethylbenzene	120	0.30	3.000E-04	3.000E-04
o-Ethyltoluene	120	0.20	2.000E-04	2.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.80	8.000E-04	8.000E-04
n-Decane	142	0.10	1.000E-04	1.000E-04
alpha-Pinene	136	ND	ND	ND
beta-Pinene	136	ND	ND	ND
delta 3-Carene	136	ND	ND	ND
d-Limonene	136	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
MTBE	88	0.70	7.000E-04	7.000E-04
ETBE	102.0	ND	ND	ND
Dichlorodifluoromethane	120.0	0.23	1.130E-03	1.130E-03
Methylchloride	50.0	ND	ND	ND
Dichlorotetrafluoroethane	171.0	ND	ND	ND
Chloroethene	63.0	ND	ND	ND
1,3-Butadiene	54.0	0.09	2.034E-04	2.034E-04
Methylbromide	95.0	ND	ND	ND
Ethylchloride	64.5	ND	ND	ND
Trichloromonofluoromethane	137.0	0.44	2.533E-03	2.533E-03
Vinylidenechloride	97.0	ND	ND	ND
Methylenechloride	85.0	0.23	8.068E-04	8.068E-04
Allylchloride	76.5	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.11	8.258E-04	8.258E-04
1,1-Dichloroethane	99.0	ND	ND	ND
1,2-Dichloroethene	97.0	ND	ND	ND
Chloroform	119.0	ND	ND	ND
1,2-Dichloroethane	99.0	ND	ND	ND
Methylchloroform	133.0	0.06	3.482E-04	3.482E-04
Benzene	78.0	0.72	2.339E-03	2.339E-03
Carbontetrachloride	154.0	0.11	7.072E-04	7.072E-04
1,2-Dichloropropane	113.0	ND	ND	ND
Trichloroethylene	133.0	ND	ND	ND
cis 1,3-Dichloro-1-propene	111.0	ND	ND	ND
trans 1,3-Dichloro-1-propene	111.0	ND	ND	ND
1,1,2-Trichloroethane	133.0	ND	ND	ND
Toluene	92.0	1.33	5.086E-03	5.086E-03
1,2-Dibromoethane	188.0	ND	ND	ND
Perchloroethylene	166.0	ND	ND	ND
Chlorobenzene	113.0	ND	ND	ND
Ethylbenzene	160.0	0.12	7.676E-04	7.676E-04
m&p-Xylene	106.0	0.54	2.390E-03	2.390E-03
Styrene	104.0	ND	ND	ND
1,1,2,2-Tetrachloroethane	168.0	ND	ND	ND
o-Xylene	106.0	0.21	9.154E-04	9.154E-04
p-Ethyltoluene	120.0	0.09	4.433E-04	4.433E-04
1,3,5-Trimethylbenzene	120.0	0.05	2.679E-04	2.679E-04
1,2,4-Trimethylbenzene	120.0	0.17	8.531E-04	8.531E-04

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzylchloride	127.0	ND	ND	ND
m-Dichlorobenzene	147.0	ND	ND	ND
p-Dichlorobenzene	147.0	ND	ND	ND
o-Dichlorobenzene	147.0	ND	ND	ND
1,2,4-Trichlorobenzene	181.0	ND	ND	ND
Hexachlorobutadiene	261.0	ND	ND	ND
Phenylacetylene	102.0	ND	ND	ND
Indane	118.0	ND	ND	ND
2,3-Dihydro-1-methyl-1H-indene	132.0	ND	ND	ND
2,3-Dihydro-4-methyl-1H-indene	132.0	ND	ND	ND
Naphthalene	128.0	0.08	4.078E-04	4.078E-04
2-Methylnaphthalene	142.0	ND	ND	ND
1-Methylnaphthalene	142.0	ND	ND	ND
Cyanogen	52	ND	ND	ND
Methylnitrite	61.0	ND	ND	ND
Acetonitrile	41.0	ND	ND	ND
Acrylonitrile	53.0	ND	ND	ND
Nitromethane	61.0	ND	ND	ND
Propanenitrile	55.0	ND	ND	ND
2-Methylpropanenitrile	69.0	ND	ND	ND
Pentanenitrile	83.0	ND	ND	ND
Hexanenitrile	97.0	ND	ND	ND
Benzonitrile	103.0	ND	ND	ND
2-Nitrophenol	139.0	ND	ND	ND
Acrolein	56.0	ND	ND	ND
Acetone	56.0	3.22	7.510E-03	7.510E-03
1-Hydroxy-2-propanone	74.0	ND	ND	ND
Furan	68.0	ND	ND	ND
2-Propanol	60.0	ND	ND	ND
2-Methylpropanal	74.0	ND	ND	ND
1-Propanol	60.0	ND	ND	ND
Methacrolein	70.0	ND	ND	ND
Methyl-vinyl Ketone	70.0	ND	ND	ND
MTBE	88.0	0.25	9.140E-04	9.140E-04
2,3-Butanedione	86.0	ND	ND	ND
Butanal	72.0	0.13	3.905E-04	3.905E-04
2-Butanone	72.0	0.32	9.694E-04	9.694E-04
2-Methyl-1,3-dioxolane	88.0	ND	ND	ND
2-Methylfuran	82.0	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Tetrahydrofuran	72.0	ND	ND	ND
trans-2-Butenal	70.0	ND	ND	ND
Acetic Acid	60.0	0.45	1.131E-03	1.131E-03
1-Butanol	74.0	ND	ND	ND
2-Pentanone	86.0	ND	ND	ND
Pentanal	86.0	0.33	1.187E-03	1.187E-03
1,4-Dioxane	88.0	ND	ND	ND
Methyl Methacrylate	100.0	ND	ND	ND
Cyclopentanone	84.0	ND	ND	ND
Hexanal	100.0	0.17	7.147E-04	7.147E-04
2-Furaldehyde	96.0	ND	ND	ND
Cyclohexanone	98.0	ND	ND	ND
Heptanal	114.0	0.12	5.849E-04	5.849E-04
2-Butoxyethanol	118.0	ND	ND	ND
Benzaldehyde	106.0	0.17	7.646E-04	7.646E-04
6-Methyl-5-hepten-2-one	126.0	0.18	9.693E-04	9.693E-04
Octanal	128.0	0.17	9.075E-04	9.075E-04
Benzofuran	118.0	ND	ND	ND
2-Ethyl-1-hexanol	120.0	ND	ND	ND
Acetophonone	120.0	ND	ND	ND
Nonanal	142.0	0.23	1.344E-03	1.344E-03
Decanal	156.0	0.16	1.007E-03	1.007E-03
Carbonyl Sulfide	60.0	0.07	1.869E-04	1.869E-04
Carbon Disulfide	76.0	0.17	5.277E-04	5.277E-04
Thiophene	84.0	ND	ND	ND
Dimethyldisulfide	94.0	ND	ND	ND

TABLE E-4. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
TNMHC	-	0.1	1.000E-04	1.000E-04	1.000E-04
Ethane	30	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylene	28	0.1	1.000E-04	1.000E-04	1.000E-04
Acetylene	26	0.1	1.000E-04	1.000E-04	1.000E-04
Propane	44	0.1	1.000E-04	1.000E-04	1.000E-04
Propene	42	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1,3-Butadiene	54	0.1	1.000E-04	1.000E-04	1.000E-04
n-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylpropane	72	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
i-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
1-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
n-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
Isoprene	68	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentene	68	0.1	1.000E-04	1.000E-04	1.000E-04
4-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentane	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
cis-4-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
1-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
n-Hexane	86	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclopentane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
Benzene	78	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclohexane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04

TABLE E-4. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
n-Heptane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-1-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclohexane	98	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-2-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
2,5-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,3,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Toluene	92	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylheptane	111	0.1	1.000E-04	1.000E-04	1.000E-04
3-Ethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylheptane	128	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylhexane	128	0.1	1.000E-04	1.000E-04	1.000E-04
n-Octane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylcyclohexane	112	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylbenzene	160	0.1	1.000E-04	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
Styrene	104	0.1	1.000E-04	1.000E-04	1.000E-04
o-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
n-Nonane	128	0.1	1.000E-04	1.000E-04	1.000E-04
i-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
p-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
m-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
o-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Decane	142	0.1	1.000E-04	1.000E-04	1.000E-04
alpha-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
beta-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
delta 3-Carene	136	0.1	1.000E-04	1.000E-04	1.000E-04
d-Limonene	136	0.1	1.000E-04	1.000E-04	1.000E-04
MTBE	88	0.1	1.000E-04	1.000E-04	1.000E-04
ETBE	102.0	0.1	1.000E-04	1.000E-04	1.000E-04
Dichlorodifluoromethane	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Methylchloride	50.0	0.1	2.080E-04	2.080E-04	2.080E-04
Dichlorotetrafluoroethane	171.0	0.1	7.114E-04	7.114E-04	7.114E-04

TABLE E-4. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Chloroethene	63.0	0.1	2.621E-04	2.621E-04	2.621E-04
1,3-Butadiene	54.0	0.1	2.246E-04	2.246E-04	2.246E-04
Methylbromide	95.0	0.1	3.952E-04	3.952E-04	3.952E-04
Ethylchloride	64.5	0.1	2.683E-04	2.683E-04	2.683E-04
Trichloromonofluoromethane	137.0	0.1	5.699E-04	5.699E-04	5.699E-04
Vinylidenechloride	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Methylenechloride	85.0	0.1	3.536E-04	3.536E-04	3.536E-04
Allylchloride	76.5	0.1	3.182E-04	3.182E-04	3.182E-04
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
1,1-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
1,2-Dichloroethene	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Chloroform	119.0	0.1	4.950E-04	4.950E-04	4.950E-04
1,2-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
Methylchloroform	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Benzene	78.0	0.1	3.245E-04	3.245E-04	3.245E-04
Carbontetrachloride	154.0	0.1	6.406E-04	6.406E-04	6.406E-04
1,2-Dichloropropane	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Trichloroethylene	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
cis 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
trans 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
1,1,2-Trichloroethane	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Toluene	92.0	0.1	3.827E-04	3.827E-04	3.827E-04
1,2-Dibromoethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
Perchloroethylene	166.0	0.1	6.906E-04	6.906E-04	6.906E-04
Chlorobenzene	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Ethylbenzene	160.0	0.1	6.656E-04	6.656E-04	6.656E-04
m&p-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
Styrene	104.0	0.1	4.326E-04	4.326E-04	4.326E-04
1,1,2,2-Tetrachloroethane	168.0	0.1	6.989E-04	6.989E-04	6.989E-04
o-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
p-Ethyltoluene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,3,5-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,2,4-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Benzylchloride	127.0	0.1	5.283E-04	5.283E-04	5.283E-04
m-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
p-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
o-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
1,2,4-Trichlorobenzene	181.0	0.1	7.530E-04	7.530E-04	7.530E-04
Hexachlorobutadiene	261.0	0.1	1.086E-03	1.086E-03	1.086E-03
Phenylacetylene	102.0	0.1	4.243E-04	4.243E-04	4.243E-04
Indane	118.0	0.1	4.909E-04	4.909E-04	4.909E-04

TABLE E-4. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dihydro-1-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
2,3-Dihydro-4-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
Naphthalene	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
2-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
1-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Cyanogen	52	0.1	2.163E-04	2.163E-04	2.163E-04
Methylnitrite	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Acetonitrile	41.0	0.1	1.706E-04	1.706E-04	1.706E-04
Acrylonitrile	53.0	0.1	2.205E-04	2.205E-04	2.205E-04
Nitromethane	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Propanenitrile	55.0	0.1	2.288E-04	2.288E-04	2.288E-04
2-Methylpropanenitrile	69.0	0.1	2.870E-04	2.870E-04	2.870E-04
Pentanenitrile	83.0	0.1	3.453E-04	3.453E-04	3.453E-04
Hexanenitrile	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Benzonitrile	103.0	0.1	4.285E-04	4.285E-04	4.285E-04
2-Nitrophenol	139.0	0.1	5.782E-04	5.782E-04	5.782E-04
Acrolein	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
Acetone	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
1-Hydroxy-2-propanone	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
Furan	68.0	0.1	2.829E-04	2.829E-04	2.829E-04
2-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
2-Methylpropanal	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
1-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Methacrolein	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Methyl-vinyl Ketone	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
MTBE	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2,3-Butanedione	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Butanal	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Butanone	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Methyl-1,3-dioxolane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2-Methylfuran	82.0	0.1	3.411E-04	3.411E-04	3.411E-04
Tetrahydrofuran	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
trans-2-Butenal	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Acetic Acid	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
1-Butanol	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
2-Pentanone	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Pentanal	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
1,4-Dioxane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
Methyl Methacrylate	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
Cyclopentanone	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Hexanal	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
2-Furaldehyde	96.0	0.1	3.994E-04	3.994E-04	3.994E-04

TABLE E-4. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Cyclohexanone	98.0	0.1	4.077E-04	4.077E-04	4.077E-04
Heptanal	114.0	0.1	4.742E-04	4.742E-04	4.742E-04
2-Butoxyethanol	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
Benzaldehyde	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
6-Methyl-5-hepten-2-one	126.0	0.1	5.242E-04	5.242E-04	5.242E-04
Octanal	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
Benzofuran	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
2-Ethyl-1-hexanol	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Acetophonone	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Nonanal	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Decanal	156.0	0.1	6.490E-04	6.490E-04	6.490E-04
Carbonyl Sulfide	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Carbon Disulfide	76.0	0.1	3.162E-04	3.162E-04	3.162E-04
Thiophene	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Dimethyldisulfide	94.0	0.1	3.910E-04	3.910E-04	3.910E-04

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WHITE PARACHUTE SIGNAL FLARE

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TABLE E-1. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
TNMHC	138.30	1.383E-01	130.40	1.304E-01	1.344E-01
Ethane	4.00	4.000E-03	4.00	4.000E-03	4.000E-03
Ethylene	11.90	1.190E-02	12.00	1.200E-02	1.195E-02
Acetylene	7.20	7.200E-03	7.40	7.400E-03	7.300E-03
Propane	1.60	1.600E-03	1.90	1.900E-03	1.750E-03
Propene	4.30	4.300E-03	4.70	4.700E-03	4.500E-03
i-Butane	3.80	3.800E-03	3.80	3.800E-03	3.800E-03
i-Butene	0.80	8.000E-04	0.90	9.000E-04	8.500E-04
1-Butene	0.70	7.000E-04	0.80	8.000E-04	7.500E-04
1,3-Butadiene	0.80	8.000E-04	0.70	7.000E-04	7.500E-04
n-Butane	1.70	1.700E-03	1.60	1.600E-03	1.650E-03
trans-2-Butene	1.50	1.500E-03	0.80	8.000E-04	1.150E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
3-Methyl-1-butene	0.10	1.000E-04	0.10	1.000E-04	1.000E-04
i-Pentane	3.50	3.500E-03	3.50	3.500E-03	3.500E-03
1-Pentene	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
2-Methyl-1-butene	0.20	2.000E-04	0.30	3.000E-04	2.500E-04
n-Pentane	2.90	2.900E-03	2.80	2.800E-03	2.850E-03
Isoprene	ND	ND	ND	ND	ND
trans-2-Pentene	ND	ND	0.20	2.000E-04	2.000E-04
cis-2-Pentene	ND	ND	ND	ND	ND
2-Methyl-2-butene	ND	ND	ND	ND	ND
2,2-Dimethylbutane	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
Cyclopentene	ND	ND	ND	ND	ND
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
2,3-Dimethylbutane	1.10	1.100E-03	1.00	1.000E-03	1.050E-03
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	2.80	2.800E-03	2.80	2.800E-03	2.800E-03
3-Methylpentane	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	0.20	2.000E-04	0.40	4.000E-04	3.000E-04
n-Hexane	2.80	2.800E-03	2.80	2.800E-03	2.800E-03
trans-2-Hexene	ND	ND	ND	ND	ND
2-Methyl-2-pentene	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND
Methylcyclopentane	1.30	1.300E-03	1.30	1.300E-03	1.300E-03
2,4-Dimethylpentane	2.00	2.000E-03	2.00	2.000E-03	2.000E-03
Benzene	7.50	7.500E-03	7.50	7.500E-03	7.500E-03

TABLE E-1. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
Cyclohexane	0.80	8.000E-04	0.80	8.000E-04	8.000E-04
2-Methylhexane	1.20	1.200E-03	1.10	1.100E-03	1.150E-03
2,3-Dimethylpentane	3.80	3.800E-03	3.80	3.800E-03	3.800E-03
3-Methylhexane	1.30	1.300E-03	1.30	1.300E-03	1.300E-03
2,2,4-Trimethylpentane	7.40	7.400E-03	7.30	7.300E-03	7.350E-03
n-Heptane	1.10	1.100E-03	1.10	1.100E-03	1.100E-03
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	0.70	7.000E-04	0.70	7.000E-04	7.000E-04
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	0.50	5.000E-04	0.50	5.000E-04	5.000E-04
2,4-Dimethylhexane	0.80	8.000E-04	0.80	8.000E-04	8.000E-04
2,3,4-Trimethylpentane	1.60	1.600E-03	1.60	1.600E-03	1.600E-03
Toluene	8.50	8.500E-03	8.60	8.600E-03	8.550E-03
2,3-Dimethylhexane	0.50	5.000E-04	0.70	7.000E-04	6.000E-04
2-Methylheptane	0.30	3.000E-04	0.40	4.000E-04	3.500E-04
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
n-Octane	0.30	3.000E-04	0.30	3.000E-04	3.000E-04
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	1.10	1.100E-03	1.00	1.000E-03	1.050E-03
m-Xylene & p-Xylene	4.10	4.100E-03	3.80	3.800E-03	3.950E-03
Styrene	0.70	7.000E-04	0.60	6.000E-04	6.500E-04
o-Xylene	1.40	1.400E-03	1.30	1.300E-03	1.350E-03
n-Nonane	0.40	4.000E-04	0.20	2.000E-04	3.000E-04
i-Propylbenzene	ND	ND	ND	ND	ND
n-Propylbenzene	0.40	4.000E-04	0.20	2.000E-04	3.000E-04
p-Ethyltoluene	0.90	9.000E-04	0.80	8.000E-04	8.500E-04
m-Ethyltoluene	0.50	5.000E-04	0.40	4.000E-04	4.500E-04
1,3,5-Trimethylbenzene	0.50	5.000E-04	0.40	4.000E-04	4.500E-04
o-Ethyltoluene	0.50	5.000E-04	0.30	3.000E-04	4.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.30	1.300E-03	1.10	1.100E-03	1.200E-03
n-Decane	0.40	4.000E-04	0.10	1.000E-04	2.500E-04
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	1.80	1.800E-03	1.80	1.800E-03	1.800E-03
ETBE	ND	ND	ND	ND	ND

TABLE E-2. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount DetecteJ, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
Dichlorodifluoromethane	0.361	-	0.366	-	3.635E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	0.362	-	0.317	-	3.396E-01
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.451	-	0.454	-	4.527E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	0.939	-	0.948	-	9.435E-01
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.111	-	0.114	-	1.124E-01
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.071	-	0.069	-	7.024E-02
Benzene	2.351	-	2.351	-	2.351E+00
Carbontetrachloride	0.127	-	0.133	-	1.301E-01
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	2.259	-	2.286	-	2.272E+00
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	0.254	-	0.231	-	2.422E-01
m&p-Xylene	0.863	-	0.773	-	8.179E-01
Styrene	ND	-	0.051	-	5.072E-02
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	0.323	-	0.300	-	3.114E-01
p-Ethyltoluene	0.113	-	0.110	-	1.116E-01
1,3,5-Trimethylbenzene	0.062	-	0.053	-	5.749E-02
1,2,4-Trimethylbenzene	0.194	-	0.185	-	1.896E-01
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND
o-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	ND	-	ND	-	ND
Indane	ND	-	ND	-	ND
2,3-Dihydro-1-methyl-1H-indene	ND	-	ND	-	ND
2,3-Dihydro-4-methyl-1H-indene	ND	-	ND	-	ND
Naphthalene	0.185	-	0.155	-	1.702E-01
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	0.163	-	0.175	-	1.687E-01
Acetonitrile	0.451	-	0.434	-	4.425E-01
Acrylonitrile	0.386	-	0.393	-	3.897E-01
Nitromethane	0.286	-	0.383	-	3.344E-01
Propanenitrile	ND	-	ND	-	ND
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	ND	-	ND	-	ND
Hexanenitrile	ND	-	ND	-	ND
Benzonitrile	0.076	-	0.085	-	8.070E-02
2-Nitrophenol	ND	-	ND	-	ND
Acrolein	0.239	-	0.194	-	2.163E-01
Acetone	4.745	-	4.383	-	4.564E+00
1-Hydroxy-2-propanone	ND	-	ND	-	ND
Furan	0.057	-	ND	-	5.653E-02
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	ND	-	ND	-	ND
1-Propanol	ND	-	ND	-	ND
Methacrolein	ND	-	ND	-	ND
Methyl-vinyl Ketone	ND	-	ND	-	ND
MTBE	0.462	-	0.485	-	4.737E-01
2,3-Butanedione	ND	-	ND	-	ND
Butanal	ND	-	ND	-	ND
2-Butanone	0.693	-	0.564	-	6.283E-01
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	ND	-	ND	-	ND
trans-2-Butenal	0.061	-	0.064	-	6.252E-02
Acetic Acid	0.557	-	0.607	-	5.820E-01
1-Butanol	ND	-	ND	-	ND
2-Pentanone	0.159	-	0.156	-	1.574E-01
Pentanal	0.132	-	0.324	-	2.279E-01

TABLE E-2. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	ND	-	ND	-	ND
Hexanal	0.243	-	0.211	-	2.273E-01
2-Furaldehyde	0.081	-	0.069	-	7.499E-02
Cyclohexanone	ND	-	ND	-	ND
Heptanal	0.167	-	0.170	-	1.682E-01
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	0.435	-	0.413	-	4.242E-01
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	0.357	-	0.362	-	3.597E-01
Benzofuran	ND	-	ND	-	ND
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	0.064	-	0.061	-	6.252E-02
Nonanal	0.484	-	0.462	-	4.733E-01
Decanal	0.184	-	0.390	-	2.871E-01
Carbonyl Sulfide	0.119	-	0.120	-	1.195E-01
Carbon Disulfide	2.845	-	3.015	-	2.930E+00
Thiophene	0.085	-	0.076	-	8.071E-02
Dimethyldisulfide	ND	-	ND	-	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
TNMHC	-	97.40	9.740E-02	9.740E-02
Ethane	30	3.10	3.100E-03	3.100E-03
Ethylene	28	2.80	2.800E-03	2.800E-03
Acetylene	26	4.50	4.500E-03	4.500E-03
Propane	44	1.50	1.500E-03	1.500E-03
Propene	42	1.30	1.300E-03	1.300E-03
i-Butane	58	3.40	3.400E-03	3.400E-03
i-Butene	56	0.50	5.000E-04	5.000E-04
1-Butene	56	0.20	2.000E-04	2.000E-04
1,3-Butadiene	54	0.20	2.000E-04	2.000E-04
n-Butane	58	1.80	1.800E-03	1.800E-03
trans-2-Butene	56	0.20	2.000E-04	2.000E-04
2,2-Dimethylpropane	72	ND	ND	ND
cis-2-Butene	56	0.10	1.000E-04	1.000E-04
3-Methyl-1-butene	70	0.10	1.000E-04	1.000E-04
i-Pentane	72	3.80	3.800E-03	3.800E-03
1-Pentene	70	0.10	1.000E-04	1.000E-04
2-Methyl-1-butene	70	0.10	1.000E-04	1.000E-04
n-Pentane	72	3.20	3.200E-03	3.200E-03
Isoprene	68	0.10	1.000E-04	1.000E-04
trans-2-Pentene	70	0.10	1.000E-04	1.000E-04
cis-2-Pentene	70	0.10	1.000E-04	1.000E-04
2-Methyl-2-butene	70	0.20	2.000E-04	2.000E-04
2,2-Dimethylbutane	86	0.40	4.000E-04	4.000E-04
Cyclopentene	68	ND	ND	ND
4-Methyl-1-pentene	84	ND	ND	ND
Cyclopentane	70	0.30	3.000E-04	3.000E-04
2,3-Dimethylbutane	86	1.10	1.100E-03	1.100E-03
cis-4-Methyl-2-pentene	84	ND	ND	ND
2-Methylpentane	86	4.00	4.000E-03	4.000E-03
3-Methylpentane	86	2.00	2.000E-03	2.000E-03
2-Methyl-1-pentene	84	ND	ND	ND
1-Hexene	84	ND	ND	ND
n-Hexane	86	2.90	2.900E-03	2.900E-03
trans-2-Hexene	84	0.10	1.000E-04	1.000E-04
2-Methyl-2-pentene	84	0.10	1.000E-04	1.000E-04
cis-2-Hexene	84	0.10	1.000E-04	1.000E-04
Methylcyclopentane	84	1.20	1.200E-03	1.200E-03
2,4-Dimethylpentane	100	1.40	1.400E-03	1.400E-03

TABLE E-3. AEC - BACKGROUND RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzene	78	3.40	3.400E-03	3.400E-03
Cyclohexane	84	1.00	1.000E-03	1.000E-03
2-Methylhexane	100	1.10	1.100E-03	1.100E-03
2,3-Dimethylpentane	100	3.80	3.800E-03	3.800E-03
3-Methylhexane	100	1.40	1.400E-03	1.400E-03
2,2,4-Trimethylpentane	114	7.40	7.400E-03	7.400E-03
n-Heptane	100	1.10	1.100E-03	1.100E-03
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND
Methylcyclohexane	98	0.80	8.000E-04	8.000E-04
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND
2,5-Dimethylhexane	114	0.50	5.000E-04	5.000E-04
2,4-Dimethylhexane	114	0.80	8.000E-04	8.000E-04
2,3,4-Trimethylpentane	114	1.60	1.600E-03	1.600E-03
Toluene	92	7.80	7.800E-03	7.800E-03
2,3-Dimethylhexane	114	0.50	5.000E-04	5.000E-04
2-Methylheptane	111	0.30	3.000E-04	3.000E-04
3-Ethylhexane	114	ND	ND	ND
2,2-Dimethylheptane	128	ND	ND	ND
2,2,4-Trimethylhexane	128	0.40	4.000E-04	4.000E-04
n-Octane	114	0.30	3.000E-04	3.000E-04
Ethylcyclohexane	112	ND	ND	ND
Ethylbenzene	160	0.80	8.000E-04	8.000E-04
m-Xylene & p-Xylene	106	3.50	3.500E-03	3.500E-03
Styrene	104	0.50	5.000E-04	5.000E-04
o-Xylene	106	1.10	1.100E-03	1.100E-03
n-Nonane	128	0.10	1.000E-04	1.000E-04
i-Propylbenzene	120	ND	ND	ND
n-Propylbenzene	120	0.20	2.000E-04	2.000E-04
p-Ethyltoluene	120	0.70	7.000E-04	7.000E-04
m-Ethyltoluene	120	0.30	3.000E-04	3.000E-04
1,3,5-Trimethylbenzene	120	0.40	4.000E-04	4.000E-04
o-Ethyltoluene	120	0.20	2.000E-04	2.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	1.00	1.000E-03	1.000E-03
n-Decane	142	0.10	1.000E-04	1.000E-04
alpha-Pinene	136	ND	ND	ND
beta-Pinene	136	ND	ND	ND
delta 3-Carene	136	ND	ND	ND
d-Limonene	136	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
MTBE	88	1.80	1.800E-03	1.800E-03
ETBE	102.0	ND	ND	ND
Dichlorodifluoromethane	120.0	0.29	1.432E-03	1.432E-03
Methylchloride	50.0	ND	ND	ND
Dichlorotetrafluoroethane	171.0	ND	ND	ND
Chloroethene	63.0	ND	ND	ND
1,3-Butadiene	54.0	0.09	2.034E-04	2.034E-04
Methylbromide	95.0	ND	ND	ND
Ethylchloride	64.5	ND	ND	ND
Trichloromonofluoromethane	137.0	0.46	2.612E-03	2.612E-03
Vinylidenechloride	97.0	ND	ND	ND
Methylenechloride	85.0	0.36	1.287E-03	1.287E-03
Allylchloride	76.5	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.11	8.801E-04	8.801E-04
1,1-Dichloroethane	99.0	ND	ND	ND
1,2-Dichloroethene	97.0	ND	ND	ND
Chloroform	119.0	ND	ND	ND
1,2-Dichloroethane	99.0	ND	ND	ND
Methylchloroform	133.0	0.06	3.547E-04	3.547E-04
Benzene	78.0	1.07	3.458E-03	3.458E-03
Carbontetrachloride	154.0	0.12	7.438E-04	7.438E-04
1,2-Dichloropropane	113.0	ND	ND	ND
Trichloroethylene	133.0	ND	ND	ND
cis 1,3-Dichloro-1-propene	111.0	ND	ND	ND
trans 1,3-Dichloro-1-propene	111.0	ND	ND	ND
1,1,2-Trichloroethane	133.0	ND	ND	ND
Toluene	92.0	2.07	7.934E-03	7.934E-03
1,2-Dibromoethane	188.0	ND	ND	ND
Perchloroethylene	166.0	ND	ND	ND
Chlorobenzene	113.0	ND	ND	ND
Ethylbenzene	160.0	0.18	1.228E-03	1.228E-03
m&p-Xylene	106.0	0.81	3.585E-03	3.585E-03
Styrene	104.0	ND	ND	ND
1,1,2,2-Tetrachloroethane	168.0	ND	ND	ND
o-Xylene	106.0	0.25	1.119E-03	1.119E-03
p-Ethyltoluene	120.0	0.11	5.604E-04	5.604E-04
1,3,5-Trimethylbenzene	120.0	0.06	2.845E-04	2.845E-04
1,2,4-Trimethylbenzene	120.0	0.19	9.399E-04	9.399E-04

TABLE E-3. AEC - BACKGROUND RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzylchloride	127.0	ND	ND	ND
m-Dichlorobenzene	147.0	ND	ND	ND
p-Dichlorobenzene	147.0	ND	ND	ND
o-Dichlorobenzene	147.0	ND	ND	ND
1,2,4-Trichlorobenzene	181.0	ND	ND	ND
Hexachlorobutadiene	261.0	ND	ND	ND
Phenylacetylene	102.0	ND	ND	ND
Indane	118.0	ND	ND	ND
2,3-Dihydro-1-methyl-1H-indene	132.0	ND	ND	ND
2,3-Dihydro-4-methyl-1H-indene	132.0	ND	ND	ND
Naphthalene	128.0	0.08	4.279E-04	4.279E-04
2-Methylnaphthalene	142.0	ND	ND	ND
1-Methylnaphthalene	142.0	ND	ND	ND
Cyanogen	52	ND	ND	ND
Methylnitrite	61.0	ND	ND	ND
Acetonitrile	41.0	ND	ND	ND
Acrylonitrile	53.0	ND	ND	ND
Nitromethane	61.0	ND	ND	ND
Propanenitrile	55.0	ND	ND	ND
2-Methylpropanenitrile	69.0	ND	ND	ND
Pentanenitrile	83.0	ND	ND	ND
Hexanenitrile	97.0	ND	ND	ND
Benzonitrile	103.0	ND	ND	ND
2-Nitrophenol	139.0	ND	ND	ND
Acrolein	56.0	ND	ND	ND
Acetone	56.0	3.58	8.348E-03	8.348E-03
1-Hydroxy-2-propanone	74.0	ND	ND	ND
Furan	68.0	ND	ND	ND
2-Propanol	60.0	ND	ND	ND
2-Methylpropanal	74.0	ND	ND	ND
1-Propanol	60.0	ND	ND	ND
Methacrolein	70.0	ND	ND	ND
Methyl-vinyl Ketone	70.0	ND	ND	ND
MTBE	88.0	0.46	1.677E-03	1.677E-03
2,3-Butanedione	86.0	ND	ND	ND
Butanal	72.0	0.13	3.764E-04	3.764E-04
2-Butanone	72.0	0.35	1.053E-03	1.053E-03
2-Methyl-1,3-dioxolane	88.0	ND	ND	ND
2-Methylfuran	82.0	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Tetrahydrofuran	72.0	ND	ND	ND
trans-2-Butenal	70.0	ND	ND	ND
Acetic Acid	60.0	0.49	1.211E-03	1.211E-03
1-Butanol	74.0	ND	ND	ND
2-Pentanone	86.0	ND	ND	ND
Pentanal	86.0	0.50	1.785E-03	1.785E-03
1,4-Dioxane	88.0	ND	ND	ND
Methyl Methacrylate	100.0	ND	ND	ND
Cyclopentanone	84.0	ND	ND	ND
Hexanal	100.0	0.34	1.397E-03	1.397E-03
2-Furaldehyde	96.0	ND	ND	ND
Cyclohexanone	98.0	ND	ND	ND
Heptanal	114.0	0.16	7.488E-04	7.488E-04
2-Butoxyethanol	118.0	ND	ND	ND
Benzaldehyde	106.0	0.20	8.702E-04	8.702E-04
6-Methyl-5-hepten-2-one	126.0	0.18	9.276E-04	9.276E-04
Octanal	128.0	0.34	1.799E-03	1.799E-03
Benzofuran	118.0	ND	ND	ND
2-Ethyl-1-hexanol	120.0	ND	ND	ND
Acetophonone	120.0	ND	ND	ND
Nonanal	142.0	0.47	2.754E-03	2.754E-03
Decanal	156.0	0.29	1.907E-03	1.907E-03
Carbonyl Sulfide	60.0	0.08	1.934E-04	1.934E-04
Carbon Disulfide	76.0	0.18	5.646E-04	5.646E-04
Thiophene	84.0	ND	ND	ND
Dimethyldisulfide	94.0	ND	ND	ND

TABLE E-4. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
TNMHC	-	0.1	1.000E-04	1.000E-04	1.000E-04
Ethane	30	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylene	28	0.1	1.000E-04	1.000E-04	1.000E-04
Acetylene	26	0.1	1.000E-04	1.000E-04	1.000E-04
Propane	44	0.1	1.000E-04	1.000E-04	1.000E-04
Propene	42	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1,3-Butadiene	54	0.1	1.000E-04	1.000E-04	1.000E-04
n-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylpropane	72	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
i-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
1-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
n-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
Isoprene	68	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentene	68	0.1	1.000E-04	1.000E-04	1.000E-04
4-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentane	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
cis-4-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
1-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
n-Hexane	86	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclopentane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
Benzene	78	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclohexane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04

TABLE E-4. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
n-Heptane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-1-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclohexane	98	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-2-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
2,5-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,3,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Toluene	92	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylheptane	111	0.1	1.000E-04	1.000E-04	1.000E-04
3-Ethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylheptane	128	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylhexane	128	0.1	1.000E-04	1.000E-04	1.000E-04
n-Octane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylcyclohexane	112	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylbenzene	160	0.1	1.000E-04	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
Styrene	104	0.1	1.000E-04	1.000E-04	1.000E-04
o-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
n-Nonane	128	0.1	1.000E-04	1.000E-04	1.000E-04
i-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
p-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
m-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
o-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Decane	142	0.1	1.000E-04	1.000E-04	1.000E-04
alpha-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
beta-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
delta 3-Carene	136	0.1	1.000E-04	1.000E-04	1.000E-04
d-Limonene	136	0.1	1.000E-04	1.000E-04	1.000E-04
MTBE	88	0.1	1.000E-04	1.000E-04	1.000E-04
ETBE	102.0	0.1	1.000E-04	1.000E-04	1.000E-04
Dichlorodifluoromethane	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Methylchloride	50.0	0.1	2.080E-04	2.080E-04	2.080E-04
Dichlorotetrafluoroethane	171.0	0.1	7.114E-04	7.114E-04	7.114E-04

TABLE E-4. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Chloroethene	63.0	0.1	2.621E-04	2.621E-04	2.621E-04
1,3-Butadiene	54.0	0.1	2.246E-04	2.246E-04	2.246E-04
Methylbromide	95.0	0.1	3.952E-04	3.952E-04	3.952E-04
Ethylchloride	64.5	0.1	2.683E-04	2.683E-04	2.683E-04
Trichloromonofluoromethane	137.0	0.1	5.699E-04	5.699E-04	5.699E-04
Vinylidenechloride	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Methylenechloride	85.0	0.1	3.536E-04	3.536E-04	3.536E-04
Allylchloride	76.5	0.1	3.182E-04	3.182E-04	3.182E-04
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
1,1-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
1,2-Dichloroethene	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Chloroform	119.0	0.1	4.950E-04	4.950E-04	4.950E-04
1,2-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
Methylchloroform	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Benzene	78.0	0.1	3.245E-04	3.245E-04	3.245E-04
Carbontetrachloride	154.0	0.1	6.406E-04	6.406E-04	6.406E-04
1,2-Dichloropropane	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Trichloroethylene	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
cis 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
trans 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
1,1,2-Trichloroethane	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Toluene	92.0	0.1	3.827E-04	3.827E-04	3.827E-04
1,2-Dibromoethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
Perchloroethylene	166.0	0.1	6.906E-04	6.906E-04	6.906E-04
Chlorobenzene	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Ethylbenzene	160.0	0.1	6.656E-04	6.656E-04	6.656E-04
m&p-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
Styrene	104.0	0.1	4.326E-04	4.326E-04	4.326E-04
1,1,2,2-Tetrachloroethane	168.0	0.1	6.989E-04	6.989E-04	6.989E-04
o-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
p-Ethyltoluene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,3,5-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,2,4-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Benzylchloride	127.0	0.1	5.283E-04	5.283E-04	5.283E-04
m-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
p-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
o-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
1,2,4-Trichlorobenzene	181.0	0.1	7.530E-04	7.530E-04	7.530E-04
Hexachlorobutadiene	261.0	0.1	1.086E-03	1.086E-03	1.086E-03
Phenylacetylene	102.0	0.1	4.243E-04	4.243E-04	4.243E-04
Indane	118.0	0.1	4.909E-04	4.909E-04	4.909E-04

TABLE E-4. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dihydro-1-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
2,3-Dihydro-4-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
Naphthalene	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
2-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
1-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Cyanogen	52	0.1	2.163E-04	2.163E-04	2.163E-04
Methylnitrite	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Acetonitrile	41.0	0.1	1.706E-04	1.706E-04	1.706E-04
Acrylonitrile	53.0	0.1	2.205E-04	2.205E-04	2.205E-04
Nitromethane	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Propanenitrile	55.0	0.1	2.288E-04	2.288E-04	2.288E-04
2-Methylpropanenitrile	69.0	0.1	2.870E-04	2.870E-04	2.870E-04
Pentanenitrile	83.0	0.1	3.453E-04	3.453E-04	3.453E-04
Hexanenitrile	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Benzonitrile	103.0	0.1	4.285E-04	4.285E-04	4.285E-04
2-Nitrophenol	139.0	0.1	5.782E-04	5.782E-04	5.782E-04
Acrolein	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
Acetone	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
1-Hydroxy-2-propanone	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
Furan	68.0	0.1	2.829E-04	2.829E-04	2.829E-04
2-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
2-Methylpropanal	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
1-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Methacrolein	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Methyl-vinyl Ketone	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
MTBE	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2,3-Butanedione	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Butanal	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Butanone	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Methyl-1,3-dioxolane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2-Methylfuran	82.0	0.1	3.411E-04	3.411E-04	3.411E-04
Tetrahydrofuran	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
trans-2-Butenal	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Acetic Acid	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
1-Butanol	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
2-Pentanone	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Pentanal	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
1,4-Dioxane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
Methyl Methacrylate	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
Cyclopentanone	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Hexanal	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
2-Furaldehyde	96.0	0.1	3.994E-04	3.994E-04	3.994E-04

TABLE E-4. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Cyclohexanone	98.0	0.1	4.077E-04	4.077E-04	4.077E-04
Heptanal	114.0	0.1	4.742E-04	4.742E-04	4.742E-04
2-Butoxyethanol	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
Benzaldehyde	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
6-Methyl-5-hepten-2-one	126.0	0.1	5.242E-04	5.242E-04	5.242E-04
Octanal	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
Benzofuran	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
2-Ethyl-1-hexanol	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Acetophonone	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Nonanal	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Decanal	156.0	0.1	6.490E-04	6.490E-04	6.490E-04
Carbonyl Sulfide	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Carbon Disulfide	76.0	0.1	3.162E-04	3.162E-04	3.162E-04
Thiophene	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Dimethyldisulfide	94.0	0.1	3.910E-04	3.910E-04	3.910E-04

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TABLE E-1. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
TNMHC	669.50	6.695E-01	748.30	7.483E-01	7.089E-01
Ethane	5.80	5.800E-03	5.30	5.300E-03	5.550E-03
Ethylene	121.10	1.211E-01	127.50	1.275E-01	1.243E-01
Acetylene	108.70	1.087E-01	119.30	1.193E-01	1.140E-01
Propane	29.30	2.930E-02	5.60	5.600E-03	1.745E-02
Propene	4.60	4.600E-03	33.10	3.310E-02	1.885E-02
i-Butane	0.80	8.000E-04	0.70	7.000E-04	7.500E-04
i-Butene	9.20	9.200E-03	12.20	1.220E-02	1.070E-02
1-Butene	8.70	8.700E-03	8.80	8.800E-03	8.750E-03
1,3-Butadiene	ND	ND	ND	ND	ND
n-Butane	2.90	2.900E-03	4.30	4.300E-03	3.600E-03
trans-2-Butene	3.40	3.400E-03	4.00	4.000E-03	3.700E-03
2,2-Dimethylpropane	ND	ND	ND	ND	ND
cis-2-Butene	1.30	1.300E-03	1.80	1.800E-03	1.550E-03
3-Methyl-1-butene	0.40	4.000E-04	ND	ND	4.000E-04
i-Pentane	1.00	1.000E-03	1.00	1.000E-03	1.000E-03
1-Pentene	3.50	3.500E-03	ND	ND	3.500E-03
2-Methyl-1-butene	1.00	1.000E-03	1.80	1.800E-03	1.400E-03
n-Pentane	1.60	1.600E-03	1.80	1.800E-03	1.700E-03
Isoprene	ND	ND	ND	ND	ND
trans-2-Pentene	0.50	5.000E-04	0.60	6.000E-04	5.500E-04
cis-2-Pentene	0.40	4.000E-04	ND	ND	4.000E-04
2-Methyl-2-butene	ND	ND	ND	ND	ND
2,2-Dimethylbutane	ND	ND	ND	ND	ND
Cyclopentene	1.80	1.800E-03	ND	ND	1.800E-03
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	0.50	5.000E-04	ND	ND	5.000E-04
2,3-Dimethylbutane	0.30	3.000E-04	0.50	5.000E-04	4.000E-04
cis-4-Methyl-2-pentene	ND	ND	ND	ND	ND
2-Methylpentane	0.80	8.000E-04	1.80	1.800E-03	1.300E-03
3-Methylpentane	1.10	1.100E-03	1.30	1.300E-03	1.200E-03
2-Methyl-1-pentene	ND	ND	ND	ND	ND
1-Hexene	4.70	4.700E-03	5.20	5.200E-03	4.950E-03
n-Hexane	1.80	1.800E-03	2.10	2.100E-03	1.950E-03
trans-2-Hexene	ND	ND	ND	ND	ND
2-Methyl-2-pentene	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND
Methylcyclopentane	0.60	6.000E-04	0.80	8.000E-04	7.000E-04
2,4-Dimethylpentane	1.00	1.000E-03	1.30	1.300E-03	1.150E-03
Benzene	45.60	4.560E-02	49.80	4.980E-02	4.770E-02

TABLE E-1. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ug/m^3	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ug/m^3	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, mg/m^3
Cyclohexane	0.70	7.000E-04	ND	ND	7.000E-04
2-Methylhexane	0.50	5.000E-04	0.70	7.000E-04	6.000E-04
2,3-Dimethylpentane	1.90	1.900E-03	2.30	2.300E-03	2.100E-03
3-Methylhexane	1.10	1.100E-03	0.70	7.000E-04	9.000E-04
2,2,4-Trimethylpentane	5.20	5.200E-03	5.80	5.800E-03	5.500E-03
n-Heptane	1.00	1.000E-03	1.20	1.200E-03	1.100E-03
2,4,4-Trimethyl-1-pentene	ND	ND	ND	ND	ND
Methylcyclohexane	ND	ND	1.10	1.100E-03	1.100E-03
2,4,4-Trimethyl-2-pentene	ND	ND	ND	ND	ND
2,5-Dimethylhexane	0.50	5.000E-04	0.40	4.000E-04	4.500E-04
2,4-Dimethylhexane	0.70	7.000E-04	0.80	8.000E-04	7.500E-04
2,3,4-Trimethylpentane	1.00	1.000E-03	1.10	1.100E-03	1.050E-03
Toluene	12.00	1.200E-02	15.20	1.520E-02	1.360E-02
2,3-Dimethylhexane	0.20	2.000E-04	0.20	2.000E-04	2.000E-04
2-Methylheptane	0.20	2.000E-04	0.40	4.000E-04	3.000E-04
3-Ethylhexane	ND	ND	ND	ND	ND
2,2-Dimethylheptane	ND	ND	ND	ND	ND
2,2,4-Trimethylhexane	1.00	1.000E-03	1.00	1.000E-03	1.000E-03
n-Octane	0.60	6.000E-04	ND	ND	6.000E-04
Ethylcyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	1.70	1.700E-03	2.50	2.500E-03	2.100E-03
m-Xylene & p-Xylene	3.50	3.500E-03	3.10	3.100E-03	3.300E-03
Styrene	ND	ND	ND	ND	ND
o-Xylene	1.40	1.400E-03	3.50	3.500E-03	2.450E-03
n-Nonane	0.50	5.000E-04	0.70	7.000E-04	6.000E-04
i-Propylbenzene	ND	ND	ND	ND	ND
n-Propylbenzene	0.50	5.000E-04	1.00	1.000E-03	7.500E-04
p-Ethyltoluene	3.40	3.400E-03	ND	ND	3.400E-03
m-Ethyltoluene	0.40	4.000E-04	1.20	1.200E-03	8.000E-04
1,3,5-Trimethylbenzene	0.50	5.000E-04	1.60	1.600E-03	1.050E-03
o-Ethyltoluene	0.40	4.000E-04	1.00	1.000E-03	7.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	1.60	1.600E-03	5.70	5.700E-03	3.650E-03
n-Decane	0.40	4.000E-04	0.40	4.000E-04	4.000E-04
alpha-Pinene	ND	ND	ND	ND	ND
beta-Pinene	ND	ND	ND	ND	ND
delta 3-Carene	ND	ND	ND	ND	ND
d-Limonene	ND	ND	ND	ND	ND
MTBE	0.70	7.000E-04	0.70	7.000E-04	7.000E-04
ETBE	ND	ND	ND	ND	ND

TABLE E-2. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
Dichlorodifluoromethane	0.155	-	0.478	-	3.163E-01
Methylchloride	ND	-	ND	-	ND
Dichlorotetrafluoroethane	ND	-	ND	-	ND
Chloroethene	ND	-	ND	-	ND
1,3-Butadiene	ND	-	ND	-	ND
Methylbromide	ND	-	ND	-	ND
Ethylchloride	ND	-	ND	-	ND
Trichloromonofluoromethane	0.426	-	0.461	-	4.433E-01
Vinylidenechloride	ND	-	ND	-	ND
Methylenechloride	199.604	-	200.881	-	2.002E+02
Allylchloride	ND	-	ND	-	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.104	-	0.115	-	1.096E-01
1,1-Dichloroethane	ND	-	ND	-	ND
1,2-Dichloroethene	ND	-	ND	-	ND
Chloroform	ND	-	ND	-	ND
1,2-Dichloroethane	ND	-	ND	-	ND
Methylchloroform	0.066	-	0.066	-	6.606E-02
Benzene	14.294	-	15.610	-	1.495E+01
Carbontetrachloride	0.127	-	0.138	-	1.323E-01
1,2-Dichloropropane	ND	-	ND	-	ND
Trichloroethylene	ND	-	ND	-	ND
cis 1,3-Dichloro-1-propene	ND	-	ND	-	ND
trans 1,3-Dichloro-1-propene	ND	-	ND	-	ND
1,1,2-Trichloroethane	ND	-	ND	-	ND
Toluene	3.189	-	4.040	-	3.614E+00
1,2-Dibromoethane	ND	-	ND	-	ND
Perchloroethylene	ND	-	ND	-	ND
Chlorobenzene	ND	-	ND	-	ND
Ethylbenzene	0.392	-	0.577	-	4.844E-01
m&p-Xylene	0.800	-	0.650	-	7.250E-01
Styrene	ND	-	ND	-	ND
1,1,2,2-Tetrachloroethane	ND	-	ND	-	ND
o-Xylene	0.323	-	0.807	-	5.651E-01
p-Ethyltoluene	0.096	-	0.100	-	9.791E-02
1,3,5-Trimethylbenzene	0.055	-	0.055	-	5.529E-02
1,2,4-Trimethylbenzene	0.188	-	0.177	-	1.828E-01
Benzylchloride	ND	-	ND	-	ND
m-Dichlorobenzene	ND	-	ND	-	ND
p-Dichlorobenzene	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
o-Dichlorobenzene	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ND	-	ND	-	ND
Hexachlorobutadiene	ND	-	ND	-	ND
Phenylacetylene	0.524	-	0.560	-	5.419E-01
Indane	ND	-	ND	-	ND
2,3-Dihydro-1-methyl-1H-indene	ND	-	ND	-	ND
2,3-Dihydro-4-methyl-1H-indene	ND	-	ND	-	ND
Naphthalene	1.787	-	1.858	-	1.823E+00
2-Methylnaphthalene	ND	-	ND	-	ND
1-Methylnaphthalene	ND	-	ND	-	ND
Cyanogen	ND	-	ND	-	ND
Methylnitrite	1.898	-	1.991	-	1.944E+00
Acetonitrile	6.587	-	6.751	-	6.669E+00
Acrylonitrile	4.117	-	4.336	-	4.227E+00
Nitromethane	1.963	-	2.049	-	2.006E+00
Propanenitrile	0.938	-	0.936	-	9.366E-01
2-Methylpropanenitrile	ND	-	ND	-	ND
Pentanenitrile	0.673	-	0.699	-	6.861E-01
Hexanenitrile	0.739	-	0.648	-	6.934E-01
Benzonitrile	1.563	-	1.618	-	1.590E+00
2-Nitrophenol	0.138	-	0.170	-	1.539E-01
Acrolein	5.593	-	5.419	-	5.506E+00
Acetone	27.455	-	27.747	-	2.760E+01
1-Hydroxy-2-propanone	ND	-	ND	-	ND
Furan	0.801	-	0.665	-	7.330E-01
2-Propanol	ND	-	ND	-	ND
2-Methylpropanal	0.778	-	0.656	-	7.169E-01
1-Propanol	ND	-	ND	-	ND
Methacrolein	0.818	-	0.720	-	7.686E-01
Methyl-vinyl Ketone	0.487	-	0.492	-	4.897E-01
MTBE	0.178	-	0.175	-	1.767E-01
2,3-Butanedione	ND	-	ND	-	ND
Butanal	0.532	-	0.489	-	5.107E-01
2-Butanone	2.868	-	2.307	-	2.587E+00
2-Methyl-1,3-dioxolane	ND	-	ND	-	ND
2-Methylfuran	ND	-	ND	-	ND
Tetrahydrofuran	0.105	-	0.058	-	8.147E-02
trans-2-Butenal	0.502	-	0.511	-	5.063E-01
Acetic Acid	1.345	-	2.854	-	2.099E+00
1-Butanol	ND	-	ND	-	ND

TABLE E-2. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Run 1 Sample 1 - Amount Detected, ppbv	Run 1 Sample 1 - Amount Detected, mg/m^3	Run 1 Sample 2 - Amount Detected, ppbv	Run 1 Sample 2 - Amount Detected, mg/m^3	Average Concentration - Run 1, ppbv
2-Pentanone	0.434	-	0.448	-	4.409E-01
Pentanal	1.127	-	1.630	-	1.379E+00
1,4-Dioxane	ND	-	ND	-	ND
Methyl Methacrylate	ND	-	ND	-	ND
Cyclopentanone	21.445	-	21.215	-	2.133E+01
Hexanal	0.324	-	0.449	-	3.863E-01
2-Furaldehyde	3.641	-	3.110	-	3.375E+00
Cyclohexanone	ND	-	ND	-	ND
Heptanal	ND	-	0.330	-	3.304E-01
2-Butoxyethanol	ND	-	ND	-	ND
Benzaldehyde	1.932	-	2.054	-	1.993E+00
6-Methyl-5-hepten-2-one	ND	-	ND	-	ND
Octanal	0.364	-	0.383	-	3.738E-01
Benzofuran	ND	-	ND	-	ND
2-Ethyl-1-hexanol	ND	-	ND	-	ND
Acetophonone	0.375	-	0.345	-	3.600E-01
Nonanal	0.380	-	0.543	-	4.618E-01
Decanal	0.446	-	0.530	-	4.882E-01
Carbonyl Sulfide	0.560	-	0.800	-	6.798E-01
Carbon Disulfide	8.995	-	9.740	-	9.368E+00
Thiophene	0.367	-	0.388	-	3.779E-01
Dimethyldisulfide	ND	-	ND	-	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
TNMHC	-	36.20	3.620E-02	3.620E-02
Ethane	30	2.50	2.500E-03	2.500E-03
Ethylene	28	0.20	2.000E-04	2.000E-04
Acetylene	26	0.70	7.000E-04	7.000E-04
Propane	44	0.80	8.000E-04	8.000E-04
Propene	42	ND	ND	ND
i-Butane	58	0.10	1.000E-04	1.000E-04
i-Butene	56	ND	ND	ND
1-Butene	56	ND	ND	ND
1,3-Butadiene	54	ND	ND	ND
n-Butane	58	0.40	4.000E-04	4.000E-04
trans-2-Butene	56	ND	ND	ND
2,2-Dimethylpropane	72	ND	ND	ND
cis-2-Butene	56	ND	ND	ND
3-Methyl-1-butene	70	ND	ND	ND
i-Pentane	72	0.50	5.000E-04	5.000E-04
1-Pentene	70	ND	ND	ND
2-Methyl-1-butene	70	ND	ND	ND
n-Pentane	72	0.60	6.000E-04	6.000E-04
Isoprene	68	0.20	2.000E-04	2.000E-04
trans-2-Pentene	70	ND	ND	ND
cis-2-Pentene	70	ND	ND	ND
2-Methyl-2-butene	70	ND	ND	ND
2,2-Dimethylbutane	86	0.10	1.000E-04	1.000E-04
Cyclopentene	68	ND	ND	ND
4-Methyl-1-pentene	84	ND	ND	ND
Cyclopentane	70	0.10	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.40	4.000E-04	4.000E-04
cis-4-Methyl-2-pentene	84	ND	ND	ND
2-Methylpentane	86	0.80	8.000E-04	8.000E-04
3-Methylpentane	86	0.70	7.000E-04	7.000E-04
2-Methyl-1-pentene	84	ND	ND	ND
1-Hexene	84	ND	ND	ND
n-Hexane	86	0.80	8.000E-04	8.000E-04
trans-2-Hexene	84	ND	ND	ND
2-Methyl-2-pentene	84	ND	ND	ND
cis-2-Hexene	84	ND	ND	ND
Methylcyclopentane	84	0.40	4.000E-04	4.000E-04
2,4-Dimethylpentane	100	0.90	9.000E-04	9.000E-04

TABLE E-3. AEC - BACKGROUND RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzene	78	1.10	1.100E-03	1.100E-03
Cyclohexane	84	0.20	2.000E-04	2.000E-04
2-Methylhexane	100	0.40	4.000E-04	4.000E-04
2,3-Dimethylpentane	100	1.90	1.900E-03	1.900E-03
3-Methylhexane	100	0.40	4.000E-04	4.000E-04
2,2,4-Trimethylpentane	114	3.70	3.700E-03	3.700E-03
n-Heptane	100	0.30	3.000E-04	3.000E-04
2,4,4-Trimethyl-1-pentene	112	ND	ND	ND
Methylcyclohexane	98	0.20	2.000E-04	2.000E-04
2,4,4-Trimethyl-2-pentene	112	ND	ND	ND
2,5-Dimethylhexane	114	0.30	3.000E-04	3.000E-04
2,4-Dimethylhexane	114	0.40	4.000E-04	4.000E-04
2,3,4-Trimethylpentane	114	0.90	9.000E-04	9.000E-04
Toluene	92	3.00	3.000E-03	3.000E-03
2,3-Dimethylhexane	114	0.40	4.000E-04	4.000E-04
2-Methylheptane	111	0.10	1.000E-04	1.000E-04
3-Ethylhexane	114	ND	ND	ND
2,2-Dimethylheptane	128	ND	ND	ND
2,2,4-Trimethylhexane	128	0.20	2.000E-04	2.000E-04
n-Octane	114	0.10	1.000E-04	1.000E-04
Ethylcyclohexane	112	ND	ND	ND
Ethylbenzene	160	0.30	3.000E-04	3.000E-04
m-Xylene & p-Xylene	106	1.40	1.400E-03	1.400E-03
Styrene	104	ND	ND	ND
o-Xylene	106	0.50	5.000E-04	5.000E-04
n-Nonane	128	ND	ND	ND
i-Propylbenzene	120	ND	ND	ND
n-Propylbenzene	120	0.20	2.000E-04	2.000E-04
p-Ethyltoluene	120	0.30	3.000E-04	3.000E-04
m-Ethyltoluene	120	0.20	2.000E-04	2.000E-04
1,3,5-Trimethylbenzene	120	0.20	2.000E-04	2.000E-04
o-Ethyltoluene	120	0.10	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.40	4.000E-04	4.000E-04
n-Decane	142	ND	ND	ND
alpha-Pinene	136	ND	ND	ND
beta-Pinene	136	ND	ND	ND
delta 3-Carene	136	ND	ND	ND
d-Limonene	136	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
MTBE	88	0.70	7.000E-04	7.000E-04
ETBE	102.0	ND	ND	ND
Dichlorodifluoromethane	120.0	0.30	1.507E-03	1.507E-03
Methylchloride	50.0	ND	ND	ND
Dichlorotetrafluoroethane	171.0	ND	ND	ND
Chloroethene	63.0	ND	ND	ND
1,3-Butadiene	54.0	ND	ND	ND
Methylbromide	95.0	ND	ND	ND
Ethylchloride	64.5	ND	ND	ND
Trichloromonofluoromethane	137.0	0.44	2.515E-03	2.515E-03
Vinylidenechloride	97.0	ND	ND	ND
Methylenechloride	85.0	0.58	2.044E-03	2.044E-03
Allylchloride	76.5	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.11	8.583E-04	8.583E-04
1,1-Dichloroethane	99.0	ND	ND	ND
1,2-Dichloroethene	97.0	ND	ND	ND
Chloroform	119.0	ND	ND	ND
1,2-Dichloroethane	99.0	ND	ND	ND
Methylchloroform	133.0	0.07	3.777E-04	3.777E-04
Benzene	78.0	0.34	1.119E-03	1.119E-03
Carbontetrachloride	154.0	0.12	7.746E-04	7.746E-04
1,2-Dichloropropane	113.0	ND	ND	ND
Trichloroethylene	133.0	ND	ND	ND
cis 1,3-Dichloro-1-propene	111.0	ND	ND	ND
trans 1,3-Dichloro-1-propene	111.0	ND	ND	ND
1,1,2-Trichloroethane	133.0	ND	ND	ND
Toluene	92.0	0.80	3.051E-03	3.051E-03
1,2-Dibromoethane	188.0	ND	ND	ND
Perchloroethylene	166.0	ND	ND	ND
Chlorobenzene	113.0	ND	ND	ND
Ethylbenzene	160.0	0.07	4.606E-04	4.606E-04
m&p-Xylene	106.0	0.30	1.321E-03	1.321E-03
Styrene	104.0	ND	ND	ND
1,1,2,2-Tetrachloroethane	168.0	ND	ND	ND
o-Xylene	106.0	0.12	5.086E-04	5.086E-04
p-Ethyltoluene	120.0	ND	ND	ND
1,3,5-Trimethylbenzene	120.0	ND	ND	ND
1,2,4-Trimethylbenzene	120.0	0.09	4.522E-04	4.522E-04

TABLE E-3. AEC - BACKGROUND RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Benzylchloride	127.0	ND	ND	ND
m-Dichlorobenzene	147.0	ND	ND	ND
p-Dichlorobenzene	147.0	ND	ND	ND
o-Dichlorobenzene	147.0	ND	ND	ND
1,2,4-Trichlorobenzene	181.0	ND	ND	ND
Hexachlorobutadiene	261.0	ND	ND	ND
Phenylacetylene	102.0	ND	ND	ND
Indane	118.0	ND	ND	ND
2,3-Dihydro-1-methyl-1H-indene	132.0	ND	ND	ND
2,3-Dihydro-4-methyl-1H-indene	132.0	ND	ND	ND
Naphthalene	128.0	0.06	3.067E-04	3.067E-04
2-Methylnaphthalene	142.0	ND	ND	ND
1-Methylnaphthalene	142.0	ND	ND	ND
Cyanogen	52	ND	ND	ND
Methylnitrite	61.0	ND	ND	ND
Acetonitrile	41.0	ND	ND	ND
Acrylonitrile	53.0	ND	ND	ND
Nitromethane	61.0	ND	ND	ND
Propanenitrile	55.0	ND	ND	ND
2-Methylpropanenitrile	69.0	ND	ND	ND
Pentanenitrile	83.0	ND	ND	ND
Hexanenitrile	97.0	ND	ND	ND
Benzonitrile	103.0	ND	ND	ND
2-Nitrophenol	139.0	ND	ND	ND
Acrolein	56.0	ND	ND	ND
Acetone	56.0	3.11	7.235E-03	7.235E-03
1-Hydroxy-2-propanone	74.0	ND	ND	ND
Furan	68.0	ND	ND	ND
2-Propanol	60.0	ND	ND	ND
2-Methylpropanal	74.0	ND	ND	ND
1-Propanol	60.0	ND	ND	ND
Methacrolein	70.0	ND	ND	ND
Methyl-vinyl Ketone	70.0	ND	ND	ND
MTBE	88.0	0.15	5.544E-04	5.544E-04
2,3-Butanedione	86.0	ND	ND	ND
Butanal	72.0	ND	ND	ND
2-Butanone	72.0	0.27	7.941E-04	7.941E-04
2-Methyl-1,3-dioxolane	88.0	ND	ND	ND
2-Methylfuran	82.0	ND	ND	ND

TABLE E-3. AEC - BACKGROUND RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Run 1 Background Sample - Amount Detected, ug/m^3 or ppbv	Run 1 Background Sample - Amount Detected, mg/m^3	Average Background Concentration - Run 1, mg/m^3
Tetrahydrofuran	72.0	ND	ND	ND
trans-2-Butenal	70.0	ND	ND	ND
Acetic Acid	60.0	0.44	1.105E-03	1.105E-03
1-Butanol	74.0	ND	ND	ND
2-Pentanone	86.0	ND	ND	ND
Pentanal	86.0	0.45	1.610E-03	1.610E-03
1,4-Dioxane	88.0	ND	ND	ND
Methyl Methacrylate	100.0	ND	ND	ND
Cyclopentanone	84.0	ND	ND	ND
Hexanal	100.0	0.29	1.206E-03	1.206E-03
2-Furaldehyde	96.0	ND	ND	ND
Cyclohexanone	98.0	ND	ND	ND
Heptanal	114.0	0.21	9.731E-04	9.731E-04
2-Butoxyethanol	118.0	ND	ND	ND
Benzaldehyde	106.0	0.15	6.469E-04	6.469E-04
6-Methyl-5-hepten-2-one	126.0	0.09	4.461E-04	4.461E-04
Octanal	128.0	0.27	1.464E-03	1.464E-03
Benzofuran	118.0	ND	ND	ND
2-Ethyl-1-hexanol	120.0	ND	ND	ND
Acetophonone	120.0	ND	ND	ND
Nonanal	142.0	0.34	2.037E-03	2.037E-03
Decanal	156.0	0.33	2.172E-03	2.172E-03
Carbonyl Sulfide	60.0	0.06	1.588E-04	1.588E-04
Carbon Disulfide	76.0	0.45	1.418E-03	1.418E-03
Thiophene	84.0	ND	ND	ND
Dimethyldisulfide	94.0	ND	ND	ND

TABLE E-4. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
TNMHC	-	0.1	1.000E-04	1.000E-04	1.000E-04
Ethane	30	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylene	28	0.1	1.000E-04	1.000E-04	1.000E-04
Acetylene	26	0.1	1.000E-04	1.000E-04	1.000E-04
Propane	44	0.1	1.000E-04	1.000E-04	1.000E-04
Propene	42	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
i-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
1,3-Butadiene	54	0.1	1.000E-04	1.000E-04	1.000E-04
n-Butane	58	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylpropane	72	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Butene	56	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
i-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
1-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
n-Pentane	72	0.1	1.000E-04	1.000E-04	1.000E-04
Isoprene	68	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Pentene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-butene	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentene	68	0.1	1.000E-04	1.000E-04	1.000E-04
4-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclopentane	70	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylbutane	86	0.1	1.000E-04	1.000E-04	1.000E-04
cis-4-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylpentane	86	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-1-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
1-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
n-Hexane	86	0.1	1.000E-04	1.000E-04	1.000E-04
trans-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methyl-2-pentene	84	0.1	1.000E-04	1.000E-04	1.000E-04
cis-2-Hexene	84	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclopentane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
Benzene	78	0.1	1.000E-04	1.000E-04	1.000E-04
Cyclohexane	84	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04

TABLE E-4. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dimethylpentane	100	0.1	1.000E-04	1.000E-04	1.000E-04
3-Methylhexane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
n-Heptane	100	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-1-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
Methylcyclohexane	98	0.1	1.000E-04	1.000E-04	1.000E-04
2,4,4-Trimethyl-2-pentene	112	0.1	1.000E-04	1.000E-04	1.000E-04
2,5-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,4-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,3,4-Trimethylpentane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Toluene	92	0.1	1.000E-04	1.000E-04	1.000E-04
2,3-Dimethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2-Methylheptane	111	0.1	1.000E-04	1.000E-04	1.000E-04
3-Ethylhexane	114	0.1	1.000E-04	1.000E-04	1.000E-04
2,2-Dimethylheptane	128	0.1	1.000E-04	1.000E-04	1.000E-04
2,2,4-Trimethylhexane	128	0.1	1.000E-04	1.000E-04	1.000E-04
n-Octane	114	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylcyclohexane	112	0.1	1.000E-04	1.000E-04	1.000E-04
Ethylbenzene	160	0.1	1.000E-04	1.000E-04	1.000E-04
m-Xylene & p-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
Styrene	104	0.1	1.000E-04	1.000E-04	1.000E-04
o-Xylene	106	0.1	1.000E-04	1.000E-04	1.000E-04
n-Nonane	128	0.1	1.000E-04	1.000E-04	1.000E-04
i-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Propylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
p-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
m-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,3,5-Trimethylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
o-Ethyltoluene	120	0.1	1.000E-04	1.000E-04	1.000E-04
1,2,4-Trimethylbenzene & sec-Butylbenzene	120	0.1	1.000E-04	1.000E-04	1.000E-04
n-Decane	142	0.1	1.000E-04	1.000E-04	1.000E-04
alpha-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
beta-Pinene	136	0.1	1.000E-04	1.000E-04	1.000E-04
delta 3-Carene	136	0.1	1.000E-04	1.000E-04	1.000E-04
d-Limonene	136	0.1	1.000E-04	1.000E-04	1.000E-04
MTBE	88	0.1	1.000E-04	1.000E-04	1.000E-04
ETBE	102.0	0.1	1.000E-04	1.000E-04	1.000E-04
Dichlorodifluoromethane	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Methylchloride	50.0	0.1	2.080E-04	2.080E-04	2.080E-04
Dichlorotetrafluoroethane	171.0	0.1	7.114E-04	7.114E-04	7.114E-04

TABLE E-4. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Chloroethene	63.0	0.1	2.621E-04	2.621E-04	2.621E-04
1,3-Butadiene	54.0	0.1	2.246E-04	2.246E-04	2.246E-04
Methylbromide	95.0	0.1	3.952E-04	3.952E-04	3.952E-04
Ethylchloride	64.5	0.1	2.683E-04	2.683E-04	2.683E-04
Trichloromonofluoromethane	137.0	0.1	5.699E-04	5.699E-04	5.699E-04
Vinylidenechloride	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Methylenechloride	85.0	0.1	3.536E-04	3.536E-04	3.536E-04
Allylchloride	76.5	0.1	3.182E-04	3.182E-04	3.182E-04
1,1,2-Trichloro-1,2,2-trifluoroethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
1,1-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
1,2-Dichloroethene	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Chloroform	119.0	0.1	4.950E-04	4.950E-04	4.950E-04
1,2-Dichloroethane	99.0	0.1	4.118E-04	4.118E-04	4.118E-04
Methylchloroform	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Benzene	78.0	0.1	3.245E-04	3.245E-04	3.245E-04
Carbontetrachloride	154.0	0.1	6.406E-04	6.406E-04	6.406E-04
1,2-Dichloropropane	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Trichloroethylene	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
cis 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
trans 1,3-Dichloro-1-propene	111.0	0.1	4.618E-04	4.618E-04	4.618E-04
1,1,2-Trichloroethane	133.0	0.1	5.533E-04	5.533E-04	5.533E-04
Toluene	92.0	0.1	3.827E-04	3.827E-04	3.827E-04
1,2-Dibromoethane	188.0	0.1	7.821E-04	7.821E-04	7.821E-04
Perchloroethylene	166.0	0.1	6.906E-04	6.906E-04	6.906E-04
Chlorobenzene	113.0	0.1	4.701E-04	4.701E-04	4.701E-04
Ethylbenzene	160.0	0.1	6.656E-04	6.656E-04	6.656E-04
m&p-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
Styrene	104.0	0.1	4.326E-04	4.326E-04	4.326E-04
1,1,2,2-Tetrachloroethane	168.0	0.1	6.989E-04	6.989E-04	6.989E-04
o-Xylene	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
p-Ethyltoluene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,3,5-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
1,2,4-Trimethylbenzene	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Benzylchloride	127.0	0.1	5.283E-04	5.283E-04	5.283E-04
m-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
p-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
o-Dichlorobenzene	147.0	0.1	6.115E-04	6.115E-04	6.115E-04
1,2,4-Trichlorobenzene	181.0	0.1	7.530E-04	7.530E-04	7.530E-04
Hexachlorobutadiene	261.0	0.1	1.086E-03	1.086E-03	1.086E-03
Phenylacetylene	102.0	0.1	4.243E-04	4.243E-04	4.243E-04
Indane	118.0	0.1	4.909E-04	4.909E-04	4.909E-04

TABLE E-4. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
2,3-Dihydro-1-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
2,3-Dihydro-4-methyl-1H-indene	132.0	0.1	5.491E-04	5.491E-04	5.491E-04
Naphthalene	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
2-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
1-Methylnaphthalene	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Cyanogen	52	0.1	2.163E-04	2.163E-04	2.163E-04
Methylnitrite	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Acetonitrile	41.0	0.1	1.706E-04	1.706E-04	1.706E-04
Acrylonitrile	53.0	0.1	2.205E-04	2.205E-04	2.205E-04
Nitromethane	61.0	0.1	2.538E-04	2.538E-04	2.538E-04
Propanenitrile	55.0	0.1	2.288E-04	2.288E-04	2.288E-04
2-Methylpropanenitrile	69.0	0.1	2.870E-04	2.870E-04	2.870E-04
Pentanenitrile	83.0	0.1	3.453E-04	3.453E-04	3.453E-04
Hexanenitrile	97.0	0.1	4.035E-04	4.035E-04	4.035E-04
Benzonitrile	103.0	0.1	4.285E-04	4.285E-04	4.285E-04
2-Nitrophenol	139.0	0.1	5.782E-04	5.782E-04	5.782E-04
Acrolein	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
Acetone	56.0	0.1	2.330E-04	2.330E-04	2.330E-04
1-Hydroxy-2-propanone	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
Furan	68.0	0.1	2.829E-04	2.829E-04	2.829E-04
2-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
2-Methylpropanal	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
1-Propanol	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Methacrolein	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Methyl-vinyl Ketone	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
MTBE	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2,3-Butanedione	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Butanal	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Butanone	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
2-Methyl-1,3-dioxolane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
2-Methylfuran	82.0	0.1	3.411E-04	3.411E-04	3.411E-04
Tetrahydrofuran	72.0	0.1	2.995E-04	2.995E-04	2.995E-04
trans-2-Butenal	70.0	0.1	2.912E-04	2.912E-04	2.912E-04
Acetic Acid	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
1-Butanol	74.0	0.1	3.078E-04	3.078E-04	3.078E-04
2-Pentanone	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
Pentanal	86.0	0.1	3.578E-04	3.578E-04	3.578E-04
1,4-Dioxane	88.0	0.1	3.661E-04	3.661E-04	3.661E-04
Methyl Methacrylate	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
Cyclopentanone	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Hexanal	100.0	0.1	4.160E-04	4.160E-04	4.160E-04
2-Furaldehyde	96.0	0.1	3.994E-04	3.994E-04	3.994E-04

TABLE E-4. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
VOCs and TNMHC Analysis of the Air Sample - Method TO-14 and Method TO-12
Compounds below the DLs are listed as nondetected (ND); compounds in bold are duplicate values
Analyzed by: Oregon Graduate Institute

Analyte	Molecular Weight	Detection Limit - Amount Detected, ug/m^3 or ppbv	Detection Limit -Amount Detected, mg/m^3	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Cyclohexanone	98.0	0.1	4.077E-04	4.077E-04	4.077E-04
Heptanal	114.0	0.1	4.742E-04	4.742E-04	4.742E-04
2-Butoxyethanol	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
Benzaldehyde	106.0	0.1	4.410E-04	4.410E-04	4.410E-04
6-Methyl-5-hepten-2-one	126.0	0.1	5.242E-04	5.242E-04	5.242E-04
Octanal	128.0	0.1	5.325E-04	5.325E-04	5.325E-04
Benzofuran	118.0	0.1	4.909E-04	4.909E-04	4.909E-04
2-Ethyl-1-hexanol	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Acetophonone	120.0	0.1	4.992E-04	4.992E-04	4.992E-04
Nonanal	142.0	0.1	5.907E-04	5.907E-04	5.907E-04
Decanal	156.0	0.1	6.490E-04	6.490E-04	6.490E-04
Carbonyl Sulfide	60.0	0.1	2.496E-04	2.496E-04	2.496E-04
Carbon Disulfide	76.0	0.1	3.162E-04	3.162E-04	3.162E-04
Thiophene	84.0	0.1	3.494E-04	3.494E-04	3.494E-04
Dimethyldisulfide	94.0	0.1	3.910E-04	3.910E-04	3.910E-04

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APPENDIX II-F. SVOC DATA RESULTS

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SIMULATOR BOOBY TRAP FLASH M117

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TABLE F-1. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	ND
Acetophenone	0.86	0.295	3.623E-04	ND	0.295	ND	3.623E-04
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	ND
Benzoic acid	7.59	36.6	ND	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	ND
Naphthalene	0.584	0.447	2.460E-04	0.736	0.447	3.551E-04	3.006E-04
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	ND
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND	0.711	ND	ND
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	ND

TABLE F-1. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	ND
Diethylphthalate	0.476	0.26	2.005E-04	0.634	0.26	3.059E-04	2.532E-04
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	ND
Phenanthrene	ND	0.61	ND	0.43	0.61	ND	ND
Anthracene	ND	0.366	ND	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND	0.245	ND	ND
Di-n-butylphthalate	2.82	0.17	1.188E-03	3.49	0.17	1.684E-03	1.436E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND	18.8	ND	ND
Butylbenzylphthalate	0.751	0.205	3.164E-04	0.688	0.205	3.320E-04	3.242E-04
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	0.788	1.22	ND	0.625	1.22	ND	ND
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	ND

[a]
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	0.348
Pyridine	ND	1.02	ND	ND	1.02	ND	1.02
2-Picoline	ND	1.06	ND	ND	1.06	ND	1.06
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	0.401
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	0.796
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	0.85
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	0.391
Phenol	ND	0.25	ND	ND	0.25	ND	0.25
Aniline	ND	0.399	ND	ND	0.399	ND	0.399
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	0.312
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	0.721
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	0.159
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	0.307
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	0.616
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	0.697
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	0.561
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	0.446
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	0.376
o-Toluidine	ND	0.396	ND	ND	0.396	ND	0.396
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	0.474
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	0.281
Acetophenone	0.951	0.295	2.808E-04	0.578	0.295	ND	0.295
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	0.899
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	1.19
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	0.494
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	0.891
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	0.729
Isophorone	ND	0.214	ND	ND	0.214	ND	0.214
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	0.337
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	0.536
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	0.391
Benzoic acid	2.99	36.6	ND	ND	36.6	ND	36.6

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	0.49
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	0.353
Naphthalene	ND	0.447	ND	ND	0.447	ND	0.447
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	0.322
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	0.344
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	0.565
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	0.51
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	20.4
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	0.374
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	0.567
Safrole	ND	0.711	ND	ND	0.711	ND	0.711
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	0.359
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	0.546
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	11.1
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	0.631
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	0.536
Isosafrole	ND	1.08	ND	ND	1.08	ND	1.08
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	0.564
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	0.358
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	1
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	0.291
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	0.837
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	0.704
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	0.327
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	0.881
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	30.7
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	31.5
Acenaphthene	ND	0.36	ND	ND	0.36	ND	0.36
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	0.445
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	0.244
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	0.674
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	1.76

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	1.56
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	0.714
Diethylphthalate	1.47	0.26	4.340E-04	ND	0.26	ND	0.26
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	0.283
Fluorene	ND	0.34	ND	ND	0.34	ND	0.34
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	0.363
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	0.775
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	27.2
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	0.368
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	1.25
Diallate	ND	0.475	ND	ND	0.475	ND	0.475
Phenacetin	ND	0.224	ND	ND	0.224	ND	0.224
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	0.689
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	0.371
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	2.07
Pronamide	ND	0.257	ND	ND	0.257	ND	0.257
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	28.8
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	1.34
Phenanthrene	ND	0.61	ND	ND	0.61	ND	0.61
Anthracene	ND	0.366	ND	ND	0.366	ND	0.366
Carbazole	ND	0.245	ND	ND	0.245	ND	0.245
Di-n-butylphthalate	2.63	0.17	7.766E-04	5.39	0.17	2.93	0.17
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	22.5
Methapyrilene	ND	20.7	ND	ND	20.7	ND	20.7
Fluoranthene	ND	0.361	ND	ND	0.361	ND	0.361
Benzidine	ND	13.4	ND	ND	13.4	ND	13.4
Pyrene	ND	0.496	ND	ND	0.496	ND	0.496
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	0.368
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	0.512
Kepone	ND	18.8	ND	ND	18.8	ND	18.8
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	0.514	0.205
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	1.98

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	0.312
bis(2-Ethylhexyl)phthalate	1.05	1.22	ND	ND	1.22	2.56	1.22
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	0.335
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	0.452
Chrysene	ND	0.488	ND	ND	0.488	ND	0.488
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	0.312
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	0.461
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	0.278
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	0.581
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	0.329
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	1.17
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	0.219
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	0.246
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	0.236

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-3. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitrosodimethylamine	0.348	0.348	1.565E-04	1.565E-04
Pyridine	1.02	1.02	4.588E-04	4.588E-04
2-Picoline	1.06	1.06	4.768E-04	4.768E-04
Methyl methanesulfonate	0.401	0.401	1.804E-04	1.804E-04
N-Nitrosomethylethylamine	0.796	0.796	3.581E-04	3.581E-04
N-Nitrosodiethylamine	0.85	0.85	3.824E-04	3.824E-04
Ethyl methanesulfonate	0.391	0.391	1.759E-04	1.759E-04
Phenol	0.25	0.25	1.125E-04	1.125E-04
Aniline	0.399	0.399	1.795E-04	1.795E-04
bis(2-Chloroethyl)ether	0.312	0.312	1.403E-04	1.403E-04
Pentachloroethane	0.721	0.721	3.243E-04	3.243E-04
2-Chlorophenol	0.159	0.159	7.152E-05	7.152E-05
1,3-Dichlorobenzene	0.307	0.307	1.381E-04	1.381E-04
1,4-Dichlorobenzene	0.616	0.616	2.771E-04	2.771E-04
Benzyl alcohol	0.697	0.697	3.135E-04	3.135E-04
2-Methylphenol	0.561	0.561	2.524E-04	2.524E-04
1,2-Dichlorobenzene	0.446	0.446	2.006E-04	2.006E-04
bis(2-Chloroisopropyl)ether	0.376	0.376	1.691E-04	1.691E-04
o-Toluidine	0.396	0.396	1.781E-04	1.781E-04
4-Methylphenol/3-Methylphenol	0.474	0.474	2.132E-04	2.132E-04
N-Nitroso-di-n-propylamine	0.281	0.281	1.264E-04	1.264E-04
Acetophenone	0.295	0.295	1.327E-04	1.327E-04
N-Nitrosomorpholine	0.899	0.899	4.044E-04	4.044E-04
N-Nitrosopyrrolidine	1.19	1.19	5.353E-04	5.353E-04
Hexachloroethane	0.494	0.494	2.222E-04	2.222E-04
Nitrobenzene	0.891	0.891	4.008E-04	4.008E-04
N-Nitrosopiperidine	0.729	0.729	3.279E-04	3.279E-04
Isophorone	0.214	0.214	9.627E-05	9.627E-05
2,4-Dimethylphenol	0.337	0.337	1.516E-04	1.516E-04
2-Nitrophenol	0.536	0.536	2.411E-04	2.411E-04
bis(2-Chloroethoxy)methane	0.391	0.391	1.759E-04	1.759E-04
Benzoic acid	36.6	36.6	1.646E-02	1.646E-02
2,4-Dichlorophenol	0.49	0.49	2.204E-04	2.204E-04
1,2,4-Trichlorobenzene	0.353	0.353	1.588E-04	1.588E-04
Naphthalene	0.447	0.447	2.011E-04	2.011E-04
p-Chloroaniline	0.322	0.322	1.448E-04	1.448E-04
2,6-Dichlorophenol	0.344	0.344	1.547E-04	1.547E-04
Hexachloropropene	0.565	0.565	2.542E-04	2.542E-04
Hexachlorobutadiene	0.51	0.51	2.294E-04	2.294E-04
Dimethylphenethylamine	20.4	20.4	9.177E-03	9.177E-03

TABLE F-3. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitroso-di-n-butylamine	0.374	0.374	1.682E-04	1.682E-04
4-Chloro-3-methylphenol	0.567	0.567	2.551E-04	2.551E-04
Safrole	0.711	0.711	3.198E-04	3.198E-04
2-Methylnaphthalene	0.359	0.359	1.615E-04	1.615E-04
1,2,4,5-Tetrachlorobenzene	0.546	0.546	2.456E-04	2.456E-04
Hexachlorocyclopentadiene	11.1	11.1	4.993E-03	4.993E-03
2,4,6-Trichlorophenol	0.631	0.631	2.838E-04	2.838E-04
2,4,5-Trichlorophenol	0.536	0.536	2.411E-04	2.411E-04
Isosafrole	1.08	1.08	4.858E-04	4.858E-04
2-Chloronaphthalene	0.564	0.564	2.537E-04	2.537E-04
2-Nitroaniline	0.358	0.358	1.610E-04	1.610E-04
1,4-Naphthoquinone	1	1	4.498E-04	4.498E-04
Dimethylphthalate	0.291	0.291	1.309E-04	1.309E-04
1,3-Dinitrobenzene	0.837	0.837	3.765E-04	3.765E-04
2,6-Dinitrotoluene	0.704	0.704	3.167E-04	3.167E-04
Acenaphthylene	0.327	0.327	1.471E-04	1.471E-04
3-Nitroaniline	0.881	0.881	3.963E-04	3.963E-04
4-Nitrophenol	30.7	30.7	1.381E-02	1.381E-02
2,4-Dinitrophenol	31.5	31.5	1.417E-02	1.417E-02
Acenaphthene	0.36	0.36	1.619E-04	1.619E-04
2,4-Dinitrotoluene	0.445	0.445	2.002E-04	2.002E-04
Dibenzofuran	0.244	0.244	1.098E-04	1.098E-04
Pentachlorobenzene	0.674	0.674	3.032E-04	3.032E-04
1-Naphthylamine	1.76	1.76	7.917E-04	7.917E-04
2-Naphthylamine	1.56	1.56	7.017E-04	7.017E-04
2,3,4,6-Tetrachlorophenol	0.714	0.714	3.212E-04	3.212E-04
Diethylphthalate	0.26	0.26	1.170E-04	1.170E-04
4-Chlorophenylphenyl ether	0.283	0.283	1.273E-04	1.273E-04
Fluorene	0.34	0.34	1.529E-04	1.529E-04
5-Nitro-o-toluidine	0.363	0.363	1.633E-04	1.633E-04
4-Nitroaniline	0.775	0.775	3.486E-04	3.486E-04
4,6-Dinitro-2-methylphenol	27.2	27.2	1.224E-02	1.224E-02
Diphenylamine/N-NitrosoDPA	0.368	0.368	1.655E-04	1.655E-04
sym-Trinitrobenzene	1.25	1.25	5.623E-04	5.623E-04
Diallate	0.475	0.475	2.137E-04	2.137E-04
Phenacetin	0.224	0.224	1.008E-04	1.008E-04
4-Bromophenylphenyl ether	0.689	0.689	3.099E-04	3.099E-04
Hexachlorobenzene	0.371	0.371	1.669E-04	1.669E-04
4-Aminobiphenyl	2.07	2.07	9.312E-04	9.312E-04
Pronamide	0.257	0.257	1.156E-04	1.156E-04

TABLE F-3. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Pentachlorophenol	28.8	28.8	1.296E-02	1.296E-02
Pentachloronitrobenzene	1.34	1.34	6.028E-04	6.028E-04
Phenanthrene	0.61	0.61	2.744E-04	2.744E-04
Anthracene	0.366	0.366	1.646E-04	1.646E-04
Carbazole	0.245	0.245	1.102E-04	1.102E-04
Di-n-butylphthalate	0.17	0.17	7.647E-05	7.647E-05
4-Nitroquinoline-1-oxide	22.5	22.5	1.012E-02	1.012E-02
Methapyrilene	20.7	20.7	9.312E-03	9.312E-03
Fluoranthene	0.361	0.361	1.624E-04	1.624E-04
Benzidine	13.4	13.4	6.028E-03	6.028E-03
Pyrene	0.496	0.496	2.231E-04	2.231E-04
p-Dimethylaminoazobenzene	0.368	0.368	1.655E-04	1.655E-04
Chlorobenzilate	0.512	0.512	2.303E-04	2.303E-04
Kepone	18.8	18.8	8.457E-03	8.457E-03
Butylbenzylphthalate	0.205	0.205	9.222E-05	9.222E-05
3,3'-Dimethylbenzidine	1.98	1.98	8.907E-04	8.907E-04
2-Acetylaminofluorene	0.312	0.312	1.403E-04	1.403E-04
bis(2-Ethylhexyl)phthalate	1.22	1.22	5.488E-04	5.488E-04
3,3'-Dichlorobenzidine	0.335	0.335	1.507E-04	1.507E-04
Benz(a)anthracene	0.452	0.452	2.033E-04	2.033E-04
Chrysene	0.488	0.488	2.195E-04	2.195E-04
Di-n-octylphthalate	0.312	0.312	1.403E-04	1.403E-04
7,12-Dimethylbenz(a)anthracene	0.461	0.461	2.074E-04	2.074E-04
Benzo(b)fluoranthene (a)	0.278	0.278	1.251E-04	1.251E-04
Benzo(k)fluoranthene (a)	0.581	0.581	2.614E-04	2.614E-04
Benz(a)pyrene	0.329	0.329	1.480E-04	1.480E-04
3-Methylcholanthrene	1.17	1.17	5.263E-04	5.263E-04
Indeno(1,2,3-cd)pyrene	0.219	0.219	9.851E-05	9.851E-05
Dibenz(a,h)anthracene	0.246	0.246	1.107E-04	1.107E-04
Benzo(g,h,i)perylene	0.236	0.236	1.062E-04	1.062E-04

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

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SIMULATOR FLASH ARTILLERY M110

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TABLE F-1. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND
Benzyl alcohol	1.31	0.697	4.289E-04	4.289E-04
2-Methylphenol	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	1.34	0.474	4.388E-04	4.388E-04
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND
Acetophenone	ND	0.295	ND	ND
N-Nitrosomorpholine	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND
Naphthalene	77.6	0.447	2.541E-02	2.541E-02
p-Chloroaniline	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND

TABLE F-1. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
4-Chloro-3-methylphenol	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND
2-Methylnaphthalene	28.5	0.359	9.332E-03	9.332E-03
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND
Acenaphthylene	1.72	0.327	5.632E-04	5.632E-04
3-Nitroaniline	ND	0.881	ND	ND
4-Nitrophenol	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND
Diethylphthalate	0.378	0.26	1.238E-04	1.238E-04
4-Chlorophenylphenyl ether	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND

TABLE F-1. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Phenanthrene	0.927	0.61	3.035E-04	3.035E-04
Anthracene	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND
Di-n-butylphthalate	1.47	0.17	4.813E-04	4.813E-04
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND
Pyrene	0.292	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND
Butylbenzylphthalate	ND	0.205	ND	ND
3,3'-Dimethylbenzidine	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND
3,3'-Dichlorobenzidine	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-2. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, ug	Run 2 Train A -Detection Limit, ug	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	1.66	0.474	5.304E-04	5.304E-04
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND
Acetophenone	ND	0.295	ND	ND
N-Nitrosomorpholine	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND
Naphthalene	61.1	0.447	1.952E-02	1.952E-02
p-Chloroaniline	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND

TABLE F-2. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, ug	Run 2 Train A -Detection Limit, ug	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
4-Chloro-3-methylphenol	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND
2-Methylnaphthalene	31.6	0.359	1.010E-02	1.010E-02
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND
4-Nitrophenol	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND
Diethylphthalate	ND	0.26	ND	ND
4-Chlorophenylphenyl ether	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND

TABLE F-2. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, ug	Run 2 Train A -Detection Limit, ug	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
Phenanthrene	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND
Di-n-butylphthalate	4.38	0.17	1.400E-03	1.400E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND
Butylbenzylphthalate	ND	0.205	ND	ND
3,3'-Dimethylbenzidine	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND
3,3'-Dichlorobenzidine	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-3. AEC - RUN NO. 1-2 COMPOSITE FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1-2 Train B -Amount Detected, ug	Run 1-2 Train B - Detection Limit, ug	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND
Benzyl alcohol	3.1	0.697	6.016E-04	6.016E-04
2-Methylphenol	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	2.35	0.474	4.560E-04	4.560E-04
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND
Acetophenone	ND	0.295	ND	ND
N-Nitrosomorpholine	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND
Naphthalene	153	0.447	2.969E-02	2.969E-02
p-Chloroaniline	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND

TABLE F-3. AEC - RUN NO. 1-2 COMPOSITE FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1-2 Train B -Amount Detected, ug	Run 1-2 Train B - Detection Limit, ug	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
4-Chloro-3-methylphenol	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND
2-Methylnaphthalene	65.9	0.359	1.279E-02	1.279E-02
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND
Acenaphthylene	2.31	0.327	4.483E-04	4.483E-04
3-Nitroaniline	ND	0.881	ND	ND
4-Nitrophenol	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND
Diethylphthalate	0.387	0.26	7.510E-05	7.510E-05
4-Chlorophenylphenyl ether	ND	0.283	ND	ND
Fluorene	0.52	0.34	1.009E-04	1.009E-04
5-Nitro-o-toluidine	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND

TABLE F-3. AEC - RUN NO. 1-2 COMPOSITE FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1-2 Train B -Amount Detected, ug	Run 1-2 Train B - Detection Limit, ug	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
Phenanthrene	1.48	0.61	2.872E-04	2.872E-04
Anthracene	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND
Di-n-butylphthalate	1.65	0.17	3.202E-04	3.202E-04
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND
Butylbenzylphthalate	ND	0.205	ND	ND
3,3'-Dimethylbenzidine	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND
3,3'-Dichlorobenzidine	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	0.348
Pyridine	ND	1.02	ND	ND	1.02	ND	1.02
2-Picoline	ND	1.06	ND	ND	1.06	ND	1.06
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	0.401
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	0.796
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	0.85
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	0.391
Phenol	ND	0.25	ND	ND	0.25	ND	0.25
Aniline	ND	0.399	ND	ND	0.399	ND	0.399
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	0.312
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	0.721
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	0.159
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	0.307
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	0.616
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	0.697
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	0.561
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	0.446
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	0.376
o-Toluidine	ND	0.396	ND	ND	0.396	ND	0.396
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	0.474
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	0.281
Acetophenone	0.574	0.295	1.786E-04	0.578	0.295	ND	0.295
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	0.899
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	1.19
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	0.494
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	0.891
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	0.729
Isophorone	ND	0.214	ND	ND	0.214	ND	0.214
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	0.337
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	0.536
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	0.391
Benzoic acid	ND	36.6	ND	ND	36.6	ND	36.6

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	0.49
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	0.353
Naphthalene	ND	0.447	ND	ND	0.447	ND	0.447
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	0.322
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	0.344
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	0.565
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	0.51
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	20.4
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	0.374
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	0.567
Safrole	ND	0.711	ND	ND	0.711	ND	0.711
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	0.359
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	0.546
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	11.1
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	0.631
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	0.536
Isosafrole	ND	1.08	ND	ND	1.08	ND	1.08
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	0.564
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	0.358
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	1
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	0.291
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	0.837
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	0.704
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	0.327
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	0.881
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	30.7
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	31.5
Acenaphthene	ND	0.36	ND	ND	0.36	ND	0.36
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	0.445
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	0.244
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	0.674
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	1.76

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	1.56
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	0.714
Diethylphthalate	0.722	0.26	2.247E-04	ND	0.26	ND	0.26
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	0.283
Fluorene	ND	0.34	ND	ND	0.34	ND	0.34
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	0.363
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	0.775
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	27.2
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	0.368
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	1.25
Diallate	ND	0.475	ND	ND	0.475	ND	0.475
Phenacetin	ND	0.224	ND	ND	0.224	ND	0.224
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	0.689
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	0.371
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	2.07
Pronamide	ND	0.257	ND	ND	0.257	ND	0.257
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	28.8
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	1.34
Phenanthrene	ND	0.61	ND	ND	0.61	ND	0.61
Anthracene	ND	0.366	ND	ND	0.366	ND	0.366
Carbazole	ND	0.245	ND	ND	0.245	ND	0.245
Di-n-butylphthalate	5.19	0.17	1.615E-03	5.39	0.17	2.93	0.17
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	22.5
Methapyrilene	ND	20.7	ND	ND	20.7	ND	20.7
Fluoranthene	ND	0.361	ND	ND	0.361	ND	0.361
Benzidine	ND	13.4	ND	ND	13.4	ND	13.4
Pyrene	ND	0.496	ND	ND	0.496	ND	0.496
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	0.368
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	0.512
Kepone	ND	18.8	ND	ND	18.8	ND	18.8
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	0.514	0.205
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	1.98

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	0.312
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND	1.22	2.56	1.22
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	0.335
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	0.452
Chrysene	ND	0.488	ND	ND	0.488	ND	0.488
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	0.312
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	0.461
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	0.278
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	0.581
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	0.329
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	1.17
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	0.219
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	0.246
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	0.236

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-5. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 2 Train A -Detection Limit, ug	Run 1-2 Train B - Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitrosodimethylamine	0.348	0.348	0.348	1.228E-04	1.228E-04
Pyridine	1.02	1.02	1.02	3.599E-04	3.599E-04
2-Picoline	1.06	1.06	1.06	3.740E-04	3.740E-04
Methyl methanesulfonate	0.401	0.401	0.401	1.415E-04	1.415E-04
N-Nitrosomethylethylamine	0.796	0.796	0.796	2.809E-04	2.809E-04
N-Nitrosodiethylamine	0.85	0.85	0.85	2.999E-04	2.999E-04
Ethyl methanesulfonate	0.391	0.391	0.391	1.380E-04	1.380E-04
Phenol	0.25	0.25	0.25	8.821E-05	8.821E-05
Aniline	0.399	0.399	0.399	1.408E-04	1.408E-04
bis(2-Chloroethyl)ether	0.312	0.312	0.312	1.101E-04	1.101E-04
Pentachloroethane	0.721	0.721	0.721	2.544E-04	2.544E-04
2-Chlorophenol	0.159	0.159	0.159	5.610E-05	5.610E-05
1,3-Dichlorobenzene	0.307	0.307	0.307	1.083E-04	1.083E-04
1,4-Dichlorobenzene	0.616	0.616	0.616	2.173E-04	2.173E-04
Benzyl alcohol	0.697	0.697	0.697	2.459E-04	2.459E-04
2-Methylphenol	0.561	0.561	0.561	1.979E-04	1.979E-04
1,2-Dichlorobenzene	0.446	0.446	0.446	1.574E-04	1.574E-04
bis(2-Chloroisopropyl)ether	0.376	0.376	0.376	1.327E-04	1.327E-04
o-Toluidine	0.396	0.396	0.396	1.397E-04	1.397E-04
4-Methylphenol/3-Methylphenol	0.474	0.474	0.474	1.672E-04	1.672E-04
N-Nitroso-di-n-propylamine	0.281	0.281	0.281	9.915E-05	9.915E-05
Acetophenone	0.295	0.295	0.295	1.041E-04	1.041E-04
N-Nitrosomorpholine	0.899	0.899	0.899	3.172E-04	3.172E-04
N-Nitrosopyrrolidine	1.19	1.19	1.19	4.199E-04	4.199E-04
Hexachloroethane	0.494	0.494	0.494	1.743E-04	1.743E-04
Nitrobenzene	0.891	0.891	0.891	3.144E-04	3.144E-04
N-Nitrosopiperidine	0.729	0.729	0.729	2.572E-04	2.572E-04
Isophorone	0.214	0.214	0.214	7.551E-05	7.551E-05
2,4-Dimethylphenol	0.337	0.337	0.337	1.189E-04	1.189E-04
2-Nitrophenol	0.536	0.536	0.536	1.891E-04	1.891E-04
bis(2-Chloroethoxy)methane	0.391	0.391	0.391	1.380E-04	1.380E-04
Benzoic acid	36.6	36.6	36.6	1.291E-02	1.291E-02
2,4-Dichlorophenol	0.49	0.49	0.49	1.729E-04	1.729E-04
1,2,4-Trichlorobenzene	0.353	0.353	0.353	1.246E-04	1.246E-04
Naphthalene	0.447	0.447	0.447	1.577E-04	1.577E-04
p-Chloroaniline	0.322	0.322	0.322	1.136E-04	1.136E-04
2,6-Dichlorophenol	0.344	0.344	0.344	1.214E-04	1.214E-04
Hexachloropropene	0.565	0.565	0.565	1.994E-04	1.994E-04
Hexachlorobutadiene	0.51	0.51	0.51	1.799E-04	1.799E-04
Dimethylphenethylamine	20.4	20.4	20.4	7.198E-03	7.198E-03

TABLE F-5. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 2 Train A -Detection Limit, ug	Run 1-2 Train B - Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitroso-di-n-butylamine	0.374	0.374	0.374	1.320E-04	1.320E-04
4-Chloro-3-methylphenol	0.567	0.567	0.567	2.001E-04	2.001E-04
Safrole	0.711	0.711	0.711	2.509E-04	2.509E-04
2-Methylnaphthalene	0.359	0.359	0.359	1.267E-04	1.267E-04
1,2,4,5-Tetrachlorobenzene	0.546	0.546	0.546	1.926E-04	1.926E-04
Hexachlorocyclopentadiene	11.1	11.1	11.1	3.916E-03	3.916E-03
2,4,6-Trichlorophenol	0.631	0.631	0.631	2.226E-04	2.226E-04
2,4,5-Trichlorophenol	0.536	0.536	0.536	1.891E-04	1.891E-04
Isosafrole	1.08	1.08	1.08	3.811E-04	3.811E-04
2-Chloronaphthalene	0.564	0.564	0.564	1.990E-04	1.990E-04
2-Nitroaniline	0.358	0.358	0.358	1.263E-04	1.263E-04
1,4-Naphthoquinone	1	1	1	3.528E-04	3.528E-04
Dimethylphthalate	0.291	0.291	0.291	1.027E-04	1.027E-04
1,3-Dinitrobenzene	0.837	0.837	0.837	2.953E-04	2.953E-04
2,6-Dinitrotoluene	0.704	0.704	0.704	2.484E-04	2.484E-04
Acenaphthylene	0.327	0.327	0.327	1.154E-04	1.154E-04
3-Nitroaniline	0.881	0.881	0.881	3.108E-04	3.108E-04
4-Nitrophenol	30.7	30.7	30.7	1.083E-02	1.083E-02
2,4-Dinitrophenol	31.5	31.5	31.5	1.111E-02	1.111E-02
Acenaphthene	0.36	0.36	0.36	1.270E-04	1.270E-04
2,4-Dinitrotoluene	0.445	0.445	0.445	1.570E-04	1.570E-04
Dibenzofuran	0.244	0.244	0.244	8.609E-05	8.609E-05
Pentachlorobenzene	0.674	0.674	0.674	2.378E-04	2.378E-04
1-Naphthylamine	1.76	1.76	1.76	6.210E-04	6.210E-04
2-Naphthylamine	1.56	1.56	1.56	5.504E-04	5.504E-04
2,3,4,6-Tetrachlorophenol	0.714	0.714	0.714	2.519E-04	2.519E-04
Diethylphthalate	0.26	0.26	0.26	9.174E-05	9.174E-05
4-Chlorophenylphenyl ether	0.283	0.283	0.283	9.985E-05	9.985E-05
Fluorene	0.34	0.34	0.34	1.200E-04	1.200E-04
5-Nitro-o-toluidine	0.363	0.363	0.363	1.281E-04	1.281E-04
4-Nitroaniline	0.775	0.775	0.775	2.734E-04	2.734E-04
4,6-Dinitro-2-methylphenol	27.2	27.2	27.2	9.597E-03	9.597E-03
Diphenylamine/N-NitrosoDPA	0.368	0.368	0.368	1.298E-04	1.298E-04
sym-Trinitrobenzene	1.25	1.25	1.25	4.410E-04	4.410E-04
Diallate	0.475	0.475	0.475	1.676E-04	1.676E-04
Phenacetin	0.224	0.224	0.224	7.904E-05	7.904E-05
4-Bromophenylphenyl ether	0.689	0.689	0.689	2.431E-04	2.431E-04
Hexachlorobenzene	0.371	0.371	0.371	1.309E-04	1.309E-04
4-Aminobiphenyl	2.07	2.07	2.07	7.304E-04	7.304E-04
Pronamide	0.257	0.257	0.257	9.068E-05	9.068E-05

TABLE F-5. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 2 Train A -Detection Limit, ug	Run 1-2 Train B - Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Pentachlorophenol	28.8	28.8	28.8	1.016E-02	1.016E-02
Pentachloronitrobenzene	1.34	1.34	1.34	4.728E-04	4.728E-04
Phenanthrene	0.61	0.61	0.61	2.152E-04	2.152E-04
Anthracene	0.366	0.366	0.366	1.291E-04	1.291E-04
Carbazole	0.245	0.245	0.245	8.644E-05	8.644E-05
Di-n-butylphthalate	0.17	0.17	0.17	5.998E-05	5.998E-05
4-Nitroquinoline-1-oxide	22.5	22.5	22.5	7.939E-03	7.939E-03
Methapyrilene	20.7	20.7	20.7	7.304E-03	7.304E-03
Fluoranthene	0.361	0.361	0.361	1.274E-04	1.274E-04
Benzidine	13.4	13.4	13.4	4.728E-03	4.728E-03
Pyrene	0.496	0.496	0.496	1.750E-04	1.750E-04
p-Dimethylaminoazobenzene	0.368	0.368	0.368	1.298E-04	1.298E-04
Chlorobenzilate	0.512	0.512	0.512	1.807E-04	1.807E-04
Kepone	18.8	18.8	18.8	6.633E-03	6.633E-03
Butylbenzylphthalate	0.205	0.205	0.205	7.233E-05	7.233E-05
3,3'-Dimethylbenzidine	1.98	1.98	1.98	6.986E-04	6.986E-04
2-Acetylaminofluorene	0.312	0.312	0.312	1.101E-04	1.101E-04
bis(2-Ethylhexyl)phthalate	1.22	1.22	1.22	4.305E-04	4.305E-04
3,3'-Dichlorobenzidine	0.335	0.335	0.335	1.182E-04	1.182E-04
Benz(a)anthracene	0.452	0.452	0.452	1.595E-04	1.595E-04
Chrysene	0.488	0.488	0.488	1.722E-04	1.722E-04
Di-n-octylphthalate	0.312	0.312	0.312	1.101E-04	1.101E-04
7,12-Dimethylbenz(a)anthracene	0.461	0.461	0.461	1.627E-04	1.627E-04
Benzo(b)fluoranthene (a)	0.278	0.278	0.278	9.809E-05	9.809E-05
Benzo(k)fluoranthene (a)	0.581	0.581	0.581	2.050E-04	2.050E-04
Benz(a)pyrene	0.329	0.329	0.329	1.161E-04	1.161E-04
3-Methylcholanthrene	1.17	1.17	1.17	4.128E-04	4.128E-04
Indeno(1,2,3-cd)pyrene	0.219	0.219	0.219	7.727E-05	7.727E-05
Dibenz(a,h)anthracene	0.246	0.246	0.246	8.680E-05	8.680E-05
Benzo(g,h,i)perylene	0.236	0.236	0.236	8.327E-05	8.327E-05

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

SIMULATOR HAND GRENADE

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TABLE F-1. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND
Acetophenone	0.855	0.295	5.368E-04	5.368E-04
N-Nitrosomorpholine	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND
Naphthalene	0.686	0.447	4.307E-04	4.307E-04
p-Chloroaniline	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND

TABLE F-1. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
4-Chloro-3-methylphenol	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND
2-Methylnaphthalene	ND	0.359	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND
4-Nitrophenol	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND
Diethylphthalate	ND	0.26	ND	ND
4-Chlorophenylphenyl ether	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND

TABLE F-1. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Phenanthrene	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND
Di-n-butylphthalate	1.67	0.17	1.048E-03	1.048E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND
Butylbenzylphthalate	1.61	0.205	1.011E-03	1.011E-03
3,3'-Dimethylbenzidine	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND
3,3'-Dichlorobenzidine	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-2. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, ug	Run 2 Train A -Detection Limit, ug	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND
Acetophenone	0.801	0.295	6.871E-04	6.871E-04
N-Nitrosomorpholine	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND
Naphthalene	0.808	0.447	6.931E-04	6.931E-04
p-Chloroaniline	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND

TABLE F-2. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, ug	Run 2 Train A -Detection Limit, ug	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
4-Chloro-3-methylphenol	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND
2-Methylnaphthalene	ND	0.359	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND
4-Nitrophenol	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND
Diethylphthalate	ND	0.26	ND	ND
4-Chlorophenylphenyl ether	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND

TABLE F-2. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, ug	Run 2 Train A -Detection Limit, ug	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
Phenanthrene	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND
Di-n-butylphthalate	6.29	0.17	5.395E-03	5.395E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND
Butylbenzylphthalate	2.17	0.205	1.861E-03	1.861E-03
3,3'-Dimethylbenzidine	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	1.3	1.22	1.115E-03	1.115E-03
3,3'-Dichlorobenzidine	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-3. AEC - RUN NO. 1-2 COMPOSITE HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1-2 Train B -Amount Detected, ug	Run 1-2 Train B - Detection Limit, ug	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND
Acetophenone	1.55	0.295	6.387E-04	6.387E-04
N-Nitrosomorpholine	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND
Naphthalene	1.73	0.447	7.129E-04	7.129E-04
p-Chloroaniline	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND

TABLE F-3. AEC - RUN NO. 1-2 COMPOSITE HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1-2 Train B -Amount Detected, ug	Run 1-2 Train B - Detection Limit, ug	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
4-Chloro-3-methylphenol	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND
2-Methylnaphthalene	0.614	0.359	2.530E-04	2.530E-04
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND
4-Nitrophenol	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND
Diethylphthalate	0.487	0.26	2.007E-04	2.007E-04
4-Chlorophenylphenyl ether	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND

TABLE F-3. AEC - RUN NO. 1-2 COMPOSITE HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1-2 Train B -Amount Detected, ug	Run 1-2 Train B - Detection Limit, ug	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
Phenanthrene	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND
Di-n-butylphthalate	12.7	0.17	5.233E-03	5.233E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND
Butylbenzylphthalate	3.87	0.205	1.595E-03	1.595E-03
3,3'-Dimethylbenzidine	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	1.92	1.22	7.912E-04	7.912E-04
3,3'-Dichlorobenzidine	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	0.348
Pyridine	ND	1.02	ND	ND	1.02	ND	1.02
2-Picoline	ND	1.06	ND	ND	1.06	ND	1.06
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	0.401
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	0.796
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	0.85
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	0.391
Phenol	ND	0.25	ND	ND	0.25	ND	0.25
Aniline	ND	0.399	ND	ND	0.399	ND	0.399
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	0.312
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	0.721
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	0.159
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	0.307
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	0.616
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	0.697
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	0.561
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	0.446
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	0.376
o-Toluidine	ND	0.396	ND	ND	0.396	ND	0.396
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	0.474
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	0.281
Acetophenone	0.582	0.295	1.897E-04	0.578	0.295	ND	0.295
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	0.899
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	1.19
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	0.494
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	0.891
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	0.729
Isophorone	ND	0.214	ND	ND	0.214	ND	0.214
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	0.337
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	0.536
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	0.391
Benzoic acid	ND	36.6	ND	ND	36.6	ND	36.6

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	0.49
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	0.353
Naphthalene	ND	0.447	ND	ND	0.447	ND	0.447
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	0.322
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	0.344
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	0.565
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	0.51
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	20.4
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	0.374
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	0.567
Safrole	ND	0.711	ND	ND	0.711	ND	0.711
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	0.359
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	0.546
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	11.1
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	0.631
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	0.536
Isosafrole	ND	1.08	ND	ND	1.08	ND	1.08
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	0.564
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	0.358
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	1
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	0.291
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	0.837
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	0.704
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	0.327
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	0.881
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	30.7
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	31.5
Acenaphthene	ND	0.36	ND	ND	0.36	ND	0.36
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	0.445
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	0.244
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	0.674
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	1.76

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	1.56
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	0.714
Diethylphthalate	ND	0.26	ND	ND	0.26	ND	0.26
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	0.283
Fluorene	ND	0.34	ND	ND	0.34	ND	0.34
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	0.363
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	0.775
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	27.2
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	0.368
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	1.25
Diallate	ND	0.475	ND	ND	0.475	ND	0.475
Phenacetin	ND	0.224	ND	ND	0.224	ND	0.224
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	0.689
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	0.371
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	2.07
Pronamide	ND	0.257	ND	ND	0.257	ND	0.257
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	28.8
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	1.34
Phenanthrene	ND	0.61	ND	ND	0.61	ND	0.61
Anthracene	ND	0.366	ND	ND	0.366	ND	0.366
Carbazole	ND	0.245	ND	ND	0.245	ND	0.245
Di-n-butylphthalate	ND	0.17	ND	5.39	0.17	2.93	0.17
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	22.5
Methapyrilene	ND	20.7	ND	ND	20.7	ND	20.7
Fluoranthene	ND	0.361	ND	ND	0.361	ND	0.361
Benzidine	ND	13.4	ND	ND	13.4	ND	13.4
Pyrene	ND	0.496	ND	ND	0.496	ND	0.496
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	0.368
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	0.512
Kepone	ND	18.8	ND	ND	18.8	ND	18.8
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	0.514	0.205
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	1.98

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	0.312
bis(2-Ethylhexyl)phthalate	65.6	1.22	2.139E-02	ND	1.22	2.56	1.22
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	0.335
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	0.452
Chrysene	ND	0.488	ND	ND	0.488	ND	0.488
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	0.312
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	0.461
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	0.278
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	0.581
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	0.329
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	1.17
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	0.219
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	0.246
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	0.236

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-5. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 2 Train A -Detection Limit, ug	Run 1-2 Train B - Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitrosodimethylamine	0.348	0.348	0.348	2.684E-04	2.684E-04
Pyridine	1.02	1.02	1.02	7.868E-04	7.868E-04
2-Picoline	1.06	1.06	1.06	8.177E-04	8.177E-04
Methyl methanesulfonate	0.401	0.401	0.401	3.093E-04	3.093E-04
N-Nitrosomethylethylamine	0.796	0.796	0.796	6.140E-04	6.140E-04
N-Nitrosodiethylamine	0.85	0.85	0.85	6.557E-04	6.557E-04
Ethyl methanesulfonate	0.391	0.391	0.391	3.016E-04	3.016E-04
Phenol	0.25	0.25	0.25	1.928E-04	1.928E-04
Aniline	0.399	0.399	0.399	3.078E-04	3.078E-04
bis(2-Chloroethyl)ether	0.312	0.312	0.312	2.407E-04	2.407E-04
Pentachloroethane	0.721	0.721	0.721	5.562E-04	5.562E-04
2-Chlorophenol	0.159	0.159	0.159	1.227E-04	1.227E-04
1,3-Dichlorobenzene	0.307	0.307	0.307	2.368E-04	2.368E-04
1,4-Dichlorobenzene	0.616	0.616	0.616	4.752E-04	4.752E-04
Benzyl alcohol	0.697	0.697	0.697	5.377E-04	5.377E-04
2-Methylphenol	0.561	0.561	0.561	4.328E-04	4.328E-04
1,2-Dichlorobenzene	0.446	0.446	0.446	3.440E-04	3.440E-04
bis(2-Chloroisopropyl)ether	0.376	0.376	0.376	2.900E-04	2.900E-04
o-Toluidine	0.396	0.396	0.396	3.055E-04	3.055E-04
4-Methylphenol/3-Methylphenol	0.474	0.474	0.474	3.656E-04	3.656E-04
N-Nitroso-di-n-propylamine	0.281	0.281	0.281	2.168E-04	2.168E-04
Acetophenone	0.295	0.295	0.295	2.276E-04	2.276E-04
N-Nitrosomorpholine	0.899	0.899	0.899	6.935E-04	6.935E-04
N-Nitrosopyrrolidine	1.19	1.19	1.19	9.180E-04	9.180E-04
Hexachloroethane	0.494	0.494	0.494	3.811E-04	3.811E-04
Nitrobenzene	0.891	0.891	0.891	6.873E-04	6.873E-04
N-Nitrosopiperidine	0.729	0.729	0.729	5.623E-04	5.623E-04
Isophorone	0.214	0.214	0.214	1.651E-04	1.651E-04
2,4-Dimethylphenol	0.337	0.337	0.337	2.600E-04	2.600E-04
2-Nitrophenol	0.536	0.536	0.536	4.135E-04	4.135E-04
bis(2-Chloroethoxy)methane	0.391	0.391	0.391	3.016E-04	3.016E-04
Benzoic acid	36.6	36.6	36.6	2.823E-02	2.823E-02
2,4-Dichlorophenol	0.49	0.49	0.49	3.780E-04	3.780E-04
1,2,4-Trichlorobenzene	0.353	0.353	0.353	2.723E-04	2.723E-04
Naphthalene	0.447	0.447	0.447	3.448E-04	3.448E-04
p-Chloroaniline	0.322	0.322	0.322	2.484E-04	2.484E-04
2,6-Dichlorophenol	0.344	0.344	0.344	2.654E-04	2.654E-04
Hexachloropropene	0.565	0.565	0.565	4.358E-04	4.358E-04
Hexachlorobutadiene	0.51	0.51	0.51	3.934E-04	3.934E-04
Dimethylphenethylamine	20.4	20.4	20.4	1.574E-02	1.574E-02

TABLE F-5. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 2 Train A -Detection Limit, ug	Run 1-2 Train B - Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitroso-di-n-butylamine	0.374	0.374	0.374	2.885E-04	2.885E-04
4-Chloro-3-methylphenol	0.567	0.567	0.567	4.374E-04	4.374E-04
Safrole	0.711	0.711	0.711	5.485E-04	5.485E-04
2-Methylnaphthalene	0.359	0.359	0.359	2.769E-04	2.769E-04
1,2,4,5-Tetrachlorobenzene	0.546	0.546	0.546	4.212E-04	4.212E-04
Hexachlorocyclopentadiene	11.1	11.1	11.1	8.562E-03	8.562E-03
2,4,6-Trichlorophenol	0.631	0.631	0.631	4.868E-04	4.868E-04
2,4,5-Trichlorophenol	0.536	0.536	0.536	4.135E-04	4.135E-04
Isosafrole	1.08	1.08	1.08	8.331E-04	8.331E-04
2-Chloronaphthalene	0.564	0.564	0.564	4.351E-04	4.351E-04
2-Nitroaniline	0.358	0.358	0.358	2.762E-04	2.762E-04
1,4-Naphthoquinone	1	1	1	7.714E-04	7.714E-04
Dimethylphthalate	0.291	0.291	0.291	2.245E-04	2.245E-04
1,3-Dinitrobenzene	0.837	0.837	0.837	6.457E-04	6.457E-04
2,6-Dinitrotoluene	0.704	0.704	0.704	5.431E-04	5.431E-04
Acenaphthylene	0.327	0.327	0.327	2.522E-04	2.522E-04
3-Nitroaniline	0.881	0.881	0.881	6.796E-04	6.796E-04
4-Nitrophenol	30.7	30.7	30.7	2.368E-02	2.368E-02
2,4-Dinitrophenol	31.5	31.5	31.5	2.430E-02	2.430E-02
Acenaphthene	0.36	0.36	0.36	2.777E-04	2.777E-04
2,4-Dinitrotoluene	0.445	0.445	0.445	3.433E-04	3.433E-04
Dibenzofuran	0.244	0.244	0.244	1.882E-04	1.882E-04
Pentachlorobenzene	0.674	0.674	0.674	5.199E-04	5.199E-04
1-Naphthylamine	1.76	1.76	1.76	1.358E-03	1.358E-03
2-Naphthylamine	1.56	1.56	1.56	1.203E-03	1.203E-03
2,3,4,6-Tetrachlorophenol	0.714	0.714	0.714	5.508E-04	5.508E-04
Diethylphthalate	0.26	0.26	0.26	2.006E-04	2.006E-04
4-Chlorophenylphenyl ether	0.283	0.283	0.283	2.183E-04	2.183E-04
Fluorene	0.34	0.34	0.34	2.623E-04	2.623E-04
5-Nitro-o-toluidine	0.363	0.363	0.363	2.800E-04	2.800E-04
4-Nitroaniline	0.775	0.775	0.775	5.978E-04	5.978E-04
4,6-Dinitro-2-methylphenol	27.2	27.2	27.2	2.098E-02	2.098E-02
Diphenylamine/N-NitrosoDPA	0.368	0.368	0.368	2.839E-04	2.839E-04
sym-Trinitrobenzene	1.25	1.25	1.25	9.642E-04	9.642E-04
Diallate	0.475	0.475	0.475	3.664E-04	3.664E-04
Phenacetin	0.224	0.224	0.224	1.728E-04	1.728E-04
4-Bromophenylphenyl ether	0.689	0.689	0.689	5.315E-04	5.315E-04
Hexachlorobenzene	0.371	0.371	0.371	2.862E-04	2.862E-04
4-Aminobiphenyl	2.07	2.07	2.07	1.597E-03	1.597E-03
Pronamide	0.257	0.257	0.257	1.982E-04	1.982E-04

TABLE F-5. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 2 Train A -Detection Limit, ug	Run 1-2 Train B - Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Pentachlorophenol	28.8	28.8	28.8	2.222E-02	2.222E-02
Pentachloronitrobenzene	1.34	1.34	1.34	1.034E-03	1.034E-03
Phenanthrene	0.61	0.61	0.61	4.706E-04	4.706E-04
Anthracene	0.366	0.366	0.366	2.823E-04	2.823E-04
Carbazole	0.245	0.245	0.245	1.890E-04	1.890E-04
Di-n-butylphthalate	0.17	0.17	0.17	1.311E-04	1.311E-04
4-Nitroquinoline-1-oxide	22.5	22.5	22.5	1.736E-02	1.736E-02
Methapyrilene	20.7	20.7	20.7	1.597E-02	1.597E-02
Fluoranthene	0.361	0.361	0.361	2.785E-04	2.785E-04
Benzidine	13.4	13.4	13.4	1.034E-02	1.034E-02
Pyrene	0.496	0.496	0.496	3.826E-04	3.826E-04
p-Dimethylaminoazobenzene	0.368	0.368	0.368	2.839E-04	2.839E-04
Chlorobenzilate	0.512	0.512	0.512	3.950E-04	3.950E-04
Kepone	18.8	18.8	18.8	1.450E-02	1.450E-02
Butylbenzylphthalate	0.205	0.205	0.205	1.581E-04	1.581E-04
3,3'-Dimethylbenzidine	1.98	1.98	1.98	1.527E-03	1.527E-03
2-Acetylaminofluorene	0.312	0.312	0.312	2.407E-04	2.407E-04
bis(2-Ethylhexyl)phthalate	1.22	1.22	1.22	9.411E-04	9.411E-04
3,3'-Dichlorobenzidine	0.335	0.335	0.335	2.584E-04	2.584E-04
Benz(a)anthracene	0.452	0.452	0.452	3.487E-04	3.487E-04
Chrysene	0.488	0.488	0.488	3.764E-04	3.764E-04
Di-n-octylphthalate	0.312	0.312	0.312	2.407E-04	2.407E-04
7,12-Dimethylbenz(a)anthracene	0.461	0.461	0.461	3.556E-04	3.556E-04
Benzo(b)fluoranthene (a)	0.278	0.278	0.278	2.144E-04	2.144E-04
Benzo(k)fluoranthene (a)	0.581	0.581	0.581	4.482E-04	4.482E-04
Benz(a)pyrene	0.329	0.329	0.329	2.538E-04	2.538E-04
3-Methylcholanthrene	1.17	1.17	1.17	9.025E-04	9.025E-04
Indeno(1,2,3-cd)pyrene	0.219	0.219	0.219	1.689E-04	1.689E-04
Dibenz(a,h)anthracene	0.246	0.246	0.246	1.898E-04	1.898E-04
Benzo(g,h,i)perylene	0.236	0.236	0.236	1.820E-04	1.820E-04

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

SIMULATOR GROUND BURST

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TABLE F-1. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND
Acetophenone	0.641	0.295	4.915E-04	4.915E-04
N-Nitrosomorpholine	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND
Naphthalene	0.869	0.447	6.663E-04	6.663E-04
p-Chloroaniline	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND

TABLE F-1. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
4-Chloro-3-methylphenol	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND
2-Methylnaphthalene	ND	0.359	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND
4-Nitrophenol	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND
Diethylphthalate	ND	0.26	ND	ND
4-Chlorophenylphenyl ether	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND

TABLE F-1. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Phenanthrene	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND
Di-n-butylphthalate	0.577	0.17	4.424E-04	4.424E-04
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND
Butylbenzylphthalate	3.96	0.205	3.036E-03	3.036E-03
3,3'-Dimethylbenzidine	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	5.09	1.22	3.903E-03	3.903E-03
3,3'-Dichlorobenzidine	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND
Di-n-octylphthalate	1.35	0.312	1.035E-03	1.035E-03
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-2. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, ug	Run 2 Train A -Detection Limit, ug	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND
Acetophenone	0.609	0.295	7.980E-04	7.980E-04
N-Nitrosomorpholine	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND
Naphthalene	1.2	0.447	1.572E-03	1.572E-03
p-Chloroaniline	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND

TABLE F-2. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, ug	Run 2 Train A -Detection Limit, ug	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
4-Chloro-3-methylphenol	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND
2-Methylnaphthalene	ND	0.359	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND
4-Nitrophenol	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND
Diethylphthalate	ND	0.26	ND	ND
4-Chlorophenylphenyl ether	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND

TABLE F-2. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 2 Train A - Amount Detected, ug	Run 2 Train A -Detection Limit, ug	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
Phenanthrene	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND
Di-n-butylphthalate	4.02	0.17	5.268E-03	5.268E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND
Butylbenzylphthalate	0.975	0.205	1.278E-03	1.278E-03
3,3'-Dimethylbenzidine	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND
3,3'-Dichlorobenzidine	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-3. AEC - RUN NO. 1-2 COMPOSITE GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1-2 Train B -Amount Detected, ug	Run 1-2 Train B - Detection Limit, ug	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND
Acetophenone	1.36	0.295	7.518E-04	7.518E-04
N-Nitrosomorpholine	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND
Naphthalene	2.17	0.447	1.200E-03	1.200E-03
p-Chloroaniline	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND

TABLE F-3. AEC - RUN NO. 1-2 COMPOSITE GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1-2 Train B -Amount Detected, ug	Run 1-2 Train B - Detection Limit, ug	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
4-Chloro-3-methylphenol	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND
2-Methylnaphthalene	0.64	0.359	3.538E-04	3.538E-04
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND
4-Nitrophenol	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND
Diethylphthalate	0.412	0.26	2.278E-04	2.278E-04
4-Chlorophenylphenyl ether	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND

TABLE F-3. AEC - RUN NO. 1-2 COMPOSITE GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1-2 Train B -Amount Detected, ug	Run 1-2 Train B - Detection Limit, ug	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
Phenanthrene	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND
Di-n-butylphthalate	2.74	0.17	1.515E-03	1.515E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND
Butylbenzylphthalate	1.86	0.205	1.028E-03	1.028E-03
3,3'-Dimethylbenzidine	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	1.39	1.22	7.684E-04	7.684E-04
3,3'-Dichlorobenzidine	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND
Di-n-octylphthalate	0.348	0.312	1.924E-04	1.924E-04
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	0.348
Pyridine	ND	1.02	ND	ND	1.02	ND	1.02
2-Picoline	ND	1.06	ND	ND	1.06	ND	1.06
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	0.401
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	0.796
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	0.85
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	0.391
Phenol	ND	0.25	ND	ND	0.25	ND	0.25
Aniline	ND	0.399	ND	ND	0.399	ND	0.399
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	0.312
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	0.721
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	0.159
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	0.307
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	0.616
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	0.697
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	0.561
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	0.446
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	0.376
o-Toluidine	ND	0.396	ND	ND	0.396	ND	0.396
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	0.474
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	0.281
Acetophenone	0.582	0.295	1.897E-04	0.578	0.295	ND	0.295
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	0.899
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	1.19
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	0.494
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	0.891
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	0.729
Isophorone	ND	0.214	ND	ND	0.214	ND	0.214
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	0.337
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	0.536
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	0.391
Benzoic acid	ND	36.6	ND	ND	36.6	ND	36.6

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	0.49
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	0.353
Naphthalene	ND	0.447	ND	ND	0.447	ND	0.447
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	0.322
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	0.344
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	0.565
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	0.51
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	20.4
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	0.374
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	0.567
Safrole	ND	0.711	ND	ND	0.711	ND	0.711
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	0.359
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	0.546
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	11.1
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	0.631
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	0.536
Isosafrole	ND	1.08	ND	ND	1.08	ND	1.08
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	0.564
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	0.358
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	1
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	0.291
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	0.837
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	0.704
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	0.327
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	0.881
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	30.7
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	31.5
Acenaphthene	ND	0.36	ND	ND	0.36	ND	0.36
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	0.445
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	0.244
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	0.674
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	1.76

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	1.56
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	0.714
Diethylphthalate	ND	0.26	ND	ND	0.26	ND	0.26
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	0.283
Fluorene	ND	0.34	ND	ND	0.34	ND	0.34
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	0.363
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	0.775
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	27.2
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	0.368
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	1.25
Diallate	ND	0.475	ND	ND	0.475	ND	0.475
Phenacetin	ND	0.224	ND	ND	0.224	ND	0.224
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	0.689
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	0.371
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	2.07
Pronamide	ND	0.257	ND	ND	0.257	ND	0.257
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	28.8
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	1.34
Phenanthrene	ND	0.61	ND	ND	0.61	ND	0.61
Anthracene	ND	0.366	ND	ND	0.366	ND	0.366
Carbazole	ND	0.245	ND	ND	0.245	ND	0.245
Di-n-butylphthalate	ND	0.17	ND	5.39	0.17	2.93	0.17
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	22.5
Methapyrilene	ND	20.7	ND	ND	20.7	ND	20.7
Fluoranthene	ND	0.361	ND	ND	0.361	ND	0.361
Benzidine	ND	13.4	ND	ND	13.4	ND	13.4
Pyrene	ND	0.496	ND	ND	0.496	ND	0.496
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	0.368
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	0.512
Kepone	ND	18.8	ND	ND	18.8	ND	18.8
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	0.514	0.205
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	1.98

TABLE F-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	0.312
bis(2-Ethylhexyl)phthalate	65.6	1.22	2.139E-02	ND	1.22	2.56	1.22
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	0.335
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	0.452
Chrysene	ND	0.488	ND	ND	0.488	ND	0.488
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	0.312
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	0.461
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	0.278
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	0.581
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	0.329
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	1.17
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	0.219
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	0.246
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	0.236

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-5. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 2 Train A -Detection Limit, ug	Run 1-2 Train B - Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitrosodimethylamine	0.348	0.348	0.348	3.591E-04	3.591E-04
Pyridine	1.02	1.02	1.02	1.053E-03	1.053E-03
2-Picoline	1.06	1.06	1.06	1.094E-03	1.094E-03
Methyl methanesulfonate	0.401	0.401	0.401	4.138E-04	4.138E-04
N-Nitrosomethylethylamine	0.796	0.796	0.796	8.214E-04	8.214E-04
N-Nitrosodiethylamine	0.85	0.85	0.85	8.771E-04	8.771E-04
Ethyl methanesulfonate	0.391	0.391	0.391	4.035E-04	4.035E-04
Phenol	0.25	0.25	0.25	2.580E-04	2.580E-04
Aniline	0.399	0.399	0.399	4.117E-04	4.117E-04
bis(2-Chloroethyl)ether	0.312	0.312	0.312	3.220E-04	3.220E-04
Pentachloroethane	0.721	0.721	0.721	7.440E-04	7.440E-04
2-Chlorophenol	0.159	0.159	0.159	1.641E-04	1.641E-04
1,3-Dichlorobenzene	0.307	0.307	0.307	3.168E-04	3.168E-04
1,4-Dichlorobenzene	0.616	0.616	0.616	6.357E-04	6.357E-04
Benzyl alcohol	0.697	0.697	0.697	7.192E-04	7.192E-04
2-Methylphenol	0.561	0.561	0.561	5.789E-04	5.789E-04
1,2-Dichlorobenzene	0.446	0.446	0.446	4.602E-04	4.602E-04
bis(2-Chloroisopropyl)ether	0.376	0.376	0.376	3.880E-04	3.880E-04
o-Toluidine	0.396	0.396	0.396	4.086E-04	4.086E-04
4-Methylphenol/3-Methylphenol	0.474	0.474	0.474	4.891E-04	4.891E-04
N-Nitroso-di-n-propylamine	0.281	0.281	0.281	2.900E-04	2.900E-04
Acetophenone	0.295	0.295	0.295	3.044E-04	3.044E-04
N-Nitrosomorpholine	0.899	0.899	0.899	9.277E-04	9.277E-04
N-Nitrosopyrrolidine	1.19	1.19	1.19	1.228E-03	1.228E-03
Hexachloroethane	0.494	0.494	0.494	5.098E-04	5.098E-04
Nitrobenzene	0.891	0.891	0.891	9.194E-04	9.194E-04
N-Nitrosopiperidine	0.729	0.729	0.729	7.523E-04	7.523E-04
Isophorone	0.214	0.214	0.214	2.208E-04	2.208E-04
2,4-Dimethylphenol	0.337	0.337	0.337	3.478E-04	3.478E-04
2-Nitrophenol	0.536	0.536	0.536	5.531E-04	5.531E-04
bis(2-Chloroethoxy)methane	0.391	0.391	0.391	4.035E-04	4.035E-04
Benzoic acid	36.6	36.6	36.6	3.777E-02	3.777E-02
2,4-Dichlorophenol	0.49	0.49	0.49	5.056E-04	5.056E-04
1,2,4-Trichlorobenzene	0.353	0.353	0.353	3.643E-04	3.643E-04
Naphthalene	0.447	0.447	0.447	4.613E-04	4.613E-04
p-Chloroaniline	0.322	0.322	0.322	3.323E-04	3.323E-04
2,6-Dichlorophenol	0.344	0.344	0.344	3.550E-04	3.550E-04
Hexachloropropene	0.565	0.565	0.565	5.830E-04	5.830E-04
Hexachlorobutadiene	0.51	0.51	0.51	5.263E-04	5.263E-04
Dimethylphenethylamine	20.4	20.4	20.4	2.105E-02	2.105E-02

TABLE F-5. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 2 Train A -Detection Limit, ug	Run 1-2 Train B - Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitroso-di-n-butylamine	0.374	0.374	0.374	3.859E-04	3.859E-04
4-Chloro-3-methylphenol	0.567	0.567	0.567	5.851E-04	5.851E-04
Safrole	0.711	0.711	0.711	7.337E-04	7.337E-04
2-Methylnaphthalene	0.359	0.359	0.359	3.705E-04	3.705E-04
1,2,4,5-Tetrachlorobenzene	0.546	0.546	0.546	5.634E-04	5.634E-04
Hexachlorocyclopentadiene	11.1	11.1	11.1	1.145E-02	1.145E-02
2,4,6-Trichlorophenol	0.631	0.631	0.631	6.511E-04	6.511E-04
2,4,5-Trichlorophenol	0.536	0.536	0.536	5.531E-04	5.531E-04
Isosafrole	1.08	1.08	1.08	1.114E-03	1.114E-03
2-Chloronaphthalene	0.564	0.564	0.564	5.820E-04	5.820E-04
2-Nitroaniline	0.358	0.358	0.358	3.694E-04	3.694E-04
1,4-Naphthoquinone	1	1	1	1.032E-03	1.032E-03
Dimethylphthalate	0.291	0.291	0.291	3.003E-04	3.003E-04
1,3-Dinitrobenzene	0.837	0.837	0.837	8.637E-04	8.637E-04
2,6-Dinitrotoluene	0.704	0.704	0.704	7.265E-04	7.265E-04
Acenaphthylene	0.327	0.327	0.327	3.374E-04	3.374E-04
3-Nitroaniline	0.881	0.881	0.881	9.091E-04	9.091E-04
4-Nitrophenol	30.7	30.7	30.7	3.168E-02	3.168E-02
2,4-Dinitrophenol	31.5	31.5	31.5	3.251E-02	3.251E-02
Acenaphthene	0.36	0.36	0.36	3.715E-04	3.715E-04
2,4-Dinitrotoluene	0.445	0.445	0.445	4.592E-04	4.592E-04
Dibenzofuran	0.244	0.244	0.244	2.518E-04	2.518E-04
Pentachlorobenzene	0.674	0.674	0.674	6.955E-04	6.955E-04
1-Naphthylamine	1.76	1.76	1.76	1.816E-03	1.816E-03
2-Naphthylamine	1.56	1.56	1.56	1.610E-03	1.610E-03
2,3,4,6-Tetrachlorophenol	0.714	0.714	0.714	7.368E-04	7.368E-04
Diethylphthalate	0.26	0.26	0.26	2.683E-04	2.683E-04
4-Chlorophenylphenyl ether	0.283	0.283	0.283	2.920E-04	2.920E-04
Fluorene	0.34	0.34	0.34	3.508E-04	3.508E-04
5-Nitro-o-toluidine	0.363	0.363	0.363	3.746E-04	3.746E-04
4-Nitroaniline	0.775	0.775	0.775	7.997E-04	7.997E-04
4,6-Dinitro-2-methylphenol	27.2	27.2	27.2	2.807E-02	2.807E-02
Diphenylamine/N-NitrosoDPA	0.368	0.368	0.368	3.797E-04	3.797E-04
sym-Trinitrobenzene	1.25	1.25	1.25	1.290E-03	1.290E-03
Diallate	0.475	0.475	0.475	4.902E-04	4.902E-04
Phenacetin	0.224	0.224	0.224	2.311E-04	2.311E-04
4-Bromophenylphenyl ether	0.689	0.689	0.689	7.110E-04	7.110E-04
Hexachlorobenzene	0.371	0.371	0.371	3.828E-04	3.828E-04
4-Aminobiphenyl	2.07	2.07	2.07	2.136E-03	2.136E-03
Pronamide	0.257	0.257	0.257	2.652E-04	2.652E-04

TABLE F-5. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 2 Train A -Detection Limit, ug	Run 1-2 Train B - Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Pentachlorophenol	28.8	28.8	28.8	2.972E-02	2.972E-02
Pentachloronitrobenzene	1.34	1.34	1.34	1.383E-03	1.383E-03
Phenanthrene	0.61	0.61	0.61	6.295E-04	6.295E-04
Anthracene	0.366	0.366	0.366	3.777E-04	3.777E-04
Carbazole	0.245	0.245	0.245	2.528E-04	2.528E-04
Di-n-butylphthalate	0.17	0.17	0.17	1.754E-04	1.754E-04
4-Nitroquinoline-1-oxide	22.5	22.5	22.5	2.322E-02	2.322E-02
Methapyrilene	20.7	20.7	20.7	2.136E-02	2.136E-02
Fluoranthene	0.361	0.361	0.361	3.725E-04	3.725E-04
Benzidine	13.4	13.4	13.4	1.383E-02	1.383E-02
Pyrene	0.496	0.496	0.496	5.118E-04	5.118E-04
p-Dimethylaminoazobenzene	0.368	0.368	0.368	3.797E-04	3.797E-04
Chlorobenzilate	0.512	0.512	0.512	5.283E-04	5.283E-04
Kepone	18.8	18.8	18.8	1.940E-02	1.940E-02
Butylbenzylphthalate	0.205	0.205	0.205	2.115E-04	2.115E-04
3,3'-Dimethylbenzidine	1.98	1.98	1.98	2.043E-03	2.043E-03
2-Acetylaminofluorene	0.312	0.312	0.312	3.220E-04	3.220E-04
bis(2-Ethylhexyl)phthalate	1.22	1.22	1.22	1.259E-03	1.259E-03
3,3'-Dichlorobenzidine	0.335	0.335	0.335	3.457E-04	3.457E-04
Benz(a)anthracene	0.452	0.452	0.452	4.664E-04	4.664E-04
Chrysene	0.488	0.488	0.488	5.036E-04	5.036E-04
Di-n-octylphthalate	0.312	0.312	0.312	3.220E-04	3.220E-04
7,12-Dimethylbenz(a)anthracene	0.461	0.461	0.461	4.757E-04	4.757E-04
Benzo(b)fluoranthene (a)	0.278	0.278	0.278	2.869E-04	2.869E-04
Benzo(k)fluoranthene (a)	0.581	0.581	0.581	5.995E-04	5.995E-04
Benz(a)pyrene	0.329	0.329	0.329	3.395E-04	3.395E-04
3-Methylcholanthrene	1.17	1.17	1.17	1.207E-03	1.207E-03
Indeno(1,2,3-cd)pyrene	0.219	0.219	0.219	2.260E-04	2.260E-04
Dibenz(a,h)anthracene	0.246	0.246	0.246	2.538E-04	2.538E-04
Benzo(g,h,i)perylene	0.236	0.236	0.236	2.435E-04	2.435E-04

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

GREEN STAR CLUSTER

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TABLE F-1. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	ND
Acetophenone	1.34	0.295	5.246E-04	1.34	0.295	6.415E-04	5.830E-04
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	ND
Naphthalene	1.58	0.447	6.185E-04	1.63	0.447	7.803E-04	6.994E-04
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	ND
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND	0.711	ND	ND
2-Methylnaphthalene	0.639	0.359	2.501E-04	0.616	0.359	2.949E-04	2.725E-04
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	ND

TABLE F-1. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	ND
Diethylphthalate	2.02	0.26	7.908E-04	2.09	0.26	1.001E-03	8.956E-04
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	ND
Phenanthrene	ND	0.61	ND	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND	0.245	ND	ND
Di-n-butylphthalate	0.953	0.17	3.731E-04	4.66	0.17	2.231E-03	1.302E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND	18.8	ND	ND
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	ND	ND
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	32.4	1.22	1.268E-02	1.6	1.22	7.659E-04	6.725E-03
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	ND

[a]
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	0.348
Pyridine	ND	1.02	ND	ND	1.02	ND	1.02
2-Picoline	ND	1.06	ND	ND	1.06	ND	1.06
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	0.401
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	0.796
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	0.85
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	0.391
Phenol	ND	0.25	ND	ND	0.25	ND	0.25
Aniline	ND	0.399	ND	ND	0.399	ND	0.399
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	0.312
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	0.721
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	0.159
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	0.307
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	0.616
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	0.697
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	0.561
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	0.446
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	0.376
o-Toluidine	ND	0.396	ND	ND	0.396	ND	0.396
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	0.474
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	0.281
Acetophenone	0.904	0.295	2.708E-04	0.578	0.295	ND	0.295
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	0.899
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	1.19
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	0.494
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	0.891
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	0.729
Isophorone	ND	0.214	ND	ND	0.214	ND	0.214
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	0.337
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	0.536
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	0.391
Benzoic acid	ND	36.6	ND	ND	36.6	ND	36.6

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	0.49
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	0.353
Naphthalene	1	0.447	2.995E-04	ND	0.447	ND	0.447
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	0.322
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	0.344
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	0.565
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	0.51
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	20.4
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	0.374
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	0.567
Safrole	ND	0.711	ND	ND	0.711	ND	0.711
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	0.359
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	0.546
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	11.1
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	0.631
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	0.536
Isosafrole	ND	1.08	ND	ND	1.08	ND	1.08
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	0.564
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	0.358
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	1
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	0.291
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	0.837
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	0.704
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	0.327
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	0.881
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	30.7
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	31.5
Acenaphthene	ND	0.36	ND	ND	0.36	ND	0.36
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	0.445
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	0.244
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	0.674
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	1.76

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	1.56
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	0.714
Diethylphthalate	1.16	0.26	3.475E-04	ND	0.26	ND	0.26
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	0.283
Fluorene	ND	0.34	ND	ND	0.34	ND	0.34
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	0.363
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	0.775
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	27.2
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	0.368
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	1.25
Diallate	ND	0.475	ND	ND	0.475	ND	0.475
Phenacetin	ND	0.224	ND	ND	0.224	ND	0.224
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	0.689
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	0.371
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	2.07
Pronamide	ND	0.257	ND	ND	0.257	ND	0.257
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	28.8
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	1.34
Phenanthrene	ND	0.61	ND	ND	0.61	ND	0.61
Anthracene	ND	0.366	ND	ND	0.366	ND	0.366
Carbazole	ND	0.245	ND	ND	0.245	ND	0.245
Di-n-butylphthalate	4.53	0.17	1.357E-03	5.39	0.17	2.93	0.17
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	22.5
Methapyrilene	ND	20.7	ND	ND	20.7	ND	20.7
Fluoranthene	ND	0.361	ND	ND	0.361	ND	0.361
Benzidine	ND	13.4	ND	ND	13.4	ND	13.4
Pyrene	ND	0.496	ND	ND	0.496	ND	0.496
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	0.368
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	0.512
Kepone	ND	18.8	ND	ND	18.8	ND	18.8
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	0.514	0.205
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	1.98

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	0.312
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND	1.22	2.56	1.22
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	0.335
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	0.452
Chrysene	ND	0.488	ND	ND	0.488	ND	0.488
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	0.312
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	0.461
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	0.278
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	0.581
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	0.329
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	1.17
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	0.219
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	0.246
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	0.236

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-3. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitrosodimethylamine	0.348	0.348	1.499E-04	1.499E-04
Pyridine	1.02	1.02	4.393E-04	4.393E-04
2-Picoline	1.06	1.06	4.566E-04	4.566E-04
Methyl methanesulfonate	0.401	0.401	1.727E-04	1.727E-04
N-Nitrosomethylethylamine	0.796	0.796	3.429E-04	3.429E-04
N-Nitrosodiethylamine	0.85	0.85	3.661E-04	3.661E-04
Ethyl methanesulfonate	0.391	0.391	1.684E-04	1.684E-04
Phenol	0.25	0.25	1.077E-04	1.077E-04
Aniline	0.399	0.399	1.719E-04	1.719E-04
bis(2-Chloroethyl)ether	0.312	0.312	1.344E-04	1.344E-04
Pentachloroethane	0.721	0.721	3.105E-04	3.105E-04
2-Chlorophenol	0.159	0.159	6.848E-05	6.848E-05
1,3-Dichlorobenzene	0.307	0.307	1.322E-04	1.322E-04
1,4-Dichlorobenzene	0.616	0.616	2.653E-04	2.653E-04
Benzyl alcohol	0.697	0.697	3.002E-04	3.002E-04
2-Methylphenol	0.561	0.561	2.416E-04	2.416E-04
1,2-Dichlorobenzene	0.446	0.446	1.921E-04	1.921E-04
bis(2-Chloroisopropyl)ether	0.376	0.376	1.619E-04	1.619E-04
o-Toluidine	0.396	0.396	1.706E-04	1.706E-04
4-Methylphenol/3-Methylphenol	0.474	0.474	2.042E-04	2.042E-04
N-Nitroso-di-n-propylamine	0.281	0.281	1.210E-04	1.210E-04
Acetophenone	0.295	0.295	1.271E-04	1.271E-04
N-Nitrosomorpholine	0.899	0.899	3.872E-04	3.872E-04
N-Nitrosopyrrolidine	1.19	1.19	5.126E-04	5.126E-04
Hexachloroethane	0.494	0.494	2.128E-04	2.128E-04
Nitrobenzene	0.891	0.891	3.838E-04	3.838E-04
N-Nitrosopiperidine	0.729	0.729	3.140E-04	3.140E-04
Isophorone	0.214	0.214	9.217E-05	9.217E-05
2,4-Dimethylphenol	0.337	0.337	1.452E-04	1.452E-04
2-Nitrophenol	0.536	0.536	2.309E-04	2.309E-04
bis(2-Chloroethoxy)methane	0.391	0.391	1.684E-04	1.684E-04
Benzoic acid	36.6	36.6	1.576E-02	1.576E-02
2,4-Dichlorophenol	0.49	0.49	2.111E-04	2.111E-04
1,2,4-Trichlorobenzene	0.353	0.353	1.520E-04	1.520E-04
Naphthalene	0.447	0.447	1.925E-04	1.925E-04
p-Chloroaniline	0.322	0.322	1.387E-04	1.387E-04
2,6-Dichlorophenol	0.344	0.344	1.482E-04	1.482E-04
Hexachloropropene	0.565	0.565	2.434E-04	2.434E-04
Hexachlorobutadiene	0.51	0.51	2.197E-04	2.197E-04
Dimethylphenethylamine	20.4	20.4	8.787E-03	8.787E-03

TABLE F-3. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitroso-di-n-butylamine	0.374	0.374	1.611E-04	1.611E-04
4-Chloro-3-methylphenol	0.567	0.567	2.442E-04	2.442E-04
Safrole	0.711	0.711	3.062E-04	3.062E-04
2-Methylnaphthalene	0.359	0.359	1.546E-04	1.546E-04
1,2,4,5-Tetrachlorobenzene	0.546	0.546	2.352E-04	2.352E-04
Hexachlorocyclopentadiene	11.1	11.1	4.781E-03	4.781E-03
2,4,6-Trichlorophenol	0.631	0.631	2.718E-04	2.718E-04
2,4,5-Trichlorophenol	0.536	0.536	2.309E-04	2.309E-04
Isosafrole	1.08	1.08	4.652E-04	4.652E-04
2-Chloronaphthalene	0.564	0.564	2.429E-04	2.429E-04
2-Nitroaniline	0.358	0.358	1.542E-04	1.542E-04
1,4-Naphthoquinone	1	1	4.307E-04	4.307E-04
Dimethylphthalate	0.291	0.291	1.253E-04	1.253E-04
1,3-Dinitrobenzene	0.837	0.837	3.605E-04	3.605E-04
2,6-Dinitrotoluene	0.704	0.704	3.032E-04	3.032E-04
Acenaphthylene	0.327	0.327	1.408E-04	1.408E-04
3-Nitroaniline	0.881	0.881	3.795E-04	3.795E-04
4-Nitrophenol	30.7	30.7	1.322E-02	1.322E-02
2,4-Dinitrophenol	31.5	31.5	1.357E-02	1.357E-02
Acenaphthene	0.36	0.36	1.551E-04	1.551E-04
2,4-Dinitrotoluene	0.445	0.445	1.917E-04	1.917E-04
Dibenzofuran	0.244	0.244	1.051E-04	1.051E-04
Pentachlorobenzene	0.674	0.674	2.903E-04	2.903E-04
1-Naphthylamine	1.76	1.76	7.581E-04	7.581E-04
2-Naphthylamine	1.56	1.56	6.719E-04	6.719E-04
2,3,4,6-Tetrachlorophenol	0.714	0.714	3.075E-04	3.075E-04
Diethylphthalate	0.26	0.26	1.120E-04	1.120E-04
4-Chlorophenylphenyl ether	0.283	0.283	1.219E-04	1.219E-04
Fluorene	0.34	0.34	1.464E-04	1.464E-04
5-Nitro-o-toluidine	0.363	0.363	1.564E-04	1.564E-04
4-Nitroaniline	0.775	0.775	3.338E-04	3.338E-04
4,6-Dinitro-2-methylphenol	27.2	27.2	1.172E-02	1.172E-02
Diphenylamine/N-NitrosoDPA	0.368	0.368	1.585E-04	1.585E-04
sym-Trinitrobenzene	1.25	1.25	5.384E-04	5.384E-04
Diallate	0.475	0.475	2.046E-04	2.046E-04
Phenacetin	0.224	0.224	9.648E-05	9.648E-05
4-Bromophenylphenyl ether	0.689	0.689	2.968E-04	2.968E-04
Hexachlorobenzene	0.371	0.371	1.598E-04	1.598E-04
4-Aminobiphenyl	2.07	2.07	8.916E-04	8.916E-04
Pronamide	0.257	0.257	1.107E-04	1.107E-04

TABLE F-3. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Pentachlorophenol	28.8	28.8	1.240E-02	1.240E-02
Pentachloronitrobenzene	1.34	1.34	5.772E-04	5.772E-04
Phenanthrene	0.61	0.61	2.627E-04	2.627E-04
Anthracene	0.366	0.366	1.576E-04	1.576E-04
Carbazole	0.245	0.245	1.055E-04	1.055E-04
Di-n-butylphthalate	0.17	0.17	7.322E-05	7.322E-05
4-Nitroquinoline-1-oxide	22.5	22.5	9.691E-03	9.691E-03
Methapyrilene	20.7	20.7	8.916E-03	8.916E-03
Fluoranthene	0.361	0.361	1.555E-04	1.555E-04
Benzidine	13.4	13.4	5.772E-03	5.772E-03
Pyrene	0.496	0.496	2.136E-04	2.136E-04
p-Dimethylaminoazobenzene	0.368	0.368	1.585E-04	1.585E-04
Chlorobenzilate	0.512	0.512	2.205E-04	2.205E-04
Kepone	18.8	18.8	8.097E-03	8.097E-03
Butylbenzylphthalate	0.205	0.205	8.830E-05	8.830E-05
3,3'-Dimethylbenzidine	1.98	1.98	8.528E-04	8.528E-04
2-Acetylaminofluorene	0.312	0.312	1.344E-04	1.344E-04
bis(2-Ethylhexyl)phthalate	1.22	1.22	5.255E-04	5.255E-04
3,3'-Dichlorobenzidine	0.335	0.335	1.443E-04	1.443E-04
Benz(a)anthracene	0.452	0.452	1.947E-04	1.947E-04
Chrysene	0.488	0.488	2.102E-04	2.102E-04
Di-n-octylphthalate	0.312	0.312	1.344E-04	1.344E-04
7,12-Dimethylbenz(a)anthracene	0.461	0.461	1.986E-04	1.986E-04
Benzo(b)fluoranthene (a)	0.278	0.278	1.197E-04	1.197E-04
Benzo(k)fluoranthene (a)	0.581	0.581	2.502E-04	2.502E-04
Benz(a)pyrene	0.329	0.329	1.417E-04	1.417E-04
3-Methylcholanthrene	1.17	1.17	5.039E-04	5.039E-04
Indeno(1,2,3-cd)pyrene	0.219	0.219	9.433E-05	9.433E-05
Dibenz(a,h)anthracene	0.246	0.246	1.060E-04	1.060E-04
Benzo(g,h,i)perylene	0.236	0.236	1.016E-04	1.016E-04

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

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GREEN PARACHUTE SIGNAL FLARE

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TABLE F-1. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	ND
Acetophenone	0.765	0.295	3.592E-04	0.876	0.295	4.778E-04	4.185E-04
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	ND
Naphthalene	1.07	0.447	5.025E-04	1.31	0.447	7.145E-04	6.085E-04
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	ND
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND	0.711	ND	ND
2-Methylnaphthalene	0.482	0.359	2.264E-04	0.555	0.359	3.027E-04	2.645E-04
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	ND

TABLE F-1. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	ND
Diethylphthalate	4.14	0.26	1.944E-03	3.84	0.26	2.094E-03	2.019E-03
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	ND
Phenanthrene	ND	0.61	ND	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND	0.245	ND	ND
Di-n-butylphthalate	1.32	0.17	6.199E-04	2.43	0.17	1.325E-03	9.726E-04
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND	18.8	ND	ND
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	ND	ND
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND	1.22	ND	ND
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	0.348
Pyridine	ND	1.02	ND	ND	1.02	ND	1.02
2-Picoline	ND	1.06	ND	ND	1.06	ND	1.06
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	0.401
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	0.796
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	0.85
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	0.391
Phenol	ND	0.25	ND	ND	0.25	ND	0.25
Aniline	ND	0.399	ND	ND	0.399	ND	0.399
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	0.312
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	0.721
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	0.159
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	0.307
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	0.616
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	0.697
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	0.561
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	0.446
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	0.376
o-Toluidine	ND	0.396	ND	ND	0.396	ND	0.396
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	0.474
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	0.281
Acetophenone	0.904	0.295	2.708E-04	0.578	0.295	ND	0.295
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	0.899
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	1.19
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	0.494
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	0.891
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	0.729
Isophorone	ND	0.214	ND	ND	0.214	ND	0.214
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	0.337
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	0.536
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	0.391
Benzoic acid	ND	36.6	ND	ND	36.6	ND	36.6

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	0.49
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	0.353
Naphthalene	1	0.447	2.995E-04	ND	0.447	ND	0.447
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	0.322
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	0.344
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	0.565
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	0.51
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	20.4
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	0.374
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	0.567
Safrole	ND	0.711	ND	ND	0.711	ND	0.711
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	0.359
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	0.546
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	11.1
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	0.631
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	0.536
Isosafrole	ND	1.08	ND	ND	1.08	ND	1.08
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	0.564
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	0.358
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	1
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	0.291
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	0.837
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	0.704
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	0.327
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	0.881
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	30.7
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	31.5
Acenaphthene	ND	0.36	ND	ND	0.36	ND	0.36
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	0.445
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	0.244
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	0.674
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	1.76

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	1.56
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	0.714
Diethylphthalate	1.16	0.26	3.475E-04	ND	0.26	ND	0.26
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	0.283
Fluorene	ND	0.34	ND	ND	0.34	ND	0.34
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	0.363
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	0.775
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	27.2
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	0.368
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	1.25
Diallate	ND	0.475	ND	ND	0.475	ND	0.475
Phenacetin	ND	0.224	ND	ND	0.224	ND	0.224
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	0.689
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	0.371
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	2.07
Pronamide	ND	0.257	ND	ND	0.257	ND	0.257
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	28.8
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	1.34
Phenanthrene	ND	0.61	ND	ND	0.61	ND	0.61
Anthracene	ND	0.366	ND	ND	0.366	ND	0.366
Carbazole	ND	0.245	ND	ND	0.245	ND	0.245
Di-n-butylphthalate	4.53	0.17	1.357E-03	5.39	0.17	2.93	0.17
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	22.5
Methapyrilene	ND	20.7	ND	ND	20.7	ND	20.7
Fluoranthene	ND	0.361	ND	ND	0.361	ND	0.361
Benzidine	ND	13.4	ND	ND	13.4	ND	13.4
Pyrene	ND	0.496	ND	ND	0.496	ND	0.496
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	0.368
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	0.512
Kepone	ND	18.8	ND	ND	18.8	ND	18.8
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	0.514	0.205
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	1.98

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	0.312
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND	1.22	2.56	1.22
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	0.335
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	0.452
Chrysene	ND	0.488	ND	ND	0.488	ND	0.488
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	0.312
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	0.461
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	0.278
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	0.581
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	0.329
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	1.17
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	0.219
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	0.246
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	0.236

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-3. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitrosodimethylamine	0.348	0.348	1.756E-04	1.756E-04
Pyridine	1.02	1.02	5.148E-04	5.148E-04
2-Picoline	1.06	1.06	5.350E-04	5.350E-04
Methyl methanesulfonate	0.401	0.401	2.024E-04	2.024E-04
N-Nitrosomethylethylamine	0.796	0.796	4.017E-04	4.017E-04
N-Nitrosodiethylamine	0.85	0.85	4.290E-04	4.290E-04
Ethyl methanesulfonate	0.391	0.391	1.973E-04	1.973E-04
Phenol	0.25	0.25	1.262E-04	1.262E-04
Aniline	0.399	0.399	2.014E-04	2.014E-04
bis(2-Chloroethyl)ether	0.312	0.312	1.575E-04	1.575E-04
Pentachloroethane	0.721	0.721	3.639E-04	3.639E-04
2-Chlorophenol	0.159	0.159	8.024E-05	8.024E-05
1,3-Dichlorobenzene	0.307	0.307	1.549E-04	1.549E-04
1,4-Dichlorobenzene	0.616	0.616	3.109E-04	3.109E-04
Benzyl alcohol	0.697	0.697	3.518E-04	3.518E-04
2-Methylphenol	0.561	0.561	2.831E-04	2.831E-04
1,2-Dichlorobenzene	0.446	0.446	2.251E-04	2.251E-04
bis(2-Chloroisopropyl)ether	0.376	0.376	1.898E-04	1.898E-04
o-Toluidine	0.396	0.396	1.999E-04	1.999E-04
4-Methylphenol/3-Methylphenol	0.474	0.474	2.392E-04	2.392E-04
N-Nitroso-di-n-propylamine	0.281	0.281	1.418E-04	1.418E-04
Acetophenone	0.295	0.295	1.489E-04	1.489E-04
N-Nitrosomorpholine	0.899	0.899	4.537E-04	4.537E-04
N-Nitrosopyrrolidine	1.19	1.19	6.006E-04	6.006E-04
Hexachloroethane	0.494	0.494	2.493E-04	2.493E-04
Nitrobenzene	0.891	0.891	4.497E-04	4.497E-04
N-Nitrosopiperidine	0.729	0.729	3.679E-04	3.679E-04
Isophorone	0.214	0.214	1.080E-04	1.080E-04
2,4-Dimethylphenol	0.337	0.337	1.701E-04	1.701E-04
2-Nitrophenol	0.536	0.536	2.705E-04	2.705E-04
bis(2-Chloroethoxy)methane	0.391	0.391	1.973E-04	1.973E-04
Benzoic acid	36.6	36.6	1.847E-02	1.847E-02
2,4-Dichlorophenol	0.49	0.49	2.473E-04	2.473E-04
1,2,4-Trichlorobenzene	0.353	0.353	1.781E-04	1.781E-04
Naphthalene	0.447	0.447	2.256E-04	2.256E-04
p-Chloroaniline	0.322	0.322	1.625E-04	1.625E-04
2,6-Dichlorophenol	0.344	0.344	1.736E-04	1.736E-04
Hexachloropropene	0.565	0.565	2.851E-04	2.851E-04
Hexachlorobutadiene	0.51	0.51	2.574E-04	2.574E-04
Dimethylphenethylamine	20.4	20.4	1.030E-02	1.030E-02

TABLE F-3. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitroso-di-n-butylamine	0.374	0.374	1.887E-04	1.887E-04
4-Chloro-3-methylphenol	0.567	0.567	2.861E-04	2.861E-04
Safrole	0.711	0.711	3.588E-04	3.588E-04
2-Methylnaphthalene	0.359	0.359	1.812E-04	1.812E-04
1,2,4,5-Tetrachlorobenzene	0.546	0.546	2.756E-04	2.756E-04
Hexachlorocyclopentadiene	11.1	11.1	5.602E-03	5.602E-03
2,4,6-Trichlorophenol	0.631	0.631	3.184E-04	3.184E-04
2,4,5-Trichlorophenol	0.536	0.536	2.705E-04	2.705E-04
Isosafrole	1.08	1.08	5.450E-04	5.450E-04
2-Chloronaphthalene	0.564	0.564	2.846E-04	2.846E-04
2-Nitroaniline	0.358	0.358	1.807E-04	1.807E-04
1,4-Naphthoquinone	1	1	5.047E-04	5.047E-04
Dimethylphthalate	0.291	0.291	1.469E-04	1.469E-04
1,3-Dinitrobenzene	0.837	0.837	4.224E-04	4.224E-04
2,6-Dinitrotoluene	0.704	0.704	3.553E-04	3.553E-04
Acenaphthylene	0.327	0.327	1.650E-04	1.650E-04
3-Nitroaniline	0.881	0.881	4.446E-04	4.446E-04
4-Nitrophenol	30.7	30.7	1.549E-02	1.549E-02
2,4-Dinitrophenol	31.5	31.5	1.590E-02	1.590E-02
Acenaphthene	0.36	0.36	1.817E-04	1.817E-04
2,4-Dinitrotoluene	0.445	0.445	2.246E-04	2.246E-04
Dibenzofuran	0.244	0.244	1.231E-04	1.231E-04
Pentachlorobenzene	0.674	0.674	3.401E-04	3.401E-04
1-Naphthylamine	1.76	1.76	8.882E-04	8.882E-04
2-Naphthylamine	1.56	1.56	7.873E-04	7.873E-04
2,3,4,6-Tetrachlorophenol	0.714	0.714	3.603E-04	3.603E-04
Diethylphthalate	0.26	0.26	1.312E-04	1.312E-04
4-Chlorophenylphenyl ether	0.283	0.283	1.428E-04	1.428E-04
Fluorene	0.34	0.34	1.716E-04	1.716E-04
5-Nitro-o-toluidine	0.363	0.363	1.832E-04	1.832E-04
4-Nitroaniline	0.775	0.775	3.911E-04	3.911E-04
4,6-Dinitro-2-methylphenol	27.2	27.2	1.373E-02	1.373E-02
Diphenylamine/N-NitrosoDPA	0.368	0.368	1.857E-04	1.857E-04
sym-Trinitrobenzene	1.25	1.25	6.308E-04	6.308E-04
Diallate	0.475	0.475	2.397E-04	2.397E-04
Phenacetin	0.224	0.224	1.130E-04	1.130E-04
4-Bromophenylphenyl ether	0.689	0.689	3.477E-04	3.477E-04
Hexachlorobenzene	0.371	0.371	1.872E-04	1.872E-04
4-Aminobiphenyl	2.07	2.07	1.045E-03	1.045E-03
Pronamide	0.257	0.257	1.297E-04	1.297E-04

TABLE F-3. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Pentachlorophenol	28.8	28.8	1.453E-02	1.453E-02
Pentachloronitrobenzene	1.34	1.34	6.763E-04	6.763E-04
Phenanthrene	0.61	0.61	3.079E-04	3.079E-04
Anthracene	0.366	0.366	1.847E-04	1.847E-04
Carbazole	0.245	0.245	1.236E-04	1.236E-04
Di-n-butylphthalate	0.17	0.17	8.579E-05	8.579E-05
4-Nitroquinoline-1-oxide	22.5	22.5	1.136E-02	1.136E-02
Methapyrilene	20.7	20.7	1.045E-02	1.045E-02
Fluoranthene	0.361	0.361	1.822E-04	1.822E-04
Benzidine	13.4	13.4	6.763E-03	6.763E-03
Pyrene	0.496	0.496	2.503E-04	2.503E-04
p-Dimethylaminoazobenzene	0.368	0.368	1.857E-04	1.857E-04
Chlorobenzilate	0.512	0.512	2.584E-04	2.584E-04
Kepone	18.8	18.8	9.488E-03	9.488E-03
Butylbenzylphthalate	0.205	0.205	1.035E-04	1.035E-04
3,3'-Dimethylbenzidine	1.98	1.98	9.993E-04	9.993E-04
2-Acetylaminofluorene	0.312	0.312	1.575E-04	1.575E-04
bis(2-Ethylhexyl)phthalate	1.22	1.22	6.157E-04	6.157E-04
3,3'-Dichlorobenzidine	0.335	0.335	1.691E-04	1.691E-04
Benz(a)anthracene	0.452	0.452	2.281E-04	2.281E-04
Chrysene	0.488	0.488	2.463E-04	2.463E-04
Di-n-octylphthalate	0.312	0.312	1.575E-04	1.575E-04
7,12-Dimethylbenz(a)anthracene	0.461	0.461	2.327E-04	2.327E-04
Benzo(b)fluoranthene (a)	0.278	0.278	1.403E-04	1.403E-04
Benzo(k)fluoranthene (a)	0.581	0.581	2.932E-04	2.932E-04
Benz(a)pyrene	0.329	0.329	1.660E-04	1.660E-04
3-Methylcholanthrene	1.17	1.17	5.905E-04	5.905E-04
Indeno(1,2,3-cd)pyrene	0.219	0.219	1.105E-04	1.105E-04
Dibenz(a,h)anthracene	0.246	0.246	1.241E-04	1.241E-04
Benzo(g,h,i)perylene	0.236	0.236	1.191E-04	1.191E-04

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

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WHITE PARACHUTE SIGNAL FLARE

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TABLE F-1. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	ND
Acetophenone	0.777	0.295	3.969E-04	1.19	0.295	7.051E-04	5.510E-04
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	ND
Naphthalene	0.682	0.447	3.483E-04	0.906	0.447	5.368E-04	4.426E-04
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	ND
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND	0.711	ND	ND
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	ND

TABLE F-1. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	ND
Diethylphthalate	ND	0.26	ND	0.997	0.26	5.907E-04	5.907E-04
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	ND
Phenanthrene	ND	0.61	ND	ND	0.61	ND	ND
Anthracene	ND	0.366	ND	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND	0.245	ND	ND
Di-n-butylphthalate	ND	0.17	ND	5.29	0.17	3.134E-03	3.134E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND	18.8	ND	ND
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	ND	ND
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	1.2	1.22	ND	ND
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	ND

[a]
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	0.348
Pyridine	ND	1.02	ND	ND	1.02	ND	1.02
2-Picoline	ND	1.06	ND	ND	1.06	ND	1.06
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	0.401
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	0.796
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	0.85
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	0.391
Phenol	ND	0.25	ND	ND	0.25	ND	0.25
Aniline	ND	0.399	ND	ND	0.399	ND	0.399
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	0.312
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	0.721
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	0.159
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	0.307
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	0.616
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	0.697
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	0.561
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	0.446
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	0.376
o-Toluidine	ND	0.396	ND	ND	0.396	ND	0.396
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	0.474
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	0.281
Acetophenone	0.904	0.295	2.708E-04	0.578	0.295	ND	0.295
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	0.899
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	1.19
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	0.494
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	0.891
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	0.729
Isophorone	ND	0.214	ND	ND	0.214	ND	0.214
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	0.337
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	0.536
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	0.391
Benzoic acid	ND	36.6	ND	ND	36.6	ND	36.6

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	0.49
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	0.353
Naphthalene	1	0.447	2.995E-04	ND	0.447	ND	0.447
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	0.322
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	0.344
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	0.565
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	0.51
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	20.4
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	0.374
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	0.567
Safrole	ND	0.711	ND	ND	0.711	ND	0.711
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	0.359
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	0.546
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	11.1
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	0.631
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	0.536
Isosafrole	ND	1.08	ND	ND	1.08	ND	1.08
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	0.564
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	0.358
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	1
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	0.291
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	0.837
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	0.704
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	0.327
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	0.881
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	30.7
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	31.5
Acenaphthene	ND	0.36	ND	ND	0.36	ND	0.36
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	0.445
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	0.244
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	0.674
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	1.76

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	1.56
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	0.714
Diethylphthalate	1.16	0.26	3.475E-04	ND	0.26	ND	0.26
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	0.283
Fluorene	ND	0.34	ND	ND	0.34	ND	0.34
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	0.363
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	0.775
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	27.2
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	0.368
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	1.25
Diallate	ND	0.475	ND	ND	0.475	ND	0.475
Phenacetin	ND	0.224	ND	ND	0.224	ND	0.224
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	0.689
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	0.371
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	2.07
Pronamide	ND	0.257	ND	ND	0.257	ND	0.257
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	28.8
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	1.34
Phenanthrene	ND	0.61	ND	ND	0.61	ND	0.61
Anthracene	ND	0.366	ND	ND	0.366	ND	0.366
Carbazole	ND	0.245	ND	ND	0.245	ND	0.245
Di-n-butylphthalate	4.53	0.17	1.357E-03	5.39	0.17	2.93	0.17
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	22.5
Methapyrilene	ND	20.7	ND	ND	20.7	ND	20.7
Fluoranthene	ND	0.361	ND	ND	0.361	ND	0.361
Benzidine	ND	13.4	ND	ND	13.4	ND	13.4
Pyrene	ND	0.496	ND	ND	0.496	ND	0.496
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	0.368
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	0.512
Kepone	ND	18.8	ND	ND	18.8	ND	18.8
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	0.514	0.205
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	1.98

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	0.312
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND	1.22	2.56	1.22
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	0.335
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	0.452
Chrysene	ND	0.488	ND	ND	0.488	ND	0.488
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	0.312
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	0.461
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	0.278
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	0.581
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	0.329
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	1.17
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	0.219
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	0.246
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	0.236

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-3. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitrosodimethylamine	0.348	0.348	1.909E-04	1.909E-04
Pyridine	1.02	1.02	5.596E-04	5.596E-04
2-Picoline	1.06	1.06	5.815E-04	5.815E-04
Methyl methanesulfonate	0.401	0.401	2.200E-04	2.200E-04
N-Nitrosomethylethylamine	0.796	0.796	4.367E-04	4.367E-04
N-Nitrosodiethylamine	0.85	0.85	4.663E-04	4.663E-04
Ethyl methanesulfonate	0.391	0.391	2.145E-04	2.145E-04
Phenol	0.25	0.25	1.372E-04	1.372E-04
Aniline	0.399	0.399	2.189E-04	2.189E-04
bis(2-Chloroethyl)ether	0.312	0.312	1.712E-04	1.712E-04
Pentachloroethane	0.721	0.721	3.956E-04	3.956E-04
2-Chlorophenol	0.159	0.159	8.723E-05	8.723E-05
1,3-Dichlorobenzene	0.307	0.307	1.684E-04	1.684E-04
1,4-Dichlorobenzene	0.616	0.616	3.379E-04	3.379E-04
Benzyl alcohol	0.697	0.697	3.824E-04	3.824E-04
2-Methylphenol	0.561	0.561	3.078E-04	3.078E-04
1,2-Dichlorobenzene	0.446	0.446	2.447E-04	2.447E-04
bis(2-Chloroisopropyl)ether	0.376	0.376	2.063E-04	2.063E-04
o-Toluidine	0.396	0.396	2.173E-04	2.173E-04
4-Methylphenol/3-Methylphenol	0.474	0.474	2.600E-04	2.600E-04
N-Nitroso-di-n-propylamine	0.281	0.281	1.542E-04	1.542E-04
Acetophenone	0.295	0.295	1.618E-04	1.618E-04
N-Nitrosomorpholine	0.899	0.899	4.932E-04	4.932E-04
N-Nitrosopyrrolidine	1.19	1.19	6.529E-04	6.529E-04
Hexachloroethane	0.494	0.494	2.710E-04	2.710E-04
Nitrobenzene	0.891	0.891	4.888E-04	4.888E-04
N-Nitrosopiperidine	0.729	0.729	3.999E-04	3.999E-04
Isophorone	0.214	0.214	1.174E-04	1.174E-04
2,4-Dimethylphenol	0.337	0.337	1.849E-04	1.849E-04
2-Nitrophenol	0.536	0.536	2.941E-04	2.941E-04
bis(2-Chloroethoxy)methane	0.391	0.391	2.145E-04	2.145E-04
Benzoic acid	36.6	36.6	2.008E-02	2.008E-02
2,4-Dichlorophenol	0.49	0.49	2.688E-04	2.688E-04
1,2,4-Trichlorobenzene	0.353	0.353	1.937E-04	1.937E-04
Naphthalene	0.447	0.447	2.452E-04	2.452E-04
p-Chloroaniline	0.322	0.322	1.767E-04	1.767E-04
2,6-Dichlorophenol	0.344	0.344	1.887E-04	1.887E-04
Hexachloropropene	0.565	0.565	3.100E-04	3.100E-04
Hexachlorobutadiene	0.51	0.51	2.798E-04	2.798E-04
Dimethylphenethylamine	20.4	20.4	1.119E-02	1.119E-02

TABLE F-3. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitroso-di-n-butylamine	0.374	0.374	2.052E-04	2.052E-04
4-Chloro-3-methylphenol	0.567	0.567	3.111E-04	3.111E-04
Safrole	0.711	0.711	3.901E-04	3.901E-04
2-Methylnaphthalene	0.359	0.359	1.970E-04	1.970E-04
1,2,4,5-Tetrachlorobenzene	0.546	0.546	2.995E-04	2.995E-04
Hexachlorocyclopentadiene	11.1	11.1	6.090E-03	6.090E-03
2,4,6-Trichlorophenol	0.631	0.631	3.462E-04	3.462E-04
2,4,5-Trichlorophenol	0.536	0.536	2.941E-04	2.941E-04
Isosafrole	1.08	1.08	5.925E-04	5.925E-04
2-Chloronaphthalene	0.564	0.564	3.094E-04	3.094E-04
2-Nitroaniline	0.358	0.358	1.964E-04	1.964E-04
1,4-Naphthoquinone	1	1	5.486E-04	5.486E-04
Dimethylphthalate	0.291	0.291	1.596E-04	1.596E-04
1,3-Dinitrobenzene	0.837	0.837	4.592E-04	4.592E-04
2,6-Dinitrotoluene	0.704	0.704	3.862E-04	3.862E-04
Acenaphthylene	0.327	0.327	1.794E-04	1.794E-04
3-Nitroaniline	0.881	0.881	4.833E-04	4.833E-04
4-Nitrophenol	30.7	30.7	1.684E-02	1.684E-02
2,4-Dinitrophenol	31.5	31.5	1.728E-02	1.728E-02
Acenaphthene	0.36	0.36	1.975E-04	1.975E-04
2,4-Dinitrotoluene	0.445	0.445	2.441E-04	2.441E-04
Dibenzofuran	0.244	0.244	1.339E-04	1.339E-04
Pentachlorobenzene	0.674	0.674	3.698E-04	3.698E-04
1-Naphthylamine	1.76	1.76	9.656E-04	9.656E-04
2-Naphthylamine	1.56	1.56	8.558E-04	8.558E-04
2,3,4,6-Tetrachlorophenol	0.714	0.714	3.917E-04	3.917E-04
Diethylphthalate	0.26	0.26	1.426E-04	1.426E-04
4-Chlorophenylphenyl ether	0.283	0.283	1.553E-04	1.553E-04
Fluorene	0.34	0.34	1.865E-04	1.865E-04
5-Nitro-o-toluidine	0.363	0.363	1.991E-04	1.991E-04
4-Nitroaniline	0.775	0.775	4.252E-04	4.252E-04
4,6-Dinitro-2-methylphenol	27.2	27.2	1.492E-02	1.492E-02
Diphenylamine/N-NitrosoDPA	0.368	0.368	2.019E-04	2.019E-04
sym-Trinitrobenzene	1.25	1.25	6.858E-04	6.858E-04
Diallate	0.475	0.475	2.606E-04	2.606E-04
Phenacetin	0.224	0.224	1.229E-04	1.229E-04
4-Bromophenylphenyl ether	0.689	0.689	3.780E-04	3.780E-04
Hexachlorobenzene	0.371	0.371	2.035E-04	2.035E-04
4-Aminobiphenyl	2.07	2.07	1.136E-03	1.136E-03
Pronamide	0.257	0.257	1.410E-04	1.410E-04

TABLE F-3. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Pentachlorophenol	28.8	28.8	1.580E-02	1.580E-02
Pentachloronitrobenzene	1.34	1.34	7.351E-04	7.351E-04
Phenanthrene	0.61	0.61	3.347E-04	3.347E-04
Anthracene	0.366	0.366	2.008E-04	2.008E-04
Carbazole	0.245	0.245	1.344E-04	1.344E-04
Di-n-butylphthalate	0.17	0.17	9.326E-05	9.326E-05
4-Nitroquinoline-1-oxide	22.5	22.5	1.234E-02	1.234E-02
Methapyrilene	20.7	20.7	1.136E-02	1.136E-02
Fluoranthene	0.361	0.361	1.981E-04	1.981E-04
Benzidine	13.4	13.4	7.351E-03	7.351E-03
Pyrene	0.496	0.496	2.721E-04	2.721E-04
p-Dimethylaminoazobenzene	0.368	0.368	2.019E-04	2.019E-04
Chlorobenzilate	0.512	0.512	2.809E-04	2.809E-04
Kepone	18.8	18.8	1.031E-02	1.031E-02
Butylbenzylphthalate	0.205	0.205	1.125E-04	1.125E-04
3,3'-Dimethylbenzidine	1.98	1.98	1.086E-03	1.086E-03
2-Acetylaminofluorene	0.312	0.312	1.712E-04	1.712E-04
bis(2-Ethylhexyl)phthalate	1.22	1.22	6.693E-04	6.693E-04
3,3'-Dichlorobenzidine	0.335	0.335	1.838E-04	1.838E-04
Benz(a)anthracene	0.452	0.452	2.480E-04	2.480E-04
Chrysene	0.488	0.488	2.677E-04	2.677E-04
Di-n-octylphthalate	0.312	0.312	1.712E-04	1.712E-04
7,12-Dimethylbenz(a)anthracene	0.461	0.461	2.529E-04	2.529E-04
Benzo(b)fluoranthene (a)	0.278	0.278	1.525E-04	1.525E-04
Benzo(k)fluoranthene (a)	0.581	0.581	3.187E-04	3.187E-04
Benz(a)pyrene	0.329	0.329	1.805E-04	1.805E-04
3-Methylcholanthrene	1.17	1.17	6.419E-04	6.419E-04
Indeno(1,2,3-cd)pyrene	0.219	0.219	1.201E-04	1.201E-04
Dibenz(a,h)anthracene	0.246	0.246	1.350E-04	1.350E-04
Benzo(g,h,i)perylene	0.236	0.236	1.295E-04	1.295E-04

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

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TABLE F-1. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	ND
Pyridine	ND	1.02	ND	ND	1.02	ND	ND
2-Picoline	ND	1.06	ND	ND	1.06	ND	ND
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	ND
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	ND
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	ND
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	ND
Phenol	ND	0.25	ND	ND	0.25	ND	ND
Aniline	ND	0.399	ND	ND	0.399	ND	ND
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	ND
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	ND
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	ND
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	ND
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	ND
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	ND
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	ND
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	ND
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	ND
o-Toluidine	ND	0.396	ND	ND	0.396	ND	ND
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	ND
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	ND
Acetophenone	0.755	0.295	2.496E-03	0.896	0.295	3.269E-03	2.883E-03
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	ND
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	ND
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	ND
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	ND
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	ND
Isophorone	ND	0.214	ND	ND	0.214	ND	ND
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	ND
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	ND
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	ND
Benzoic acid	ND	36.6	ND	ND	36.6	ND	ND
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	ND
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	ND
Naphthalene	1.62	0.447	5.357E-03	1.59	0.447	5.801E-03	5.579E-03
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	ND
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	ND
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	ND
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	ND
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	ND
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	ND
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	ND
Safrole	ND	0.711	ND	ND	0.711	ND	ND
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	ND
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	ND
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	ND
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	ND
Isosafrole	ND	1.08	ND	ND	1.08	ND	ND
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	ND
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	ND
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	ND
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	ND
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	ND
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	ND
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	ND
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	ND

TABLE F-1. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A - Amount Detected, ug	Run 1 Train A -Detection Limit, ug	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, ug	Run 1 Train B -Detection Limit, ug	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	ND
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	ND
Acenaphthene	ND	0.36	ND	ND	0.36	ND	ND
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	ND
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	ND
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	ND
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	ND
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	ND
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	ND
Diethylphthalate	0.675	0.26	2.232E-03	0.362	0.26	1.321E-03	1.776E-03
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	ND
Fluorene	ND	0.34	ND	ND	0.34	ND	ND
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	ND
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	ND
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	ND
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	ND
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	ND
Diallate	ND	0.475	ND	ND	0.475	ND	ND
Phenacetin	ND	0.224	ND	ND	0.224	ND	ND
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	ND
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	ND
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	ND
Pronamide	ND	0.257	ND	ND	0.257	ND	ND
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	ND
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	ND
Phenanthrene	0.411	0.61	ND	0.318	0.61	ND	ND
Anthracene	ND	0.366	ND	ND	0.366	ND	ND
Carbazole	ND	0.245	ND	ND	0.245	ND	ND
Di-n-butylphthalate	1.42	0.17	4.695E-03	0.948	0.17	3.458E-03	4.077E-03
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	ND
Methapyrilene	ND	20.7	ND	ND	20.7	ND	ND
Fluoranthene	ND	0.361	ND	ND	0.361	ND	ND
Benzidine	ND	13.4	ND	ND	13.4	ND	ND
Pyrene	ND	0.496	ND	ND	0.496	ND	ND
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	ND
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	ND
Kepone	ND	18.8	ND	ND	18.8	ND	ND
Butylbenzylphthalate	ND	0.205	ND	0.83	0.205	3.028E-03	3.028E-03
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	ND
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	ND
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND	1.22	ND	ND
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	ND
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	ND
Chrysene	ND	0.488	ND	ND	0.488	ND	ND
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	ND
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	ND
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	ND
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	ND
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	ND
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	ND
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	ND

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
N-Nitrosodimethylamine	ND	0.348	ND	ND	0.348	ND	0.348
Pyridine	ND	1.02	ND	ND	1.02	ND	1.02
2-Picoline	ND	1.06	ND	ND	1.06	ND	1.06
Methyl methanesulfonate	ND	0.401	ND	ND	0.401	ND	0.401
N-Nitrosomethylethylamine	ND	0.796	ND	ND	0.796	ND	0.796
N-Nitrosodiethylamine	ND	0.85	ND	ND	0.85	ND	0.85
Ethyl methanesulfonate	ND	0.391	ND	ND	0.391	ND	0.391
Phenol	ND	0.25	ND	ND	0.25	ND	0.25
Aniline	ND	0.399	ND	ND	0.399	ND	0.399
bis(2-Chloroethyl)ether	ND	0.312	ND	ND	0.312	ND	0.312
Pentachloroethane	ND	0.721	ND	ND	0.721	ND	0.721
2-Chlorophenol	ND	0.159	ND	ND	0.159	ND	0.159
1,3-Dichlorobenzene	ND	0.307	ND	ND	0.307	ND	0.307
1,4-Dichlorobenzene	ND	0.616	ND	ND	0.616	ND	0.616
Benzyl alcohol	ND	0.697	ND	ND	0.697	ND	0.697
2-Methylphenol	ND	0.561	ND	ND	0.561	ND	0.561
1,2-Dichlorobenzene	ND	0.446	ND	ND	0.446	ND	0.446
bis(2-Chloroisopropyl)ether	ND	0.376	ND	ND	0.376	ND	0.376
o-Toluidine	ND	0.396	ND	ND	0.396	ND	0.396
4-Methylphenol/3-Methylphenol	ND	0.474	ND	ND	0.474	ND	0.474
N-Nitroso-di-n-propylamine	ND	0.281	ND	ND	0.281	ND	0.281
Acetophenone	0.711	0.295	2.071E-04	0.578	0.295	ND	0.295
N-Nitrosomorpholine	ND	0.899	ND	ND	0.899	ND	0.899
N-Nitrosopyrrolidine	ND	1.19	ND	ND	1.19	ND	1.19
Hexachloroethane	ND	0.494	ND	ND	0.494	ND	0.494
Nitrobenzene	ND	0.891	ND	ND	0.891	ND	0.891
N-Nitrosopiperidine	ND	0.729	ND	ND	0.729	ND	0.729
Isophorone	ND	0.214	ND	ND	0.214	ND	0.214
2,4-Dimethylphenol	ND	0.337	ND	ND	0.337	ND	0.337
2-Nitrophenol	ND	0.536	ND	ND	0.536	ND	0.536
bis(2-Chloroethoxy)methane	ND	0.391	ND	ND	0.391	ND	0.391
Benzoic acid	ND	36.6	ND	ND	36.6	ND	36.6

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2,4-Dichlorophenol	ND	0.49	ND	ND	0.49	ND	0.49
1,2,4-Trichlorobenzene	ND	0.353	ND	ND	0.353	ND	0.353
Naphthalene	ND	0.447	ND	ND	0.447	ND	0.447
p-Chloroaniline	ND	0.322	ND	ND	0.322	ND	0.322
2,6-Dichlorophenol	ND	0.344	ND	ND	0.344	ND	0.344
Hexachloropropene	ND	0.565	ND	ND	0.565	ND	0.565
Hexachlorobutadiene	ND	0.51	ND	ND	0.51	ND	0.51
Dimethylphenethylamine	ND	20.4	ND	ND	20.4	ND	20.4
N-Nitroso-di-n-butylamine	ND	0.374	ND	ND	0.374	ND	0.374
4-Chloro-3-methylphenol	ND	0.567	ND	ND	0.567	ND	0.567
Safrole	ND	0.711	ND	ND	0.711	ND	0.711
2-Methylnaphthalene	ND	0.359	ND	ND	0.359	ND	0.359
1,2,4,5-Tetrachlorobenzene	ND	0.546	ND	ND	0.546	ND	0.546
Hexachlorocyclopentadiene	ND	11.1	ND	ND	11.1	ND	11.1
2,4,6-Trichlorophenol	ND	0.631	ND	ND	0.631	ND	0.631
2,4,5-Trichlorophenol	ND	0.536	ND	ND	0.536	ND	0.536
Isosafrole	ND	1.08	ND	ND	1.08	ND	1.08
2-Chloronaphthalene	ND	0.564	ND	ND	0.564	ND	0.564
2-Nitroaniline	ND	0.358	ND	ND	0.358	ND	0.358
1,4-Naphthoquinone	ND	1	ND	ND	1	ND	1
Dimethylphthalate	ND	0.291	ND	ND	0.291	ND	0.291
1,3-Dinitrobenzene	ND	0.837	ND	ND	0.837	ND	0.837
2,6-Dinitrotoluene	ND	0.704	ND	ND	0.704	ND	0.704
Acenaphthylene	ND	0.327	ND	ND	0.327	ND	0.327
3-Nitroaniline	ND	0.881	ND	ND	0.881	ND	0.881
4-Nitrophenol	ND	30.7	ND	ND	30.7	ND	30.7
2,4-Dinitrophenol	ND	31.5	ND	ND	31.5	ND	31.5
Acenaphthene	ND	0.36	ND	ND	0.36	ND	0.36
2,4-Dinitrotoluene	ND	0.445	ND	ND	0.445	ND	0.445
Dibenzofuran	ND	0.244	ND	ND	0.244	ND	0.244
Pentachlorobenzene	ND	0.674	ND	ND	0.674	ND	0.674
1-Naphthylamine	ND	1.76	ND	ND	1.76	ND	1.76

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Naphthylamine	ND	1.56	ND	ND	1.56	ND	1.56
2,3,4,6-Tetrachlorophenol	ND	0.714	ND	ND	0.714	ND	0.714
Diethylphthalate	0.474	0.26	1.381E-04	ND	0.26	ND	0.26
4-Chlorophenylphenyl ether	ND	0.283	ND	ND	0.283	ND	0.283
Fluorene	ND	0.34	ND	ND	0.34	ND	0.34
5-Nitro-o-toluidine	ND	0.363	ND	ND	0.363	ND	0.363
4-Nitroaniline	ND	0.775	ND	ND	0.775	ND	0.775
4,6-Dinitro-2-methylphenol	ND	27.2	ND	ND	27.2	ND	27.2
Diphenylamine/N-NitrosoDPA	ND	0.368	ND	ND	0.368	ND	0.368
sym-Trinitrobenzene	ND	1.25	ND	ND	1.25	ND	1.25
Diallate	ND	0.475	ND	ND	0.475	ND	0.475
Phenacetin	ND	0.224	ND	ND	0.224	ND	0.224
4-Bromophenylphenyl ether	ND	0.689	ND	ND	0.689	ND	0.689
Hexachlorobenzene	ND	0.371	ND	ND	0.371	ND	0.371
4-Aminobiphenyl	ND	2.07	ND	ND	2.07	ND	2.07
Pronamide	ND	0.257	ND	ND	0.257	ND	0.257
Pentachlorophenol	ND	28.8	ND	ND	28.8	ND	28.8
Pentachloronitrobenzene	ND	1.34	ND	ND	1.34	ND	1.34
Phenanthrene	ND	0.61	ND	ND	0.61	ND	0.61
Anthracene	ND	0.366	ND	ND	0.366	ND	0.366
Carbazole	ND	0.245	ND	ND	0.245	ND	0.245
Di-n-butylphthalate	2.64	0.17	7.691E-04	5.39	0.17	2.93	0.17
4-Nitroquinoline-1-oxide	ND	22.5	ND	ND	22.5	ND	22.5
Methapyrilene	ND	20.7	ND	ND	20.7	ND	20.7
Fluoranthene	ND	0.361	ND	ND	0.361	ND	0.361
Benzidine	ND	13.4	ND	ND	13.4	ND	13.4
Pyrene	ND	0.496	ND	ND	0.496	ND	0.496
p-Dimethylaminoazobenzene	ND	0.368	ND	ND	0.368	ND	0.368
Chlorobenzilate	ND	0.512	ND	ND	0.512	ND	0.512
Kepone	ND	18.8	ND	ND	18.8	ND	18.8
Butylbenzylphthalate	ND	0.205	ND	ND	0.205	0.514	0.205
3,3'-Dimethylbenzidine	ND	1.98	ND	ND	1.98	ND	1.98

TABLE F-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Background - Amount Detected, ug	Background - Detection Limit, ug	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, ug	Reagent Blank - Detection Limit, ug	Field Blank - Amount Detected, ug	Field Blank - Detection Limit, ug
2-Acetylaminofluorene	ND	0.312	ND	ND	0.312	ND	0.312
bis(2-Ethylhexyl)phthalate	ND	1.22	ND	ND	1.22	2.56	1.22
3,3'-Dichlorobenzidine	ND	0.335	ND	ND	0.335	ND	0.335
Benz(a)anthracene	ND	0.452	ND	ND	0.452	ND	0.452
Chrysene	ND	0.488	ND	ND	0.488	ND	0.488
Di-n-octylphthalate	ND	0.312	ND	ND	0.312	ND	0.312
7,12-Dimethylbenz(a)anthracene	ND	0.461	ND	ND	0.461	ND	0.461
Benzo(b)fluoranthene (a)	ND	0.278	ND	ND	0.278	ND	0.278
Benzo(k)fluoranthene (a)	ND	0.581	ND	ND	0.581	ND	0.581
Benz(a)pyrene	ND	0.329	ND	ND	0.329	ND	0.329
3-Methylcholanthrene	ND	1.17	ND	ND	1.17	ND	1.17
Indeno(1,2,3-cd)pyrene	ND	0.219	ND	ND	0.219	ND	0.219
Dibenz(a,h)anthracene	ND	0.246	ND	ND	0.246	ND	0.246
Benzo(g,h,i)perylene	ND	0.236	ND	ND	0.236	ND	0.236

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

TABLE F-3. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)

Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap

Compounds below the DLs are listed as nondetected (ND)

Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitrosodimethylamine	0.348	0.348	1.207E-03	1.207E-03
Pyridine	1.02	1.02	3.538E-03	3.538E-03
2-Picoline	1.06	1.06	3.677E-03	3.677E-03
Methyl methanesulfonate	0.401	0.401	1.391E-03	1.391E-03
N-Nitrosomethylethylamine	0.796	0.796	2.761E-03	2.761E-03
N-Nitrosodiethylamine	0.85	0.85	2.949E-03	2.949E-03
Ethyl methanesulfonate	0.391	0.391	1.356E-03	1.356E-03
Phenol	0.25	0.25	8.673E-04	8.673E-04
Aniline	0.399	0.399	1.384E-03	1.384E-03
bis(2-Chloroethyl)ether	0.312	0.312	1.082E-03	1.082E-03
Pentachloroethane	0.721	0.721	2.501E-03	2.501E-03
2-Chlorophenol	0.159	0.159	5.516E-04	5.516E-04
1,3-Dichlorobenzene	0.307	0.307	1.065E-03	1.065E-03
1,4-Dichlorobenzene	0.616	0.616	2.137E-03	2.137E-03
Benzyl alcohol	0.697	0.697	2.418E-03	2.418E-03
2-Methylphenol	0.561	0.561	1.946E-03	1.946E-03
1,2-Dichlorobenzene	0.446	0.446	1.547E-03	1.547E-03
bis(2-Chloroisopropyl)ether	0.376	0.376	1.304E-03	1.304E-03
o-Toluidine	0.396	0.396	1.374E-03	1.374E-03
4-Methylphenol/3-Methylphenol	0.474	0.474	1.644E-03	1.644E-03
N-Nitroso-di-n-propylamine	0.281	0.281	9.748E-04	9.748E-04
Acetophenone	0.295	0.295	1.023E-03	1.023E-03
N-Nitrosomorpholine	0.899	0.899	3.119E-03	3.119E-03
N-Nitrosopyrrolidine	1.19	1.19	4.128E-03	4.128E-03
Hexachloroethane	0.494	0.494	1.714E-03	1.714E-03
Nitrobenzene	0.891	0.891	3.091E-03	3.091E-03
N-Nitrosopiperidine	0.729	0.729	2.529E-03	2.529E-03
Isophorone	0.214	0.214	7.424E-04	7.424E-04
2,4-Dimethylphenol	0.337	0.337	1.169E-03	1.169E-03
2-Nitrophenol	0.536	0.536	1.859E-03	1.859E-03
bis(2-Chloroethoxy)methane	0.391	0.391	1.356E-03	1.356E-03
Benzoic acid	36.6	36.6	1.270E-01	1.270E-01
2,4-Dichlorophenol	0.49	0.49	1.700E-03	1.700E-03
1,2,4-Trichlorobenzene	0.353	0.353	1.225E-03	1.225E-03
Naphthalene	0.447	0.447	1.551E-03	1.551E-03
p-Chloroaniline	0.322	0.322	1.117E-03	1.117E-03
2,6-Dichlorophenol	0.344	0.344	1.193E-03	1.193E-03
Hexachloropropene	0.565	0.565	1.960E-03	1.960E-03
Hexachlorobutadiene	0.51	0.51	1.769E-03	1.769E-03
Dimethylphenethylamine	20.4	20.4	7.077E-02	7.077E-02

TABLE F-3. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
N-Nitroso-di-n-butylamine	0.374	0.374	1.297E-03	1.297E-03
4-Chloro-3-methylphenol	0.567	0.567	1.967E-03	1.967E-03
Safrole	0.711	0.711	2.466E-03	2.466E-03
2-Methylnaphthalene	0.359	0.359	1.245E-03	1.245E-03
1,2,4,5-Tetrachlorobenzene	0.546	0.546	1.894E-03	1.894E-03
Hexachlorocyclopentadiene	11.1	11.1	3.851E-02	3.851E-02
2,4,6-Trichlorophenol	0.631	0.631	2.189E-03	2.189E-03
2,4,5-Trichlorophenol	0.536	0.536	1.859E-03	1.859E-03
Isosafrole	1.08	1.08	3.747E-03	3.747E-03
2-Chloronaphthalene	0.564	0.564	1.957E-03	1.957E-03
2-Nitroaniline	0.358	0.358	1.242E-03	1.242E-03
1,4-Naphthoquinone	1	1	3.469E-03	3.469E-03
Dimethylphthalate	0.291	0.291	1.009E-03	1.009E-03
1,3-Dinitrobenzene	0.837	0.837	2.904E-03	2.904E-03
2,6-Dinitrotoluene	0.704	0.704	2.442E-03	2.442E-03
Acenaphthylene	0.327	0.327	1.134E-03	1.134E-03
3-Nitroaniline	0.881	0.881	3.056E-03	3.056E-03
4-Nitrophenol	30.7	30.7	1.065E-01	1.065E-01
2,4-Dinitrophenol	31.5	31.5	1.093E-01	1.093E-01
Acenaphthene	0.36	0.36	1.249E-03	1.249E-03
2,4-Dinitrotoluene	0.445	0.445	1.544E-03	1.544E-03
Dibenzofuran	0.244	0.244	8.464E-04	8.464E-04
Pentachlorobenzene	0.674	0.674	2.338E-03	2.338E-03
1-Naphthylamine	1.76	1.76	6.105E-03	6.105E-03
2-Naphthylamine	1.56	1.56	5.412E-03	5.412E-03
2,3,4,6-Tetrachlorophenol	0.714	0.714	2.477E-03	2.477E-03
Diethylphthalate	0.26	0.26	9.019E-04	9.019E-04
4-Chlorophenylphenyl ether	0.283	0.283	9.817E-04	9.817E-04
Fluorene	0.34	0.34	1.179E-03	1.179E-03
5-Nitro-o-toluidine	0.363	0.363	1.259E-03	1.259E-03
4-Nitroaniline	0.775	0.775	2.688E-03	2.688E-03
4,6-Dinitro-2-methylphenol	27.2	27.2	9.436E-02	9.436E-02
Diphenylamine/N-NitrosoDPA	0.368	0.368	1.277E-03	1.277E-03
sym-Trinitrobenzene	1.25	1.25	4.336E-03	4.336E-03
Diallate	0.475	0.475	1.648E-03	1.648E-03
Phenacetin	0.224	0.224	7.771E-04	7.771E-04
4-Bromophenylphenyl ether	0.689	0.689	2.390E-03	2.390E-03
Hexachlorobenzene	0.371	0.371	1.287E-03	1.287E-03
4-Aminobiphenyl	2.07	2.07	7.181E-03	7.181E-03
Pronamide	0.257	0.257	8.915E-04	8.915E-04

TABLE F-3. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
Particulate/Vapor-phase SVOCs Analysis of the Air Sample - Method 8270B; samples collected on filter and resin trap
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Radian International LLC

Analyte	Run 1 Train A -Detection Limit, ug	Run 1 Train B -Detection Limit, ug	Average Maximum Detection Limit - Concentration, mg/m^3	Average Minimum Detection Limit - Concentration, mg/m^3
Pentachlorophenol	28.8	28.8	9.991E-02	9.991E-02
Pentachloronitrobenzene	1.34	1.34	4.648E-03	4.648E-03
Phenanthrene	0.61	0.61	2.116E-03	2.116E-03
Anthracene	0.366	0.366	1.270E-03	1.270E-03
Carbazole	0.245	0.245	8.499E-04	8.499E-04
Di-n-butylphthalate	0.17	0.17	5.897E-04	5.897E-04
4-Nitroquinoline-1-oxide	22.5	22.5	7.805E-02	7.805E-02
Methapyrilene	20.7	20.7	7.181E-02	7.181E-02
Fluoranthene	0.361	0.361	1.252E-03	1.252E-03
Benzidine	13.4	13.4	4.648E-02	4.648E-02
Pyrene	0.496	0.496	1.721E-03	1.721E-03
p-Dimethylaminoazobenzene	0.368	0.368	1.277E-03	1.277E-03
Chlorobenzilate	0.512	0.512	1.776E-03	1.776E-03
Kepone	18.8	18.8	6.522E-02	6.522E-02
Butylbenzylphthalate	0.205	0.205	7.111E-04	7.111E-04
3,3'-Dimethylbenzidine	1.98	1.98	6.869E-03	6.869E-03
2-Acetylaminofluorene	0.312	0.312	1.082E-03	1.082E-03
bis(2-Ethylhexyl)phthalate	1.22	1.22	4.232E-03	4.232E-03
3,3'-Dichlorobenzidine	0.335	0.335	1.162E-03	1.162E-03
Benz(a)anthracene	0.452	0.452	1.568E-03	1.568E-03
Chrysene	0.488	0.488	1.693E-03	1.693E-03
Di-n-octylphthalate	0.312	0.312	1.082E-03	1.082E-03
7,12-Dimethylbenz(a)anthracene	0.461	0.461	1.599E-03	1.599E-03
Benzo(b)fluoranthene (a)	0.278	0.278	9.644E-04	9.644E-04
Benzo(k)fluoranthene (a)	0.581	0.581	2.015E-03	2.015E-03
Benz(a)pyrene	0.329	0.329	1.141E-03	1.141E-03
3-Methylcholanthrene	1.17	1.17	4.059E-03	4.059E-03
Indeno(1,2,3-cd)pyrene	0.219	0.219	7.597E-04	7.597E-04
Dibenz(a,h)anthracene	0.246	0.246	8.534E-04	8.534E-04
Benzo(g,h,i)perylene	0.236	0.236	8.187E-04	8.187E-04

a
Resulting value based on average of benzo(b) and benzo(k)fluoranthene isomers.

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APPENDIX II-G. HCl/Cl_2 DATA RESULTS

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SIMULATOR BOOBY TRAP FLASH M117

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TABLE G-1. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Detected Amount, mg	Cl^- Concentration, mg/m^3	Average HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-481 (b)	Run 1 Train A H_2SO_4	12.05	44.8	ND	ND	ND
DPG-483 (b)	Run 1 Train B H_2SO_4	20.1	41	ND	ND	
DPG-482 (b)	Run 1 Train A NaOH	11.8	1.24	0.012	0.016	0.042
DPG-484 (b)	Run 1 Train B NaOH	50.75	1.4	0.051	0.067	

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

Maximum (H_2SO_4) DL = 44.800
Minimum (H_2SO_4) DL = 0.588
Maximum (NaOH) DL = 1.400
Minimum (NaOH) DL = 0.147

TABLE G-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Amount Detected, mg	Cl^- Concentration, mg/m^3	HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-436	Background 0.1 N H_2SO_4	19.15	52.4	ND	ND	ND
DPG-437	Background 0.1N NaOH	2	1.46	0.002	0.003	0.003
DPG-907 (b)	Reagent Blank 0.1 N H_2SO_4	22.3	289	ND	NA	NA
DPG-908	Reagent Blank 0.1N NaOH	0	2.79	ND	NA	NA
DPG-909 (b)	Reagent Blank Rinsate Distilled H_2O	2.425	5.4	ND	NA	NA
DPG-905/946 (b)	Field Blank 0.1 N H_2SO_4	75.9	55.1	0.076	NA	NA
DPG-906/947 (b)	Field Blank 0.1N NaOH	6.82	1.23	0.007	NA	NA

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

TABLE G-3. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Detection Limit, ug	Detected Amount, mg	Cl^- Detection Limit Concentration, mg/m^3	HCl/Cl_2 Detection Limit Concentration, mg/m^3 (a)
Maximum DL	H_2SO_4	44.800	0.045	0.060	0.062
Minimum DL	H_2SO_4	0.588	0.001	0.001	0.001
Maximum DL	NaOH	1.400	0.001	0.002	0.002
Minimum DL	NaOH	0.147	0.000	0.000	0.000

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	BT-Background	
Train No.		
Barometric Pressure =	644	mmHg
	25.35	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	0		
	5.36	1.8	16
	10.71	1.8	16
	16.29	1.8	16
	21.73	1.8	16
	27.77	1.8	16
	32.82	1.8	16
Volume =	**32.82**		
Average =		**1.80**	**16.0**

Volume corrected to standard conditions =	**28.16 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	521 ^oR
Pmeter =	25.49 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	BT-2	
Train No.	A	
Barometric Pressure =	637	mmHg
	25.08	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (°C)
	0		
	5.4	1.4	42
	10.8	1.4	44
	16.2	1.4	45
	21.7	1.4	47
	27.3	1.4	48
	32.92	1.4	49
Volume =	**32.92**		
Average =		**1.40**	**45.8**

Volume corrected to standard conditions =	**25.58 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	575 °R
Pmeter =	25.18 in. Hg

Pmeter = Average ΔH/13.6 + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	BT-2	
Train No.	B	
Barometric Pressure =	637	mmHg
	25.08	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	**ΔH (in H_2O)**	**Dry Gas Meter Temperature (^oC)**
	276		
	281.1	1.8	6
	286.2	1.8	6
	291.4	1.8	7
	296.6	1.8	7
		1.8	8
	306.52	1.8	8
Volume =	**30.52**		
Average =		**1.80**	**7.0**

Volume corrected to standard conditions =	**26.73 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	505 ^oR
Pmeter =	25.21 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

SIMULATOR FLASH ARTILLERY M110

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TABLE G-1. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Detected Amount, mg	Cl^- Concentration, mg/m^3	Average HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-331 (b)	Run 1 Train A H_2SO_4	53.25	47.5	0.053	0.064	0.075
DPG-333 (b)	Run 1 Train B H_2SO_4	57.7	41	0.058	0.086	
DPG-332 (b)	Run 1 Train A NaOH	19.4	1.49	0.019	0.023	0.025
DPG-334 (b)	Run 1 Train B NaOH	18.5	1.12	0.019	0.028	
DPG-381 (b)	Run 2 Train A H_2SO_4	42.75	48.6	ND	ND	0.031
DPG-383 (b)	Run 2 Train B H_2SO_4	19.9	5.89	0.020	0.030	
DPG-382	Run 2 Train A NaOH	14.95	1.24	0.015	0.018	0.020
DPG-384	Run 2 Train B NaOH	14.5	1.09	0.015	0.022	

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

Maximum (H_2SO_4) DL = 48.600
Minimum (H_2SO_4) DL = 5.890
Maximum (NaOH) DL = 1.490
Minimum (NaOH) DL = 1.090

TABLE G-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Amount Detected, mg	Cl^- Concentration, mg/m^3	HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-346 (b)	Background 0.1 N H_2SO_4	10.33	47	ND	ND	ND
DPG-347 (b)	Background 0.1N NaOH	2.62	1.24	0.003	0.003	0.003
DPG-907 (b)	Reagent Blank 0.1 N H_2SO_4	22.3	289	ND	NA	NA
DPG-908	Reagent Blank 0.1N NaOH	0	2.79	ND	NA	NA
DPG-909 (b)	Reagent Blank Rinsate Distilled H_2O	2.425	5.4	ND	NA	NA
DPG-905/946 (b)	Field Blank 0.1 N H_2SO_4	75.9	55.1	0.076	NA	NA
DPG-906/947 (b)	Field Blank 0.1N NaOH	6.82	1.23	0.007	NA	NA

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

TABLE G-3. AEC - RUN NO. 1-2 FA TEST (28 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Detection Limit, ug	Detected Amount, mg	Cl^- Detection Limit Concentration, mg/m^3	HCl/Cl_2 Detection Limit Concentration, mg/m^3 (a)
Maximum DL	H_2SO_4	48.600	0.049	0.065	0.067
Minimum DL	H_2SO_4	5.890	0.006	0.008	0.008
Maximum DL	NaOH	1.490	0.001	0.002	0.002
Minimum DL	NaOH	1.090	0.001	0.001	0.001

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	FA-Background	
Train No.		
Barometric Pressure =	637	mmHg
	25.08	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	0		
	5.6	1.8	9
	11.2	1.8	9
	16.6	1.8	9
	21.9	1.8	9
	27.4	1.8	9
	32.93	1.8	9
Volume =	**32.93**		
Average =		**1.80**	**9.0**

Volume corrected to standard conditions =	**28.64 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	508 ^oR
Pmeter =	25.21 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	FA-1	
Train No.	A	
Barometric Pressure =	635	mmHg
	25.00	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	**ΔH (in H_2O)**	**Dry Gas Meter Temperature (^oC)**
	0		
	5.68	1.8	11
	11.3	1.8	11
	17	1.8	11
	22.7	1.8	11
	28.4	1.8	11
	34.2	1.8	12
Volume =	**34.2**		
Average =		**1.80**	**11.2**

Volume corrected to standard conditions =	**29.43 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	512 ^oR
Pmeter =	25.13 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	FA-1	
Train No.	B	
Barometric Pressure =	635	mmHg
	25.00	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (°C)
	310.37		
	315.5	1.2	48
	320.8	1.2	50
	326	1.2	51
	331.1	1.2	51
	336.1	1.2	51
	341.37	1.2	52
Volume =	**31**		
Average =		**1.20**	**50.5**

Volume corrected to standard conditions =	**23.65 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	583 °R
Pmeter =	25.09 in. Hg

Pmeter = Average ΔH/13.6 + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	FA-2	
Train No.	A	
Barometric Pressure =	635	mmHg
	25.00	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	**ΔH (in H_2O)**	**Dry Gas Meter Temperature (^oC)**
	0		
	5.5	1.8	9
	11.1	1.8	9
	16.1	1.8	9
	22.1	1.8	10
	27.6	1.8	10
	33.37	1.8	10
Volume =	**33.37**		
Average =		**1.80**	**9.5**

Volume corrected to standard conditions =	**28.88 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	509 ^oR
Pmeter =	25.13 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	FA-2	
Train No.	B	
Barometric Pressure =	635	mmHg
	25.00	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	347.2		
	352.4	1.2	47
	357.6	1.2	49
	362.6	1.2	50
	367.7	1.2	51
	372.8	1.2	52
	377.86	1.2	52
Volume =	**30.66**		
Average =		**1.20**	**50.2**

Volume corrected to standard conditions =	**23.42 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	582 ^oR
Pmeter =	25.09 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

SIMULATOR HAND GRENADE

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TABLE G-1. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Detected Amount, mg	Cl^- Concentration, mg/m^3	Average HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-231 (b)	Run 1 Train A H_2SO_4	13.1	42.1	ND	ND	ND
DPG-233 (b)	Run 1 Train B H_2SO_4	16.35	43.7	ND	ND	
DPG-232 (b)	Run 1 Train A NaOH	3.34	1.21	0.003	0.004	0.008
DPG-234 (b)	Run 1 Train B NaOH	7.59	1	0.008	0.011	
DPG-281 (b)	Run 2 Train A H_2SO_4	17	55.6	ND	ND	ND
DPG-283 (b)	Run 2 Train B H_2SO_4	13.3	43.7	ND	ND	
DPG-282 (b)	Run 2 Train A NaOH	4.77	1.09	0.005	0.006	0.015
DPG-284 (b)	Run 2 Train B NaOH	15.75	1.12	0.016	0.024	

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

Maximum (H_2SO_4) DL = 55.600
Minimum (H_2SO_4) DL = 42.100
Maximum (NaOH) DL = 1.210
Minimum (NaOH) DL = 1.000

TABLE G-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Amount Detected, mg	Cl^- Concentration, mg/m^3	HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-246 (b)	Background 0.1 N H_2SO_4	44.65	46.4	ND	ND	ND
DPG-247 (b)	Background 0.1N NaOH	3.275	1.12	0.003	0.004	0.004
DPG-907 (b)	Reagent Blank 0.1 N H_2SO_4	22.3	289	ND	NA	NA
DPG-908	Reagent Blank 0.1N NaOH	0	2.79	ND	NA	NA
DPG-909 (b)	Reagent Blank Rinsate Distilled H_2O	2.425	5.4	ND	NA	NA
DPG-905/946 (b)	Field Blank 0.1 N H_2SO_4	75.9	55.1	0.076	NA	NA
DPG-906/947 (b)	Field Blank 0.1N NaOH	6.82	1.23	0.007	NA	NA

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

TABLE G-3. AEC - RUN NO. 1-2 HG TEST (30 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Detection Limit, ug	Detected Amount, mg	Cl^- Detection Limit Concentration, mg/m^3	HCl/Cl_2 Detection Limit Concentration, mg/m^3 (a)
Maximum DL	H_2SO_4	55.600	0.056	0.073	0.075
Minimum DL	H_2SO_4	42.100	0.042	0.055	0.057
Maximum DL	NaOH	1.210	0.001	0.002	0.002
Minimum DL	NaOH	1.000	0.001	0.001	0.001

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	HG-Background	
Train No.		
Barometric Pressure =	646	mmHg
	25.43	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	**ΔH (in H_2O)**	**Dry Gas Meter Temperature (°C)**
	0		
	5.4	1.8	4
	10.9	1.8	4
	16.5	1.8	5
	22.2	1.8	5
	27.2	1.8	5
	33.3	1.8	5
Volume =	**33.3**		
Average =		**1.80**	**4.7**

Volume corrected to standard conditions =	**29.83 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	500 °R
Pmeter =	25.56 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	HG-1	
Train No.	A	
Barometric Pressure =	646	mmHg
	25.43	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	**ΔH (in H_2O)**	**Dry Gas Meter Temperature (^oC)**
	0		
	5.6	1.8	5
	11.2	1.8	5
	16.8	1.8	6
	23.3	1.8	6
	27.9	1.8	6
	34.06	1.8	7
Volume =	**34.06**		
Average =		**1.80**	**5.8**

Volume corrected to standard conditions =	**30.38 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	503 ^oR
Pmeter =	25.56 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	HG-1	
Train No.	B	
Barometric Pressure =	646	mmHg
	25.43	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	379.6		
	384.6	1.2	37
	389.5	1.2	39
	394.4	1.2	41
	399.4	1.2	41
	404.41	1.2	41
	409.25	1.2	42
Volume =	**29.65**		
Average =		**1.20**	**40.2**

Volume corrected to standard conditions =	**23.77 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	564 ^oR
Pmeter =	25.52 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	HG-2	
Train No.	A	
Barometric Pressure =	646	mmHg
	25.43	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	0		
	5.05	1.8	7
	10.9	1.8	7
	16.8	1.8	7
	22.2	1.8	7
	27.6	1.8	8
	33.65	1.8	9
Volume =	**33.65**		
Average =		**1.80**	**7.5**

Volume corrected to standard conditions =	**29.84 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	506 ^oR
Pmeter =	25.56 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	HG-2	
Train No.	B	
Barometric Pressure =	646	mmHg
	25.43	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (°C)
	409.7		
	414.7	1.2	42
	419.7	1.2	44
	424.7	1.2	45
	429.6	1.2	46
	434.5	1.2	47
	439.67	1.2	47
Volume =	**29.97**		
Average =		**1.20**	**45.2**

Volume corrected to standard conditions =	**23.65 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	573 °R
Pmeter =	25.52 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

SIMULATOR GROUND BURST

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TABLE G-1. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Detected Amount, mg	Cl^- Concentration, mg/m^3	Average HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-131 (b)	Run 1 Train A H_2SO_4	44.95	42.7	0.045	0.053	0.066
DPG-133 (b)	Run 1 Train B H_2SO_4	48.25	41.6	0.048	0.076	
DPG-132 (b)	Run 1 Train A NaOH	59.65	1.12	0.060	0.071	0.067
DPG-134 (b)	Run 1 Train B NaOH	40.35	1.21	0.040	0.063	
DPG-181 (b)	Run 2 Train A H_2SO_4	49.2	40	0.049	0.059	0.080
DPG-183 (b)	Run 2 Train B H_2SO_4	60.45	48.6	0.060	0.096	
DPG-182 (b)	Run 2 Train A NaOH	25.95	1.24	0.026	0.031	0.060
DPG-184 (b)	Run 2 Train B NaOH	55.35	1.21	0.055	0.088	

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

Maximum (H_2SO_4) DL = 48.600
Minimum (H_2SO_4) DL = 40.000
Maximum (NaOH) DL = 1.240
Minimum (NaOH) DL = 1.120

TABLE G-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Amount Detected, mg	Cl^- Concentration, mg/m^3	HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-246 (b)	Background 0.1 N H_2SO_4	44.65	46.4	ND	ND	ND
DPG-247 (b)	Background 0.1N NaOH	3.275	1.12	0.003	0.004	0.004
DPG-907 (b)	Reagent Blank 0.1 N H_2SO_4	22.3	289	ND	NA	NA
DPG-908	Reagent Blank 0.1N NaOH	0	2.79	ND	NA	NA
DPG-909 (b)	Reagent Blank Rinsate Distilled H_2O	2.425	5.4	ND	NA	NA
DPG-905/946 (b)	Field Blank 0.1 N H_2SO_4	75.9	55.1	0.076	NA	NA
DPG-906/947 (b)	Field Blank 0.1N NaOH	6.82	1.23	0.007	NA	NA

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

TABLE G-3. AEC - RUN NO. 1-2 GB TEST (30 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Detection Limit, ug	Detected Amount, mg	Cl^- Detection Limit Concentration, mg/m^3	HCl/Cl_2 Detection Limit Concentration, mg/m^3 (a)
Maximum DL	H_2SO_4	48.600	0.049	0.066	0.068
Minimum DL	H_2SO_4	40.000	0.040	0.055	0.056
Maximum DL	NaOH	1.240	0.001	0.002	0.002
Minimum DL	NaOH	1.120	0.001	0.002	0.002

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	GB-1	
Train No.	A	
Barometric Pressure =	646	mmHg
	25.43	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	0		
	5.5	1.8	10
	11.1	1.8	10
	16.8	1.8	10
	22.4	1.8	10
	28	1.8	11
	33.82	1.8	11
Volume =	**33.82**		
Average =		**1.80**	**10.3**

Volume corrected to standard conditions =	**29.69 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	511 ^oR
Pmeter =	25.56 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	GB-1	
Train No.	B	
Barometric Pressure =	646	mmHg
	25.43	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	443.61		
	448.4	1.2	48
	453.3	1.2	50
	458.2	1.2	51
	463	1.2	52
	467.8	1.2	53
	472.75	1.2	54
Volume =	**29.14**		
Average =		**1.20**	**51.3**

Volume corrected to standard conditions =	**22.56 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	584 ^oR
Pmeter =	25.52 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	GB-2	
Train No.	A	
Barometric Pressure =	647	mmHg
	25.47	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (°C)
	0		
	5.6	1.8	12
	11.1	1.8	13
	16.7	1.8	13
	22.3	1.8	13
	27.8	1.8	13
	33.56	1.8	14
Volume =	**33.56**		
Average =		**1.80**	**13.0**

Volume corrected to standard conditions =	**29.23 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	515 °R
Pmeter =	25.60 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	GB-2	
Train No.	B	
Barometric Pressure =	647	mmHg
	25.47	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (°C)
	474.55		
	479.5	1.2	59
	484.3	1.2	60
	489.2	1.2	60
	494.1	1.2	60
	498.9	1.2	61
	503.9	1.2	62
Volume =	**29.35**		
Average =		**1.20**	**60.3**

Volume corrected to standard conditions =	**22.14 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	601 °R
Pmeter =	25.56 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

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GREEN STAR CLUSTER

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TABLE G-1. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Detected Amount, mg	Cl^- Concentration, mg/m^3	Average HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-831 (b)	Run 1 Train A H_2SO_4	58.45	51.3	0.058	0.072	0.072
DPG-833 (b)	Run 1 Train B H_2SO_4	49.9	55.6	ND	ND	
DPG-832 (b)	Run 1 Train A NaOH	6.305	1.27	0.006	0.008	0.017
DPG-834 (b)	Run 1 Train B NaOH	17.9	1.27	0.018	0.027	

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

Maximum (H_2SO_4) DL = 55.600
Minimum (H_2SO_4) DL = 51.300
Maximum (NaOH) DL = 1.270
Minimum (NaOH) DL = 1.270

TABLE G-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Amount Detected, mg	Cl^- Concentration, mg/m^3	HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-746 (b)	Background 0.1 N H_2SO_4	16.05	45.9	ND	ND	ND
DPG-747 (b)	Background 0.1N NaOH	11.7	1.12	0.012	0.014	0.014
DPG-907 (b)	Reagent Blank 0.1 N H_2SO_4	22.3	289	ND	NA	NA
DPG-908	Reagent Blank 0.1N NaOH	0	2.79	ND	NA	NA
DPG-909 (b)	Reagent Blank Rinsate Distilled H_2O	2.425	5.4	ND	NA	NA
DPG-905/946 (b)	Field Blank 0.1 N H_2SO_4	75.9	55.1	0.076	NA	NA
DPG-906/947 (b)	Field Blank 0.1N NaOH	6.82	1.23	0.007	NA	NA

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

TABLE G-3. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Detection Limit, mg/L	Detected Amount, mg	Cl^- Detection Limit Concentration, mg/m^3	HCl/Cl_2 Detection Limit Concentration, mg/m^3 (a)
Maximum DL	H_2SO_4	55.600	0.056	0.075	0.078
Minimum DL	H_2SO_4	51.300	0.051	0.070	0.072
Maximum DL	NaOH	1.270	0.001	0.002	0.002
Minimum DL	NaOH	1.270	0.001	0.002	0.002

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	GS-1	
Train No.	A	
Barometric Pressure =	648	mmHg
	25.51	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	**ΔH (in H_2O)**	**Dry Gas Meter Temperature (^oC)**
	0		
	5.5	1.8	13
	11.1	1.8	13
	16.7	1.8	14
	22.2	1.8	14
	27.6	1.8	15
	33.16	1.8	16
Volume =	**33.16**		
Average =		**1.80**	**14.2**

Volume corrected to standard conditions =	**28.81 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	518 ^oR
Pmeter =	25.64 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	GS-1	
Train No.	B	
Barometric Pressure =	648	mmHg
	25.51	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	487.5		
	492.3	1.2	57
	497.7	1.2	59
	503	1.2	61
	508	1.2	63
	513.1	1.2	64
	518.32	1.2	65
Volume =	**30.82**		
Average =		**1.20**	**61.5**

Volume corrected to standard conditions =	**23.21 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	603 ^oR
Pmeter =	25.60 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

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GREEN PARACHUTE SIGNAL FLARE

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TABLE G-1. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Detected Amount, mg	Cl^- Concentration, mg/m^3	Average HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-631 (b)	Run 1 Train A H_2SO_4	12.05	47	ND	ND	ND
DPG-633 (b)	Run 1 Train B H_2SO_4	47.1	48.6	ND	ND	
DPG-632 (b)	Run 1 Train A NaOH	10.13	1.21	0.010	0.012	0.016
DPG-634 (b)	Run 1 Train B NaOH	12.4	1.23	0.012	0.019	

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

Maximum (H_2SO_4) DL = 48.600
Minimum (H_2SO_4) DL = 47.000
Maximum (NaOH) DL = 1.230
Minimum (NaOH) DL = 1.210

TABLE G-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Amount Detected, mg	Cl^- Concentration, mg/m^3	HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-746 (b)	Background 0.1 N H_2SO_4	16.05	45.9	ND	ND	ND
DPG-747 (b)	Background 0.1N NaOH	11.7	1.12	0.012	0.014	0.014
DPG-907 (b)	Reagent Blank 0.1 N H_2SO_4	22.3	289	ND	NA	NA
DPG-908	Reagent Blank 0.1N NaOH	0	2.79	ND	NA	NA
DPG-909 (b)	Reagent Blank Rinsate Distilled H_2O	2.425	5.4	ND	NA	NA
DPG-905/946 (b)	Field Blank 0.1 N H_2SO_4	75.9	55.1	0.076	NA	NA
DPG-906/947 (b)	Field Blank 0.1N NaOH	6.82	1.23	0.007	NA	NA

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

TABLE G-3. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Detection Limit, mg/L	Detected Amount, mg	Cl^- Detection Limit Concentration, mg/m^3	HCl/Cl_2 Detection Limit Concentration, mg/m^3 (a)
Maximum DL	H_2SO_4	48.600	0.049	0.066	0.068
Minimum DL	H_2SO_4	47.000	0.047	0.064	0.066
Maximum DL	NaOH	1.230	0.001	0.002	0.002
Minimum DL	NaOH	1.210	0.001	0.002	0.002

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	GP-1	
Train No.	A	
Barometric Pressure =	648	mmHg
	25.51	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	0		
	5.6	1.8	17
	11.1	1.8	17
	16.4	1.8	17
	21.7	1.8	18
	27.8	1.8	18
	33.39	1.8	19
Volume =	**33.39**		
Average =		**1.80**	**17.7**

Volume corrected to standard conditions =	**28.66 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	524 ^oR
Pmeter =	25.64 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	GP-1	
Train No.	B	
Barometric Pressure =	648	mmHg
	25.51	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (°C)
	520.5		
	525.8	1.2	68
	531	1.2	70
	536	1.2	71
	541	1.2	72
	546.6	1.2	73
	551.98	1.2	73
Volume =	**31.48**		
Average =		**1.20**	**71.2**

Volume corrected to standard conditions =	**23.04 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	620 °R
Pmeter =	25.60 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

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WHITE PARACHUTE SIGNAL FLARE

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TABLE G-1. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Detected Amount, mg	Cl^- Concentration, mg/m^3	Average HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-781 (b)	Run 1 Train A H_2SO_4	18.4	55.1	ND	ND	ND
DPG-783 (b)	Run 1 Train B H_2SO_4	45.65	53.5	ND	ND	
DPG-782 (b)	Run 1 Train A NaOH	41.1	1.18	0.041	0.050	0.068
DPG-784 (b)	Run 1 Train B NaOH	55.55	1.26	0.056	0.085	

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

Maximum (H_2SO_4) DL = 55.100
Minimum (H_2SO_4) DL = 53.500
Maximum (NaOH) DL = 1.260
Minimum (NaOH) DL = 1.180

TABLE G-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Amount Detected, mg	Cl^- Concentration, mg/m^3	HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-746 (b)	Background 0.1 N H_2SO_4	16.05	45.9	ND	ND	ND
DPG-747 (b)	Background 0.1N NaOH	11.7	1.12	0.012	0.014	0.014
DPG-907 (b)	Reagent Blank 0.1 N H_2SO_4	22.3	289	ND	NA	NA
DPG-908	Reagent Blank 0.1N NaOH	0	2.79	ND	NA	NA
DPG-909 (b)	Reagent Blank Rinsate Distilled H_2O	2.425	5.4	ND	NA	NA
DPG-905/946 (b)	Field Blank 0.1 N H_2SO_4	75.9	55.1	0.076	NA	NA
DPG-906/947 (b)	Field Blank 0.1N NaOH	6.82	1.23	0.007	NA	NA

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

TABLE G-3. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Detection Limit, ug	Detected Amount, mg	Cl^- Detection Limit Concentration, mg/m^3	HCl/Cl_2 Detection Limit Concentration, mg/m^3 (a)
Maximum DL	H_2SO_4	55.100	0.055	0.075	0.077
Minimum DL	H_2SO_4	53.500	0.054	0.073	0.075
Maximum DL	NaOH	1.260	0.001	0.002	0.002
Minimum DL	NaOH	1.180	0.001	0.002	0.002

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	WP-Background	
Train No.		
Barometric Pressure =	648	mmHg
	25.51	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	**ΔH (in H_2O)**	**Dry Gas Meter Temperature (°C)**
	0		
	5.6	1.8	9
	11.2	1.8	8
	16.8	1.8	9
	22.5	1.8	9
	28.2	1.8	9
	33.81	1.8	9
Volume =	**33.81**		
Average =		**1.80**	**8.8**

Volume corrected to standard conditions =	**29.93 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	508 °R
Pmeter =	25.64 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	WP-2	
Train No.	A	
Barometric Pressure =	645	mmHg
	25.39	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (°C)
	0		
	5.5	1.8	12
	11	1.8	12
	17.5	1.8	13
	22.8	1.8	14
	27.2	1.8	14
	33.49	1.8	15
Volume =	**33.49**		
Average =		**1.80**	**13.3**

Volume corrected to standard conditions =	**29.04 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	516 °R
Pmeter =	25.52 in. Hg

Pmeter = Average ΔH/13.6 + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	WP-2	
Train No.	B	
Barometric Pressure =	645	mmHg
	25.39	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	554.8		
	559.8	1.2	52
	565	1.2	55
	570	1.2	57
	575	1.2	60
	580	1.2	61
	585.15	1.2	64
Volume =	**30.35**		
Average =		**1.20**	**58.2**

Volume corrected to standard conditions =	**22.98 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	597 ^oR
Pmeter =	25.48 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

155 MM ILLUMINATION ROUND

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TABLE G-1. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Detected Amount, mg	Cl^- Concentration, mg/m^3	Average HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-531 (b)	Run 1 Train A H_2SO_4	13.6	53.5	ND	ND	ND
DPG-533 (b)	Run 1 Train B H_2SO_4	29.85	42.1	ND	ND	
DPG-532 (b)	Run 1 Train A NaOH	11.1	1.03	0.011	0.012	0.025
DPG-534 (b)	Run 1 Train B NaOH	23.35	1.31	0.023	0.037	

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

Maximum (H_2SO_4) DL = 53.500
Minimum (H_2SO_4) DL = 42.100
Maximum (NaOH) DL = 1.310
Minimum (NaOH) DL = 1.030

TABLE G-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Amount Detected, ug	Detection Limit, ug	Amount Detected, mg	Cl^- Concentration, mg/m^3	HCl/Cl_2 Concentration, mg/m^3 (a)
DPG-546 (b)	Background 0.1 N H_2SO_4	14.55	51.8	ND	ND	ND
DPG-547 (b)	Background 0.1N NaOH	25.05	1.18	0.025	0.030	0.030
DPG-907 (b)	Reagent Blank 0.1 N H_2SO_4	22.3	289	ND	NA	NA
DPG-908	Reagent Blank 0.1N NaOH	0	2.79	ND	NA	NA
DPG-909 (b)	Reagent Blank Rinsate Distilled H_2O	2.425	5.4	ND	NA	NA
DPG-905/946 (b)	Field Blank 0.1 N H_2SO_4	75.9	55.1	0.076	NA	NA
DPG-906/947 (b)	Field Blank 0.1N NaOH	6.82	1.23	0.007	NA	NA

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl^-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

b

The amount shown is the average of the measured and duplicate values.

TABLE G-3. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)

HCl/Cl_2 Analysis of the Air Sample - 40 CFR 60 Appendix A Method 9057; sample collected in 40 CFR 60 Appendix A Method 26 impinger trains

Analyzed by: Radian International LLC

Sample ID Number	Sample	Detection Limit, mg/L	Detected Amount, mg	Cl^- Detection Limit Concentration, mg/m^3	HCl/Cl_2 Detection Limit Concentration, mg/m^3 (a)
Maximum DL	H_2SO_4	53.500	0.054	0.069	0.071
Minimum DL	H_2SO_4	42.100	0.042	0.055	0.056
Maximum DL	NaOH	1.310	0.001	0.002	0.002
Minimum DL	NaOH	1.030	0.001	0.001	0.001

a

The HCl/Cl_2 concentration reflects the estimated concentration of HCl based on the ratio of the molecular weight of HCl to the molecular weight of Cl-; the ratio is calculated as 36.46 g/gmol divided by 35.45 g/gmol. Impingers that contain H_2SO_4 estimate the HCl concentration.

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	IR-Background	
Train No.		
Barometric Pressure =	645	mmHg
	25.39	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	0		
	5.5	1.8	8
	11	1.8	8
	16.5	1.8	8
	22	1.8	9
	27.5	1.8	9
	33.18	1.8	9
Volume =	**33.18**		
Average =		**1.80**	**8.5**

Volume corrected to standard conditions =	**29.27 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	507 ^oR
Pmeter =	25.52 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	IR-1	
Train No.	A	
Barometric Pressure =	643	mmHg
	25.31	in. Hg
DGMCF =	0.9935	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (^oC)
	0		
	6.5	1.8	16
	12.7	1.8	16
	19	1.8	17
	25.4	1.8	17
	32.3	1.8	18
	37.81	1.8	18
Volume =	**37.81**		
Average =		**1.80**	**17.0**

Volume corrected to standard conditions =	**32.28 std ft^3**
Ts =	528 ^oR
Ps =	29.92 in. Hg
Tmeter =	523 ^oR
Pmeter =	25.45 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX G - AEC - SAMPLE VOLUME CALCULATIONS FOR HCl/Cl_2 TRAINS

Run No.	IR-1	
Train No.	B	
Barometric Pressure =	643	mmHg
	25.31	in. Hg
DGMCF =	1.0046	

	Dry Gas Meter Reading (ft^3)	ΔH (in H_2O)	Dry Gas Meter Temperature (°C)
	587		
	592	1.2	64
	597.1	1.2	67
	602.2	1.2	67
	607.2	1.2	68
	612.2	1.2	69
	617.11	1.2	69
Volume =	**30.11**		
Average =		**1.20**	**67.3**

Volume corrected to standard conditions =	**22.11 std ft^3**
Ts =	528 °R
Ps =	29.92 in. Hg
Tmeter =	613 °R
Pmeter =	25.40 in. Hg

Pmeter = Average $\Delta H/13.6$ + Barometric Pressure (in. Hg)

APPENDIX II-H. DIOXIN/FURAN DATA RESULTS

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SIMULATOR BOOBY TRAP FLASH M117

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TABLE H-1. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
2,3,7,8-TCDD	ND	1.5	ND	ND	2.1	ND	ND
1,2,3,7,8-PeCDD	ND	2.6	ND	ND	3	ND	ND
1,2,3,4,7,8-HxCDD	ND	4.2	ND	ND	4	ND	ND
1,2,3,6,7,8-HxCDD	ND	3.9	ND	ND	3.7	ND	ND
1,2,3,7,8,9-HxCDD	ND	4	ND	ND	3.8	ND	ND
1,2,3,4,6,7,8-HpCDD	ND		ND	7.9		3.403E-09	3.403E-09
1,2,3,4,6,7,8,9-OCDD	70.4		2.475E-08	36		1.551E-08	2.013E-08
Total TCDD	ND	1.5	ND	ND	2.1	ND	ND
Total PeCDD	ND	2.6	ND	5.5		2.369E-09	2.369E-09
Total HxCDD	ND	4	ND	ND		ND	ND
Total HpCDD	ND		ND	15.7		6.763E-09	6.763E-09
2,3,7,8-TCDF	ND		ND	5.4		2.326E-09	2.326E-09
1,2,3,7,8-PeCDF	ND	2	ND	ND	2.3	ND	ND
2,3,4,7,8-PeCDF	ND	2.1	ND	ND	2.4	ND	ND
1,2,3,4,7,8-HxCDF	4.8		1.687E-09	4.4		1.895E-09	1.791E-09
1,2,3,6,7,8-HxCDF	2.5		8.787E-10	ND		ND	8.787E-10
2,3,4,6,7,8-HxCDF	3.4		1.195E-09	2.8		1.206E-09	1.201E-09
1,2,3,7,8,9-HxCDF	ND	2.8	ND	ND	3.3	ND	ND
1,2,3,4,6,7,8-HpCDF	ND	3.2	ND	ND		ND	ND
1,2,3,4,7,8,9-HpCDF	ND	4.5	ND	ND	4.4	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	6.3	ND	8.2		3.532E-09	3.532E-09
Total TCDF	ND		ND	5.4		2.326E-09	2.326E-09
Total PeCDF	ND		ND	7.1		3.058E-09	3.058E-09
Total HxCDF	16.3		5.729E-09	12.5		5.385E-09	5.557E-09
Total HpCDF	ND	3.8	ND	ND		ND	ND

TABLE H-1. AEC - RUN NO. 1 BT TEST (28 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Dioxin TEQ (b)	1.1404		4.008E-10	1.3832		5.958E-10	4.983E-10

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
2,3,7,8-TCDD	ND	1.9	ND	ND	1.5	ND	1.4
1,2,3,7,8-PeCDD	ND	3.6	ND	ND	2.9	ND	2.4
1,2,3,4,7,8-HxCDD	ND	6.1	ND	ND	3.8	ND	4
1,2,3,6,7,8-HxCDD	ND	5.6	ND	ND	3	ND	3.2
1,2,3,7,8,9-HxCDD	ND	5.7	ND	ND	3.1	ND	3.3
1,2,3,4,6,7,8-HpCDD	ND	8.4	ND	ND	4	ND	5.6
1,2,3,4,6,7,8,9-OCDD	ND	12.7	ND	15.7		18.1	
Total TCDD	ND	1.9	ND	ND	1.5	ND	1.4
Total PeCDD	ND	3.6	ND	ND	2.9	ND	2.4
Total HxCDD	ND	5.8	ND	ND	3.2	ND	3.5
Total HpCDD	ND	8.4	ND	ND	4	ND	5.6
2,3,7,8-TCDF	ND	1.4	ND	6.1		4.6	
1,2,3,7,8-PeCDF	ND	2.9	ND	ND	2.2	ND	1.7
2,3,4,7,8-PeCDF	ND	3.1	ND	ND	2.3	ND	1.8
1,2,3,4,7,8-HxCDF	5.3		1.246E-09	5.6		ND	2.5
1,2,3,6,7,8-HxCDF	ND	3.7	ND	ND	1.9	ND	2
2,3,4,6,7,8-HxCDF	ND	4.8	ND	ND	2.4	ND	2.5
1,2,3,7,8,9-HxCDF	ND	5.1	ND	ND	2.7	ND	2.9
1,2,3,4,6,7,8-HpCDF	ND	5.2	ND	ND	2.6	ND	3.4
1,2,3,4,7,8,9-HpCDF	ND	7.3	ND	ND	3.4	ND	4.4
1,2,3,4,6,7,8,9-OCDF	ND	9.5	ND	ND	4	ND	6.5
Total TCDF	ND	1.4	ND	6.1		4.6	
Total PeCDF	ND		ND	ND	2.2	ND	
Total HxCDF	11.3		2.657E-09	5.6		ND	2.4
Total HpCDF	ND	6.1	ND	ND	3	ND	3.8

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
Dioxin TEQ (b)	0.53		1.246E-10	1.1857		0.4781	

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

SIMULATOR FLASH ARTILLERY M110

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TABLE H-1. AEC - RUN NO. 1 FA TEST (28 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
2,3,7,8-TCDD	ND	2.5	ND	ND
1,2,3,7,8-PeCDD	ND	4.1	ND	ND
1,2,3,4,7,8-HxCDD	ND	8.9	ND	ND
1,2,3,6,7,8-HxCDD	ND	7	ND	ND
1,2,3,7,8,9-HxCDD	ND	7.2	ND	ND
1,2,3,4,6,7,8-HpCDD	30.2		8.916E-09	8.916E-09
1,2,3,4,6,7,8,9-OCDD	209		6.170E-08	6.170E-08
Total TCDD	ND	2.5	ND	ND
Total PeCDD	ND	4.1	ND	ND
Total HxCDD	ND	7.6	ND	ND
Total HpCDD	30.2		8.916E-09	8.916E-09
2,3,7,8-TCDF	10.2		3.011E-09	3.011E-09
1,2,3,7,8-PeCDF	ND	3.3	ND	ND
2,3,4,7,8-PeCDF	ND	3.4	ND	ND
1,2,3,4,7,8-HxCDF	ND		ND	ND
1,2,3,6,7,8-HxCDF	ND		ND	ND
2,3,4,6,7,8-HxCDF	4.1		1.210E-09	1.210E-09
1,2,3,7,8,9-HxCDF	ND	5.6	ND	ND
1,2,3,4,6,7,8-HpCDF	16.9		4.989E-09	4.989E-09
1,2,3,4,7,8,9-HpCDF	ND	9.1	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	14.5	ND	ND
Total TCDF	21.8		6.436E-09	6.436E-09
Total PeCDF	28.3		8.355E-09	8.355E-09
Total HxCDF	4.1		1.210E-09	1.210E-09
Total HpCDF	16.9		4.989E-09	4.989E-09
Dioxin TEQ (b)	2.11		6.229E-10	6.229E-10

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-2. AEC - RUN NO. 2 FA TEST (28 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 2 Train A - Amount Detected, pg	Run 2 Train A -Detection Limit, pg	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
2,3,7,8-TCDD	ND	2.6	ND	ND
1,2,3,7,8-PeCDD	ND	4.7	ND	ND
1,2,3,4,7,8-HxCDD	ND	7.9	ND	ND
1,2,3,6,7,8-HxCDD	ND	7.2	ND	ND
1,2,3,7,8,9-HxCDD	ND	7.5	ND	ND
1,2,3,4,6,7,8-HpCDD	ND		ND	ND
1,2,3,4,6,7,8,9-OCDD	181		5.683E-08	5.683E-08
Total TCDD	ND	2.6	ND	ND
Total PeCDD	ND	4.7	ND	ND
Total HxCDD	ND	7.5	ND	ND
Total HpCDD	ND		ND	ND
2,3,7,8-TCDF	ND	2	ND	ND
1,2,3,7,8-PeCDF	ND	3.6	ND	ND
2,3,4,7,8-PeCDF	ND	3.8	ND	ND
1,2,3,4,7,8-HxCDF	ND		ND	ND
1,2,3,6,7,8-HxCDF	ND	4.3	ND	ND
2,3,4,6,7,8-HxCDF	ND	5.5	ND	ND
1,2,3,7,8,9-HxCDF	ND	5.8	ND	ND
1,2,3,4,6,7,8-HpCDF	ND		ND	ND
1,2,3,4,7,8,9-HpCDF	ND	9.2	ND	ND
1,2,3,4,6,7,8,9-OCDF	11.8		3.705E-09	3.705E-09
Total TCDF	ND	2	ND	ND
Total PeCDF	ND	3.7	ND	ND
Total HxCDF	ND		ND	ND
Total HpCDF	ND		ND	ND
Dioxin TEQ (b)	0.1928		6.054E-11	6.054E-11

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-3. AEC - RUN NO. 1-2 COMPOSITE FA TEST (28 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1-2 Train B -Amount Detected, pg	Run 1-2 Train B - Detection Limit, pg	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
2,3,7,8-TCDD	ND	1.9	ND	ND
1,2,3,7,8-PeCDD	ND	3.9	ND	ND
1,2,3,4,7,8-HxCDD	ND	5.3	ND	ND
1,2,3,6,7,8-HxCDD	ND	4.8	ND	ND
1,2,3,7,8,9-HxCDD	ND	5	ND	ND
1,2,3,4,6,7,8-HpCDD	57.6		7.569E-09	7.569E-09
1,2,3,4,6,7,8,9-OCDD	453		5.953E-08	5.953E-08
Total TCDD	ND	1.9	ND	ND
Total PeCDD	ND	3.9	ND	ND
Total HxCDD	ND	5	ND	ND
Total HpCDD	110		1.445E-08	1.445E-08
2,3,7,8-TCDF	ND		ND	ND
1,2,3,7,8-PeCDF	ND	2.6	ND	ND
2,3,4,7,8-PeCDF	ND	2.7	ND	ND
1,2,3,4,7,8-HxCDF	ND		ND	ND
1,2,3,6,7,8-HxCDF	ND		ND	ND
2,3,4,6,7,8-HxCDF	6.7		8.804E-10	8.804E-10
1,2,3,7,8,9-HxCDF	ND	4.1	ND	ND
1,2,3,4,6,7,8-HpCDF	26.8		3.522E-09	3.522E-09
1,2,3,4,7,8,9-HpCDF	ND	7.1	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND		ND	ND
Total TCDF	14.8		1.945E-09	1.945E-09
Total PeCDF	10.7		1.406E-09	1.406E-09
Total HxCDF	21.2		2.786E-09	2.786E-09
Total HpCDF	43.9		5.769E-09	5.769E-09
Dioxin TEQ (b)	1.967		2.585E-10	2.585E-10

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
2,3,7,8-TCDD	ND	1.5	ND	ND	1.5	ND	1.4
1,2,3,7,8-PeCDD	ND	2.6	ND	ND	2.9	ND	2.4
1,2,3,4,7,8-HxCDD	ND	5	ND	ND	3.8	ND	4
1,2,3,6,7,8-HxCDD	ND	4.5	ND	ND	3	ND	3.2
1,2,3,7,8,9-HxCDD	ND	4.7	ND	ND	3.1	ND	3.3
1,2,3,4,6,7,8-HpCDD	ND	6.5	ND	ND	4	ND	5.6
1,2,3,4,6,7,8,9-OCDD	17.3		3.972E-09	15.7		18.1	
Total TCDD	ND		ND	ND	1.5	ND	1.4
Total PeCDD	ND	2.6	ND	ND	2.9	ND	2.4
Total HxCDD	ND	4.7	ND	ND	3.2	ND	3.5
Total HpCDD	ND	6.5	ND	ND	4	ND	5.6
2,3,7,8-TCDF	ND	1	ND	6.1		4.6	
1,2,3,7,8-PeCDF	ND	2.1	ND	ND	2.2	ND	1.7
2,3,4,7,8-PeCDF	ND	2.2	ND	ND	2.3	ND	1.8
1,2,3,4,7,8-HxCDF	5.8		1.332E-09	5.6		ND	2.5
1,2,3,6,7,8-HxCDF	ND	2.6	ND	ND	1.9	ND	2
2,3,4,6,7,8-HxCDF	ND	3.3	ND	ND	2.4	ND	2.5
1,2,3,7,8,9-HxCDF	ND	3.5	ND	ND	2.7	ND	2.9
1,2,3,4,6,7,8-HpCDF	ND	4.6	ND	ND	2.6	ND	3.4
1,2,3,4,7,8,9-HpCDF	ND	6.5	ND	ND	3.4	ND	4.4
1,2,3,4,6,7,8,9-OCDF	ND	7.3	ND	ND	4	ND	6.5
Total TCDF	ND	1	ND	6.1		4.6	
Total PeCDF	ND		ND	ND	2.2	ND	
Total HxCDF	5.8		1.332E-09	5.6		ND	2.4
Total HpCDF	ND	5.4	ND	ND	3	ND	3.8

TABLE H-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
Dioxin TEQ (b)	0.5973		1.371E-10	1.1857		0.4781	

a
All data presented was outside the laboratory calibration range is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

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TABLE H-1. AEC - RUN NO. 1 HG TEST (30 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
2,3,7,8-TCDD	ND	4.4	ND	ND
1,2,3,7,8-PeCDD	ND	7.9	ND	ND
1,2,3,4,7,8-HxCDD	ND	16.1	ND	ND
1,2,3,6,7,8-HxCDD	ND	12.6	ND	ND
1,2,3,7,8,9-HxCDD	ND	13.1	ND	ND
1,2,3,4,6,7,8-HpCDD	ND	19	ND	ND
1,2,3,4,6,7,8,9-OCDD	56.7		3.472E-08	3.472E-08
Total TCDD	ND	4.4	ND	ND
Total PeCDD	ND	7.9	ND	ND
Total HxCDD	ND	13.8	ND	ND
Total HpCDD	ND	19	ND	ND
2,3,7,8-TCDF	ND	3.2	ND	ND
1,2,3,7,8-PeCDF	ND	5.6	ND	ND
2,3,4,7,8-PeCDF	ND	5.8	ND	ND
1,2,3,4,7,8-HxCDF	ND	10.9	ND	ND
1,2,3,6,7,8-HxCDF	ND	8.7	ND	ND
2,3,4,6,7,8-HxCDF	ND	11.1	ND	ND
1,2,3,7,8,9-HxCDF	ND	12.6	ND	ND
1,2,3,4,6,7,8-HpCDF	ND	15.4	ND	ND
1,2,3,4,7,8,9-HpCDF	ND	19.8	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	24.6	ND	ND
Total TCDF	ND	3.2	ND	ND
Total PeCDF	ND	5.7	ND	ND
Total HxCDF	ND	10.6	ND	ND
Total HpCDF	ND	17.3	ND	ND
Dioxin TEQ (b)	0.0567		3.472E-11	3.472E-11

a
All data presented was outside the laboratory calibration range and is an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-2. AEC - RUN NO. 2 HG TEST (30 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 2 Train A - Amount Detected, pg	Run 2 Train A -Detection Limit, pg	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
2,3,7,8-TCDD	ND	3.9	ND	ND
1,2,3,7,8-PeCDD	ND	4.8	ND	ND
1,2,3,4,7,8-HxCDD	ND	6.2	ND	ND
1,2,3,6,7,8-HxCDD	ND	5.7	ND	ND
1,2,3,7,8,9-HxCDD	ND	5.8	ND	ND
1,2,3,4,6,7,8-HpCDD	19.7		1.706E-08	1.706E-08
1,2,3,4,6,7,8,9-OCDD	99.8		8.645E-08	8.645E-08
Total TCDD	ND	3.9	ND	ND
Total PeCDD	ND	4.8	ND	ND
Total HxCDD	ND	5.9	ND	ND
Total HpCDD	39		3.378E-08	3.378E-08
2,3,7,8-TCDF	ND	2.9	ND	ND
1,2,3,7,8-PeCDF	ND	3.7	ND	ND
2,3,4,7,8-PeCDF	ND	3.7	ND	ND
1,2,3,4,7,8-HxCDF	ND	4.1	ND	ND
1,2,3,6,7,8-HxCDF	ND	3.8	ND	ND
2,3,4,6,7,8-HxCDF	ND	4.7	ND	ND
1,2,3,7,8,9-HxCDF	ND	5.2	ND	ND
1,2,3,4,6,7,8-HpCDF	ND	5.6	ND	ND
1,2,3,4,7,8,9-HpCDF	ND	7.9	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	8.7	ND	ND
Total TCDF	ND	2.9	ND	ND
Total PeCDF	ND	3.7	ND	ND
Total HxCDF	ND	4.4	ND	ND
Total HpCDF	ND	6.5	ND	ND
Dioxin TEQ (b)	0.2968		2.571E-10	2.571E-10

a
All data presented was outside the laboratory calibration range and is an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-3. AEC - RUN NO. 1-2 COMPOSITE HG TEST (30 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1-2 Train B -Amount Detected, pg	Run 1-2 Train B - Detection Limit, pg	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
2,3,7,8-TCDD	ND	3.1	ND	ND
1,2,3,7,8-PeCDD	ND	3.5	ND	ND
1,2,3,4,7,8-HxCDD	ND	4.7	ND	ND
1,2,3,6,7,8-HxCDD	ND	4.3	ND	ND
1,2,3,7,8,9-HxCDD	ND	4.4	ND	ND
1,2,3,4,6,7,8-HpCDD	ND		ND	ND
1,2,3,4,6,7,8,9-OCDD	170		5.722E-08	5.722E-08
Total TCDD	ND	3.1	ND	ND
Total PeCDD	ND	3.5	ND	ND
Total HxCDD	ND	4.5	ND	ND
Total HpCDD	27		9.089E-09	9.089E-09
2,3,7,8-TCDF	7.1		2.390E-09	2.390E-09
1,2,3,7,8-PeCDF	ND	3.1	ND	ND
2,3,4,7,8-PeCDF	ND	3.1	ND	ND
1,2,3,4,7,8-HxCDF	4.9		1.649E-09	1.649E-09
1,2,3,6,7,8-HxCDF	ND	2.9	ND	ND
2,3,4,6,7,8-HxCDF	ND	3.6	ND	ND
1,2,3,7,8,9-HxCDF	ND	4	ND	ND
1,2,3,4,6,7,8-HpCDF	8.6		2.895E-09	2.895E-09
1,2,3,4,7,8,9-HpCDF	ND	6.5	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	7.2	ND	ND
Total TCDF	7.1		2.390E-09	2.390E-09
Total PeCDF	9.2		3.097E-09	3.097E-09
Total HxCDF	11.9		4.006E-09	4.006E-09
Total HpCDF	8.6		2.895E-09	2.895E-09
Dioxin TEQ (b)	1.456		4.901E-10	4.901E-10

a
All data presented was outside the laboratory calibration range and is an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
2,3,7,8-TCDD	ND	6.3	ND	ND	1.5	ND	1.4
1,2,3,7,8-PeCDD	ND	11.5	ND	ND	2.9	ND	2.4
1,2,3,4,7,8-HxCDD	ND	24.1	ND	ND	3.8	ND	4
1,2,3,6,7,8-HxCDD	ND	18.9	ND	ND	3	ND	3.2
1,2,3,7,8,9-HxCDD	ND	19.6	ND	ND	3.1	ND	3.3
1,2,3,4,6,7,8-HpCDD	ND	30.1	ND	ND	4	ND	5.6
1,2,3,4,6,7,8,9-OCDD	ND	43.9	ND	15.7		18.1	
Total TCDD	ND	6.3	ND	ND	1.5	ND	1.4
Total PeCDD	ND	11.5	ND	ND	2.9	ND	2.4
Total HxCDD	ND	20.6	ND	ND	3.2	ND	3.5
Total HpCDD	ND	30.1	ND	ND	4	ND	5.6
2,3,7,8-TCDF	ND	5.4	ND	6.1		4.6	
1,2,3,7,8-PeCDF	ND	9.1	ND	ND	2.2	ND	1.7
2,3,4,7,8-PeCDF	ND	9.4	ND	ND	2.3	ND	1.8
1,2,3,4,7,8-HxCDF	ND	13.8	ND	5.6		ND	2.5
1,2,3,6,7,8-HxCDF	ND	11.1	ND	ND	1.9	ND	2
2,3,4,6,7,8-HxCDF	ND	14.1	ND	ND	2.4	ND	2.5
1,2,3,7,8,9-HxCDF	ND	16	ND	ND	2.7	ND	2.9
1,2,3,4,6,7,8-HpCDF	ND	17.8	ND	ND	2.6	ND	3.4
1,2,3,4,7,8,9-HpCDF	ND	22.9	ND	ND	3.4	ND	4.4
1,2,3,4,6,7,8,9-OCDF	ND	35.3	ND	ND	4	ND	6.5
Total TCDF	ND	5.4	ND	6.1		4.6	
Total PeCDF	ND	9.2	ND	ND	2.2	ND	
Total HxCDF	ND	13.5	ND	5.6		ND	2.4
Total HpCDF	ND	20	ND	ND	3	ND	3.8

TABLE H-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
Dioxin TEQ (b)	ND		ND	1.1857		0.4781	

a
All data presented was outside the laboratory calibration range and is an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

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SIMULATOR GROUND BURST

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TABLE H-1. AEC - RUN NO. 1 GB TEST (30 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
2,3,7,8-TCDD	ND	3.6	ND	ND
1,2,3,7,8-PeCDD	ND	4	ND	ND
1,2,3,4,7,8-HxCDD	ND	5.5	ND	ND
1,2,3,6,7,8-HxCDD	ND	5.1	ND	ND
1,2,3,7,8,9-HxCDD	ND	5.1	ND	ND
1,2,3,4,6,7,8-HpCDD	24.3		1.526E-08	1.526E-08
1,2,3,4,6,7,8,9-OCDD	94.6		5.942E-08	5.942E-08
Total TCDD	ND	3.6	ND	ND
Total PeCDD	ND	4	ND	ND
Total HxCDD	ND	5.2	ND	ND
Total HpCDD	48.8		3.065E-08	3.065E-08
2,3,7,8-TCDF	7.7		4.837E-09	4.837E-09
1,2,3,7,8-PeCDF	ND	3.4	ND	ND
2,3,4,7,8-PeCDF	ND	3.4	ND	ND
1,2,3,4,7,8-HxCDF	8.3		5.214E-09	5.214E-09
1,2,3,6,7,8-HxCDF	ND	3.4	ND	ND
2,3,4,6,7,8-HxCDF	ND	4.3	ND	ND
1,2,3,7,8,9-HxCDF	ND	4.7	ND	ND
1,2,3,4,6,7,8-HpCDF	ND		ND	ND
1,2,3,4,7,8,9-HpCDF	ND	7.4	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	7.4	ND	ND
Total TCDF	7.7		4.837E-09	4.837E-09
Total PeCDF	ND	3.4	ND	ND
Total HxCDF	8.3		5.214E-09	5.214E-09
Total HpCDF	ND		ND	ND
Dioxin TEQ (b)	1.9376		1.217E-09	1.217E-09

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-2. AEC - RUN NO. 2 GB TEST (30 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 2 Train A - Amount Detected, pg	Run 2 Train A -Detection Limit, pg	Run 2 Train A - Concentration, mg/m^3	Average Concentration - Run 2, mg/m^3
2,3,7,8-TCDD	ND	3.7	ND	ND
1,2,3,7,8-PeCDD	ND	4.5	ND	ND
1,2,3,4,7,8-HxCDD	ND	6.1	ND	ND
1,2,3,6,7,8-HxCDD	ND	5.6	ND	ND
1,2,3,7,8,9-HxCDD	ND	5.7	ND	ND
1,2,3,4,6,7,8-HpCDD	24.8		2.428E-08	2.428E-08
1,2,3,4,6,7,8,9-OCDD	147		1.439E-07	1.439E-07
Total TCDD	ND	3.7	ND	ND
Total PeCDD	ND	4.5	ND	ND
Total HxCDD	ND	5.8	ND	ND
Total HpCDD	56.9		5.571E-08	5.571E-08
2,3,7,8-TCDF	7.9		7.735E-09	7.735E-09
1,2,3,7,8-PeCDF	ND	3.4	ND	ND
2,3,4,7,8-PeCDF	ND	3.4	ND	ND
1,2,3,4,7,8-HxCDF	6.1		5.972E-09	5.972E-09
1,2,3,6,7,8-HxCDF	ND	3.6	ND	ND
2,3,4,6,7,8-HxCDF	ND	4.5	ND	ND
1,2,3,7,8,9-HxCDF	ND	4.9	ND	ND
1,2,3,4,6,7,8-HpCDF	ND	5.1	ND	ND
1,2,3,4,7,8,9-HpCDF	ND	7.2	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	8.8	ND	ND
Total TCDF	7.9		7.735E-09	7.735E-09
Total PeCDF	7.1		6.951E-09	6.951E-09
Total HxCDF	6.1		5.972E-09	5.972E-09
Total HpCDF	ND	5.9	ND	ND
Dioxin TEQ (b)	1.795		1.757E-09	1.757E-09

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-3. AEC - RUN NO. 1-2 COMPOSITE GB TEST (30 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1-2 Train B -Amount Detected, pg	Run 1-2 Train B - Detection Limit, pg	Run 1-2 Train B - Concentration, mg/m^3	Average Concentration - Run 1-2, mg/m^3
2,3,7,8-TCDD	ND	3	ND	ND
1,2,3,7,8-PeCDD	ND	3.4	ND	ND
1,2,3,4,7,8-HxCDD	ND	4.4	ND	ND
1,2,3,6,7,8-HxCDD	ND	4.1	ND	ND
1,2,3,7,8,9-HxCDD	ND	4.1	ND	ND
1,2,3,4,6,7,8-HpCDD	36.5		1.464E-08	1.464E-08
1,2,3,4,6,7,8,9-OCDD	237		9.504E-08	9.504E-08
Total TCDD	ND	3	ND	ND
Total PeCDD	ND	3.4	ND	ND
Total HxCDD	11.9		4.772E-09	4.772E-09
Total HpCDD	80.5		3.228E-08	3.228E-08
2,3,7,8-TCDF	8.6		3.449E-09	3.449E-09
1,2,3,7,8-PeCDF	ND	2.8	ND	ND
2,3,4,7,8-PeCDF	ND	2.8	ND	ND
1,2,3,4,7,8-HxCDF	4.7		1.885E-09	1.885E-09
1,2,3,6,7,8-HxCDF	ND	2.6	ND	ND
2,3,4,6,7,8-HxCDF	ND	3.3	ND	ND
1,2,3,7,8,9-HxCDF	ND	3.6	ND	ND
1,2,3,4,6,7,8-HpCDF	ND	3.6	ND	ND
1,2,3,4,7,8,9-HpCDF	ND	5.1	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND		ND	ND
Total TCDF	8.6		3.449E-09	3.449E-09
Total PeCDF	ND	2.8	ND	ND
Total HxCDF	4.7		1.885E-09	1.885E-09
Total HpCDF	9.2		3.689E-09	3.689E-09
Dioxin TEQ (b)	1.932		7.748E-10	7.748E-10

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
2,3,7,8-TCDD	ND	6.3	ND	ND	1.5	ND	1.4
1,2,3,7,8-PeCDD	ND	11.5	ND	ND	2.9	ND	2.4
1,2,3,4,7,8-HxCDD	ND	24.1	ND	ND	3.8	ND	4
1,2,3,6,7,8-HxCDD	ND	.18.9	ND	ND	3	ND	3.2
1,2,3,7,8,9-HxCDD	ND	19.6	ND	ND	3.1	ND	3.3
1,2,3,4,6,7,8-HpCDD	ND	30.1	ND	ND	4	ND	5.6
1,2,3,4,6,7,8,9-OCDD	ND	43.9	ND	15.7		18.1	
Total TCDD	ND	6.3	ND	ND	1.5	ND	1.4
Total PeCDD	ND	11.5	ND	ND	2.9	ND	2.4
Total HxCDD	ND	20.6	ND	ND	3.2	ND	3.5
Total HpCDD	ND	30.1	ND	ND	4	ND	5.6
2,3,7,8-TCDF	ND	5.4	ND	6.1		4.6	
1,2,3,7,8-PeCDF	ND	9.1	ND	ND	2.2	ND	1.7
2,3,4,7,8-PeCDF	ND	9.4	ND	ND	2.3	ND	1.8
1,2,3,4,7,8-HxCDF	ND	13.8	ND	5.6		ND	2.5
1,2,3,6,7,8-HxCDF	ND	11.1	ND	ND	1.9	ND	2
2,3,4,6,7,8-HxCDF	ND	14.1	ND	ND	2.4	ND	2.5
1,2,3,7,8,9-HxCDF	ND	16	ND	ND	2.7	ND	2.9
1,2,3,4,6,7,8-HpCDF	ND	17.8	ND	ND	2.6	ND	3.4
1,2,3,4,7,8,9-HpCDF	ND	22.9	ND	ND	3.4	ND	4.4
1,2,3,4,6,7,8,9-OCDF	ND	35.3	ND	ND	4	ND	6.5
Total TCDF	ND	5.4	ND	6.1		4.6	
Total PeCDF	ND	9.2	ND	ND	2.2	ND	
Total HxCDF	ND	13.5	ND	5.6		ND	2.4
Total HpCDF	ND	20	ND	ND	3	ND	3.8

TABLE H-4. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
Dioxin TEQ (b)	ND		ND	1.1857		0.4781	

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

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GREEN STAR CLUSTER

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TABLE H-1. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
2,3,7,8-TCDD	ND	3.6	ND	ND	2.8	ND	ND
1,2,3,7,8-PeCDD	ND	4.1	ND	ND	4	ND	ND
1,2,3,4,7,8-HxCDD	ND	5.7	ND	ND	5.7	ND	ND
1,2,3,6,7,8-HxCDD	ND	5.3	ND	ND	5.3	ND	ND
1,2,3,7,8,9-HxCDD	ND	5.3	ND	ND	5.3	ND	ND
1,2,3,4,6,7,8-HpCDD	ND	7.3	ND	ND	8.1	ND	ND
1,2,3,4,6,7,8,9-OCDD	ND		ND	38.1		1.226E-08	1.226E-08
Total TCDD	ND	3.6	ND	ND	2.8	ND	ND
Total PeCDD	ND	4.1	ND	ND	4	ND	ND
Total HxCDD	ND	5.4	ND	ND	5.4	ND	ND
Total HpCDD	ND	7.3	ND	ND	8.1	ND	ND
2,3,7,8-TCDF	ND	2.6	ND	7.9		2.542E-09	2.542E-09
1,2,3,7,8-PeCDF	ND	3.3	ND	ND	2.6	ND	ND
2,3,4,7,8-PeCDF	ND	3.3	ND	ND	2.6	ND	ND
1,2,3,4,7,8-HxCDF	ND	3.8	ND	ND	3.5	ND	ND
1,2,3,6,7,8-HxCDF	ND	3.5	ND	ND	3.2	ND	ND
2,3,4,6,7,8-HxCDF	ND	4.3	ND	ND	4	ND	ND
1,2,3,7,8,9-HxCDF	ND	4.8	ND	ND	4.4	ND	ND
1,2,3,4,6,7,8-HpCDF	ND	5.1	ND	ND	5.6	ND	ND
1,2,3,4,7,8,9-HpCDF	ND	7.2	ND	ND	8	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	8.8	ND	ND	13.8	ND	ND
Total TCDF	ND	2.6	ND	7.9		2.542E-09	2.542E-09
Total PeCDF	ND	3.3	ND	ND	2.6	ND	ND
Total HxCDF	ND	4	ND	ND	3.8	ND	ND
Total HpCDF	ND	6	ND	ND	6.6	ND	ND

TABLE H-1. AEC - RUN NO. 1 GS TEST (31 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Dioxin TEQ (b)	ND		ND	0.8281		2.664E-10	2.664E-10

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
2,3,7,8-TCDD	ND	3	ND	ND	1.5	ND	1.4
1,2,3,7,8-PeCDD	ND	3.4	ND	ND	2.9	ND	2.4
1,2,3,4,7,8-HxCDD	ND	4.6	ND	ND	3.8	ND	4
1,2,3,6,7,8-HxCDD	ND	4.3	ND	ND	3	ND	3.2
1,2,3,7,8,9-HxCDD	ND	4.3	ND	ND	3.1	ND	3.3
1,2,3,4,6,7,8-HpCDD	ND	5.6	ND	ND	4	ND	5.6
1,2,3,4,6,7,8,9-OCDD	ND		ND	15.7		18.1	
Total TCDD	ND	3	ND	ND	1.5	ND	1.4
Total PeCDD	ND	3.4	ND	ND	2.9	ND	2.4
Total HxCDD	ND	4.4	ND	ND	3.2	ND	3.5
Total HpCDD	ND	5.6	ND	ND	4	ND	5.6
2,3,7,8-TCDF	6.7		1.512E-09	6.1		4.6	
1,2,3,7,8-PeCDF	ND	2.8	ND	ND	2.2	ND	1.7
2,3,4,7,8-PeCDF	ND	2.8	ND	ND	2.3	ND	1.8
1,2,3,4,7,8-HxCDF	ND	3	ND	5.6		ND	2.5
1,2,3,6,7,8-HxCDF	ND	2.8	ND	ND	1.9	ND	2
2,3,4,6,7,8-HxCDF	ND	3.5	ND	ND	2.4	ND	2.5
1,2,3,7,8,9-HxCDF	ND	3.8	ND	ND	2.7	ND	2.9
1,2,3,4,6,7,8-HpCDF	ND	4	ND	ND	2.6	ND	3.4
1,2,3,4,7,8,9-HpCDF	ND	5.7	ND	ND	3.4	ND	4.4
1,2,3,4,6,7,8,9-OCDF	ND	6.7	ND	ND	4	ND	6.5
Total TCDF	6.7		1.512E-09	6.1		4.6	
Total PeCDF	ND	2.8	ND	ND	2.2	ND	
Total HxCDF	ND	3.2	ND	5.6		ND	2.4
Total HpCDF	ND	4.7	ND	ND	3	ND	3.8

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
Dioxin TEQ (b)	0.67		1.512E-10	1.1857		0.4781	

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

GREEN PARACHUTE SIGNAL FLARE

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TABLE H-1. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
2,3,7,8-TCDD	ND	2	ND	ND	1.5	ND	ND
1,2,3,7,8-PeCDD	ND	3.2	ND	ND	2.6	ND	ND
1,2,3,4,7,8-HxCDD	ND	6.3	ND	ND	4.6	ND	ND
1,2,3,6,7,8-HxCDD	ND	5	ND	ND	3.6	ND	ND
1,2,3,7,8,9-HxCDD	ND	5.2	ND	ND	3.7	ND	ND
1,2,3,4,6,7,8-HpCDD	ND	9.1	ND	ND	5.3	ND	ND
1,2,3,4,6,7,8,9-OCDD	23.3		7.766E-09	ND		ND	7.766E-09
Total TCDD	3.8		1.267E-09	ND	1.5	ND	1.267E-09
Total PeCDD	ND	3.2	ND	ND	2.6	ND	ND
Total HxCDD	ND	5.4	ND	ND	3.9	ND	ND
Total HpCDD	ND	9.1	ND	ND	5.3	ND	ND
2,3,7,8-TCDF	15.3		5.100E-09	13.7		5.165E-09	5.132E-09
1,2,3,7,8-PeCDF	ND	2.4	ND	ND	1.8	ND	ND
2,3,4,7,8-PeCDF	5.9		1.967E-09	ND	1.9	ND	1.967E-09
1,2,3,4,7,8-HxCDF	11		3.666E-09	ND	2.6	ND	3.666E-09
1,2,3,6,7,8-HxCDF	4.8		1.600E-09	ND	2.1	ND	1.600E-09
2,3,4,6,7,8-HxCDF	5.4		1.800E-09	ND	2.6	ND	1.800E-09
1,2,3,7,8,9-HxCDF	ND	4.3	ND	ND	3	ND	ND
1,2,3,4,6,7,8-HpCDF	10.6		3.533E-09	ND		ND	3.533E-09
1,2,3,4,7,8,9-HpCDF	ND	7	ND	ND	4.2	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	11.1	ND	ND	5.4	ND	ND
Total TCDF	45.1		1.503E-08	19.9		7.502E-09	1.127E-08
Total PeCDF	39.9		1.330E-08	21.5		8.106E-09	1.070E-08
Total HxCDF	38.4		1.280E-08	ND	2.5	ND	1.280E-08
Total HpCDF	10.6		3.533E-09	ND		ND	3.533E-09

TABLE H-1. AEC - RUN NO. 1 GP TEST (31 MARCH 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Dioxin TEQ (b)	6.7293		2.243E-09	1.37		5.165E-10	1.380E-09

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
2,3,7,8-TCDD	ND	3	ND	ND	1.5	ND	1.4
1,2,3,7,8-PeCDD	ND	3.4	ND	ND	2.9	ND	2.4
1,2,3,4,7,8-HxCDD	ND	4.6	ND	ND	3.8	ND	4
1,2,3,6,7,8-HxCDD	ND	4.3	ND	ND	3	ND	3.2
1,2,3,7,8,9-HxCDD	ND	4.3	ND	ND	3.1	ND	3.3
1,2,3,4,6,7,8-HpCDD	ND	5.6	ND	ND	4	ND	5.6
1,2,3,4,6,7,8,9-OCDD	ND		ND	15.7		18.1	
Total TCDD	ND	3	ND	ND	1.5	ND	1.4
Total PeCDD	ND	3.4	ND	ND	2.9	ND	2.4
Total HxCDD	ND	4.4	ND	ND	3.2	ND	3.5
Total HpCDD	ND	5.6	ND	ND	4	ND	5.6
2,3,7,8-TCDF	6.7		1.512E-09	6.1		4.6	
1,2,3,7,8-PeCDF	ND	2.8	ND	ND	2.2	ND	1.7
2,3,4,7,8-PeCDF	ND	2.8	ND	ND	2.3	ND	1.8
1,2,3,4,7,8-HxCDF	ND	3	ND	5.6		ND	2.5
1,2,3,6,7,8-HxCDF	ND	2.8	ND	ND	1.9	ND	2
2,3,4,6,7,8-HxCDF	ND	3.5	ND	ND	2.4	ND	2.5
1,2,3,7,8,9-HxCDF	ND	3.8	ND	ND	2.7	ND	2.9
1,2,3,4,6,7,8-HpCDF	ND	4	ND	ND	2.6	ND	3.4
1,2,3,4,7,8,9-HpCDF	ND	5.7	ND	ND	3.4	ND	4.4
1,2,3,4,6,7,8,9-OCDF	ND	6.7	ND	ND	4	ND	6.5
Total TCDF	6.7		1.512E-09	6.1		4.6	
Total PeCDF	ND	2.8	ND	ND	2.2	ND	
Total HxCDF	ND	3.2	ND	5.6		ND	2.4
Total HpCDF	ND	4.7	ND	ND	3	ND	3.8

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
Dioxin TEQ (a)	0.67		1.512E-10	1.1857		0.4781	

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

WHITE PARACHUTE SIGNAL FLARE

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TABLE H-1. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
2,3,7,8-TCDD	ND	1.3	ND	ND	2.5	ND	ND
1,2,3,7,8-PeCDD	ND	2.2	ND	ND	4	ND	ND
1,2,3,4,7,8-HxCDD	ND	4	ND	ND	7.2	ND	ND
1,2,3,6,7,8-HxCDD	ND	3.1	ND	ND	5.7	ND	ND
1,2,3,7,8,9-HxCDD	ND	3.2	ND	ND	5.9	ND	ND
1,2,3,4,6,7,8-HpCDD	7.7		3.600E-09	ND	10.3	ND	3.600E-09
1,2,3,4,6,7,8,9-OCDD	32.2		1.505E-08	25.1		1.207E-08	1.356E-08
Total TCDD	ND	1.3	ND	ND	2.5	ND	ND
Total PeCDD	ND	2.2	ND	ND	4	ND	ND
Total HxCDD	ND	3.4	ND	ND	6.2	ND	ND
Total HpCDD	15.4		7.199E-09	ND	10.3	ND	7.199E-09
2,3,7,8-TCDF	6.8		3.179E-09	6.8		3.269E-09	3.224E-09
1,2,3,7,8-PeCDF	ND	1.7	ND	ND	3.3	ND	ND
2,3,4,7,8-PeCDF	ND	1.8	ND	ND	3.4	ND	ND
1,2,3,4,7,8-HxCDF	6.3		2.945E-09	ND	4.7	ND	2.945E-09
1,2,3,6,7,8-HxCDF	ND		ND	ND	3.8	ND	ND
2,3,4,6,7,8-HxCDF	ND	2.4	ND	ND	4.8	ND	ND
1,2,3,7,8,9-HxCDF	ND	2.7	ND	ND	5.4	ND	ND
1,2,3,4,6,7,8-HpCDF	ND	3.2	ND	ND	6.3	ND	ND
1,2,3,4,7,8,9-HpCDF	ND	4.2	ND	ND	8.1	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	5.3	ND	ND	10.7	ND	ND
Total TCDF	6.8		3.179E-09	6.8		3.269E-09	3.224E-09
Total PeCDF	ND	1.8	ND	ND		ND	ND
Total HxCDF	9.2		4.301E-09	ND	4.6	ND	4.301E-09
Total HpCDF	ND	3.6	ND	ND	7.1	ND	ND

TABLE H-1. AEC - RUN NO. 1 WP TEST (1 APRIL 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Dioxin TEQ (b)	1.4192		6.635E-10	0.7051		3.390E-10	5.012E-10

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
2,3,7,8-TCDD	ND	3	ND	ND	1.5	ND	1.4
1,2,3,7,8-PeCDD	ND	3.4	ND	ND	2.9	ND	2.4
1,2,3,4,7,8-HxCDD	ND	4.6	ND	ND	3.8	ND	4
1,2,3,6,7,8-HxCDD	ND	4.3	ND	ND	3	ND	3.2
1,2,3,7,8,9-HxCDD	ND	4.3	ND	ND	3.1	ND	3.3
1,2,3,4,6,7,8-HpCDD	ND	5.6	ND	ND	4	ND	5.6
1,2,3,4,6,7,8,9-OCDD	ND		ND	15.7		18.1	
Total TCDD	ND	3	ND	ND	1.5	ND	1.4
Total PeCDD	ND	3.4	ND	ND	2.9	ND	2.4
Total HxCDD	ND	4.4	ND	ND	3.2	ND	3.5
Total HpCDD	ND	5.6	ND	ND	4	ND	5.6
2,3,7,8-TCDF	6.7		1.512E-09	6.1		4.6	
1,2,3,7,8-PeCDF	ND	2.8	ND	ND	2.2	ND	1.7
2,3,4,7,8-PeCDF	ND	2.8	ND	ND	2.3	ND	1.8
1,2,3,4,7,8-HxCDF	ND	3	ND	5.6		ND	2.5
1,2,3,6,7,8-HxCDF	ND	2.8	ND	ND	1.9	ND	2
2,3,4,6,7,8-HxCDF	ND	3.5	ND	ND	2.4	ND	2.5
1,2,3,7,8,9-HxCDF	ND	3.8	ND	ND	2.7	ND	2.9
1,2,3,4,6,7,8-HpCDF	ND	4	ND	ND	2.6	ND	3.4
1,2,3,4,7,8,9-HpCDF	ND	5.7	ND	ND	3.4	ND	4.4
1,2,3,4,6,7,8,9-OCDF	ND	6.7	ND	ND	4	ND	6.5
Total TCDF	6.7		1.512E-09	6.1		4.6	
Total PeCDF	ND	2.8	ND	ND	2.2	ND	
Total HxCDF	ND	3.2	ND	5.6		ND	2.4
Total HpCDF	ND	4.7	ND	ND	3	ND	3.8

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
Dioxin TEQ (b)	0.67		1.512E-10	1.1857		0.4781	

a
All data presented was outside the laboratory calibration range and is considered an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

155 MM ILLUMINATION ROUND

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TABLE H-1. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
2,3,7,8-TCDD	ND	12.3	ND	ND	1.4	ND	ND
1,2,3,7,8-PeCDD	ND	16.2	ND	ND	2.3	ND	ND
1,2,3,4,7,8-HxCDD	ND	22.7	ND	ND	4.1	ND	ND
1,2,3,6,7,8-HxCDD	ND	17.8	ND	ND	3.2	ND	ND
1,2,3,7,8,9-HxCDD	ND	18.5	ND	ND	3.4	ND	ND
1,2,3,4,6,7,8-HpCDD	ND	26.5	ND	39.5		1.072E-07	1.072E-07
1,2,3,4,6,7,8,9-OCDD	213		5.415E-07	198		5.375E-07	5.395E-07
Total TCDD	ND	12.3	ND	ND	1.4	ND	ND
Total PeCDD	ND	16.2	ND	ND	2.3	ND	ND
Total HxCDD	ND	19.4	ND	21.6		5.863E-08	5.863E-08
Total HpCDD	ND	26.5	ND	68.2		1.851E-07	1.851E-07
2,3,7,8-TCDF	ND	9.2	ND	10		2.714E-08	2.714E-08
1,2,3,7,8-PeCDF	ND	13.3	ND	ND	1.7	ND	ND
2,3,4,7,8-PeCDF	ND	13.7	ND	ND	1.7	ND	ND
1,2,3,4,7,8-HxCDF	ND	13.1	ND	8.4		2.280E-08	2.280E-08
1,2,3,6,7,8-HxCDF	ND	10.6	ND	ND	2.1	ND	ND
2,3,4,6,7,8-HxCDF	ND	13.4	ND	ND	2.7	ND	ND
1,2,3,7,8,9-HxCDF	ND	15.2	ND	ND	3.1	ND	ND
1,2,3,4,6,7,8-HpCDF	ND	15.5	ND	8.9		2.416E-08	2.416E-08
1,2,3,4,7,8,9-HpCDF	ND	20	ND	ND	4.5	ND	ND
1,2,3,4,6,7,8,9-OCDF	ND	24.9	ND	ND	7	ND	ND
Total TCDF	ND	9.2	ND	17.3		4.696E-08	4.696E-08
Total PeCDF	ND	13.5	ND	7.8		2.117E-08	2.117E-08
Total HxCDF	ND	12.9	ND	17.3		4.696E-08	4.696E-08
Total HpCDF	ND	17.5	ND	8.9		2.416E-08	2.416E-08

TABLE H-1. AEC - RUN NO. 1 IR TEST (1 APRIL 1998)
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Run 1 Train A - Amount Detected, pg	Run 1 Train A -Detection Limit, pg	Run 1 Train A - Concentration, mg/m^3	Run 1 Train B - Amount Detected, pg	Run 1 Train B -Detection Limit, pg	Run 1 Train B - Concentration, mg/m^3	Average Concentration - Run 1, mg/m^3
Dioxin TEQ (b)	0.213		5.415E-10	2.522		6.846E-09	3.694E-09

a
All data presented was outside the laboratory calibration range and is an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
2,3,7,8-TCDD	ND	1.5	ND	ND	1.5	ND	1.4
1,2,3,7,8-PeCDD	ND	3	ND	ND	2.9	ND	2.4
1,2,3,4,7,8-HxCDD	ND	6.5	ND	ND	3.8	ND	4
1,2,3,6,7,8-HxCDD	ND	5.1	ND	ND	3	ND	3.2
1,2,3,7,8,9-HxCDD	ND	5.3	ND	ND	3.1	ND	3.3
1,2,3,4,6,7,8-HpCDD	ND	9	ND	ND	4	ND	5.6
1,2,3,4,6,7,8,9-OCDD	23.8		7.456E-09	15.7		18.1	
Total TCDD	ND	1.5	ND	ND	1.5	ND	1.4
Total PeCDD	ND	3	ND	ND	2.9	ND	2.4
Total HxCDD	ND	5.6	ND	ND	3.2	ND	3.5
Total HpCDD	ND	9	ND	ND	4	ND	5.6
2,3,7,8-TCDF	4.5		1.410E-09	6.1		4.6	
1,2,3,7,8-PeCDF	ND	1.9	ND	ND	2.2	ND	1.7
2,3,4,7,8-PeCDF	ND	2	ND	ND	2.3	ND	1.8
1,2,3,4,7,8-HxCDF	ND	3.5	ND	5.6		ND	2.5
1,2,3,6,7,8-HxCDF	ND	2.8	ND	ND	1.9	ND	2
2,3,4,6,7,8-HxCDF	ND	3.5	ND	ND	2.4	ND	2.5
1,2,3,7,8,9-HxCDF	ND	4	ND	ND	2.7	ND	2.9
1,2,3,4,6,7,8-HpCDF	ND	4.6	ND	ND	2.6	ND	3.4
1,2,3,4,7,8,9-HpCDF	ND	5.9	ND	ND	3.4	ND	4.4
1,2,3,4,6,7,8,9-OCDF	ND	8.3	ND	ND	4	ND	6.5
Total TCDF	4.5		1.410E-09	6.1		4.6	
Total PeCDF	ND	1.9	ND	ND	2.2	ND	
Total HxCDF	ND	3.4	ND	5.6		ND	2.4
Total HpCDF	ND	5.2	ND	ND	3	ND	3.8

TABLE H-2. AEC - BACKGROUND, REAGENT BLANK, AND FIELD BLANK
Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by Method 8290; samples collected via PUF/XAD/rinsate according to EPA Compendium Method TO-9
Compounds below the DLs are listed as nondetected (ND)
Analyzed by: Triangle Laboratories, Inc.

Analyte (a)	Background - Amount Detected, pg	Background - Detection Limit, pg	Background - Concentration, mg/m^3	Reagent Blank - Amount Detected, pg	Reagent Blank - Detection Limit, pg	Field Blank - Amount Detected, pg	Field Blank - Detection Limit, pg
Dioxin TEQ (b)	0.4738		1.484E-10	1.1857		0.4781	

a
All data presented was outside the laboratory calibration range and is an estimate only.
b
Total detected PCDD and PCDF isomers as 2,3,7,8-TCDD

APPENDIX II-I. CEM DATA RESULTS

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SIMULATOR BOOBY TRAP FLASH M117

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TABLE I-1. AEC - BT TEST (28 MARCH 1998)

Real-time measurement of CO, CO_2, NO_x, SO_2, and HCl; sample collected via 40 CFR 60 Appendix A Method 10, 40 CFR 60 Appendix A Method 3A, 40 CFR 60 Appendix A Method 7E, and 40 CFR 60 Appendix A Method 10, respectively

Analyzed: 40 CFR 50 Appendix C, 40 CFR 60 Appendix A Method 3A, 40 CFR 50 Appendix F, and 40 CFR 50 Appendix A

Sample	Pollutant	Background Concentration, ppmv	Test Concentration, ppmv	Concentration, ppbv
BT-Background	CO	NA	0.01905	1.905E+01
BT-Background	CO_2	NA	368.16160	3.682E+05
BT-Background	NO	NA	0.00064	6.360E-01
BT-Background	NO_2	NA	0.01094	1.094E+01
BT-Background	NO_x	NA	0.02079	2.079E+01
BT-Background	SO_2	NA	0.00570	5.704E+00
BT-Background	HCl	NA	-0.19753	-1.975E+02
BT Run No. 1	CO	0.12042	0.616384	6.164E+02
BT Run No. 1	CO_2	387.8258	386.8354	3.868E+05
BT Run No. 1	NO	0.001202	0.224734	2.247E+02
BT Run No. 1	NO_2	0.01453	0.027722	2.772E+01
BT Run No. 1	NO_x	0.00972	0.258861	2.589E+02
BT Run No. 1	SO_2	0.000600075	1.589753	1.590E+03
BT Run No. 1	HCl	-0.026382	-0.033171	-3.317E+01

AEC = Army Environmental Center
BT = Booby Trap Flash

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SIMULATOR FLASH ARTILLERY M110

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TABLE I-1. AEC - FA TEST (28 MARCH 1998)

Real-time measurement of CO, CO_2, NO_x, SO_2, and HCl; sample collected via 40 CFR 60 Appendix A Method 10, 40 CFR 60 Appendix A Method 3A, 40 CFR 60 Appendix A Method 7E, and 40 CFR 60 Appendix A Method 10, respectively

Analyzed: 40 CFR 50 Appendix C, 40 CFR 60 Appendix A Method 3A, 40 CFR 50 Appendix F, and 40 CFR 50 Appendix A

Sample	Pollutant	Background Concentration, ppmv	Test Concentration, ppmv	Concentration, ppbv
FA-Background	CO	NA	0.160654	1.607E+02
FA-Background	CO_2	NA	378.1061	3.781E+05
FA-Background	NO	NA	0.000836	8.360E-01
FA-Background	NO_2	NA	0.010815	1.082E+01
FA-Background	NO_x	NA	0.021042	2.104E+01
FA-Background	SO_2	NA	0.000497014	4.970E-01
FA-Background	HCl	NA	-0.006066	-6.066E+00
FA Run No. 1	CO	0.118883	2.538847	2.539E+03
FA Run No. 1	CO_2	372.716	405.6876	4.057E+05
FA Run No. 1	NO	0.0008	0.276371	2.764E+02
FA Run No. 1	NO_2	0.010956	0.05743	5.743E+01
FA Run No. 1	NO_x	0.021239	0.344923	3.449E+02
FA Run No. 1	SO_2	0.000068844	0.02131479	2.131E+01
FA Run No. 1	HCl	-0.031263	-0.070619	-7.062E+01
FA Run No. 2	CO	0.115893	1.7954	1.795E+03
FA Run No. 2	CO_2	370.5705	438.5098	4.385E+05
FA Run No. 2	NO	0.000559	0.337334	3.373E+02
FA Run No. 2	NO_2	0.011086	0.07747	7.747E+01
FA Run No. 2	NO_x	0.021198	0.425901	4.259E+02
FA Run No. 2	SO_2	-0.000162863	0.02040783	2.041E+01
FA Run No. 2	HCl	-0.108875	-0.102343	-1.023E+02

AEC = Army Environmental Center
FA = Simulator Flash Artillery

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SIMULATOR HAND GRENADE

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TABLE I-1. AEC - HG TEST (30 MARCH 1998)

Real-time measurement of CO, CO_2, NO_x, SO_2, and HCl; sample collected via 40 CFR 60 Appendix A Method 10, 40 CFR 60 Appendix A Method 3A, 40 CFR 60 Appendix A Method 7E, and 40 CFR 60 Appendix A Method 10, respectively

Analyzed: 40 CFR 50 Appendix C, 40 CFR 60 Appendix A Method 3A, 40 CFR 50 Appendix F, and 40 CFR 50 Appendix A

Sample	Pollutant	Background Concentration, ppmv	Test Concentration, ppmv	Concentration, ppbv
HG - Background	CO	NA	0.124298	1.243E+02
HG - Background	CO_2	NA	369.9217	3.699E+05
HG - Background	NO	NA	0.000672	6.720E-01
HG - Background	NO_2	NA	0.010107	1.011E+01
HG - Background	NO_x	NA	0.020999	2.100E+01
HG - Background	SO_2	NA	0.000005878	5.878E-03
HG - Background	HCl	NA	0.343946	3.439E+02
HG Run No. 1	CO	0.019335	0.389655	3.897E+02
HG Run No. 1	CO_2	373.1109	373.9272	3.739E+05
HG Run No. 1	NO	0.00097.	2.929431	2.929E+03
HG Run No. 1	NO_2	0.009562	0.090772	9.077E+01
HG Run No. 1	NO_x	0.020511	3.035694	3.036E+03
HG Run No. 1	SO_2	-0.000346882	0.375232	3.752E+02
HG Run No. 1	HCl	0.582195	0.566555	5.666E+02
HG Run No. 2	CO	0.008047	0.27504	2.750E+02
HG Run No. 2	CO_2	377.3065	382.9329	3.829E+05
HG Run No. 2	NO	0.015869	5.121771	5.122E+03
HG Run No. 2	NO_2	0.008838	0.179643	1.796E+02
HG Run No. 2	NO_x	0.034465	5.320853	5.321E+03
HG Run No. 2	SO_2	-0.00101043	0.1092788	1.093E+02
HG Run No. 2	HCl	0.318236	-0.525452	-5.255E+02

AEC = Army Environmental Center
HG = Simulator Hand Grenade

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SIMULATOR GROUND BURST

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TABLE I-1. AEC - GB TEST (30 MARCH 1998)

Real-time measurement of CO, CO_2, NO_x, SO_2, and HCl; sample collected via 40 CFR 60 Appendix A Method 10, 40 CFR 60 Appendix A Method 3A, 40 CFR 60 Appendix A Method 7E, and 40 CFR 60 Appendix A Method 10, respectively

Analyzed: 40 CFR 50 Appendix C, 40 CFR 60 Appendix A Method 3A, 40 CFR 50 Appendix F, and 40 CFR 50 Appendix A

Sample	Pollutant	Background Concentration, ppmv	Test Concentration, ppmv	Concentration, ppbv
HG - Background	CO	NA	0.124298	1.243E+02
HG - Background	CO_2	NA	369.9217	3.699E+05
HG - Background	NO	NA	0.000672	6.720E-01
HG - Background	NO_2	NA	0.010107	1.011E+01
HG - Background	NO_x	NA	0.020999	2.100E+01
HG - Background	SO_2	NA	0.000005878	5.878E-03
HG - Background	HCl	NA	0.343946	3.439E+02
GB Run No. 1	CO	0.230679	1.427143	1.427E+03
GB Run No. 1	CO_2	367.4535	369.7581	3.698E+05
GB Run No. 1	NO	0.000794	2.265131	2.265E+03
GB Run No. 1	NO_2	0.010266	0.07512	7.512E+01
GB Run No. 1	NO_x	0.020769	2.352856	2.353E+03
GB Run No. 1	SO_2	-0.01030488	0.04149491	4.149E+01
GB Run No. 1	HCl	-0.142175	-1.340773	-1.341E+03
GB Run No. 2	CO	0.107961	2.144911	2.145E+03
GB Run No. 2	CO_2	369.2293	373.6055	3.736E+05
GB Run No. 2	NO	0.007131	2.741216	2.741E+03
GB Run No. 2	NO_2	0.011184	0.088587	8.859E+01
GB Run No. 2	NO_x	0.028136	2.844788	2.845E+03
GB Run No. 2	SO_2	-0.001980136	0.04741902	4.742E+01
GB Run No. 2	HCl	0.249551	-1.113386	-1.113E+03

AEC = Army Environmental Center
GB = Simulator Ground Burst

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GREEN STAR CLUSTER

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TABLE I-1. AEC - GS TEST (31 MARCH 1998)

Real-time measurement of CO, CO_2, NO_x, SO_2, and HCl; sample collected via 40 CFR 60 Appendix A Method 10, 40 CFR 60 Appendix A Method 3A, 40 CFR 60 Appendix A Method 7E, and 40 CFR 60 Appendix A Method 10, respectively

Analyzed: 40 CFR 50 Appendix C, 40 CFR 60 Appendix A Method 3A, 40 CFR 50 Appendix F, and 40 CFR 50 Appendix A

Sample	Pollutant	Background Concentration, ppmv	Test Concentration, ppmv	Concentration, ppbv
WP - Background	CO	NA	0.090626	9.063E+01
WP - Background	CO_2	NA	373.2464	3.732E+05
WP - Background	NO	NA	0.000173	1.730E-01
WP - Background	NO_2	NA	0.01076	1.076E+01
WP - Background	NO_x	NA	0.020899	2.090E+01
WP - Background	SO_2	NA	0.000374876	3.749E-01
WP - Background	HCl	NA	0.101429	1.014E+02
GS Run No. 1	CO	0.228424	3.642119	3.642E+03
GS Run No. 1	CO_2	365.7781	397.2924	3.973E+05
GS Run No. 1	NO	-0.0000988	0.339562	3.396E+02
GS Run No. 1	NO_2	0.011409	0.014521	1.452E+01
GS Run No. 1	NO_x	0.02142	0.36498	3.650E+02
GS Run No. 1	SO_2	0.000918438	0.000851918	8.519E-01
GS Run No. 1	HCl	0.066379	0.040446	4.045E+01

AEC = Army Environmental Center
GS = Green Star Cluster

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GREEN PARACHUTE SIGNAL FLARE

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TABLE I-1. AEC - GP TEST (31 MARCH 1998)

Real-time measurement of CO, CO_2, NO_x, SO_2, and HCl; sample collected via 40 CFR 60 Appendix A Method 10, 40 CFR 60 Appendix A Method 3A, 40 CFR 60 Appendix A Method 7E, and 40 CFR 60 Appendix A Method 10, respectively

Analyzed: 40 CFR 50 Appendix C, 40 CFR 60 Appendix A Method 3A, 40 CFR 50 Appendix F, and 40 CFR 50 Appendix A

Sample	Pollutant	Background Concentration, ppmv	Test Concentration, ppmv	Concentration, ppbv
WP - Background	CO	NA	0.090626	9.063E+01
WP - Background	CO_2	NA	373.2464	3.732E+05
WP - Background	NO	NA	0.000173	1.730E-01
WP - Background	NO_2	NA	0.01076	1.076E+01
WP - Background	NO_x	NA	0.020899	2.090E+01
WP - Background	SO_2	NA	0.000374876	3.749E-01
WP - Background	HCl	NA	0.101429	1.014E+02
GP Run No. 1	CO	0.438401	3.381302	3.381E+03
GP Run No. 1	CO_2	384.3116	402.6624	4.027E+05
GP Run No. 1	NO	0.47854	0.045741	4.574E+01
GP Run No. 1	NO_2	0.011314	0.033021	3.302E+01
GP Run No. 1	NO_x	0.068608	0.52062	5.206E+02
GP Run No. 1	SO_2	-0.009615203	0.000299126	2.991E-01
GP Run No. 1	HCl	-0.227326	-0.244292	-2.443E+02

AEC = Army Environmental Center
GP = Green Parachute Signal Flare

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WHITE PARACHUTE SIGNAL FLARE

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TABLE I-1. AEC - WP TEST (1 APRIL 1998)

Real-time measurement of CO, CO_2, NO_x, SO_2, and HCl; sample collected via 40 CFR 60 Appendix A Method 10, 40 CFR 60 Appendix A Method 3A, 40 CFR 60 Appendix A Method 7E, and 40 CFR 60 Appendix A Method 10, respectively

Analyzed: 40 CFR 50 Appendix C, 40 CFR 60 Appendix A Method 3A, 40 CFR 50 Appendix F, and 40 CFR 50 Appendix A

Sample	Pollutant	Background Concentration, ppmv	Test Concentration, ppmv	Concentration, ppbv
WP - Background	CO	NA	0.090626	9.063E+01
WP - Background	CO_2	NA	373.2464	3.732E+05
WP - Background	NO	NA	0.000173	1.730E-01
WP - Background	NO_2	NA	0.01076	1.076E+01
WP - Background	NO_x	NA	0.020899	2.090E+01
WP - Background	SO_2	NA	0.000374876	3.749E-01
WP - Background	HCl	NA	0.101429	1.014E+02
WP Run No. 1	CO	0.188034	1.853316	1.853E+03
WP Run No. 1	CO_2	360.4916	362.1898	3.622E+05
WP Run No. 1	NO	0.058601	1.343095	1.343E+03
WP Run No. 1	NO_2	0.010453	0.034349	3.435E+01
WP Run No. 1	NO_x	0.087148	1.393578	1.394E+03
WP Run No. 1	SO_2	0.000676349	0.02381874	2.382E+01
WP Run No. 1	HCl	0.279603	0.27661	2.766E+02

AEC = Army Environmental Center
WP = White Parachute Signal Flare

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155 MM ILLUMINATION ROUND

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TABLE I-1. AEC - IR TEST (1 APRIL 1998)

Real-time measurement of CO, CO_2, NO_x, SO_2, and HCl; sample collected via 40 CFR 60 Appendix A Method 10, 40 CFR 60 Appendix A Method 3A, 40 CFR 60 Appendix A Method 7E, and 40 CFR 60 Appendix A Method 10, respectively

Analyzed: 40 CFR 50 Appendix C, 40 CFR 60 Appendix A Method 3A, 40 CFR 50 Appendix F, and 40 CFR 50 Appendix A

Sample	Pollutant	Background Concentration, ppmv	Test Concentration, ppmv	Concentration, ppbv
IR-Background	CO	NA	0.20182	2.018E+02
IR-Background	CO_2	NA	375.1583	3.752E+05
IR-Background	NO	NA	0.000356	3.560E-01
IR-Background	NO_2	NA	0.014954	1.495E+01
IR-Background	NO_x	NA	0.019519	1.952E+01
IR-Background	SO_2	NA	-0.000441395	-4.414E-01
IR-Background	HCl	NA	0.313247	3.132E+02
IR Run No. 1	CO	0.242657	8.811353	8.811E+03
IR Run No. 1	CO_2	359.5272	742.1837	7.422E+05
IR Run No. 1	NO	-0.000136	18.08908	1.809E+04
IR Run No. 1	NO_2	0.010463	0.778311	7.783E+02
IR Run No. 1	NO_x	0.009077	18.91274	1.891E+04
IR Run No. 1	SO_2	0.000279057	0.3995781	3.996E+02
IR Run No. 1	HCl	0.256672	0.303724	3.037E+02

AEC = Army Environmental Center
IR = Illumination Round

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APPENDIX II-J. FIELD DATA SHEETS AND CALIBRATION DATA

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RADIAN CORPORATION

FIELD DATA

Run BT Bkg
Page 1 of 1

Plant	DP6	Probe Length and Type	N/A	Height of Location (ft)	N/A
Date	3/27/98	Nozzle ID (in.)	N/A	Duct Dimensions (in)	N/A
Sampling Location	Bagbox	Meter Box Number	V-11	Filter Number	N/A
Sample Type	M26	Meter ΔH@	N/A	Assumed Moisture (%)	N/A
Run Number	BT-Bkg	Yd	0.9935	O2 (%)	21
Operator	WP6	K Factor	N/A	CO2 (%)	0
Ambient Temperature (°F)	65	Probe Heater Setting (°F)	N/A	O2/CO2 Method	Assumed
Barometric Pressure (in)	644mm	Heater Box Setting (°F)	50°C	Moisture Collected (g)	N/A
Static Pressure (in H2O)	+0.5	Intial Leak Check	0.01 lpm@5"	Final Leak Check	0.001 lpm@5"



Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	13:55:30	0.00									
	5	14:00:30	5.36	NA	1.8	NA	NA	52°C	NA	16°C	N/A	2
BAGBOX	10	14:05:30	10.71	↓	1.8	↓	↓	53°	↓	16°	↓	2
	15	14:10:30	16.29	↓	1.8	↓	↓	54°	↓	16°	↓	2
	20	14:15:30	21.73	↓	1.8	↓	↓	54	↓	16	↓	2
	25	14:20:30	27.77	↓	1.8	↓	↓	53	↓	16	↓	2
	30	14:25:30	32.62	↓	1.8	↓	↓	52	↓	16	↓	2

Comments:

RADIAN CORPORATION

FIELD DATA

Run FB-1
Page 1 of

Plant	DPG	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/27/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	↓
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	↓
Run Number HCl-	FB-1	Yd	1.0046	O2 (%)	21
Operator	WPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	35	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	NA	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	NA	Intial Leak Check	0.00@5	Final Leak Check	0.01@5"

Read and Record All Data Every Minutes

Diagram of Duct

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	13:55:30	235.06									
Baghouse	30	14:25:30	235.06	NA	0	NA	NA	127	NA	NA	NA	0

Comments:

First Field Blank - 905 & 906

RADIAN CORPORATION

FIELD DATA

Run
Page 1 of

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	0
Date	3/27/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	BAGBOX	Meter Box Number Yd	0.9935	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	BT-HCl A-1	Yd Meter #	V-11	O2 (%)	21
Operator	WP6	K Factor PV	NA	CO2 (%)	0
Ambient Temperature (°F)	60	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	643 mm	Heater Box Setting (°F)	50°C	Moisture Collected (g)	N/A
Static Pressure (in H2O)	+0.5	Intial Leak Check	0.01 @ 10"	Final Leak Check	0.01 lpm @ 5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head ΔP (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F) °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F) °C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0:00	18:28:15	0.00									
BAGBOX	5.00	18:33:15	5.45	NA	2.0	NA	NA	51	NA	8	NA	2
	10:00	18:38:15	11.1		2.0			53		8		3
	15	18:43:15	16.6		2.0			53		8		2
	20	18:48:15	22.1		2.0			54		8		2
	25	18:53:15	27.3		2.0			54		9		2
	30	18:58:15	33.56		2.0			53		9		2

Run Void

Comments:

RADIAN CORPORATION

FIELD DATA

Run ____
Page 1 of ____

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/27	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	Bangbox	Meter Box Number	V-13	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	BT-HClB-1	Yd	1.0046	O2 (%)	21
Operator	WP6	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	60	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	645mm	Heater Box Setting (°F)	50°C	Moisture Collected (g)	NA
Static Pressure (in H2O)	+0.5"	Intial Leak Check	0.01 lpm @ 15" Hg	Final Leak Check	0.01 lpm @ 6"

Read and Record All Data Every ____ Minutes

Diagram of Duct

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	18:28:15	244.60									
BANGBOX	5:00	18:33:15	249.50	NA	1.2	NA	NA	123	NA	46	NA	1
	10	18:38:15	254.8		1.2			125		46		1
	15	18:43:15	259.6		1.2			127		47		1
	20	18:48:15	264.4		1.2			126		49		1
	25	18:53:15	269.4		1.2			127		50		1
	30	18:58:15	274.32		1.2			126		50		1

Run Voided

Comments:

RADIAN CORPORATION

FIELD DATA

Run BT-2
Page 1 of ____

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/28	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	Rangbox	Meter Box Number	V-13	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	BT-2A	Yd	1.0046	O2 (%)	21
Operator	WP6	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	50	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	637 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	1.3"	Intial Leak Check	0.00 @ 6"	Final Leak Check	0.00 @ 6"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	10:51:00	0.00									
Rangbox	5	10:56	5.4	NA	1.4	NA	NA	124	NA	42	NA	1
	10	11:01	10.8	↓	1.4	↓	↓	126	↓	44	↓	1
	15	11:06	16.2		1.4			126		45		1
	20	11:11	21.7		1.4			126		47		1
	25	11:16	27.3		1.4			126		48		1
↓	30	11:21	32.92	↓	1.4	↓	↓	125	↓	49	↓	1

Comments:

RADIAN CORPORATION

FIELD DATA

Run BT-2-B
Page 1 of

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/28	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	BAGBOX	Meter Box Number	V-11	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	BT-2-B	Yd	0.9935	O2 (%)	21
Operator	WPB	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	50	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	637 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	1.3"	Intial Leak Check	0.00@5"	Final Leak Check	0.01@5"

Diagram of Duct

Read and Record All Data Every Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F) C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F) C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	10:51:00	276.0									
BAGBOX	5	10:56	281.1	NA	1.8	NA	N/A	52	NA	6	NA	2
	10	11:01	286.2		1.8			53		6		2
	15	11:06	291.4		1.8			53		7		2
	20	11:11	296.6		1.8			50		7		2
	25	11:16	391.6		1.8			48		8		2
	30	11:21	306.52		1.8			51		8		2

Comments:

RADIAN CORPORATION

FIELD DATA

Run
Page 1 of

Plant	DPG	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/28	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	Bangbox	Meter Box Number	V-11	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	FA - Bkg	Yd	0.9935	O2 (%)	21
Operator	WPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	42	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	637	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5"	Intial Leak Check	0.00 @6	Final Leak Check	0.00@6"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F) °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F) °C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	12:40:15	0.00									
Bangbox	5	12:45:15	5.6	NA	1.8	NA	NA	53	NA	9	NA	2
	10	12:50:15	11.2		1.8			53		9		2
	15	12:55:15	16.6		1.8			54		9		2
	20	13:00:15	21.9		1.8			53		9		2
	25	13:05:15	27.4		1.8			52		9		2
	30	13:10:15	32.93		1.8			53		9		2

Comments:

RADIAN CORPORATION

FIELD DATA

Run FA-A-1
Page 1 of 1

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA	
Date	3/28/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA	
Sampling Location	BAGBOX	Meter Box Number	Y-11	Filter Number	NA	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA	
Run Number	FA-A-1	Yd	0.9935	O2 (%)	21	
Operator	WRG	K Factor	NA	CO2 (%)	0	
Ambient Temperature (°F)	42	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient	
Barometric Pressure (in)	635 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	N.A	
Static Pressure (in H2O)	+1.5"	Intial Leak Check	0.01@5	Final Leak Check	0.01 @5"	

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F) °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F) °C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	13:41:45	0.00									
BAGBOX	5	13:46:45	5.68	NA	1.8	NA	NA	~~56~~ 56	NA	~~56~~ 11	NA	2
↓	10	13:51:45	11.3	↓	1.8	↓	↓	55	↓	11	↓	2
	15	13:56:45	17.00		1.8			52		11		2
	20	14:01:45	22.7		1.8			55		11		2
	25	14:06:45	28.4		1.8			54		11		2
↓	30	14:11:45	34.20	↓	1.8	↓	↓	54	↓	12	↓	2

Comments:

RADIAN CORPORATION

FIELD DATA

Run
Page 1 of

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/28/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	FA-B-1	Yd	1.0046	O2 (%)	21
Operator	WP6	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	42	Probe Heater Setting (°F)	NA	O2/CO2 Method	AMBIENT
Barometric Pressure (in)	635 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.01@5	Final Leak Check	0.00@5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	13:41:45	310.37									
BAGHOUSE	5	13:46:45	315.5	NA	1.2	NA	NA	146	NA	48	NA	1
	10	13:51:45	320.8		1.2			140		50		1
	15	13:56:45	326.0		1.2			140		51		1
	20	14:01:45	331.1		1.2			133		51		1
	25	14:06:45	336.1		1.2			130		51		1
	30	14:16:45	341.37		1.2			130		52		1

Comments:

RADIAN CORPORATION

FIELD DATA

Run FA-A-2
Page 1 of 1

Plant	DPG	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/28/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	BAGBOX	Meter Box Number	V-11	Filter Number	NA
Sample Type	M26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	FA-A-2	Yd	0.9935	O2 (%)	21
Operator	WPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	42	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	635 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.01@5"	Final Leak Check	0.01@5"

Read and Record All Data Every ____ Minutes

Diagram of Duct

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature °F °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet °F °C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	15:16:45	0.00									
BAGBOX	5	15:21:45	5.5	NA	1.8	NA	NA	58	NA	9	NA	2
	10	15:26:45	11.1		1.8			57		9		2
	15	15:31:45	16.1		1.8			52		9		2
	20	15:36:45	22.1		1.8			52		10		2
	25	15:41:45	27.6		1.8			53		10		2
	30	15:46:45	33.37		1.8			53		10		2

Comments:

RADIAN CORPORATION

FIELD DATA

Run FA-B
Page 1 of

Plant	DPG	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/28/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	FA-B-2	Yd	1.0046	O2 (%)	21
Operator	WPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	42	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	635 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.0005	Final Leak Check	0.01 @ 5

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	15:16:45	347.20									
BAGHOUSE	5	15:21:45	352.4	NA	1.2	NA	NA	127	NA	47	NA	1
↓	10	15:26:45	357.6	↓	1.2	↓	↓	128	↓	49	↓	1
	15	15:31:45	362.6		1.2			128		50		1
	20	15:36:45	367.7		1.2			127		51		1
↓	25	15:41:45	372.8	↓	1.2	↓	↓	128	↓	52		1
	30	15:46:45	377.86		1.2		↓	127		52	↓	1

Comments:

RADIAN CORPORATION

FIELD DATA

Run ____
Page 1 of ____

Plant	IPG	Probe Length and Type	NA	Height of Location (ft)	NA	
Date	3/30/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA	
Sampling Location	BAGHOUSE	Meter Box Number	V-11	Filter Number	NA	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA	
Run Number	HCl, Hg-Blg	Yd	0.9935	O2 (%)	21	
Operator	WPG	K Factor	NA	CO2 (%)	0	
Ambient Temperature (°F)	40	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient	
Barometric Pressure (in)	646 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA	
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.00 @ 5"	Final Leak Check	0.00 @ 5"	

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F) °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F) °C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	~~0700~~ 0734	0.00									
BAGHOUSE	5	07:39	5.4	NA	1.8	NA	NA	67	NA	4	NA	2
	10	07:44	10.9		1.8			64		4		2
	15	07:49	16.5		1.8			62		5		2
	20	07:54	22.2		1.8			57		5		2
	25	07:59	27.2		1.8			56		5		2
	30	08:04	33.3		1.8			55		5		2

Comments:

RAMAN CORPORATION

FIELD DATA

Run HCl A-1
Page 1 of 1

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/30	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	BAGHOUSE	Meter Box Number	V-11	Filter Number	
Sample Type	M26	Meter ΔH@	NA	Assumed Moisture (%)	✓
Run Number	HCl-A-H6-1	Yd	0.9935	O2 (%)	21
Operator	WP6	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	42	Probe Heater Setting (°F)	NA	O2/CO2 Method	
Barometric Pressure (in)	646 mm	Heater Box Setting (°F)	125°	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5"	Intial Leak Check	0.01@.5"	Final Leak Check	0.00@5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature °F °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F) °C	Impinger Exit (°F) °C	Pump Vacuum (in. Hg)
BAGBOX	0	9:14:45	0.00	NA	1.8	NA	NA	54	NA	5	NA	2
↓	10	9:19:45	5.6	↓	1.8	↓	↓	55	↓	5	↓	2
	15	9:24:45	11.2		1.8			57		6		2
	20	9:29:45	16.8		1.8			57		6		2
	25	9:34:45	23.3		1.8			56		6		2
↓	30	9:39:45	27.9		1.8			56		7		2
		9:44:45	34.06									
		9:45:15		↓		↓	↓		↓		↓	

Comments:

RADIAN CORPORATION

FIELD DATA

Run HCl B-HG-1
Page 1 of 1

Plant	DPG	Probe Length and Type	N.A	Height of Location (ft)	NA
Date	3/30	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	
Run Number	HCl-B-HG-1	Yd	1.0046	O2 (%)	21
Operator	WPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	42	Probe Heater Setting (°F)	N.A	O2/CO2 Method	Ambient
Barometric Pressure (in)	646mm	Heater Box Setting (°F)	725°	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.00@5"	Final Leak Check	0.00@6"

Diagram of Duct

Read and Record All Data Every Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head ΔP (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
BAGHOUSE	0	9:14:45	379.60	NA	1.2	NA	NA	125	NA	37	NA	2
↓	5	9:19:45	384.6	↓	1.2	↓	↓	126	↓	39	↓	2
	10	9:24:45	389.5		1.2			126		41		2
	15	9:29:45	394.4		1.2			125		41		2
	20	9:34:45	399.4		1.2			126		41		2
	25	9:39:45	404.41		1.2			127		42		2
	30	~~9:44:45~~	409.25									
		9:45:15										

Comments:

RADIAN CORPORATION

FIELD DATA

Run A-HG-
Page 1 of 1

Plant	Bayboy	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/30	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	BAYBOX	Meter Box Number	V-11	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	HCl-A-HG-2	Yd	0.9935	O2 (%)	21
Operator	WBG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	45	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	646mm	Heater Box Setting (°F)	125°	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5"	Intial Leak Check	0.0005"	Final Leak Check	0.0005"

Diagram of Duct

Read and Record All Data Every Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature °F/°C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet °F/°C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	11:12:15	0.00									
BAYBOX	5	11:17:15	5.05	NA	1.8	NA	NA	57	NA	7	NA	2
	10	11:22:15	10.9		1.8			57		7		2
	15	11:27:15	16.6		1.8			56		7		2
	20	11:32:15	22.2		1.8			56		7		2
	25	11:37:15	27.8		1.8			55		8		2
	30	11:42:15	33.65		1.8			54		9		2

Comments:

RADIAN CORPORATION

FIELD DATA

Run B-HG-2
Page 1 of 1

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/30	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number	
Sample Type	M-29	Meter ΔH@	NA	Assumed Moisture (%)	
Run Number	HCIB-HG-2	Yd	1.0046	O2 (%)	21
Operator	WP6	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	45	Probe Heater Setting (°F)	N.A	O2/CO2 Method	Ambient
Barometric Pressure (in)	646 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5"	Intial Leak Check	0.0006	Final Leak Check	0.006@5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head ΔP (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
BAGHOUSE	0	11:12:15	409.70	NA	1.2	N.A	NA	130	NA	42	NA	1
↓	5	11:17:15	414.7	↓	1.2	↓	↓	130	↓	44	↓	1
	10	11:22:15	419.7		1.2			129		45		1
	15	11:27:15	424.7		1.2			128		46		1
	20	11:32:15	429.6		1.2			128		47		1
	25	11:37:15	434.5		1.2			127		47		1
↓	30	11:42:15	439.67	↓	1.2	↓	↓	↓	↓	↓	↓	1

Comments:

RADIAN CORPORATION

FIELD DATA

Run A-6B-1
Page 1 of

Plant	Bayfront	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/30	Nozzle ID (in.)	NA	Duct Dimensions (in)	↓
Sampling Location	Bayfront	Meter Box Number	V-11	Filter Number	
Sample Type	M-22	Meter ΔH@	NA	Assumed Moisture (%)	↓
Run Number	HCl-A-6B-1	Yd	0.9935	O2 (%)	21
Operator	CWPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	42	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	646 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.01 @ 6"	Final Leak Check	0.01 lpm @ 5"

Diagram of Duct

Read and Record All Data Every Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F) °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F) °C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	13:24:30	0.00									
Bayfront	5	13:29:30	5.5	NA	1.8	NA	NA	56	NA	10	NA	2
↓	10	13:34:30	11.1	↓	1.8	↓	↓	57	↓	10	↓	2
	15	13:39:30	16.8		1.8			57		10		2
	20	13:44:30	22.4		1.8			56		10		2
	25	13:49:30	28.0		1.8			54		11		2
	30	13:54:30	33.82	↓	1.8	↓	↓	56	↓	11	↓	2

Comments:

RADIAN CORPORATION

FIELD DATA

Run B-GB-1
Page 1 of ____

Plant	DPG	Probe Length and Type	NA	Height of Location (ft)	NA	
Date	3/30	Nozzle ID (in.)	NA	Duct Dimensions (in)		
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number		
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	↓	
Run Number	HCl-GB-B-1	Yd	1.0046	O2 (%)	21	
Operator	WPG	K Factor	NA	CO2 (%)	0	
Ambient Temperature (°F)	42	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient	
Barometric Pressure (in)	646	Heater Box Setting (°F)	125	Moisture Collected (g)	NA	
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.006@5"	Final Leak Check	0.001cfm@5"	

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	13:24:30	443.61									
BAGHOUSE	5	13:29:30	448.4	NA	1.2	NA	NA	127	NA	48	NA	1
↓	10	13:34:30	453.3	↓	1.2	↓	↓	128	↓	50	↓	1
	15	13:39:30	458.2		1.2			127		51		1
	20	13:44:30	463.0		1.2			128		52		1
	25	13:49:30	467.8		1.2			128		53		1
↓	30	13:54:30	472.75	↓	1.2	↓	↓	127	↓	54	↓	1

Comments:

RADIAN CORPORATION

FIELD DATA

Run A-6[illegible]2
Page 1 of 1

Plant	BAGHOUSE	Probe Length and Type	NA	Height of Location (ft)	NA
Date	5/30	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	DP6	Meter Box Number	V-11	Filter Number	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	
Run Number	HClA-6B-2	Yd	0.9935	O2 (%)	21
Operator	WPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	50	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	647mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5"	Intial Leak Check	0.0085"	Final Leak Check	0.010@5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	15:02:30	0.00									
BAGHOUSE	5	15:07:30	5.6	NA	1.8	NA	NA	56	NA	12	NA	2
	10	15:12:30	11.1		1.8			56		13		2
	15	15:17:30	16.7		1.8			56		13		2
	20	15:22:30	22.3		1.8			57		13		2
	25	15:27:30	27.8		1.8			57		13		2
	30	15:32:30	33.56		1.8			56		14		2

Comments:

RADIAN CORPORATION

FIELD DATA

Run HCl B-6B-2
Page 1 of 1

Plant	DA6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/30	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	V
Run Number	HCl B-6B-2	Yd	1.0046	O2 (%)	21
Operator	WPC	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	50	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	647 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5"	Intial Leak Check	0.0005"	Final Leak Check	0.0005"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	15:02:30	474.55									
BAGHOUSE	5	15:07:30	479.5	NA	1.2	NA	NA	138	NA	59	NA	1
	10	15:12:30	484.3		1.2			139		60		1
	15	15:17:30	489.2		1.2			134		60		1
	20	15:22:30	494.1		1.2			132		60		1
	25	15:27:30	498.9		1.2			134		61		1
	30	15:32:30	503.90		1.2			133		62		1

Comments:

RADIAN CORPORATION

FIELD DATA

Run WP-[redacted]
Page 1 of 1

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/31	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	BAGHOUSE	Meter Box Number	V-11	Filter Number	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	
Run Number	WP-BKG	Yd	0.9935	O2 (%)	21
Operator	WPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	40	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	648 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.01 @ 5'	Final Leak Check	0.01 @ 5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	07:50	0.00									
BAGHOUSE	5	07:55	5.6	NA	1.8	NA	NA	57	NA	9	NA	2
	10	08:00	11.2		1.8			55		8		2
	15	08:05	16.8		1.8			56		9		2
	20	08:10	22.5		1.8			56		9		2
	25	08:15	28.2		1.8			55		9		2
	30	08:20	33.81		1.8			57		9		2

Comments:

RADIAN CORPORATION

FIELD DATA

Run A-WP-1
Page 1 of 1

Plant	DPC	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/31	Nozzle ID (in.)	NA	Duct Dimensions (in)	↓
Sampling Location	BAGHOUSE	Meter Box Number	V-11	Filter Number	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	↓
Run Number	A-WP-1	Yd	0.9935	O2 (%)	21
Operator	WP6	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	45	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	648 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.01 @ 5"	Final Leak Check	0.00 @ 5"

Read and Record All Data Every ____ Minutes

Diagram of Duct

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	09:24	0.00									
BAGHOUSE	5	09:29	5.6	NA	1.8	NA	NA	55	NA	9	NA	2
↓	10	09:34	11.2	↓	1.8	↓	↓	56	↑	9	↓	2
	15	09:39	16.7		1.8			56		10		2
	20	09:44	22.2		1.8			55		10		2
	25	09:49	27.7		1.8			54		11		2
↓	30	09:54	33.37	↓	1.8	↓	↓	53	↓	11	↓	2

Comments:

135 202 419-544-5729 187.5

RADIAN CORPORATION

FIELD DATA

Run B-WP-1
Page 1 of 1

Plant	DPC	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/31	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	BAGBOX	Meter Box Number	V-13	Filter Number	
Sample Type	HCl/MeCl	Meter ΔH@	NA	Assumed Moisture (%)	↓
Run Number	B-WP-1	Yd	1.0046	O2 (%)	21
Operator	WPC	K Factor		CO2 (%)	0
Ambient Temperature (°F)	45	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	648 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.01@5"	Final Leak Check	0.00 @ 6

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head ΔP (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	09:24	456.50									
BAGBOX	5	09:29	461.3	NA	1.2	NA	NA	129	NA	45	NA	1
↓	10	09:34	466.1	↓	1.2	↓	↓	129	↓	47	↓	1
	15	09:39	471.1		1.2			130		49		1
	20	09:44	476.0		1.2			129		50		1
	25	09:49	480.9		1.2			128		52		1
↓	30	09:54	485.77	↓	1.2	↓	↓	126	↓	53	↓	1

Comments:

RADIAN CORPORATION

Green Star Cluster HCl+A — Run 1

FIELD DATA

Run A-WP-2
Page 1 of

Plant	DPG	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/31	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	Bayside X	Meter Box Number	Y-11	Filter Number	
Sample Type	M-26 GS-1	Meter ΔH@	NA	Assumed Moisture (%)	
Run Number	A-WP-2 WPG	Yd	0.9935	O2 (%)	21
Operator	WPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	50	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	648 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.00 @ 5"	Final Leak Check	0.01 @ 5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
BAYSIDE	0	12:37	0.00									
	5	12:42	5.5	NA	1.8	NA	NA	53	NA	13	NA	2
	10	12:47	11.1		1.8			53		13		2
	15	12:52	16.7		1.8			56		14		2
	20	12:57	22.2		1.8			53		14		2
	25	13:02	27.6		1.8			53		15		2
	30	13:07	33.16		1.8			54		16		2

Comments:

RADIAN CORPORATION

Green Star Cluster UCI B Run 1
FIELD DATA

Run B-GS
Page 1 of

Plant	DPG	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/31	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	BAGBOX	Meter Box Number	V-13	Filter Number	
Sample Type	M-26 65-1	Meter ΔH@	V-13	Assumed Moisture (%)	
Run Number	B-GSP-2 WDG	Yd	1.0046	O2 (%)	21
Operator	WDG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	50	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	648 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.00@5	Final Leak Check	0.00@5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	12:37	487.50									
BAGBOX	5	12:42	492.3	NA	1.2	NA	NA	137	NA	57	NA	1
	10	12:47	497.7		1.2			136		59		1
	15	12:52	503.0		1.2			135		61		1
	20	12:57	508.0		1.2			133		63		1
	25	13:02	513.1		1.2			132		64		1
	30	13:07	518.32		1.2			131		65		1

Comments:

RADIAN CORPORATION

FIELD DATA

Run A-GP-1
Page 1 of 1

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/31/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	BAGHOUSE	Meter Box Number	V-11	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	A-HCl-GP-1	Yd	0.9935	O2 (%)	21
Operator	WP6	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	60	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	648	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.00 @ 5"	Final Leak Check	0.00 @ 5"

Diagram of Duct

Read and Record All Data Every Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F) °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F) °C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
BAGHOUSE	0	14:17:30	0.00	NA	1.8	NA	NA	55	NA	17	NA	2
	5	14:22:30	5.6		1.8			56		17		2
	10	14:27:30	11.1		1.8			55		17		2
	15	14:32:30	16.4		1.8			55		18		2
	20	14:37:30	21.7		1.8			54		18		2
	25	14:42:30	27.8		1.8			55		19		2
	30	14:47:30	33.39		1.8							

Comments:

RADIAN CORPORATION

FIELD DATA

Run B-GP-1
Page 1 of 1

Plant	DPG	Probe Length and Type	NA	Height of Location (ft)	NA
Date	3/31/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	Bag box	Meter Box Number	V-13	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	B-HCl-GP-1	Yd	1.0046	O2 (%)	21
Operator	DPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	60	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	648	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.00 @ 5"	Final Leak Check	0.00 @ 5"

Diagram of Duct

Read and Record All Data Every ___ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
Bagbox	0	14:17:30	520.50	NA	1.2	NA	NA	134	NA	68	NA	1
	5	14:22:30	525.8		1.2			133		70		1
	10	14:27:30	531.0		1.2			134		71		1
	15	14:32:30	536.0		1.2			132		72		1
	20	14:37:30	541.0		1.2			131		73		1
	25	14:42:30	546.6		1.2			130		73		1
	30	14:47:30	551.98		1.2							

Comments:

RADIAN CORPORATION

FIELD DATA

Run HCl A-IR-Blg
Page 1 of ____

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	4/1	Nozzle ID (in.)	NA	Duct Dimensions (in)	↓
Sampling Location	BAGBOX	Meter Box Number	V-11	Filter Number	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	↓
Run Number (HCl A-WP-B)		Yd	0.9935	O2 (%)	21
Operator HCl A-IR-Blg		K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	40	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	645	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.0005	Final Leak Check	0.0005

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F) °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F) °C	Pump Vacuum (in. Hg)
	0	08:20	0.00									
BAGBOX	5	08:25	5.5	NA	1.8	NA	NA	55	NA	8	NA	2
	10	08:30	11.0	↓	1.8	↓	↓	56	↓	8	↓	2
	15	08:35	16.5		1.8			57		8		2
	20	08:40	22.0		1.8			55		8		2
	25	08:45	27.5		1.8			54		9		2
	30	08:50	33.18	↓	1.8	↓	↓	55	↓	9	↓	2

Comments:

RADIAN CORPORATION

FIELD DATA

Run HCl-FB B
Page 1 of 1

Plant	DPC	Probe Length and Type	NA	Height of Location (ft)	NA
Date	4/1/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	
Run Number	HCl-FB (Field Blank)	Pa	1.0046	O2 (%)	
Operator	WPG	K Factor	NA	CO2 (%)	
Ambient Temperature (°F)	40	Probe Heater Setting (°F)	NA	O2/CO2 Method	
Barometric Pressure (in)	645 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	↓
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.00@5"	Final Leak Check	0.00@5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0		553.79									
BAGHOUSE	30		553.79	NA	0	NA	NA	127	NA	NA	NA	0

Comments: Second Field Blank - 946 & 947

RADIAN CORPORATION

FIELD DATA

Run HC1A-WP-2
Page 1 of 1

Plant	DP6	Probe Length and Type	NA	Height of Location (ft)	NA
Date	4/1/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	↓
Sampling Location	BAGBOX	Meter Box Number	V-2	Filter Number	↓
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	↓
Run Number	HC1A-WP-2	Yd	0.9935	O2 (%)	21
Operator	WP6	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	55	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	645mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.01@5"	Final Leak Check	0.00@5"

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F) °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F) °C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	09:53:30	0.00									
BAGBOX	5	09:58:30	5.5	NA	1.8	NA	NA	55	NA	12	NA	2
↓	10	10:03:30	11.0	↓	1.8	↓	↓	55	↓	12	↓	2
	15	10:08:30	17.5		1.8			55		13		2
	20	10:13:30	22.8		1.8			56		14		2
	25	10:18:30	27.2		1.8			55		14		2
↓	30	10:23:30	33.49	↓	1.8	↓	↓	54	↓	15	↓	2

Comments:

RADIAN CORPORATION

FIELD DATA

Run HC1B-WP-2
Page 1 of

Plant	DPG	Probe Length and Type	NA	Height of Location (ft)	NA	
Date	4/1/98	Nozzle ID (in.)	N.A	Duct Dimensions (in)	NA	
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number	NA	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA	
Run Number	HC1B-WP-2	Yd	1.0046	O2 (%)	21	
Operator	WPG	K Factor	NA	CO2 (%)	0	
Ambient Temperature (°F)	55	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient	
Barometric Pressure (in)	645 mm	Heater Box Setting (°F)	125 F	Moisture Collected (g)	NA	
Static Pressure (in H2O)	+1.5"	Intial Leak Check	0.00@5"	Final Leak Check	0.00@5"	

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	09:53:30	554.80									
~~BAGHOUSE~~	5	09:58:30	559.8	NA	1.2	NA	NA	141	NA	52	NA	1
	10	10:03:30	565.0	↓	1.2	↓	↓	139	↓	55	↓	1
	15	10:08:30	570.0		1.2			136		57		1
	20	10:13:30	575.0		1.2			134		60		1
	25	10:18:30	580.0		1.2			134		61		1
	30	10:23:30	585.15	↓	1.2	↓	↓	132	↓	64	↓	1

Comments:

RADIAN CORPORATION

FIELD DATA

Run HCIA-IR-1
Page 1 of 1

Plant	DPC	Probe Length and Type	NA	Height of Location (ft)	NA
Date	4/1/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA
Sampling Location	Baghouse	Meter Box Number	V-11	Filter Number	NA
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA
Run Number	HCIA-IR-1	Yd	0.9935	O2 (%)	21
Operator	WPG	K Factor	NA	CO2 (%)	0
Ambient Temperature (°F)	60	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient
Barometric Pressure (in)	643mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.0005"	Final Leak Check	0.0005"

Read and Record All Data Every ____ Minutes

Diagram of Duct

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature °F °C	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet °F °C	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	12:24:30	0.00									
Baghouse	5	12:29:30	6.5	NA	1.8	NA	NA	57	NA	16	NA	2
↓	10	12:34:30	12.7	↓	1.8	↓	↓	52	↓	16	↓	2
	15	12:39:30	19.0		1.8			53		17		2
	20	12:44:30	25.4		1.8			52		17		2
	25	12:49:30	32.3		1.8			52		18		2
	30	12:54:30	37.81	↓	1.8	↓	↓	53	↓	18	↓	2

Comments:

RADIAN CORPORATION

FIELD DATA

Run HCl B-IR-1
Page 1 of 1

Plant	DPC	Probe Length and Type	NA	Height of Location (ft)	NA	
Date	4/1/98	Nozzle ID (in.)	NA	Duct Dimensions (in)	NA	
Sampling Location	BAGHOUSE	Meter Box Number	V-13	Filter Number	NA	
Sample Type	M-26	Meter ΔH@	NA	Assumed Moisture (%)	NA	
Run Number	HCl B-IR-1	Yd	1.0046	O2 (%)	21	
Operator	WPC	K Factor	NA	CO2 (%)	0	
Ambient Temperature (°F)	60	Probe Heater Setting (°F)	NA	O2/CO2 Method	Ambient	
Barometric Pressure (in)	648 mm	Heater Box Setting (°F)	125	Moisture Collected (g)	NA	
Static Pressure (in H2O)	+1.5	Intial Leak Check	0.005"	Final Leak Check	0.005"	

Diagram of Duct

Read and Record All Data Every ____ Minutes

Traverse Point Number	Sampling Time (min)	Clock Time (24-hr)	Gas Meter Reading Vm (ft³)	Velocity Head Δ P (in H2O)	Orifice Pressure Differential ΔH (in H2O)	Flue Gas Temperature (°F)	Probe Temperature (°F)	Filter Temperature (°F)	Dry Gas Meter Temperature Inlet (°F)	Dry Gas Meter Temperature Outlet (°F)	Impinger Exit (°F)	Pump Vacuum (in. Hg)
	0	12:24:30	587.0									
BAGHOUSE	5	12:29:30	592.0	NA	1.2	NA	NA	125	NA	64	NA	1
	10	12:34:30	597.1		1.2			127		67		1
	15	12:39:30	602.3		1.2			128		67		1
	20	12:44:30	607.2		1.2			128		68		1
	25	12:49:30	612.2		1.2			127		69		1
	30	12:54:30	617.11		1.2			127		69		1

Comments:

TSP, PS-1, and PM-10 Flow Calibration Checks
AEC and Dugway Tests
March 1998

Sampler	Input Volts	Equation Volts	Volt/DP Conversion	Pressure Drop (in wc)	Bar. Pressure (mm Hg)	Temp. (C)	P/T Parameter	Slope	Interept	SCFM	Calibration Orifice Data: DP Orifice (in wc)	Slope	Intercept	SCFM	Error
PM-10-B	1.4	0.4	3	1.2	640	20	1.0059	17.66731	8.487616	26.25857	1.8	23.04	1.2269	29.61057	-11%

Maximum calibration error for BT, FA, HG, GB tests

PM-10-B	2.14	1.14	2.5	2.85	640	20	1.550	22.86507	0.219797	35.66396	2.65	23.04	1.2269	35.66627	0%

Calibration error for WP, GS, GP, and IR tests

TSP, PS-1, and PM-10 Flow Calibration Checks
AEC and Dugway Tests
March 1998

Sampler	Input Volts	Equation Volts	Volt/DP Conversion	Pressure Drop (in wc)	Bar. Pressure (mm Hg)	Temp. (C)	P/T Parameter	Slope	Interept	SCFM	Calibration Orifice Data: DP Orifice (in wc)	Slope	Intercept	SCFM	Error
TSP-A	2.6	1.6	2.5	4	640	20	1.8365	22.17781	-0.482855	40.24566	4.3	23.04	1.2269	45.09679	-11%
TSP-B	3.01	2.01	2.5	5.025	640	20	2.0583	21.24739	1.334765	45.06918	4.05	23.04	1.2269	43.80241	3%
PM-10-A	1.84	0.84	1	0.84	640	20	0.8416	44.93056	-3.472785	34.33936	2.25	23.04	1.2269	32.96081	4%
SVOC-A	4.77	3.77	6.26	23.6002	640	20	4.4607	1.328689	0.052409	5.979357	2.4	3.8308	0.0426	5.491953	9%
DIOXIN-A	1.38	0.38	50	19	640	20	4.0025	1.221132	-0.070617	4.816913	1.7	3.8308	0.0426	4.628914	4%
SVOC-B	3.69	2.69	6.25	16.8125	640	20	3.7650	1.313398	-0.067066	4.877887	2.25	3.8308	0.0426	5.318913	-8%
DIOXIN B	1.38	0.38	50	19	640	20	4.0025	1.255245	0.032969	5.057032	1.8	3.8308	0.0426	4.761878	6%

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APPENDIX II-K. LETTERS OF INSTRUCTION

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1.0 BANGBOX TEST OPERATIONS

This letter of instruction outlines the BANGBOX™ (BB) test operations procedures that will be followed as a part of the BangBox test program at the U.S. Army Dugway Proving Ground (DPG). Facility requirements for test preparation, test procedures, and sequences of events are included.

2.0 TESTING DESCRIPTION

A series of tests will be carried out at DPG that will involve the detonation of explosive munitions and the burning of propellants. The Propellant, Explosive, and Pyrotechnic Thermal Treatment Evaluation and Test Facility, commonly known as the BangBox, will be used to contain the detonation or combustion cloud of test munitions in order to collect both gaseous and aerosol samples so that a complete characterization of their emission products can be accomplished.

3.0 RB TEST FACILITY STRUCTURE

Standing operating procedure (SOP) for the BB is contained in West Desert Test Center, Dugway Proving Ground SOP Number DP-O0O-P-85 1 with Change number 1 dated 4 October 1994. All personnel participating in BB tests are required to read and sign the Command Post (CP) copy of the SOP prior to test operations. This standing procedure complies with DPG and Department of the Army policies and procedures for test facilities and includes safety, security, and environmental hygiene issues. The BB SOP also details the operation and controls for the inflation system, which is the central system of the structure function.

3.1 Test Chamber

The BB test chamber wall is a flexible polyvinylchloride (PVC)-coated polyester fabric in the shape of a hemisphere sixteen meters in diameter. The chamber volume is maintained at approximately 1008 cubic meters by means of the BB inflation system which provides air pressure in the range of +1.1 to +1.5 inches of water column (in.w.c.) differential to ambient air pressure. The chamber serves to capture the clouds of detonated and/or burned energetic material emissions. The captured cloud is contained in the chamber, diluted at a controlled rate, and sampled over the period designated in the Detailed Test Plan (DTP). The sampling period normally extends from 35 to 60 mm.

The number of personnel in the test chamber prior to tests and between test trials must be kept to the minimum required to accomplish designated tasks, and then only for as long as necessary. Purging of the chamber atmosphere after personnel leave may be required to achieve 'background' conditions, especially for carbon dioxide (CO_2) gas.

Discrete samplers are placed in the test chamber for collection of particulate matter for laboratory analyses. Samplers to be used are outlined in the test design test plan. All sampling equipment must be ready for test approximately 30 minutes prior to ignition or detonation.

3.2 Inflation System

The BB inflation system provides ambient air to the test chamber to maintain structure support and volume. The system is comprised of a primary and secondary blower and an emergency gasoline powered engine. The primary blower operates at all times. The secondary blower is activated in the event the primary blower is unable to maintain +0.75 in.w.c. differential to ambient air pressure. It is deactivated when the differential pressure achieves +1.0 in.w.c.. During periods of unsettled ambient conditions, such as gusting winds, the secondary blower is placed in the *'firm'* position to operate simultaneous with the primary unit. The secondary blower can also operate in the 'firm' position to provide air pressure in the event of failure of the primary unit. The emergency engine is gasoline (unleaded) powered and activates in the event of loss of electrical power. It starts automatically upon power loss by a twelve volt battery powered starting motor and provides rotation of the secondary blower fan through a mechanical power linkage. The secondary blower then provides air pressure to the BB test chamber.

The operation of the inflation system controls and the emergency engine are tested every working day, including test days. Entries are made accordingly in the BB log, including observations regarding potential malfunction or requiring immediate maintenance.

In the event of loss of electric power service to the BB facility during tests, test personnel will stand clear of the facility to allow orderly operation of the emergency engine and controlled deflation of the test chamber if necessary.

3.3 Airlock

The BB airlock is an interlock passageway to achieve access to the test chamber in such a way as to minimize air pressure loss from the test chamber. This is accomplished by ensuring that no more than one inside or outside personnel or overhead door are open at the same time. All doors remain closed except for ingress or egress.

The BB airlock also serves as the sampling and continuous recording analyzers center. Continuous analyzers for criteria pollutants, toxic gases, PM_{10} particulate, and discrete sampling in canisters are connected to the sampling manifold. Electric inputs to the data acquisition system provide information which is converted into useful data and engineering units.

The airlock has a pressurization system that will be activated during sampling operations. This system provides sufficient internal air pressure to prevent sample gases under pressure in the test chamber from leaking into the airlock and contaminating instrumentation sampling processes or test personnel. The blower will be turned off during non-test conditions.

3.4 Burn Pad

The burn pad is located in the center of the BB test chamber and is constructed of steel plate. It is one square meter and lies flat on the floor.

Burning of test material is conducted by placing the material in a stainless steel burn pan and putting it on the burn pad. Preparation of test materials is performed only by qualified munitions personnel. Charges are weighed prior to ignition and the weight recorded. Munitions personnel are the last persons in the test chamber prior to firing, and the first to re-enter after the sampling period. They are responsible for the safety of ignition\detonation operations and insure the BB is evacuated before firing the test trial and that all is safe again prior to personnel re-entry of the test chamber.

After completion of each test trial the floor of the suppressive shield will be swept clean of residues using a foxtail brush and dust pan. Residue samples are then collected for analysis and the BB structure fabric and floor are cleaned, and made ready for the next test.

3.5 Overpressure Hatch

The hatch is a weighted trap door located in the overhead of the test chamber entryway which opens when a rapid overpressure occurs. This serves to protect the BB structure from stress rupture. Weights are available to minimize gaseous release by instantly returning the hatch to a sealed position prior to cloud mixing and commencement of sampling.

The hatch is also used to provide a passage to purge the test chamber of sample gases. This will be used whenever necessary during post test procedures to render the test chamber safe for re-entry. It may also provide rapid purge prior to sampling to bring CO_2 concentrations down to background levels after test personnel complete sampler setup and exit the test chamber.

4.0 TEST EQUIPMENT

Test equipment requirements are established in the DTP. Analyzers, samplers, calibrators and support equipment will be ready in all respects to operate and set in place to comply.

4.1 Sampling Manifold

The stainless steel, polished manifold provides sampling ports for gaseous and discrete (canister) samplers. The manifold is configured to sample from both inside the test chamber and ambient (outside). It is internally swabbed clean with distilled and deionized pure water, then purged of residual gases with a nitrogen purge, and leak tested prior to sampling.

4.2 Real Time Analyzers

Calibration, sampling, maintenance, and quality control procedures for real time analyzers are contained in BANGBOX™ LOI 2.

4.3 Aerosol Samples

Samples are extracted to canisters from valve ports in the sample manifold. Specific requirements are contained in the DTP.

4.4 Particulate Samplers

Continuous monitoring and discrete sampling of particulate will be conducted. Total sample particulate (TSP) will be collected on specified media by high volume and PS1 samplers. Particulate measuring in the particle size range of 0-10 microns (PM_{10}) is monitored for concentration and weight and PM 10 particulate samples collected for analyses as contained in the DTP. BANGBOX™ LOI 2 contains calibration and sampling procedures.

4.5 Air Circulator Fans

High and low speed industrial air circulators will be operated in the test chamber. Fan locations and direction of flow are configured to provide maximum mixing of burning clouds in the BB test chamber. The BB facility manager and/or BangBox Test Director (TD) will ensure that fans are operating prior to personnel exit from the BB during sampling..

4.6 Heaters

Salamander type space heaters (electric) are located in the test chamber. These will be operated for temperature control or removed as necessary to support the DTP requirements.

4.7 Vacuum Pumps

Vacuum pumps are used for providing sample flow through the sample manifold, pressurized flow to the 'zero' air generation system, and sample flow to the PM 10 monitoring system. Flow volumes through these systems must be verified prior to and after testing with calibrated dry gas meters. Before and after test flow rate are compared to ascertain continuity and identify potential flow corrections to data.

4.8 Environment Instruments

These instruments provide measurements necessary to reduce data to standard conditions and units. Temperature, barometric pressure in the test chamber, relative humidity, and test chamber differential pressure will be recorded. Data is recorded in the data acquisition system (DAS).

5.0 DATA ACQUISITION SYSTEM

The DAS collects real time data for continuous analyzers, environmental measurements, samplers using flow devices, and other test inputs. The DAS is described in detail in BANGBOX™ LOI 3.

6.0 DETONATION/IGNITION FIRING SYSTEM (DIFS)

The Detonation/Ignition Firing System (DIFS) provides electric current for activation of ignition devices used to detonate and/or burn test munitions. This system is operated only by qualified munitions personnel and is the key' element to safe operations. Separate LOIs describe procedures for DIFS operations

7.0 COMMAND POST

The CP trailer is located approximately 540 meters from the BB. It contains the DAS file server, remote DAS monitors, the DIFS firing station, and a small work station for conducting test support. All personnel report to the CP prior to trial ignition and remain during sampling operations. Only necessary sampling and DAS test personnel are authorized to be in the BB airlock during sampling. The TD will monitor all test operations.

8.0 TEST MATERIALS

8.1 Portable Magazine

A portable, munitions storage magazine for holding munitions and donor charge material for the days testing is located approximately 500 m north of the BB.

8.2 Munitions Preparation Trailer

The munitions preparation trailer is used to weigh test materials and prepare the munitions and donor material prior to placement in the BB suppressive shield detonation/ignition chamber.

9.0 SAMPLE ANALYSES

Sample analyses will be conducted to meet the requirements of the DTP. Real time analyzers, environmental measurement sensors, high volume and other flow devices provide input to the

DAS for analysis. Discrete samples in canisters, on filter media, and residues will be submitted for laboratory analysis as specified by the DTP.

10.0 TEST OUTLINE

10.1 Sequence of Events for Sampling

A complete characterization test for each munition consists of an ambient background sample and three trials with each trial providing independent samples. The sequence of events is the same for both, with the exception that the background is without detonation or ignition of test materials.

10.2 Background Sampling

The same test procedures that apply to test material trials apply to background tests. Preparation of test equipment and test materials are contained in specific LOIs, DPG SOPs, and in the DTP.

10.3 Sequence of Events for Testing

Test preparations will be complete and the test facility ready approximately 60 minutes prior to ignition/sampling times. A typical test day would have trials as follows:

- 0730 BB test facility ready for test
- 0830 Begin test background sample
- 1030 Begin test trial #1
- 1230 Begin test trial #2
- 1430 Begin test trial #3
- 1530 Clean test facility for next test

Note: Some test materials may require cleaning the test chamber after every trial.

11.0 MASTER SEQUENCE OF EVENTS

11.1 Preparation Phase

The first test of any given test day is normally for background data to use as a baseline during data analysis. All required preparation items must be in place approximately 30 min prior to beginning data collection for backgrounds, or detonation/ignition of munitions test items. Preparation items that require lead or long lead times to accomplish must commence in sufficient time to meet this schedule. Responsibility for completion of preparation items is as specified, or reasonably implied by the DTP.

11.2 Pre-test

The following items must be accomplished prior to being 'ready' for testing:

- Sampling materials, including travel blanks, on site at BB
- All operators read and sign the current DPG BB SOP DP-000-P-851
-
- Conduct daily safety briefing for all test personnel
- Munitions designated for the test period are available in the portable munitions magazine
- Specified scales and paper sacks are available in the munitions preparation trailer
- Medical services personnel are on site or standing by at Ditto Aid Station
- Clear area .all non-test personnel depart BB and report to TD at GP
- Close Prime Road to non-test traffic .place standard barricades at intersection of Prime Road and Stark Road and 300 yards north of the portable magazine
- Notify DPG Range Control office of road closure and BB test facility going 'hot'
- Proper fire symbol displayed while testing munitions items
- Red warning light ON when operating BB

11.3 Background Sample

Background samples are performed prior to test trials for each munition. The background test is performed with the same instrument and sampler requirements as a live test trial. The sample gas will be drawn from the sample manifold alternating between outside ambient source and inside test chamber source at five minute intervals. Background sampling will be conducted for a minimum of 35 min.

11.4 Test

Where there is conflict between instructions, provisions of the DTP will govern.

The list of events and times are subject to change before detonation or ignition. 'T' is the symbol that refers to the event of detonation or ignition. Times are given in minutes from this reference point.

The following is a typical series of events performed in a test sequence.

- Prior to T-60—Analyzers and samplers and data acquisition systems ready in all respects

- T-60 to T-15—Install sample media
  - Dry ice and coolers on site
  - Expendable items in place (filters, sample bottles, burn pans, etc.)
  - Check DAS display for anomalies
  - Check all vacuum pumps for performance
  - Sample line heater(s) operating
  - Prepare munitions for setup in BB
  - Brief BB visitors at BB
  - Real-time analyzers apparatus/flow checks
  - Sample line scrubbers in place and ready

- T-15 to T-5—Place munitions in BB
  - Munitions personnel complete material setup and exit test chamber
  - Purge BB to ambient gas levels

- T-5 to T—Close overpressure door (make sure proper weights in place)
  - Check closure of all doors
  - Start Hi-Vols, PS-1's, HiVol-PM-l0's, circulating fans, heaters (if required)
  - Collect 6-L and 0.85-L samples
  - Record final background on DAS
  - Turn airlock pressurization system 'on'
  - Assure red light at BB is ON and flashing
  - Relocate all personnel to CP
  - Check that road barricade and placard are displayed

T

T+5

T+7
Detonation or Ignition from CP

Sample VOCs (inside and out), and SF_6

Sample SF_6

- T+19—Sample SF_6

- T+35—Sample SF_6

TRIAL #3

- T+36—End of trial
  - Shut sampling off
  - Weapons personnel enter BB when safe gas level achieved

- T+37—Start purge of chamber to safe gas levels for entry
  - Weapons personnel declare BB entry permitted
  - Turn airlock pressurization system 'off
  - Sampling crew collect samples, check labeling and prepare for shipment to laboratories designated for analysis.

11.5 Post-test—Clean BB test chamber

- Open Prime Road by removing barricade
- Notify Range Control when the test facility is 'cold'
- Turn OFF red flashing light
- Release medical personnel from the test site
- Remove fire symbols from test facility
- Complete logbook entries with date and signatures on each page
- Ensure BB and CP equipment is secure and doors locked
- Samples not shipped place in walk-in freezer at work center

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1.0 OVERVIEW

1.1 Purpose

This letter of instruction specifies the BangBox Test Facility instrument suite for test operations. It includes calibration, sampling, maintenance and quality control procedures that will be followed as a part of the BangBox test program at Dugway Proving Ground (DPG).

1.2 Objective:

These instruments are used to obtain measurements of the concentrations (in ppb/ppm) of specified criteria gases in the air resulting from BangBox open burning/open detonation activities. A continuous flow of chamber air will be drawn through a sample manifold to the Continuous Emissions Monitors (CEM's). The CEM's provide a front panel digital output of the concentration level and real time voltage data to the data acquisition system for recording A real time data display from the converted analog value is also viewed on the Command Post computers.

1.3 Pollutants:

CO_2, CO, SO_2, HCl, NO-NO_2-NO_x, Cl_2/CN.

1.4 Sampling Location:

CEM's are located in the BangBox Instrumentation Building. Two heated sample manifolds, 12 feet in length, deliver the sample gases from the BangBox Test Chamber to the Instrumentation Building protected by a PVC tube enclosure.

1.5 Equipment:

Pertinent equipment includes the following: Thermo Environmental Instruments Model 15C - HCl Analyzer, Thermo Environmental Instruments Model 41C - CO_2 Analyzer, Advanced Pollution Instrumentation Model 200A - Chemiluminescent NO_x Analyzer, Advanced Pollution Instrumentation Model 100A - Fluorescent SO_2 Analyzer, Advanced Pollution Instrumentation Model 300 - Gas Filter Correlation CO Analyzer, MDA Toxic Gas Monitor, a 1" stainless steel sampling manifold (heated to 90 deg F, a ½ " teflon sampling line (heated to 250 deg F), vacuum pump able to draw a minimum of 12 lpm through a ¼" line, Certified EPA Protocol Gases for each criteria pollutant, zero air source, and a gas dilution system.

1.6 Duration:

Three sample periods are specified 1) A 20 minute ambient air sample will be performed at the beginning of each test day. 2) Once the munitions have been loaded and all test personnel have exited the BangBox Test Chamber, the hatch is opened and equalization between ambient air

and Test Chamber air must occur. This is checked by the CO_2 values. Once values are within 2 ppm, the BangBox is now considered ready for testing, the hatch is closed and five minutes of test chamber air will be sampled. 3) A minimum of 22 minutes of chamber sampling occurs after each detonation/burn has occurred.

1.7 Preparation:

Preparation for tests include the following steps: flow rate calibration of Gas Dilution System; routine maintenance checks; multipoint calibration on each CEM; linear regression analysis; MDA Toxic Gas Monitor calibration; daily pre-test and post-test span and zero checks.

2.0 INSTRUMENTS AND CALIBRATION

2.1 Flow Rate Calibration:

Flow rates are determined using a BIOS International DryCal DC-2 Flow Calibrator, a zero air generator, and a cylinder of High Purity Nitrogen Gas. The Nitrogen gas is connected to the pollutant gas input, the zero air is disconnected and the BIOS DryCal (Low Flow Cell) is connected to the gas output on the Gas Dilution System. A burst of 10 cycles is used to determine the Standard Flow Average. This is completed three times at each pressure for each valve combination. These values and the average of the three are recorded in the Gas Dilution System log book. The pressures used are from 26 to 40 psi in steps of 2 psi. This is repeated for the zero air (dilution gas), with the following changes; the DryCal Medium Flow Cell is used; zero air is connected to the air input; pollutant gas is disconnected and no valve combinations need be used. All data is also recorded in the GDS record book. The values resulting from this calibration are entered into an Excel Spreadsheet to determine concentration levels of criteria gases using different pressure combinations and valve combinations. These values are used to perform multipoint and span calibrations on each CEM.

2.2 Routine Maintenance Checks

Routine maintenance checks will be performed on each analyzer prior to the testing period. These protocols are found in the instruction manuals for each analyzer. All information will be recorded in the permanent bound record books for each instrument. The log books and the instruction manuals are located in the Instrumentation Building.

2.3 Multipoint Calibration

Multipoint Calibrations are performed to determine conversion factors for each CEM for analog data recorded by the data acquisition system. Separate multi-point calibrations will be done on each CEM using a NIST traceable, U.S. Environmental Protection Agency (EPA) Protocol at the start and completion of the test series. Note: Check gas cylinders to see if their calibration date has or will expire before completion of test series and log in log book that calibration date is good. The gas will be diluted to the working range of the instrument (outlined in the Detailed Test Plan). The GDS will interface with the CEM's through valve arrangements and provide

gases for dynamic calibrations. The sample gas will be delivered to the instrument through a Teflon in-line filter installed on the instrument inlet. At least five gas concentration levels will be generated and sampled with each instrument. The voltage response of the instrument is recorded from the Data Acquisition System. The conversions factors for the determination of the concentration levels from voltage output from the instrument will be determined by linear regression of the input concentration of the test gas against the measured voltage output for all test concentrations generated. The calibration response factors will be considered valid if the correlation coefficient (r2) of the regression is greater than 0.98. All calibration data will be recorded in the instrument record book.

2.4 Linear Regression Analysis

A linear regression analysis will be performed using Excel Spreadsheet or similar software. Expected concentration versus analog output values are entered to determine the best fit equation for each instrument.

2.5 MDA Toxic Gas Monitor Calibration

Calibration on the MDA Toxic Gas Monitor will be performed according to the instruction manual located in the Instrumentation Building.

2.6 Daily Span And Zero Checks

Daily checks on instrument performance will be carried out using a zero gas and a span gas with a concentration in the normal working range of the instrument. In the event that the recorded instrument output during a span gas check deviates from the expected output by more than ± 10 percent, the instrument will be checked and the problem remedied.

Following any significant repairs on the instrument, (note: all repairs are noted in log book) a multipoint calibration will be carried out prior to placement of the instrument back in service. Results from all daily zero and span checks will be recorded in the instrument logbook.

2.7 Special Instructions

All instruments will be turned on at least 12 hours prior to testing. The manifold heating systems will be turned on at least two hours prior to testing. The required temperatures of all sections will be verified through thermocouple readings on the data acquisition system.

3.0 BANGBOX™ - REAL TIME GAS ANALYZERS CALIBRATION PROCEDURES

*****This document should be read in its entirety before *****
*****starting the calibration procedure.*****

5 Steps to this process.

1. Flow Calibrations
2. Zero and Span Settings
3. Analyzer Calibration Procedures
4. Linear Regression Calculations
5. Span and Zero Checks

3.1 Flow Calibrations

Flow calibrations are performed every six months or when flow rates changes, whichever is lesser. All information for this section is recorded in the GDS Calibration Book

Equipment needed: The Gas Dilution System (GDS), BIOS Dry Flow Calibrator, 1 cylinder high purity nitrogen gas, zero air system (vacuum pump and scrubber system).

The first set of flow measurements are used to determine flow numbers for pollutant gases, the second set is used for dilution gases (zero air).

3.1.1 Pollutant Gases:

3.1.1.1 Preparation:

1. Open Excel document "flow" in folder "MyDocuments" on computer system. You will be logging data into this spreadsheet for flow rates for pollutant and dilution gases.

2. Mount Low Flow Cell on Dry Cal Base. Connect Rubber Tube from GDS Pollutant Sample Output to Dry Cal Inlet. Turn Unit On. Wait until menu appears and press enter to run. Unit is set up for bursts of 10 cycles.

3. Make sure the air pump is off so there is not any dilution pressure within the system.

4. Connect sample line from Nitrogen cylinder to pollutant input. Open pressure regulator on cylinder. Open Valves 1, 2, and 3 (valve in up position) on GDS. Turn pollutant pressure knob until pressure gauge reads 30 psi.

5. Press burst on Dry Cal for a burst of 10. The value that will be used for calibration is SAvg. After a burst of 10 has occurred, check that the average (SAvg) is consistent with previous flow calibrations in the GDS record book. If it is not within 10% of previous values, do the following:

If you notice that the SAvg values keep decreasing, it could be that the valves are clogged from running HCl through the lines when calibrating. A quick way to clear this is to turn the dilution air pressure up to a few psi and run the pollutant and dilution gas through for 3 bursts of ten. Shut off the dilution gas (air pump) and run an additional three burst of ten through the BIOS.

You should see declining (gradual) values (the air is being purged out of the entire system). Once you get stabilized values, analyze to see if they have changed and are back to previous values. If they are, continue with calibrations. . . . .

3.1.2.2 Calibration:

System is calibrated for pressures of 24, 30, 34 and 40. The valve combinations for each pressure setting are 123, 12, 13, 23, 1, 2, and 3. Three bursts of ten will be averaged for each valve combination to obtain the final value.

For each pressure setting (24, 30, 34, and 40) complete the following:

- Turn pressure knob to desired pressure setting. Do a quick release on the pressure (via pressure release knob) to ensure pressure gauge stays at the desired setting. Adjust if necessary and repeat. Open first valve combination and repeat the following for each combination:

  - Press single entry on BIOS to purge lines.

  - Press burst. A burst of 10 will happen. Enter the SAvg value as Flow1 in the "flow" spreadsheet. Press burst. Enter the second SAvg value as Flow2. Press burst. Enter the third SAvg value as Flow3. The spreadsheet will compute the average of the three values. This is the average standardized value that will be used for all further calculations. Steps a & b will be repeated for each valve combination. Units of measure are Standardized milliliters per minute (converted to standard temperature and pressure).

- Release pressure from line by opening pressure release valve on GDS. Open When finished: close pressure regulator on Nitrogen cylinder. Release pollutant pressure knob and shut valves 1, 2 and 3.

3.1.2 Dilution Gases (Zero Air)

3.1.2.1 Preparation

a) Mount standard flow cell on BIOS Dry Cell unit. Turn unit on.
b) Connect tubing from air scrubbers to air input line on the GDS.
c) Turn vacuum pump on.
d) Turn up air pressure knob until gauge reads 14 psig.
e) Press burst on Dry Cal for a burst of 10. The value that will be used for calibration is SAvg. After a burst of 10 has occurred, check that the average (SAvg) is consistent with previous flow calibrations in the GDS record book. If it is not within 10% of previous values, there is a flow blockage and system must be troubleshot. If it is within 10%, continue with flow calibrations. . . .

3.1.2.2 Calibration:

System is calibrated for pressures of 14, 18, 22, 26, 30, and 34. Three bursts of ten will be averaged for each pressure setting to obtain the final value. Within the "flow" spreadsheet, there is a separate section for dilution gases. Make sure that you input data from the dilution flows into this section and not the pollutant flow section

For each pressure setting complete the following:

a) Hit burst for a burst of ten. Enter the SAvg value as Flow1 in the spreadsheet.
b) Hit burst. Enter the second SAvg value as Flow2.
c) Hit burst. Enter the third SAvg value as Flow3.
d) The spreadsheet will average the three values. If done manually (no spreadsheet) Add three values together and divide by 3. This is the value that will be used for all calibration equations. The following is an example for pollutant and dilution flow rates:

c:\mydocuments\flow

GDS Flow Parameters - Pollutant Gas
Pollutant Pressure 30 psi

Valve Comb.	Flow1 Sml/m	Flow2 Sml/m	Flow3 Sml/m	STP AVG Sml/m
123	91.28	91.28	91.36	91.31
13	76.85	76.83	76.84	76.84
12	56.69	56.66	56.73	56.69
23	48.94	48.93	48.93	48.93
1	42.08	42.11	42.14	42.11
3	34.31	34.25	34.26	34.27
2	12.28	12.34	12.29	12.30

Example for Pollutant Pressure: Enter values into columns 2,3 and 4 for flow rates. Column 5 (STP AVG) is automatically calculated.

GDS Flow Parameters - Dilution Gas
Variable Pressures

Pressure Psig	Flow1 Sml/m	Flow2 Sml/m	Flow3 Sml/m	STP AVG Sml/m
14	1629	1627	1626	1627.3
18	2210	2209	2211	2210.0
22	2760	2760	2761	2760.3
26	3285	3287	3284	3285.3
30	3887	3881	3882	3883.3
34	4512	4505	4502	4506.3

Example for Dilution Gas (Zero Air): Enter values into columns 2,3 and 4 for flow rates. Column 5 is automatically calculated.

Print the entire "flow" spreadsheet and tape pages into GDS System record book. When finished, complete the following:

a) Open Excel spreadsheet document "calpoints" under folder "My Documents".
b) Enter values into section "Data from flow calibrations" (on page one, at top of spreadsheet) from the pollutant and dilution gas calculations (calculated from "flow" spreadsheet). **Do not make changes in any other part of the spreadsheet. All values are all calculated from data on page one.**
c) Make sure the concentrations for the EPA protocol gases match the concentrations in the spreadsheet. (Note: make suree that the certification hasn't expired.) Each new gas cylinder that we get has a different concentration level than the previous. Ensure that the Calibration Gas Concentrations from the EPA protocol gases have not changed. If they have, make the appropriate changes in the spreadsheet on page 1 (under Calibration Gas Concentrations).
d) After changing the values in the top section of the spreadsheet, values in the resulting calibration concentrations will be changed. Do a spot check to ensure these values have changed and data is valid.
e) Print the entire document and tape pages into GDS record book. These values will be used for calibration of the analyzers.

C:\mydocuments\calpoints.....page one of spreadsheet

Data From Flow Calibrations
Performed on 14 Jan 97

	Pollutant	Concentrations				Dilution	Concentrations
GDS Valve	30 psi	34 psi	40 psi	24 Psi		Pressure	STP
Comb	Sml/m	Sml/m	Sml/m	Sml/m		Psig	Sml/m
1,2,3	91.3	113.9	145.9	67.75		14	1627.3
1,3	76.8	95.7	124.3	57.55		18	2210.3
1,2	56.7	69.6	90.2	42.09		22	2760.3
2,3	48.9	60.1	78.2	36.45		26	3285.3
1	42.1	51.9	66.4	32.04		30	3883.3
3	34.3	42.7	54.7	26.48		34	4506.3
2	12.3	16.2	21.2	10.58			

Calibration Gas	CO_2-ppm	CO-ppm	NO-ppm	NO_2-ppm	SO_2-ppm	HCl-ppm
Concentrations	80700	3930	810	73.32	40.6	9890

Calibration performed by: _____

Example: only change values in this section. All other values will change automatically when these are . Sign form when finished.

14-Jan-97

Calibration Gas Dilution System (GDS) NuTech L/A07593 USEPA Property #07792 Unit #E-131
Calibration Standard BIOS International, Dry Cal Flow Calibrator
Certificate of NIST (NBS) Traceability

GDS Parameters
Calibration gas (pollutant) gauge pressure 30 psig
Zero air gas (diluent) gauge pressure 18 psig

GDS Valve Comb.	STP Flow Ave (10)	Ratio Ave/Total	CO_2-ppm 80700	CO-ppm 3930	NO-ppm 810	NO_2-ppm 73.32	SO_2-ppm 40.6	HCl-ppm 9890
1,2,3	91.3	0.0396681	3201.212	155.895	32.1311	2.9085	1.6105	392.3171
1,3	76.8	0.0335796	2709.877	131.968	27.1995	2.4621	1.3633	332.1027
1,2	56.7	0.025011	2018.390	98.293	20.2589	1.8338	1.0154	247.3591
2,3	48.9	0.0216448	1746.738	85.064	17.5323	1.5870	0.8788	214.0674
1	42.1	0.0186912	1508.378	73.456	15.1399	1.3704	0.7589	184.8557
3	34.3	0.0152811	1233.186	60.055	12.3777	1.1204	0.6204	151.1303
2	12.3	0.0055341	446.599	21.749	4.4826	0.4058	0.2247	54.7318
0	2210.3	0	0	0				

Example2: Resulting calibration spreadsheet used for calibration of analyzers.

3.2 Zero and Span Settings

For testing purposes, the analyzers are usually set to sample gas for a specific concentration range. The expected concentration range for each criteria pollutant should be obtained from the Detailed Test Plan. Before each analyzer can be calibrated for a specific range setting, the instruments must be "told" what a zero concentration gas is and a specified span (concentration) gas is. To do this, the analyzer must sample a zero air source/span gas source and the concentration that the analyzer outputs must be adjusted so it reads the appropriate concentration. This is accomplished using the analyzers internal zero and span settings. Specific instructions on how to do this are located in the manuals for each analyzer.

Zero and span settings must be performed for each range the analyzer will be set on. The following are quick and easy instructions.

3.2.1 Preparation:

a) Most importantly, obtain the expected concentration levels from the Detailed Test Plan. You cannot change the range setting without redoing zero/span settings, calibration and linear regression curves.
b) Make sure analyzers are turned on for a full hour before attempting to do any calibrations.
c) Turn zero air pump on. Make sure output of scrubbers is connected to Dilution Gas Input on the GDS.
d) Perform a zero setting and span setting for each analyzer consecutively. Do not attempt to calibrate more than one analyzer at a time. We have had problems with this before.
e) Record all activities in the analyzer record books. Under no circumstances should any changes be made to an analyzer without recording it in this book. These are audited by EPA and considered official documents.

3.2.2 Zero Setting

a) Set range thumbwheels on analyzer. Record this setting in the analyzer record book. (Range values differ for each analyzer. Use the instruction manual to determine what range corresponds to each setting)
b) Turn appropriate valve off at the manifold for the analyzer you are going to work on. Disconnect sample line from manifold at the back of the instrument (input sample line).
c) Connect output of GDS system directly to sample port of analyzer.
d) Turn dilution gas pressure setting to 30 psig. Make sure valves 1,2 and 3 are shut and no pollutant gas is entering the system.
e) Allow analyzer to sample zero air for 5-10 minutes or until the front panel reading has stopped fluctuating. (This does not mean that the analyzer will read 0.0 ppb/ppm, this will be accomplished in step 6)
f) Once analyzer has stabilized, turn zero thumbwheels until front panel reading is approximately 0.0 ppm. Note: rarely does an analyzer stay stable at 0.00, it will normally fluctuate around that value.
g) Allow the analyzer to stabilize for 5 minutes. Step 6 and 7 might need to be repeated a few times to obtain a good zero setting.
h) Record the zero thumbwheel setting in the record book.

3.2.3 Span Setting

a) Define what 80% of the range setting is to determine the span value. Example: If range is set at 200 ppm, 200 ppm x .80 = 160 ppm. The span gas entered should be around 80% of the range limit. Look up the valve and pressure combination that will give a concentration close to the calculated span value.

Example:

GDS Parameters — Calibration gas (pollutant) gauge pressure: 30 psig; Zero air gas (diluent) gauge pressure: 22 psig

GDS Valve Comb.	STP Flow Ave (10)	Ratio Ave/Total	CO_2-ppm 80700	CO-ppm 3930	NO-ppm 810	NO_2-ppm 73.32	SO_2-ppm 40.6	HCl-ppm 9890
1,2,3	91.3	0.0320171	2583.8	125.83	25.934	2.3475	1.2999	316.65
1,3	76.8	0.0270699	2184.5	106.38	21.927	1.9848	1.0990	267.72
1,2	56.7	0.0201278	1624.3	79.10	16.304	1.4758	0.8172	199.06
2,3	48.9	0.0174071	1404.8	68.41	14.100	1.2763	0.7067	172.16

If the range setting for the CO_2 instrument was set to 2000 ppm, 80% of this value would be 1600 ppm (2000 x .80 = 1600). Set pollutant gas pressure to 30 psig, and the zero gas pressure to 22 psig, and open valves 1 and 2. The calculated concentration is 1624.3 ppm. This would be the span gas concentration entered.

b) Connect pollutant gas line from GDS system to appropriate gas cylinder. Open pressure regulator on gas cylinder, set desired pressure for pollutant and dilutant gases, and open correct valves. Output of GDS system should still be connected to analyzer.
c) Let span gas enter analyzer for 5 minutes. Once reading has stabilized adjust span thumbwheels until the instrument reads approximately the same value as was calculated.
d) Let instrument stabilize for an additional 5 minutes. Make adjustments as necessary.
e) Record span thumbwheel setting in the analyzer record book.

At this point you can either continue on to perform a full calibration on the analyzer, or you can perform zero and span settings on the rest of the instruments. The order does not matter as long as each analyzer is zeroed, spanned and calibrated.

3.3 Analyzers Calibration Procedures

Calibration procedures are performed to obtain data to determine the relationship between voltage level and concentration for each analyzer. The basic concept is to perform an 8 point calibration, which gives us eight points to obtain the best linear fit equation. These eight points should be evenly spaced between the zero level and the top of the range. For example, if we are calibrating the CO2 instrument for the 2000 ppm range, we would like to input eight concentrations of gases between and including 0 to 2000 ppm. The zero point must always be included as it provides the offset for the linear equation.

When: A full eight point calibration should be performed on each analyzer at the beginning of the test period and at the end. It is important that the equations match for these two calibrations to ensure that the analyzer was not out of calibration for the testing period. It can also be used as a tool for troubleshooting analyzer problems. If any kind of maintenance is performed on an analyzer, the full eight point calibration (along with span and zero settings) MUST be redone.

Eight evenly spaced concentrations for the 2000 ppm range:

0, 285, 570, 855, 1140, 1425, 1710 and 2000 ppm.

Note: Rarely will you go to the calibration spreadsheets and find the exact concentrations you are looking for. Try to use values that are within 10% of those you have calculated.

3.3.1 Procedures for calibration:

a) Calculate eight evenly spaced concentrations for the range you are calibrating.
b) Write the following information down in the record book in column form.

Time	Pressure comb.	Valve Comb	Calculated (ppm/ppb)	Analyzer ppm/ppb)	DAS (v)	%diff

Go through the concentration spreadsheets to determine what pressure and valve combinations will provide the closest concentrations to the eight calculated values from above and fill out the following entries for each point (in descending order):

Pressure comb: The pressure combination is written down as pollutant gas pressure/dilutant gas pressure. Ex. 30/18 is equivalent to 30 psig for pollutant gas and 18 psig for dilutant gas.

Valve comb.: Write down the valve combination that corresponds to the concentration level. Ex: from previous CO_2 example, it was found that 30/18 pressure combination with valves 1 and 2 on would give 1624 ppm. The valve combination is therefore 1,2.

Calculated: Write down the calculated concentration level from the concentration spreadsheet. Also include whether it is ppm or ppb.

***Remember, zero should be the last point. This is important because of the priming effect on the sample lines.

You are now ready to start calibrating. Hook up the pollutant gas and turn the pressure regulator on, turn on the zero air pump and get ready to go. Perform the following steps for each concentration point:

a) Ensure that the output of the GDS is connected to the sample port of the instrument being calibrated.
b) Turn the pollutant pressure knob until the pressure gauge reads the required pressure. Lift the pressure release knob and release to ensure that the pressure reading stays at the same point.
c) Turn the dilutant pressure knob until pressure gauge is at the required pressure level.
d) Turn the required valves on.
e) Let the instrument sample the gas for a full five minutes or when it reaches a stabile value, whichever is greater. Record the following data in the record book:

Time: write down the time that you are taking the stabilized reading.

Analyzer (concentration): write down the front panel concentration reading.

DAS: Write down the voltage level from the DAS system. This will most likely be viewed in a LabView program. Talk to the computer programmer to obtain the program name.

% diff: This is the percent difference between the calculated concentration and the instrument reading. Calculated by :

$$\%\text{diff} = \frac{\text{calculated - instrument}}{\text{calculated}} \times 100$$

f) Repeat for each of the eight data points.

Note: No pollutant pressure is used for the zero point.

When finished with the eight point calibration, take an average of the % diff. If you end up with an average of greater than 8%, then the instrument must be respanned and recalibrated. As you are going through the calibration, analyze the values as you write them down, if there is a consistent error, you should stop the calibration, respan the instrument and start over to achieve the best results. For example, if the first four readings are consistently 20 ppm lower than the calculated concentration, most likely there was an error during the span setting. Try respanning with a different pressure combination or valve setting and ensure that the pressure readings are accurate.

3.3.2 Special Notes:

The HCl and SO_2 analyzers are the most difficult to calibrate because the sample lines need to be primed. The analyzer must "settle" for a full five minutes before adjustments are valid. It tends to fluctuate by a few ppm. Do not worry, this is normal.

The SO_2 analyzer has zero and span potentiometers instead of thumbwheels.

The NO_x analyzer has three outputs, NO, NO_2 and NO_x, although the analyzer is calibrated with NO. The NO_2 cylinder of gas is used to ensure that the instrument is converting properly. Follow the eight point calibration procedure to obtain a linear regression for this channel also.

3.4 Linear Regression Analysis

Linear regression analysis is performed to find an extremely accurate relation between DAS voltage levels and concentration level. This part of the process is very important.

a) Open a blank Excel spreadsheet. You can name it linear#. An example spreadsheet can be found in folder MyDocuments called linregress.

b) A linear regression curve must be done for each analyzer. This is official data, so make sure you pay attention when doing these steps. The best idea is to create a separate sheet or page for each analyzer within the file.

Do the following for each analyzer:

I. Fill out the headings like the example below. Input all eight data points in the two columns. This information is obtained from the analyzer record book from the calibrations done in the previous section. The following show example data from an eight point calibration on the SO_2 Analyzer.

SO_2 Linear Regression Analysis
Performed by Lisa Diamanti
On Feb 11, 1997

DAS (v)	Calc. conc. (ppm)
0.964	1.989
0.8	1.61
0.689	1.363
0.505	1.015
0.384	0.759
0.251	0.498
0.121	0.225
-0.003	0

You now have all the data required to perform a linear regression analysis on the preceding data. Voltage is your "X" series, concentration is the "Y" series. From the linear regression we want to obtain an equation in the form of y=mx + b,

where y = concentration m = voltage coefficient
x = voltage b = offset

This will give us the linear relationship between the voltage level and concentration. This information will be given to the computer programmer so that during the tests real time concentration levels can be viewed in the command post. It is also given to the agency that will be compiling all data for reports. The following describes how to do a linear regression using Excel spreadsheet.

From the Tools menu, click on Data Analysis. At the new menu (Data Analysis) click on Regression. A regression menu will appear. Fill out the following entries:

Input Y Range: This is the concentration data points. Click and drag over the eight points and the range will fill in automatically.

Input X Range: These are the voltage data points. Click first in the input x range data box, then click and drag over the eight data points for automatic

Output Range: Click on the circular button that allows you to input data. Click on the data box and enter a value (or click on a box in the spreadsheet) below your data range (make sure it is not in your data range, otherwise the output will overwrite the data you have entered). The following will appear:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999587
R Square	0.999175
Adjusted R Square	0.999037
Standard Error	0.021486
Observations	8

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1	3.35357	3.35357	7264.303	1.76E-10
Residual	6	0.00277	0.000462		
Total	7	3.35634			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-0.01577	0.013471	-1.17083	0.286059	-0.04873	0.01719	-0.04873	0.01719
X Variable 1	2.043971	0.023982	85.23088	1.76E-10	1.98529	2.102651	1.98529	2.102651

The main items you are looking at are:

Regression Statistics: Insure that the R square value is above .98

Coefficients: Intercept and X Variable 1. These are the numbers you will need for the linear equation.

For equation: $y = mx + b$ b = Intercept m = X variable 1

From this example, the equation for the SO_2 analyzer would be:

SO_2 concentration (ppm) = 2.04 x (DAS voltage) - .016

Repeat this for each of the analyzers. Write down the results in each analyzer record book.

3.5 Span And Zero Checks

Span and zero checks are used as a tool to check if an analyzer is maintaining it's span and zero settings, or if it drifts. These should be performed on the analyzer **once a week** during nontesting periods. **During a testing cycle, this MUST be performed before the start of a test and after the end of the last test DAILY.** The procedure is similar to span and zero settings, except no adjustments will be made to the analyzer. If an analyzer has drifted and the difference is greater than 10% from the expected concentration, you must redo the span and zero settings and a full calibration (with linear regression). This must be done on each of the instruments being used for the test.

To perform this procedure, do the following:

a) Connect the sample port of the analyzer up to the output of the GDS system. Turn air pump on for dilution gas. Connect pollutant input (GDS) to appropriate EPA Calibration Gas.
b) From the analyzer record book, determine what concentration was used for the span setting. This will be the same concentration you want to use for a span check.
c) Put the following entries down in the analyzer record book and fill them in as you do a span and a zero air check. Make sure you date each page and sign the bottom. These are official documents.
d) Perform the zero air and span level check.

Today's Date

Zero/Span Check

ZERO

Zero Pot:	_____	(thumbwheel setting)
Analyzer:	_____	(instrument reading after zero air entered)
DAS:	_____	(voltage from DAS)
Time:	_____	(time that reading was taken)

SPAN

Span Pot	_____	(span thumbwheel setting)
Pressures:	_____	(Pressure setting, pollutant/dilution)
Valves:	_____	(valves that are open)
Calculated	_____	(calculated concentration)
Analyzer	_____	(Analyzer response, front panel reading)
DAS	_____	(DAS voltage)
Time	_____	(time that reading was taken)
%diff	_____	(difference between calculated and analyzer)

Sign name when finished!!

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1.0 DATA ACQUISITION SYSTEM

This document outlines the data acquisition system (DAS) operation, calibration, and data filing procedures that will be carried out as a part of the BANGBOX test program at Dugway Proving Ground (DPG). A description of hardware/software components, wiring, data storage formats, calibration and operation procedures are included, providing a detailed Instructional guideline of the steps that will be used to gather and validate data taken from the test instrument suite.

A series of tests will be carried out at DPG that will involve the burning of propellants and detonation of explosive munitions. The Propellant, Explosive, and Pyrotechnic Thermal Treatment Evaluation and Test (PEP-TTET]) Facility, commonly known as the BangBox (BB), will be used to contain the detonation or combustion cloud in order to collect both gaseous and aerosol samples so that a complete characterization of the emission products can be accomplished. The BB DAS collects real-time data from continuous gas and particulate analyzers, sample gas flow data from discrete gas and particulate samplers, and pertinent environmental sensor Information.

2.0 COMPONENT DESCRIPTION AND INTERFACE

2.1 Basic System Elements

Five computer systems connected to a BangBox local area network (LAN) comprise the basic system elements. Two computers located in the BangBox instrumentation building provide for calibration of the CEMs and data acquisition and command and control functions respectively. Two workstations, located at the Command Post, provide for remote command and control of the DAS or allow for observation only; depending on the client software that is used (Normally, one station is configured for command and control and the other for observation only). The fifth computer is the server.

2.2 DAS Hardware

The computer systems in the BangBox instrumentation building and those located at the CP communicate by using fiber-optic cabling. A 10 base-T hub at each location fitted with a 10 base-FL transceiver provides a reliable high-speed data link. All data is passed digitally over the Ethernet link. In the BangBox instrumentation building, the DAS is connected to a National Instruments SCXI chassis which is the external acquisition device that interfaces the

DAS to the test instrumentation suite. The temperature, pressure, humidity, criteria pollutant instruments, toxic gas analyzers, and particulate samplers have data lines leading to this computer.

2.3 Voltage Output Instruments

Direct voltage outputs are provided by the continuous analyzers such as the criteria pollutant instruments, toxic gas analyzer, ambient PM_1, particulate monitor, and environmental pressure and barometric pressure transmitters.

A voltage divider in the Firing Line, which is wired in parallel to the ignition device, provides for the detection of detonation and time zero reference for the DAS.

2.4 DAS Software

LABVIEW version 4.0 is the software used for polling each sampling channel at scheduled intervals, and for storing and transmitting this data.

Data is displayed and control of the system is made possible using client software developed specifically for the BangBox using LABVIEW. Both converted and raw data may be viewed or stored at any computer that utilizes this software.

3.0 OPERATIONAL PROCEDURES

3.1 Pre-Test

Two days prior to testing, the system will be activated, which will generate data files containing one hour of data for each file Operation. Acquisition will only be stopped prior to the end of the test series in the event of malfunction or miscalibration of test instruments. Acquisition will be resumed promptly following setup changes or hardware repairs.

3.2 Post-Test

A copy of the active configuration files will be placed with the data files for each trial. At the conclusion of each test day, files for that day will be copied to a removable disk cartridge for transport. The data stored on the data acquisition computer will be maintained throughout the test cycle pending available disk space. At no time will data be deleted from this machine without concurrence of the DPG Test Director (TD) and with sufficient verified backups in place. At the end of test, a compact disk containing all data will be produced.

4.0 ACQUISITION SYSTEM CALIBRATION

4.1 Frequency

The performance of the data acquisition system will be checked against a voltage standard annually certified one month prior to the onset of the test.

4.2 Analog-to-Digital Conversion

Each data channel physically connected to a sensor or test instrument will be checked for voltage accuracy and linearity. The data acquisition system will be used as a voltage injector that will be attached to each channel in parallel with a digital voltmeter (DVM) that has been calibrated and certified to meet manufacturer specification. Ten readings will be observed by the DVM and that of the acquisition system, then logged and entered into a regression table. Accuracy within a tolerance of plus or minus two percent of range and regression parameters with an R squared of 0.995 or greater will be acceptable.

4.3 System Integrity

Total system integrity will be checked by verification of proper voltage signals on the data files written by the system.

5.0 DATA FILE FORMAT

5.1 Sampling Interval

The DAS sampling Interval is set to a one-second interval, allowing for the greatest degree of resolution for all instruments. A typical 45-minute sampling time for each trial will contain approximately 2700 data points per data channel.

5.2 Data Files

Each data file will be arranged by row and column of ASCII formatted floating point numbers. Each row will contain all samples for a given time interval and each column will contain all data points for one specific acquisition channel. Each row is also time and date stamped. Each file will contain a header indicating when the file was initially created, the sampling interval, what the file represents, and what each column of data represents. Each column of data will represent the raw voltage data from a particular test instrument or sensor and the converted data from each instrument in scientific units.

5.3 File Names

The file names will be assigned to the DAS using a sequence number to insure that no data files are created that matches a previous file name causing data to be overwritten.

5.4 Data Transfer

When data is transferred to removable compact disk, a directory structure will be created using Julian dates for names. All files belonging to a trial will be copied into the directory specified by the trial name.

1.0 BANGBOX EXPLOSIVE DETONATION AND MUNITIONS DESTRUCTION TRIALS

1.1 Munitions Designations for Trials

1.1.1 Explosives

The explosives to be detonated will be prepared as surrogates designed to represent munition loadings in the demilitarization inventory. Modifications to this LOI may be made if specific munitions are tested

1.1.2 Munitions for Burn Tests

Specific munitions previously detonated with a detonation/initiation train will be initiated and destroyed by exposing them to the flame of a natural gas or propane burner. The burner will be remotely actuated.

1.1.3 Blasting Caps

Exploding bridge wire blasting caps are most desirable for all munitions trials because of safety. However in the present trials, electric blasting caps will be used. When ignition only is necessary, electric squibs with additional powder may be used.

1.2. Support Material

1.2.1 Single Explosives

Explosive charges will be detonated in the open in the BangBox. All charges will be contained in light polyethylene film packages and will be secured and mounted with non-metallic filament or string. The only metal present will be the blasting cap shell which will be consumed in the detonation. No other metal than the blasting cap leads will be used,

1.2.2 Explosive Charge Location

All explosive charges will be located at least 1 m above the floor of the BangBox, and centered over the firing pit cover. This cover may be covered by a metal plate to prevent the fireball from contacting the epoxy paint on the cover.

1.2.3 Mounting

The individual explosive charge will be suspended from a stand prepared from angle iron welded to a base plate, which plate will be inserted under the pit cover. The charge will be mounted horizontally by monofilament line or cotton string from the top ends of these angle iron stands.

1.3 Munition Burns

Selected munitions previously tested will be destroyed by heating over a burner placed in the lower part of the detonation firing pit. This simulates the destruction in the field by simple furnaces.

1.3.1 Multiple Munitions

Several pieces for each munition may be tested in the same trial as determined by the PEP content of the individual munition.

1.3.2 BangBox Protection

The BangBox will be protected from munition travel, when it is actuated by the flame, by placing at least one layer of an expanded metal screen over the top of the pit where the burner is located.

1.3.3 Burner Actuation

The burner in the pit will be remotely actuated including both the release of gas to the burner and the ignition of the flame.

2.0 EXPLOSIVE AND MUNITIONS PREPARATION

2.1 Identification

All explosives and munitions tested in the BangBox will be identified and all lot and other numbers will be recorded. This identification will also extend to aluminum, ammonium nitrate and other additives used in surrogate mixes.

2.2 Casing Removal

The munitions will be removed from the external casings or packaging before mounting for detonation trial. All packing material will be removed completely from the BangBox and disposed of in accordance with established DPG procedures.

2.3 Explosives and Munitions Handling

2.3.1 Personnel

All explosives and munitions will be handled only by qualified personnel.

2.3.2 Safety Devices

No munitions will be used unless all personnel protective devices are in place.

2.3.3 Initiation

2.3.3.1 Mode

Wherever practical the explosives and munitions will be initiated in the precise manner for which they were designed unless otherwise specified by the test officer. In no instance will the munitions be initiated in a manner which will endanger personnel.

2.3.3.2 Remote operation

All explosives and munitions will be remotely initiated.

2.3.3.3 Modification

Methods of initiation may be modified as needed to assure that the explosives and munitions will function correctly when remotely initiated.

2.3.3.4 Alternate Methods

Munitions is to be tested by burning procedures will be tested under separate and distinct LOI.

3.0 MUNITIONS CONTAINING MORE THAN ONE EXPLOSIVE CLASS

3.1 Definition

These include any explosives and munitions where high explosives and/or propellants and/or pyrotechnics are present in the same munitions.

3.2 Safe Procedures

No munitions under the definition of 3.1 will be tested in such a manner that one or more of the materials will not be completely consumed.

4.0 INITIATION

4.1 Preparation for initiation

4.1.1 Procedures

Procedures will be established for each specific explosive or munition and approved by competent authority.

4.1.2 Personnel

Only competent designated personnel will arm charges. All other personnel will be out of the BangBox area before arming and will not return.

4.1.3 Interlocks

Firing circuits will have interlocks which keep firing lines short circuited and de-energized. This interlocks will only be opened at a remote location. Only personnel responsible for firing circuit operation with have keys and authority to complete arming and firing of the munitions.

5.0 POST BANGBOX DETONATION PROCEDURES

5.1 Initiation Failure.

Failure to initiate will be treated as a misfire or unforeseen mishap and will be handled in accordance with DPG and WDTC standing operating procedures (SOP).

5.2 Inspection

Designated persons will inspect the BangBox after the detonation is completed in accordance with DPG and WDTC SOP. No other personnel will enter the BangBox until it is cleared.

5.3 Personnel Access

Further post detonation access to the BangBox will be as designated by the Test Officer.

6.0 ACCOUNTABILITY

6.1 Records

All pertinent data will be recorded for each test including explosive type, munitions type, method of support, method of initiation, and observations.

6.2 Compliance to LOI

Quality assurance/quality control procedures will be established to assure compliance with this LOI.

7.0 ADDITIONAL REFERENCES

West Desert Test Center and DPG references relating to the detonation of munitions modified as necessary for BangBox testing. Any instructions in conflict with these references will be resolved before proceeding with the test.

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1.0 BANGBOX M110 ARTILLERY SIMULATOR DETONATION TRIALS

1.1 Test Preparation

The Test Officer will obtain the fuel filler for the M110 that is to be used for the test.

The munition handlers will fill the fuel well of the M110 in the preparation bunker prior to movement to the BANGBOX.

Any fuel spills or leakage will be thoroughly cleaned and allowed to air dry before the device is moved to the BANGBOX for detonation.

The Squibb (Provided with the M110) will not be installed into the fuse-well of the device prior to set up in the BANGBOX.

2.0 DETONATION OF THE M110 ARTILLERY SIMULATOR

The M110 Artillery Simulator will be detonated IAW LOI 29 Section 4.

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1.0 TRIALS UTILIZING THE BANGBOX MECHANICAL INITIATION JIG

The Mechanical Initiation Jig is used to remotely simulate actual field initiation, or ignition, of a variety of test items. The items tested on the Jig roughly fall into one of the following categories: Trip Wire initiated, Pull String initiated, and Hand Held devices.

The Munitions Handlers will be thoroughly trained on the use of the Mechanical Initiation Jig prior to any test that utilizes one or more of the Jig configurations.

An ORI will also be conducted prior to any testing to insure the completeness of the training and to resolve any problems that may arise.

Preparation of the Mechanical Initiation Jig (Hereafter referred to as the Loom)

Prior to actual loading of munitions into the Loom, the following steps must be taken:

- The striking arm must be locked into the full upright position.
- The safety bolts must be put into place on either side if the striking arm.
- The computer control for the actuating solenoid must be placed in safe.
- The Firing Line safety shunts must be in place.

Each type of munition has a unique mounting device specifically designed to hold it securely in the Loom. The munition may be mounted in or on the appropriate device prior to installation. Pre-mounting will be done in the Munitions Prep Bunker. The loaded device will then be moved to the BANGBOX for the Loom installation.

1.1 Munitions Mounting Devices

1.1.1 Trip Wire Initiated Devices

The Trip Wire Devices are mounted on a "Burn Hardened" 2 x 4 that has been modified for use in the Loom.

Each device will be mounted utilizing the mounting hardware that came in its package. The 2 x 4 will be pre-marked to properly space each device for maximum efficiency in the Loom.

The 2 × 4 is mounted in the Loom at a height that allows the trip wires to extend perpendicular to the two tension bars.

The trip wires are then attached to the corresponding screws on the base of the Loom.

1.1.2 Draw String Initiated Devices

The Draw String Devices are mounted in a tray that is one inch deep and four inches wide. The tray is constructed of 1 x 4 pine that has been lined with stainless steel and then mounted on a 2 x 4 that has been modified for mounting in the loom.

A clamping device made of 2 x 2 pine is used to secure the devices in the tray.

The draw strings on the devices is not long enough for normal operation in the loom. Therefore; trip wire from a previous test or 20lb fishing line may be used to lengthen the draw strings.

The tray is mounted in the Loom at a height that allows the draw strings to extend perpendicular to the tension bars.

The draw strings are then attached to the corresponding screws on the base of the Loom.

1.1.3 Hand Held Devices (Parachute Flares, Green Star Cluster, etc)

These devices are secured in a clamp made of 2 x 2 pine.

A plum bob (Furnished by the Test Officer) is used to center the devices so that the striking arm of the loom strikes both devices evenly and at an angle that is perpendicular to the floor of the BANGBOX.

The plum bob is also used to insure that the devices are aimed at the center of the burn pit in the BANGBOX floor.

1.2 Pre-ignition Checks

Insure that the safety bolts have been removed from the loom.

Connect the control relay to the Firing Line.

In the Instrumentation Building, enable the power to the initiation solenoid.

1.3 Initiation

Initiation is conducted IAW LOI 29 Section 4.

High-Volume Total Suspended Particulates (TSP)
Sampling and Analysis Procedure
Letter of Instruction
Revision Control Sheet

Revision number	Date of change	Reason for change
0	31 October 1996	Initial revision for BangBox testing
Description of changes:		

Revision number	Date of change	Reason for change
Description of changes:		

High-Volume Total Suspended Particulates (TSP) Sampling and Analysis Procedure Letter of Instruction

Chamber:	BangBox Test Chamber
Media:	Air
Objective:	This method is used to obtain a measurement of the total mass concentration of particulate matter in the air resulting from BangBox energetics testing activities. A measured quantity of sampled air is drawn into a covered housing and through a filter during the sampling period. The filter is gravimetrically weighed (after moisture equilibration) before and after use to determine the net weight (mass) gain. The concentration of total particulate matter in the air is computed as the mass of collected particles divided by the volume of air sampled, corrected to standard conditions, and is expressed in micrograms per standard cubic meter ($\mu g/std\ m^3$).
Pollutant:	Total suspended particulates (TSP)
Sampler:	High-volume sampler
Sampling Location:	The high-volume sampler is placed in the test chamber greater than 3 feet from the test chamber's outer wall.
Equipment:	Pertinent sampling equipment include the following: high-volume sampler with shelter, quartz-fiber filter (20.3 × 25.4 cm), calibration orifice set, pressure transducer, barometer, analytical balance, and a computerized Data Acquisition System (DAS).
Duration:	Two simultaneous samples will be obtained using two samplers operating simultaneously during each run. Target minimum sampling time for each run is 20 minutes.
Sampling Preparation:	Sampling preparation for TSP sample collection includes the following steps: filter handling and preparation, high-volume sampler filter loading and preparation, and air flowmeter calibration. Filter Handling and Preparation. Prior to sample collection, all quartz-fiber filters that meet the requirements of 40 CFR Part 50 Appendix B-Section 7.1 are gravimetrically weighed in the laboratory to determine the baseline tare weight for calculation of aerosol weight collected. Personnel loading filters will wear clean gloves to minimize cross-contamination. High-Volume Sampler Filter Loading and Preparation. The filters are placed on the high-volume sampler backup screen. The filter housing locknuts are then tightened down to ensure good contact between the gasket and the two halves of the filter holder. The filter number and filter unit position are then recorded. Air Flowmeter Calibration. Each sampler will be calibrated using procedures described in 40 CFR Part 50 Appendix B before each test series.
Sampling Procedure:	After the sampling preparation procedures, operation of the high-volume sampler is begun remotely to draw a measured quantity of air through the filter. Sampling rate is continuously recorded by the DAS.

Sample Recovery: Sample recovery involves one step: high-volume sampler filter unloading and storage.

High-Volume Sampler Filter Unloading and Storage. Following completion of each test run, the top half of the filter unit is removed and the sampled filter is folded in half and placed in plastic and labeled paper envelopes.

Sample Analysis: In the laboratory, TSP-containing filters are placed in desiccators to remove uncombined moisture. The filter is then allowed to equilibrate and weighed to the nearest milligram until a constant final weight is obtained. This final weight is recorded.

References: Title 40 Code of Federal Regulations Part 50, Appendix B-*Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method)*.

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PM_{10} Sampling and Analysis Procedure
Letter of Instruction
Revision Control

Revision number	Date of change	Reason for change
0	31 October 1996	Initial revision for BangBox testing
Description of changes:		

Revision number	Date of change	Reason for change
Description of changes:		

PM_{10} Sampling and Analysis Procedure
Letter of Instruction

Chamber:	BangBox Test Chamber
Media:	Air
Objective:	This method is used to obtain a measurement of the mass concentration of particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}) in the air resulting from BangBox energetics testing activities. A measured quantity of sampled air is drawn at a constant flow rate into a specially shaped, omnidirectional size selective inlet where the suspended particulate matter is inertially separated into one or more size fractions within the PM_{10} size range during the sampling period. The filter is gravimetrically weighed (after moisture equilibration) before and after use to determine the net weight (mass) gain. The concentration of PM_{10} in the air is computed as the mass of collected particles divided by the volume of air sampled, corrected to standard conditions, and is expressed in micrograms per standard cubic meter ($\mu g/std\ m^3$).
Pollutant:	PM_{10}
Sampler:	High-volume PM_{10} sampler
Sampling Location:	The high-volume sampler is placed in the test chamber greater than 3 feet from the test chamber's outer wall.
Equipment:	Pertinent sampling equipment include the following: high-volume PM_{10} sampler with shelter, quartz-fiber filter (20.3 × 25.4 cm), flow control device, filter holder, calibration orifice set, pressure transducer, barometer, analytical balance, and a computerized DAS.
Duration:	One sample will be obtained during each run. The sampler is operated until flow rate within 20% of setpoint cannot be maintained.
Sampling Preparation:	Sampling preparation for PM_{10} sample collection includes the following steps: filter handling and preparation, high-volume PM_{10} sampler filter loading and preparation, and air flowmeter calibration. Filter Handling and Preparation. Prior to sample collection, all quartz-fiber filters that meet the requirements of 40 CFR Part 50 Appendix J-Section 7.2 are gravimetrically weighed in the laboratory to determine the baseline tare weight for calculation of aerosol weight collected. Personnel loading filters will wear gloves to minimize cross-contamination. High-Volume PM_{10} Sampler Filter Loading and Preparation. The filter is placed on the PM_{10} sampler backup screen. The filter housing locknuts are then tightened down to ensure good contact between the gasket and the two halves of the filter holder. The filter number and filter unit position are then recorded. Air Flowmeter Calibration. Each sampler will be calibrated using procedures described in 40 CFR Part 50 Appendix J before each test series using a certified variable flow orifice calibrator.

Sampling Procedure: After the sampling preparation procedures, operation of the high-volume PM_{10} sampler is begun remotely to draw a measured quantity of air through the filter. Sampling will be stopped when a flow rate within 20% of setpoint cannot be maintained.

Sample Recovery: Sample recovery involves one step: high-volume PM_{10} sampler filter unloading and storage.

High-Volume PM_{10} Sampler Filter Unloading and Storage. Following completion of each test run, the top half of the filter unit is removed and the sampled filter is folded in half and placed in plastic and labeled paper envelopes.

Sample Analysis: In the laboratory, PM_{10}-containing filters are placed in desiccators to remove uncombined moisture. The filter is then allowed to equilibrate and weighed to the nearest milligram until a constant final weight is obtained. The final weight is recorded.

References: Title 40 Code of Federal Regulations Part 50, Appendix J-*Reference Method for the Determination of Particulate Matter as PM_{10} in the Atmosphere.*

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Semivolatile Organic Compounds (SVOCs), Polychlorinated Biphenyls (PCBs), and Dioxins/Furans (CDD/CDF) Sampling and Analysis Procedure Letter of Instruction Revision Control

Revision number	Date of change	Reason for change
0	20 February 1998	Initial revision for BangBox testing
Description of changes:		

Revision number	Date of change	Reason for change
1	27 February 1998	Added PCB sampling and analysis to instructions
Description of changes: Added PCB sampling and analysis procedures to text of DPB LOI-103 and changed the title appropriately.		

Semivolatile Organic Compounds (SVOCs), Polychlorinated Biphenyls (PCBs), and Dioxins/Furans (CDD/CDF) Sampling and Analysis Procedure Letter of Instruction

Chamber:	BangBox Test Chamber
Media:	Air
Objective:	This method is used to obtain a measurement of the concentration of semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), or dioxins/furans (CDD/CDF) in the air resulting from BangBox energetics testing. SVOC sampling is based on U.S. Environmental Protection Agency (EPA) Compendium Method TO-13; PCB sampling is based on EPA Compendium Method TO-4; CDD/CDF sampling is based on EPA Compendium Method TO-9. For all these methods, a measured quantity of sampled air is drawn into a high-volume housing that contains a special sampling inlet (i.e., aluminum sampling module) that is designed to hold a 100 mm diameter quartz fiber filter followed by XAD-2 resin. The mass of SVOCs and PCBs collected will be quantitatively determined by gas chromatography (GC)/mass spectrometry (MS) analysis of the sample media. The mass of CDD/CDF collected will be quantitatively determined by high resolution gas chromatography (HRGC)/high resolution mass spectrometry (HRMS).
Pollutants:	SVOCs, PCBs, and CDD/CDF
Sampler:	General Metal Works (GMW), Inc. Model PS-1 Sampler with Aluminum Sampling Module. Separate PS-1 samplers are used for SVOC, PCB, and CDD/CDF sampling.
Sampling Location:	The PS-1 samplers are placed in the test chamber greater than 3 feet from the test chamber's outer wall.
Equipment:	Pertinent sampling equipment includes the following: Model PS-1 sampler with aluminum sampling module, quartz fiber filter (100 mm), XAD-2 resin (approximately 45 grams), polyurethane foam plugs (PUF), Teflon-coated tweezers, Ziploc bags, aluminum foil, glass jars with Teflon-lined lids, orifice calibration unit, and a computerized DAS.
Duration:	Target minimum sampling time is 20 minutes.
Sampling Preparation:	Preparation for SVOC, PCB, and CDD/CDF sample collection includes the following: preparation of sampling module, sampler calibration, and loading the module and PS-1 Sampler. Preparation of Sampling Module. For SVOC sampling, a glass cartridge will be loaded with approximately 45 grams of XAD-2 resin. For PCB and CDD/CDF sampling, the cartridge will contain XAD-2 resin sandwiched between PUF plugs. Because of the specialized nature of XAD-2 sampling, the XAD-2 resin will be prepared for sampling before mobilization to the field. The sampling modules will be thoroughly washed with soap (Alconox or equivalent) and water and rinsed with distilled water and appropriate solvent before and after each sampling episode. After drying, each module will be wrapped in aluminum foil and placed in Ziploc bags for dust protection. The XAD-2 resin that will be used to collect SVOCs and PCBs will be obtained from the

manufacturer and re-cleaned according to the requirements of EPA Compendium Method TO-13. Personnel will wear the appropriate gloves to avoid contamination of samples.

The filters for the PS-1 sampler will be pre-cleaned, dried, and transported to the field for use in sampling. Personnel will wear the appropriate gloves to avoid contamination of samples.

For CDD/CDF sampling, the resin cartridges will be spiked in the laboratory with an isotopically labeled CDD/CDF surrogate standard solution to ensure accurate quantitative measurements. It is important to note that the PS-1 cartridges used for CDD/CDF analysis will be shipped to the field pre-spiked and loaded with XAD-2 resin that is designated for CDD/CDF sampling only.

Sampler Calibration. Calibration of the PS-1 samplers will be performed using an orifice calibration unit. Each PS-1 sampler will be multi-point calibrated prior to sampling.

Loading the Module and PS-1 Sampler. Open the aluminum sampling head with the small opening facing down while ensuring there is both a gasket above and below the cartridge. Use the Teflon-coated tweezers to lift the glass cartridge into the sampling module. To load the filter, loosen the three screws and pull them down. Remove the aluminum plate and ring and with the Teflon tweezers remove the thicker of the two Teflon rings. Place the 100 mm diameter quartz fiber filter, rough side up, on the second Teflon ring on top of the metal screen. Replace the thicker Teflon ring on the filter, making sure that the filter is centered, and retighten the three screws. Once the filter is loaded into the sample module, open the PS-1 sample hood, insert the sample module above the orifice of the PS-1 sampler, and close the hood and lock it down.

Sampling Procedure: After the sampling preparation procedures, operation of the PS-1 sampler is begun remotely. Air flow through the sampler is measured by an in-line venturi with pressure transducer located immediately downstream of the sampling module. The sampling flow is measured by monitoring the pressure drop. Particulate matter is removed from the gas stream by means of the quartz fiber filter. The sample gas is passed into the XAD-2 resin adsorbent trap for collection of vapor phase SVOC, PCB, or CDD/CDF.

Sample Recovery: Following the completion of each test run, the quartz fiber filter is removed with Teflon tweezers and placed particulate laden side up. Aluminum foil is wrapped around the trap and placed in a Ziploc bag. The resins and filters for each test run will be labeled appropriately for the analytical laboratory. Samples will be collated so that an XAD-2 trap and a filter are packed for each PS-1 sampler. Each sample is then placed into a Teflon-lined sample jar and sealed. The sample jars are shipped to the appropriate laboratory for analysis. All sample recovery will be performed in a clean and dry area, to minimize sample contamination and loss. All sample containers will be numbered and labeled. The cartridges will be solvent extracted and the extracts will be analyzed for SVOCs, PCBs, or CDD/CDF.

Sample Analysis: In the laboratory, SVOC and PCB samples will be analyzed using GC/MS. The analysis for SVOC will follow EPA SW-846 Method 8270, and the analysis for PCB will follow EPA SW-846 Method 680. The CDD/CDF samples will be analyzed using HRGC/HRMS following EPA SW-846 Method 8290.

References:

EPA. *Second Supplement to Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air*, Methods TO-4, TO-9, and TO-13. Publication No. EPA/600/4-89/018, Atmospheric Research and Exposure Assessment Laboratory, Office of Research and Development, Research Triangle Park, NC, June 1988.

EPA. *Test Methods for Evaluating Solid Waste Physical/Chemical Methods* (SW-846), Methods 680, 8270, and 8290. Office of Solid Waste and Emergency Response, Washington, DC, November 1986.

Volatile Organic Compounds (VOCs) and Tracer Compounds
Sampling and Analysis Procedure
Letter of Instruction
Revision Control

Revision number	Date of change	Reason for change
0	20 February 1998	Initial revision for BangBox testing
Description of changes:		

Revision number	Date of change	Reason for change
Description of changes:		

Volatile Organic Compounds (VOCs) and Tracer Compounds Sampling and Analysis Procedure Letter of Instruction

Chamber:	BangBox Test Chamber
Media:	Air
Objective:	This method is used to obtain a measurement of the total concentration of VOCs and a tracer compound [sulfur hexafluoride (SF_6)] in the air resulting from testing activities. The method is based on collecting air samples from energetics testing activities. The procedure is based on collecting air samples in stainless steel canisters. The VOCs are subsequently separated by gas chromatography and measured by multidetector techniques. The tracer concentration is measured by an electron capture detector.
Pollutants:	VOCs and Tracer Compounds
Samplers:	Standard EPA Compendium Method TO-12 and TO-14 SUMMA® Canisters for VOCs and 850 mL Canisters for Tracers.
Sampling Location:	Manifold in BangBox instrumentation building
Equipment:	Pertinent sampling equipment include the following: sampling manifold, stainless steel internally electropolished canisters (6 L and 0.85 L), vacuum gauge, and pumps.
Duration:	The minimum sampling time for each VOC canister will be 10 minutes and 2 minutes for each tracer canister.
Sampling Preparation:	Pre-certified canisters, meeting the requirements of EPA Compendium Method TO-12 and TO-14 will be used to collect VOC samples. All prepared VOC and tracer canisters will be evacuated prior to shipping to the field. Each canister will be identified with a unique label. This identification is recorded prior to sampling.
Sampling Procedure:	After the sampling preparation procedures, a sample of gas is drawn through a sampling train comprised of components that regulate the rate and duration of sampling into a pre-evacuated canister. The 6.0 L canisters will be used for VOCs and the 0.85 L canisters will be used for tracer gases. After the gas sample is collected, the canister valve is closed.
Sample Recovery:	Following canister sampling, the canister is removed from the chamber and then transported to the appropriate analytical laboratory.
Sample Analysis:	VOCs are concentrated as the sample is passed into a cryogenically-cooled trap. The methane fraction passes through. The temperature of the sample is raised to volatilize the sample into a gas chromatograph. For total VOC analysis (TO-12), the sample is directed to a flame ionization detector and the total area under the individual peaks is integrated and reported as total nonmethane VOC. For speciated VOC and tracer

analysis (TO-14), a high-resolution gas chromatograph is used, and the temperature is increased through a temperature program. The compounds are eluted and quantified using multiple detectors.

References:

EPA. *Second Supplement to Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Method TO-12, Method for the Determination of Non-methane Organic Compounds in Ambient Air using Cryogenic Preconcentration and Direct Flame Ionization Detection.* Publication No. EPA/600/4-89/018, Atmospheric Research and Exposure Assessment Laboratory, Office of Research and Development, Research Triangle Park, NC, June 1988.

EPA. *Second Supplement to Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Method TO-14, Determination of Volatile Organic Compounds in Ambient Air using SUMMA Passivated Canister Sampling and Gas Chromatographic Analysis.* Publication No. EPA/600/4-89/018, Atmospheric Research and Exposure Assessment Laboratory, Office of Research and Development, Research Triangle Park, NC, June 1988.

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Metals Sampling and Analysis Procedure
Letter of Instruction
Revision Control

Revision number	Date of change	Reason for change
0	31 October 1996	Initial revision for BangBox testing
Description of changes:		

Revision number	Date of change	Reason for change
Description of changes:		

Metals Sampling and Analysis Procedure
Letter of Instruction

Chamber:	BangBox Test Chamber
Media:	Air
Objective:	This method is used to obtain a measurement of the total mass concentration of particulate metals in the air resulting from BangBox energetics testing activities. A measured quantity of sampled air is drawn into a covered housing and through a filter during the sampling period. A fraction of the particulate matter, following determination of total suspended particulate net weight gain, is digested in nitric acid. Metals (except mercury) are quantitatively determined by inductively coupled argon plasma emission spectroscopy (ICAP). Mercury is determined by cold vapor atomic absorption spectroscopy (CVAAS). Concentrations are expressed in micrograms per standard cubic meter ($\mu g/std\ m^3$).
Pollutant:	Particulate Metals
Sampler:	High-volume sampler
Sampling Location:	The high-volume sampler is placed in the test chamber greater than 3 feet from the test chamber's outer wall.
Equipment:	Pertinent sampling equipment include the following: high-volume sampler with shelter, quartz-fiber filter (20.3 × 25.4 cm), air flowmeter, calibration orifice set, pressure transducer, barometer, and a computerized DAS.
Duration:	Two simultaneous samples will be obtained using two samplers operating simultaneously during each run. Target minimum sampling time for each run is 20 minutes.
Sampling Preparation:	Sampling preparation for particulate metals sample collection includes the following steps: filter handling and preparation, high-volume sampler filter loading and preparation, and air flowmeter calibration. Filter Handling and Preparation. All quartz-fiber filters used will meet the requirements of 40 CFR Part 50 Appendix B-Section 7.1. Personnel loading filters will wear clean gloves to minimize cross-contamination. High-Volume Sampler Filter Loading and Preparation. The filters are placed on the high-volume sampler backup screen. The filter housing locknuts are then tightened down to ensure good contact between the gasket and the two halves of the filter holder. The filter number and filter unit position are then recorded. Air Flowmeter Calibration. Each sampler will be calibrated using procedures described in 40 CFR Part 50 Appendix B before each test series.
Sampling Procedure:	After the sampling preparation procedures, operation of the high-volume sampler is begun remotely to draw a measured quantity of air through the filter.
Sample Recovery:	Sample recovery includes one step: high-volume sampler filter unloading and storage.

High-Volume Sampler Filter Unloading and Storage. Following completion of each test run, the top half of the filter unit is removed and the sampled filter is folded in half and placed in plastic and labeled paper envelopes.

Sample Analysis: In the laboratory, an aliquot of the TSP material will be digested using nitric acid prior to analysis. Alternatively, if insufficient material is present, the entire filter will be digested. The digestate is analyzed by CVAAS for mercury and ICAP for other metals.

References: Title 40 CFR Part 50, Appendix B-*Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method).*

Title 40 CFR Part 60, Appendix A-*Reference Method for the Determination of Metals Emissions from Stationary Sources (Method 29).*

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HCl/Cl_2
Sampling and Analysis Procedure
Letter of Instruction
Revision Control

Revision number	Date of change	Reason for change
0	20 February 1998	Initial revision for BangBox testing
Description of changes:		

Revision number	Date of change	Reason for change
Description of changes:		

HCl/Cl_2
Sampling and Analysis Procedure
Letter of Instruction

Chamber:	BangBox Test Chamber
Media:	Air
Objective:	This method is used to obtain a measurement of the concentrations of hydrogen chloride (HCl) and chlorine (Cl_2) in the air resulting from chlorine-containing energetics testing activities. A measured quantity of sampled air is drawn from the chamber and passed through a heated filter into dilute sulfuric acid and then through dilute sodium hydroxide solutions. The HCl fraction is absorbed in the sulfuric acid solution and the Cl_2 fraction in the sodium hydroxide solution. The concentrations of HCl and Cl_2 will be measured using ion chromatography.
Pollutant:	HCl and Cl_2
Sampler:	Sampling train based on 40 CFR Part 60, Appendix A, Method 26.
Sampling Location:	The sampling system is placed in the test chamber greater than 3 feet from the chamber's outer wall.
Equipment:	Pertinent sampling equipment include the following: quartz-fiber filter, filter holder, two 0.1N sulfuric acid (15 mL each) impingers for HCl collection, one empty impinger for acid impinger liquid carry-over, two 0.1N sodium hydroxide (15 mL each) impingers for Cl_2 collection, one silica gel impinger, ice bath, flow controller, wash bottles, storage bottles, pump, and gas meter.
Duration:	Two sample will be obtained during each test of chlorine-containing energetics with a target sampling duration of 30 minutes.
Sampling Preparation:	Sampling preparation for HCl/Cl_2 sample collection includes the following steps: sampling train preparation and sampling flow control system calibration. Sampling Train Preparation. Prior to sample collection, all train components, reagents, and cleaning solutions will be specially prepared to meet the requirements of 40 CFR Part 60, Appendix A, Method 26. All parts of the sampling train will be precleaned prior to sampling. Field assembly of the sampling train will take place in a clean area. A clean and inspected filter will be placed in the filter holder for particulate collection. Two sulfuric acid and two sodium hydroxide Teflon impingers will be charged with 15 mL of solution each prior to sampling. Sampling Flow Control System Calibration. Each gas meter will be calibrated using procedures described in 40 CFR 60, Appendix A, Method 5, Section 7.2, prior to each test.
Sampling Procedure:	After the sampling preparation procedures, operation of the sampling system is begun remotely to draw a measured quantity of air through the filter into the sampling train for the test duration. Sampled air is drawn into the HCl/Cl_2 sampling train impingers. The sampling rate and gas volume are recorded manually.

Sample Recovery: Sample recovery includes one step: filter and train recovery.

Filter and Train Recovery. Following completion of each test, the particulate filter is removed and discarded. The liquid contents of the two sulfuric acid impingers, the two sodium hydroxide impingers, and the empty impinger are placed in separate sample bottles. The impingers will each be rinsed with distilled water and the rinsate placed into their respective sample containers. All sample recovery will be performed in a clean and dry area, to minimize sample contamination and loss. All sample containers will be numbered and labeled.

Sample Analysis: In the laboratory, the chloride content of all solutions is measured by EPA Method 9057.

References: Title 40 CFR Part 60, Appendix A, *Method 26-Determination of Hydrogen Chloride Emissions from Stationary Sources*.