Chemical Analysis Report

CEN-DIST-2008-12-17-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Florida Department of Environmental Protection
Innovation Park Laboratory
2051 E. Paul Dirac Dr.
Tallahassee, FL 32310
DOH Accreditation E31640

Event Description: **Safety Kleen**
Request ID: **RQ-2008-12-15-40**
Customer: **CEN-DIST**
Project ID: **OTHER-WSM**

Send Reports to:
FL Dept. of Environmental Protection
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3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
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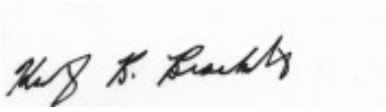
Certified by: Kathryn Brackett, Environmental Manager

Date Certified: 09-FEB-2009 14:36



Abbreviations and data remark codes

CERT # - NELAP (National Environmental Laboratory Accreditation Program) Certification Number of the laboratory that performed the analysis.
LCS – Laboratory Control Sample; in the QC Failures column, this notation indicates a batch recovery failure.
MS – Matrix Spike; in the QC Failures column, this notation indicates a batch recovery failure.
RPD – Relative Percent Difference; in the QC Failures column, this notation indicates a batch failure for precision.
CCV – Continuing Calibration Verification; in the QC Failures column, this notation indicates a failure of the calibration verification check sample.
RSD – Relative Standard Deviation expressed as a percentage.
SMP – Sample.
* - Item was outside the QC Limits.
** - The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.

A - Value reported is the mean of two or more determinations
B - Results based on colony counts outside the acceptable range.
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J - Estimated value
K - Actual value is known to be less than value given
L - Actual value is known to be greater than value given
N - Presumptive evidence of presence of material.
O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
V - Analyte was detected in both sample and method blank.
X - Too few individuals to calculate SCI value.
Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate
Z - Colonies were too numerous to count (TNTC).

Precision is reported as relative percent difference unless otherwise noted.

Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published test performance acceptance criteria.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

All sample collection performed by Bureau of Laboratories staff followed the field Standard Operating Procedures adopted by reference in Rule 62-160 FAC unless otherwise noted.

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Results for NELAP accredited tests contained in this report meet the requirements specified by the National Environmental Laboratory Accreditation Conference (NELAC). All samples received were in acceptable condition and met NELAC requirements unless otherwise noted. Results generated in this report pertain to the samples collected and submitted for analysis.

Job: TLH-2008-12-17-18 Group: Priority Organic Pollutants
Job: TLH-2008-12-17-19 Group: Priority Organic Pollutants

Sample Location: SAFETY KLEEN **Collection Date/Time: 12/16/2008 09:40 AM**

Field ID: 105 Matrix: WAS-LIQUID

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
1154108	EPA 8270D	Acenaphthene	1.6E+04	U		ug/kg	E31780
		Acenaphthylene	1.6E+04	U		ug/kg	
		Anthracene	1.6E+04	U		ug/kg	
		Azobenzene/1,2-Diphenylhydrazine	1.6E+04	U		ug/kg	
		Benzidine	3.6E+05	U		ug/kg	
		Benzo(a)anthracene	1.6E+04	U		ug/kg	
		Benzo(a)pyrene	1.6E+04	U		ug/kg	
		Benzo(b)fluoranthene	1.6E+04	U		ug/kg	
		Benzo(k)fluoranthene	1.6E+04	U		ug/kg	
		Benzo(g,h,i)perylene	1.6E+04	U		ug/kg	
		Bis(2-chloroethoxy)methane	1.6E+04	UJ		ug/kg	
		Bis(2-chloroethyl)ether	1.6E+04	UJ		ug/kg	
		Bis(2-chloroisopropyl)ether	1.6E+04	UJ		ug/kg	
		Bis(2-ethylhexyl)phthalate	9.9E+04	U		ug/kg	
		Butyl benzyl phthalate	1.6E+04	U		ug/kg	
		4-Bromophenyl phenyl ether	1.6E+04	U		ug/kg	
		2-Chloronaphthalene	1.6E+04	U		ug/kg	
		4-Chlorophenyl phenyl ether	1.6E+04	U		ug/kg	
		Chrysene	1.6E+04	U		ug/kg	
		Di-n-butyl phthalate	9.9E+04	U		ug/kg	
		Di-n-octyl phthalate	1.6E+04	U		ug/kg	
		Dibenzo(a,h)anthracene	1.6E+04	U		ug/kg	
		3,3'-Dichlorobenzidine	9.9E+05	UJ	CCV	ug/kg	
		Diethyl phthalate	1.6E+04	U		ug/kg	
		Dimethyl phthalate	1.6E+04	U		ug/kg	
		2,4-Dinitrotoluene	1.6E+04	U		ug/kg	
		2,6-Dinitrotoluene	1.6E+04	U		ug/kg	
		Fluoranthene	1.6E+04	U		ug/kg	
		Fluorene	1.6E+04	U		ug/kg	
		Hexachlorobenzene	1.6E+04	U		ug/kg	
		Hexachlorobutadiene	4.9E+04	UJ		ug/kg	
		Hexachlorocyclopentadiene	1.6E+04	UJ		ug/kg	
		Hexachloroethane	4.9E+04	UJ		ug/kg	
		Indeno(1,2,3-cd)pyrene	1.6E+04	U		ug/kg	

Field ID: 105 Matrix: WAS-LIQUID

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
		Isophorone	1.6E+04	UJ		ug/kg	
		Naphthalene	1.6E+04	UJ		ug/kg	
		Nitrobenzene	1.6E+04	UJ		ug/kg	
		N-Nitrosodimethylamine	9.9E+04	UJ		ug/kg	
		N-Nitrosodi-n-propylamine	1.6E+04	UJ		ug/kg	
		Phenanthrene	1.6E+04	U		ug/kg	
		Pyrene	1.6E+04	U		ug/kg	
		1,2,4-Trichlorobenzene	4.9E+04	UJ		ug/kg	
		4-Chloro-3-methylphenol	1.6E+04	UJ		ug/kg	
		2-Chlorophenol	4.9E+04	UJ		ug/kg	
		2,4-Dichlorophenol	1.6E+04	UJ		ug/kg	
		2,4-Dimethylphenol	9.9E+04	UJ		ug/kg	
		2,4-Dinitrophenol	9.9E+04	UJ		ug/kg	
		2-Methyl-4,6-dinitrophenol	1.6E+04	UJ	MS	ug/kg	
		2-Nitrophenol	1.6E+04	UJ		ug/kg	
		4-Nitrophenol	1.6E+04	U		ug/kg	
		Pentachlorophenol	1.6E+04	U		ug/kg	
		Phenol	1.6E+04	UJ		ug/kg	
		2,4,6-Trichlorophenol	1.6E+04	U		ug/kg	
		N-Nitrosodiphenylamine/ Diphenylamine	1.6E+04	U		ug/kg	
1154109	EPA 1311/8260C	Benzene	5.0E+05	UQ		ug/L	E31640
		Carbon tetrachloride	2.0E+05	UQ		ug/L	
		Chlorobenzene	2.0E+05	UQ		ug/L	
		Chloroform	2.0E+05	UQ		ug/L	
		1,4-Dichlorobenzene	5.0E+05	UQ		ug/L	
		1,2-Dichloroethane	2.0E+05	UQ		ug/L	
		1,1-Dichloroethene	5.0E+05	UQ		ug/L	
		Tetrachloroethene	3.1E+06	Q		ug/L	
		Trichloroethene	2.0E+05	UQ		ug/L	
		Vinyl chloride	5.0E+05	UQ		ug/L	
		2-Butanone	1.0E+07	UQ		ug/L	
	EPA 8260C	Benzene	6.3E+05	UQ		ug/kg	
		Bromodichloromethane	2.5E+05	UQ		ug/kg	
		Bromoform	6.3E+05	UQ		ug/kg	
		Bromomethane	6.3E+05	UQJ	CCV,MS	ug/kg	
		2-Butanone	1.2E+07	UQ		ug/kg	

Field ID: 105 Matrix: WAS-LIQUID

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
		Carbon tetrachloride	2.5E+05	UQ		ug/kg	
		Chlorobenzene	2.5E+05	UQ		ug/kg	
		Chloroethane	6.2E+05	UQJ	CCV,MS	ug/kg	
		2-Chloroethylvinyl ether	6.3E+05	UQ		ug/kg	
		Chloroform	2.5E+05	UQ		ug/kg	
		Chloromethane	6.3E+05	UQ		ug/kg	
		Dibromochloromethane	2.5E+05	UQ		ug/kg	
		1,2-Dichlorobenzene	6.3E+05	UQ		ug/kg	
		1,3-Dichlorobenzene	6.3E+05	UQ		ug/kg	
		1,4-Dichlorobenzene	6.3E+05	UQ		ug/kg	
		1,1-Dichloroethane	2.5E+05	UQ		ug/kg	
		1,2-Dichloroethane	2.5E+05	UQ		ug/kg	
		1,1-Dichloroethene	6.3E+05	UQJ	CCV	ug/kg	
		cis-1,2-Dichloroethene	6.3E+05	UQ		ug/kg	
		trans-1,2-Dichloroethene	6.3E+05	UQJ	CCV	ug/kg	
		1,2-Dichloropropane	6.3E+05	UQ		ug/kg	
		cis-1,3-Dichloropropene	6.3E+05	UQ		ug/kg	
		trans-1,3-Dichloropropene	2.5E+05	UQ		ug/kg	
		Ethylbenzene	6.3E+05	UQ		ug/kg	
		Methylene chloride	1.3E+06	UQ	RPD	ug/kg	
		1,1,2,2-Tetrachloroethane	6.3E+05	UQ	MS	ug/kg	
		Tetrachloroethene	3.7E+06	Q		ug/kg	
		Toluene	1.8E+06	IQ		ug/kg	
		1,1,1-Trichloroethane	2.5E+05	UQ		ug/kg	
		1,1,2-Trichloroethane	2.5E+05	UQ		ug/kg	
		Trichloroethene	2.5E+05	UQJ	CCV,MS	ug/kg	
		Trichlorofluoromethane	6.3E+05	UQ		ug/kg	
		Vinyl chloride	6.3E+05	UQ		ug/kg	
		o-Xylene	9.5E+05	IQ		ug/kg	
		m,p-Xylene	1.9E+06	IQ		ug/kg	
		Methyl-t-butyl ether	6.3E+05	UQ		ug/kg	

Ref. Method and Comment:
EPA 8270D Refer to the QC Report for parameters exceeding limits. Duplicate matrix spike recoveries for some analytes, and Phenol-d5 and Nitrobenzene-d5 surrogate spike recoveries are not available due to the matrix interferences in the sample. J - due to quality control failure. One or more results were qualified due to CCV failure.
EPA 1311/8260C The sample was re-analyzed and reported beyond normal holding time in order to achieve lower detection limits. The MDLs are elevated due to required dilution of the sample matrix.
EPA 8260C The sample was re-analyzed and reported beyond normal holding time in order to achieve lower detection limits. Please refer to the QC Report for parameters observed to exceed control limits. Tentative identification: total other purgeable organic compounds = est. 2E+09 ug/Kg. One or more results were qualified due to CCV failure.

Sample Location: SAFETY KLEEN **Collection Date/Time: 12/16/2008 09:41 AM**

Field ID: 150 Matrix: WAS-LIQUID

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #

Field ID: 150 Matrix: WAS-LIQUID

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
1155356	EPA 8270D	Acenaphthene	1.7E+04	U		ug/kg	E31780
		Acenaphthylene	1.7E+04	U		ug/kg	
		Anthracene	1.7E+04	U		ug/kg	
		Azobenzene/1,2-Diphenylhydrazine	1.7E+04	U		ug/kg	
		Benzidine	3.7E+05	U		ug/kg	
		Benzo(a)anthracene	1.7E+04	U		ug/kg	
		Benzo(a)pyrene	1.7E+04	U		ug/kg	
		Benzo(b)fluoranthene	1.7E+04	U		ug/kg	
		Benzo(k)fluoranthene	1.7E+04	U		ug/kg	
		Benzo(g,h,i)perylene	1.7E+04	U		ug/kg	
		Bis(2-chloroethoxy)methane	1.7E+04	UJ		ug/kg	
		Bis(2-chloroethyl)ether	1.7E+04	UJ		ug/kg	
		Bis(2-chloroisopropyl)ether	1.7E+04	UJ		ug/kg	
		Bis(2-ethylhexyl)phthalate	1.0E+05	U		ug/kg	
		Butyl benzyl phthalate	1.7E+04	U		ug/kg	
		4-Bromophenyl phenyl ether	1.7E+04	U		ug/kg	
		2-Chloronaphthalene	1.7E+04	U		ug/kg	
		4-Chlorophenyl phenyl ether	1.7E+04	U		ug/kg	
		Chrysene	1.7E+04	U		ug/kg	
		Di-n-butyl phthalate	1.0E+05	U		ug/kg	
		Di-n-octyl phthalate	1.7E+04	U		ug/kg	
		Dibenzo(a,h)anthracene	1.7E+04	U		ug/kg	
		3,3'-Dichlorobenzidine	1.0E+06	UJ	CCV	ug/kg	
		Diethyl phthalate	3.3E+04	I		ug/kg	
		Dimethyl phthalate	1.7E+04	U		ug/kg	
		2,4-Dinitrotoluene	1.7E+04	U		ug/kg	
		2,6-Dinitrotoluene	1.7E+04	U		ug/kg	
		Fluoranthene	1.7E+04	U		ug/kg	
		Fluorene	1.7E+04	U		ug/kg	
		Hexachlorobenzene	1.7E+04	U		ug/kg	
		Hexachlorobutadiene	5.0E+04	UJ		ug/kg	
		Hexachlorocyclopentadiene	1.7E+04	U		ug/kg	
		Hexachloroethane	5.0E+04	UJ		ug/kg	
		Indeno(1,2,3-cd)pyrene	1.7E+04	U		ug/kg	
		Isophorone	1.7E+04	UJ		ug/kg	
		Naphthalene	1.7E+04	UJ		ug/kg	

Field ID: 150 Matrix: WAS-LIQUID

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
		Nitrobenzene	1.7E+04	UJ		ug/kg	
		N-Nitrosodimethylamine	1.0E+05	UJ		ug/kg	
		N-Nitrosodi-n-propylamine	7.1E+04	UJ		ug/kg	
		Phenanthrene	1.7E+04	U		ug/kg	
		Pyrene	1.7E+04	U		ug/kg	
		1,2,4-Trichlorobenzene	5.0E+04	UJ		ug/kg	
		4-Chloro-3-methylphenol	1.7E+04	UJ		ug/kg	
		2-Chlorophenol	5.0E+04	UJ		ug/kg	
		2,4-Dichlorophenol	1.7E+04	UJ		ug/kg	
		2,4-Dimethylphenol	1.0E+05	UJ		ug/kg	
		2,4-Dinitrophenol	1.0E+05	U		ug/kg	
		2-Methyl-4,6-dinitrophenol	1.7E+04	U	MS	ug/kg	
		2-Nitrophenol	4.4E+04	UJ		ug/kg	
		4-Nitrophenol	1.7E+04	U		ug/kg	
		Pentachlorophenol	1.7E+04	U		ug/kg	
		Phenol	1.7E+04	UJ		ug/kg	
		2,4,6-Trichlorophenol	1.7E+04	U		ug/kg	
		N-Nitrosodiphenylamine/ Diphenylamine	1.7E+04	U		ug/kg	
1155357	EPA 8260C	Benzene	6.2E+06	U		ug/kg	E31640
		Bromodichloromethane	2.5E+06	U		ug/kg	
		Bromoform	6.2E+06	U		ug/kg	
		Bromomethane	6.2E+06	UJ	CCV,LCS, MS	ug/kg	
		2-Butanone	1.2E+08	UJ	CCV	ug/kg	
		Carbon tetrachloride	2.5E+06	U		ug/kg	
		Chlorobenzene	2.5E+06	U		ug/kg	
		Chloroethane	6.2E+06	U	LCS,MS	ug/kg	
		2-Chloroethylvinyl ether	6.2E+06	U		ug/kg	
		Chloroform	2.5E+06	U		ug/kg	
		Chloromethane	6.2E+06	U		ug/kg	
		Dibromochloromethane	2.5E+06	U		ug/kg	
		1,2-Dichlorobenzene	6.2E+06	U		ug/kg	
		1,3-Dichlorobenzene	6.2E+06	U		ug/kg	
		1,4-Dichlorobenzene	6.2E+06	U		ug/kg	
		1,1-Dichloroethane	2.5E+06	U		ug/kg	
		1,2-Dichloroethane	2.5E+06	U		ug/kg	
		1,1-Dichloroethene	6.2E+06	U		ug/kg	

Field ID: 150 Matrix: WAS-LIQUID

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
		cis-1,2-Dichloroethene	6.2E+06	U		ug/kg	
		trans-1,2-Dichloroethene	6.2E+06	U		ug/kg	
		1,2-Dichloropropane	6.2E+06	U		ug/kg	
		cis-1,3-Dichloropropene	6.2E+06	U		ug/kg	
		trans-1,3-Dichloropropene	2.5E+06	U		ug/kg	
		Ethylbenzene	6.2E+06	U		ug/kg	
		Methylene chloride	1.2E+07	U		ug/kg	
		1,1,2,2-Tetrachloroethane	6.2E+06	U		ug/kg	
		Tetrachloroethene	6.2E+06	U		ug/kg	
		Toluene	6.2E+06	U		ug/kg	
		1,1,1-Trichloroethane	2.5E+06	U		ug/kg	
		1,1,2-Trichloroethane	2.5E+06	U		ug/kg	
		Trichloroethene	2.5E+06	U		ug/kg	
		Trichlorofluoromethane	6.2E+06	U		ug/kg	
		Vinyl chloride	6.2E+06	U		ug/kg	
		o-Xylene	2.5E+06	U		ug/kg	
		m,p-Xylene	6.2E+06	U		ug/kg	
		Methyl-t-butyl ether	6.2E+06	U		ug/kg	

Ref. Method and Comment:
EPA 8270D Phenol-d5 and Nitrobenzene-d5 surrogate spike recoveries are not available due to the matrix interferences in the sample. J - due to quality control failure. One or more results were qualified due to CCV failure.
EPA 8260C The MDLs are elevated due to required dilution of the sample matrix. Please refer to the QC Report for parameters observed to exceed control limits. Tentative identification: total other purgeable organic compounds = est. 1E+09 ug/Kg. One or more results were qualified due to CCV failure.

Quality Control Report

Ref. Method	Analyte	LCS %Recovery		MS %Recovery		Precision		
						LCS	SMP	MS
EPA 8270D	1,2,4-Trichlorobenzene	86.0	88.8			3.20		
	2,4,6-Trichlorophenol	77.6	83.2	81.6	88.6	6.97		7.22
	2,4-Dichlorophenol	77.0	80.8			4.82		
	2,4-Dimethylphenol	93.2	95.6			2.54		
	2,4-Dinitrotoluene	78.2	79.2	75.4	75.4	1.27		0.0
	2,6-Dinitrotoluene	81.2	80.4	75.6	74.2	0.990		1.75
	2-Chloronaphthalene	83.6	85.6	75.4	76.6	2.36		1.58
	2-Chlorophenol	81.8	84.4			3.13		
	2-Methyl-4,6-dinitrophenol	42.4	46.2	32.6*	28.6*	8.58		13.1
	2-Nitrophenol	73.6	82.0			10.8		
	4-Bromophenyl phenyl ether	78.4	81.0	72.4	72.8	3.26		0.551
	4-Chloro-3-methylphenol	85.4	88.2			3.23		
	4-Chlorophenyl phenyl ether	85.4	86.2	80.6	77.2	0.932		4.31
	4-Nitrophenol	77.4	80.2	72.8	69.4	3.55		4.78
	Acenaphthene	89.8	92.4	83.4	81.4	2.85		2.43
	Acenaphthylene	86.6	86.2	77.6	77.0	0.463		0.776
	Anthracene	83.6	86.8	75.0	75.2	3.76		0.266
	Azobenzene/1,2-Diphenylhydrazine	80.6	84.2	74.4	76.0	4.37		2.13
	Benzo(a)anthracene	84.4	88.0	75.2	76.8	4.18		2.11
	Benzo(a)pyrene	84.2	86.6	71.8	72.6	2.81		1.07
	Benzo(b)fluoranthene	83.4	91.0	76.6	80.4	8.72		4.84
	Benzo(g,h,i)perylene	81.4	83.4	73.2	73.8	2.43		0.816
	Benzo(k)fluoranthene	88.0	86.6	76.0	78.6	1.60		3.36
	Bis(2-chloroethoxy)methane	90.8	92.2			1.53		
	Bis(2-chloroethyl)ether	122	122			0.164		
	Bis(2-chloroisopropyl)ether	82.0	82.8			0.971		

Quality Control Report

Ref. Method	Analyte	LCS %Recovery		MS %Recovery		Precision		
						LCS	SMP	MS
	Bis(2-ethylhexyl)phthalate	85.4	87.2	74.6	79.2	2.09		2.56
	Butyl benzyl phthalate	81.8	82.6	76.2	77.8	0.973		2.08
	Chrysene	82.4	85.0	73.2	75.0	3.11		2.43
	Di-n-butyl phthalate	78.0	81.6	75.4	76.2	4.51		1.06
	Di-n-octyl phthalate	85.0	86.8	82.0	80.4	2.10		1.97
	Dibenzo(a,h)anthracene	76.6	80.0	71.2	71.2	4.34		0.0
	Diethyl phthalate	82.8	83.4	79.2	78.2	0.722		1.15
	Dimethyl phthalate	82.6	84.0	75.4	77.8	1.68		2.97
	Fluoranthene	81.8	84.8	72.6	74.8	3.60		2.99
	Fluorene	82.4	84.6	77.4	75.4	2.63		2.62
	Hexachlorobenzene	80.8	83.8	71.0	75.2	3.65		5.75
	Hexachlorobutadiene	82.0	83.4	95.8	116	1.69		18.7
	Hexachloroethane	83.6	84.6			1.19		
	Indeno(1,2,3-cd)pyrene	79.2	81.8	71.4	74.4	3.23		4.12
	Isophorone	87.0	89.6			2.94		
	N-Nitrosodi-n-propylamine	83.6	87.6			4.67		
	N-Nitrosodimethylamine	105	101			3.50		
	N-Nitrosodiphenylamine/ Diphenylamine	80.8	82.2	75.6	76.4	1.72		1.05
	Naphthalene	88.6	89.8	44.0	88.0	1.35		11.4
	Nitrobenzene	86.2	88.6			2.75		
	Pentachlorophenol	55.2	57.6	53.2	64.4	4.26		19.0
	Phenanthrene	82.4	85.8	74.0	75.4	4.04		1.87
	Phenol	87.0	90.2			3.61		
	Pyrene	87.0	89.6	77.4	77.4	2.94		0.0
EPA 8260C	1,1,1-Trichloroethane	89.5	90.5	89.1	89.5	1.11		0.448
	1,1,2,2-Tetrachloroethane	83.3	76.2	93.2	94.7	8.90		1.60
	1,1,2-Trichloroethane	91.1	84.0	91.5	94.4	8.11		3.12
	1,1-Dichloroethane	94.5	93.5	93.3	95.0	1.06		1.81
	1,1-Dichloroethene	99.0	99.2	95.4	96.8	0.202		1.46
	1,2-Dichlorobenzene	94.3	92.0	93.2	92.3	2.47		0.970
	1,2-Dichloroethane	93.0	93.7	93.0	91.9	0.750		1.19
	1,2-Dichloropropane	88.6	88.0	87.1	88.0	0.680		1.03
	1,3-Dichlorobenzene	92.4	87.5	88.9	93.2	5.45		4.72
	1,4-Dichlorobenzene	97.1	94.1	93.3	94.2	3.14		0.958
	Benzene	90.3	90.0	89.3	90.4	0.333		1.22
	Bromodichloromethane	89.6	86.4	87.3	87.4	3.64		0.114
	Bromoform	85.4	83.1	83.5	84.8	2.73		1.54
	Bromomethane	151*	147*	139*	144*	2.61		3.61
	Carbon tetrachloride	88.2	87.3	88.7	88.3	1.03		0.452
	Chlorobenzene	86.8	85.7	85.7	88.7	1.28		3.44
	Chloroethane	129	143*	139*	142*	10.3		1.71
	Chloroform	90.9	91.5	91.0	92.0	0.658		1.06
	Chloromethane	121	120	116	121	0.414		3.54
	Dibromochloromethane	88.0	85.1	84.1	86.2	3.35		2.47
	Ethylbenzene	82.7	83.6	82.2	85.2	1.08		3.58
	Methyl-t-butyl ether	110	106	108	106	3.43		1.03
	Methylene chloride	99.5	96.0	98.0	99.4	3.58		1.42
	Tetrachloroethene	92.5	94.3	91.6	95.9	1.93		4.39
	Toluene	88.9	89.6	88.9	90.5	0.784		1.76
	Trichloroethene	95.6	99.7	86.0	87.7	4.20		1.96
	Trichlorofluoromethane	102	101	101	101	0.296		0.488
	Vinyl chloride	113	110	106	109	3.14		2.87
	cis-1,3-Dichloropropene	84.0	84.3	81.2	82.2	0.357		1.22
	m,p-Xylene	101	97.4	101	98.5	3.53		2.50
	o-Xylene	90.8	86.8	89.6	88.0	4.50		1.80
	trans-1,2-Dichloroethene	93.6	92.2	95.7	93.3	1.51		2.54
	trans-1,3-Dichloropropene	81.5	80.6	80.9	80.6	1.11		0.372
EPA 1311/8260C	1,1-Dichloroethene	73.7	82.5	88.2	86.9	11.3		1.48
	1,2-Dichloroethane	88.5	101	111	111	13.3		0.451
	1,4-Dichlorobenzene	97.5	106	115	116	8.26		0.345
	Benzene	97.3	108	118	117	10.2		0.852

Quality Control Report

Ref. Method	Analyte	LCS %Recovery		MS %Recovery		Precision LCS	Precision SMP	Precision MS
	Carbon tetrachloride	79.0	90.7	99.8	100	13.8		0.500
	Chlorobenzene	92.3	98.8	109	108	6.80		0.645
	Chloroform	88.8	100	111	111	12.2		0.631
	Tetrachloroethene	92.5	99.8	108	109	7.59		0.624
	Trichloroethene	97.9	109	108	107	10.5		1.12
	Vinyl chloride	67.8	76.4	83.4	85.1	11.9		2.01
EPA 8260C	1,1,1-Trichloroethane	99.4	101	107	102	1.60		4.80
	1,1,2,2-Tetrachloroethane	83.0	78.4	25.2*	32.6*	5.70		25.6
	1,1,2-Trichloroethane	96.0	98.8	94.9	104	2.87		9.63
	1,1-Dichloroethane	108	106	116	111	1.77		4.23
	1,1-Dichloroethene	83.9	81.2	81.6	77.2	3.27		5.53
	1,2-Dichlorobenzene	108	111	112	116	2.92		4.12
	1,2-Dichloroethane	109	110	120	120	0.822		0.167
	1,2-Dichloropropane	109	109	113	112	0.0		0.884
	1,3-Dichlorobenzene	109	114	107	115	4.48		7.29
	1,4-Dichlorobenzene	108	113	111	113	3.71		2.14
	Benzene	110	111	115	114	0.905		0.876
	Bromodichloromethane	107	106	112	112	1.32		0.446
	Bromoform	89.4	89.1	91.7	93.0	0.336		1.41
	Bromomethane	66.4	62.7	60.1	53.9*	5.73		10.4
	Carbon tetrachloride	97.2	96.8	99.9	100	0.412		0.200
	Chlorobenzene	103	102	105	103	1.07		2.02
	Chloroethane	77.7	76.5	59.1*	57.7*	1.56		1.86
	Chloroform	106	105	110	109	0.568		1.18
	Chloromethane	94.1	95.9	102	101	1.89		0.0985
	Dibromochloromethane	96.9	96.4	98.0	99.8	0.517		1.82
	Ethylbenzene	104	101	102	103	2.82		1.36
	Methyl-t-butyl ether	95.3	97.9	102	104	2.69		1.85
	Methylene chloride	114	110	122	86.8	3.47		33.5*
	Tetrachloroethene	104	101	99.0	101	3.32		2.39
	Toluene	104	102	106	105	2.13		0.664
	Trichloroethene	113	114	158*	150*	1.41		4.94
	Trichlorofluoromethane	98.9	98.5	98.8	101	0.405		2.59
	Vinyl chloride	79.0	78.3	77.3	77.9	0.890		0.772
	cis-1,3-Dichloropropene	91.9	90.3	74.3	74.2	1.76		0.135
	m,p-Xylene	105	109	104	109	3.98		4.67
	o-Xylene	109	111	112	114	2.45		2.29
	trans-1,2-Dichloroethene	112	110	121	116	1.44		3.63
	trans-1,3-Dichloropropene	84.9	84.6	68.8	67.2	0.354		2.35

Reference Method Descriptions

Ref. Method:	Description
EPA 1311/8260C	Volatile organic pollutants in TCLP samples using GC/MS
EPA 8260C	Volatile organic pollutants in waste matrices using GC/MS
EPA 8270D	Semi-volatile organic pollutants, excluding PCBs and Toxaphene, in waste matrices by GC/MS.

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared by	Analysis Date/Time	Analyzed by	Associated Samples
EPA 1311/8260C	12/17/2008	01/23/2009	Farzad Booeshaghi	01/30/2009	Yi Lin Luo	1154109
EPA 8260C	12/17/2008	12/18/2008	Farzad Booeshaghi	12/18/2008	Farzad Booeshaghi	1155357
EPA 8260C	12/17/2008	12/19/2008	Farzad Booeshaghi	01/31/2009	Yi Lin Luo	1154109
EPA 8270D	12/17/2008	12/24/2008	Hoor Shaik	12/29/2008	Mohammad Ghaffari	1154108, 1155356