

## Appendix G

## WETLANDS SOIL DATA

October 20, 2010

Kevin O'Reilly  
OTO Associates  
293 Bridge St. Suite 500  
Springfield, MA 01103

Project Location: W.R. Grace  
Client Job Number:  
Project Number: 2118-01-02  
Laboratory Work Order Number: 10J0533

Enclosed are results of analyses for samples received by the laboratory on October 18, 2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Susan M. Burney  
Project Manager

OTO Associates  
293 Bridge St. Suite 500  
Springfield, MA 01103  
ATTN: Kevin O'Reilly

REPORT DATE: 10/20/2010

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 2118-01-02

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 10J0533

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: W.R. Grace

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Wetland Soil	10J0533-01	Soil		SM 2540G	
				SW 846 9060	MA M-MA071/CT PH-0520
				SW-846 6010B	
				SW-846 7471B	
				SW-846 8081A	
				SW-846 8082	
				SW-846 8260B	
				SW-846 8270C	
				SW846 9014	
				SW-846 9045D	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

**SW-846 8082****Qualifications:**

Surrogate recovery outside of control limits in BS/MS spiked sample, all reported analytes are within control criteria, data not significantly affected.

**Analyte & Samples(s) Qualified:****Tetrachloro-m-xylene [2C]**

B020836-BSD1

**SW-846 8260B****Qualifications:**

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

**Analyte & Samples(s) Qualified:****Isopropylbenzene (Cumene)**

B020850-BS1

Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.

**Analyte & Samples(s) Qualified:****Bromomethane, Chloromethane, Dichlorodifluoromethane (Freon 12)**

B020850-BS1, B020850-BSD1

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

**Analyte & Samples(s) Qualified:**

**1,1-Dichloropropene, 1,3,5-Trimethylbenzene, 2,2-Dichloropropane, Carbon Disulfide, Carbon Tetrachloride, Dichlorodifluoromethane (Freon 12), Hexachlorobutadiene, Isopropylbenzene (Cumene), n-Butylbenzene, n-Propylbenzene, p-Isopropyltoluene (p-Cymene), sec-Butylbenzene, Trichlorofluoromethane (Freon 11), Vinyl Chloride**

10J0533-01[Wetland Soil], B020850-BLK1, B020850-BS1, B020850-BSD1

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Significant uncertainty is associated with the reported value which is likely to be biased on the low side.

**Analyte & Samples(s) Qualified:**

**1,2,3-Trichlorobenzene, 1,2,3-Trichloropropane, 1,2-Dibromo-3-chloropropane (DBCP), 1,4-Dioxane, 2-Butanone (MEK), 2-Hexanone (MBK), 4-Methyl-2-pentanone (MIBK), Acetone, Naphthalene, tert-Amyl Methyl Ether (TAME)**

10J0533-01[Wetland Soil], B020850-BLK1, B020850-BS1, B020850-BSD1

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy are associated with reported result.

**Analyte & Samples(s) Qualified:****1,4-Dioxane, 2-Butanone (MEK), Acetone, Tetrahydrofuran**

10J0533-01[Wetland Soil], B020850-BLK1, B020850-BS1, B020850-BSD1

**SW-846 8270C****Qualifications:**

Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99.

**Analyte & Samples(s) Qualified:****2,4-Dinitrophenol, Pentachlorophenol**

10J0533-01[Wetland Soil], B020865-BLK1, B020865-BS1, B020865-BSD1

**SW-846 8260B**

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits of 40-160% are used and/or unless otherwise listed in this narrative. Difficult analytes: MIBK, MEK, acetone, 1,4-dioxane, chloromethane, dichlorodifluoromethane, 2-hexanone, and bromomethane.

**SW-846 8270C**

Laboratory control sample recoveries for required MCP Data Enhancement 8270 compounds were all within control limits specified by the method, 40-140% for base/neutrals and 30-130% for acids except for "difficult analytes" listed below and/or otherwise listed in this narrative. Difficult analytes limits are 15 and 140%: 2,4-dinitrophenol, 4-chloroaniline, 4-nitrophenol, and phenol.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "M. Erickson", is written on a light gray rectangular background.

Michael A. Erickson  
Laboratory Director

Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.50	mg/Kg dry	1	V-05, V-16	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0050	mg/Kg dry	1	V-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Benzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Bromobenzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Bromochloromethane	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Bromodichloromethane	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Bromoform	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Bromomethane	ND	0.050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
2-Butanone (MEK)	ND	0.20	mg/Kg dry	1	V-05, V-16	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
n-Butylbenzene	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
sec-Butylbenzene	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
tert-Butylbenzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Carbon Disulfide	ND	0.030	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Carbon Tetrachloride	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Chlorobenzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Chlorodibromomethane	ND	0.0050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Chloroethane	ND	0.050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Chloroform	ND	0.020	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Chloromethane	ND	0.050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
2-Chlorotoluene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
4-Chlorotoluene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.020	mg/Kg dry	1	V-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,2-Dibromoethane (EDB)	ND	0.0050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Dibromomethane	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,2-Dichlorobenzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,3-Dichlorobenzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,4-Dichlorobenzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.050	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,1-Dichloroethane	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,2-Dichloroethane	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,1-Dichloroethylene	ND	0.020	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
cis-1,2-Dichloroethylene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
trans-1,2-Dichloroethylene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,2-Dichloropropane	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,3-Dichloropropane	ND	0.0050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
2,2-Dichloropropane	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,1-Dichloropropene	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
cis-1,3-Dichloropropene	ND	0.0050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
trans-1,3-Dichloropropene	ND	0.0050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Diethyl Ether	ND	0.050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Diisopropyl Ether (DIPE)	ND	0.0050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,4-Dioxane	ND	0.50	mg/Kg dry	1	V-05, V-16	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Ethylbenzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF



Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
2-Hexanone (MBK)	ND	0.10	mg/Kg dry	1	V-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Isopropylbenzene (Cumene)	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.020	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Methylene Chloride	ND	0.050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.10	mg/Kg dry	1	V-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Naphthalene	ND	0.020	mg/Kg dry	1	V-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
n-Propylbenzene	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Styrene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,1,1,2-Tetrachloroethane	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,1,2,2-Tetrachloroethane	ND	0.0050	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Tetrachloroethylene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Tetrahydrofuran	ND	0.050	mg/Kg dry	1	V-16	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Toluene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,2,3-Trichlorobenzene	ND	0.020	mg/Kg dry	1	V-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,2,4-Trichlorobenzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,1,1-Trichloroethane	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,1,2-Trichloroethane	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Trichloroethylene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Trichlorofluoromethane (Freon 11)	ND	0.050	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,2,3-Trichloropropane	ND	0.010	mg/Kg dry	1	V-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,2,4-Trimethylbenzene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
1,3,5-Trimethylbenzene	ND	0.010	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Vinyl Chloride	ND	0.050	mg/Kg dry	1	R-05	SW-846 8260B	10/18/10	10/18/10 16:14	MFF
m+p Xylene	ND	0.020	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
o-Xylene	ND	0.010	mg/Kg dry	1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	119	70-130							
Toluene-d8	94.6	70-130							
4-Bromofluorobenzene	99.0	70-130							

Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

## Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1		SW-846 8260B	10/18/10	10/18/10 16:14	MFF

Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Acenaphthylene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Acetophenone	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Aniline	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Benzo(a)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Benzo(a)pyrene	0.34	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Benzo(b)fluoranthene	0.48	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Benzo(g,h,i)perylene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Benzo(k)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Bis(2-chloroethoxy)methane	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Bis(2-chloroethyl)ether	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Bis(2-chloroisopropyl)ether	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
4-Bromophenylphenylether	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Butylbenzylphthalate	ND	1.3	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
4-Chloroaniline	ND	1.3	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2-Chloronaphthalene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2-Chlorophenol	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Chrysene	0.40	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Dibenz(a,h)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Dibenzofuran	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Di-n-butylphthalate	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
1,2-Dichlorobenzene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
1,3-Dichlorobenzene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
1,4-Dichlorobenzene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
3,3-Dichlorobenzidine	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2,4-Dichlorophenol	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Diethylphthalate	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2,4-Dimethylphenol	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Dimethylphthalate	ND	1.3	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2,4-Dinitrophenol	ND	1.3	mg/Kg dry	1	V-19	SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2,4-Dinitrotoluene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2,6-Dinitrotoluene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Di-n-octylphthalate	ND	1.3	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Fluoranthene	0.54	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Fluorene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Hexachlorobenzene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Hexachlorobutadiene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Hexachloroethane	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Indeno(1,2,3-cd)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Isophorone	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL

Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
3/4-Methylphenol	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Naphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Nitrobenzene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2-Nitrophenol	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
4-Nitrophenol	ND	1.3	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Pentachlorophenol	ND	0.65	mg/Kg dry	1	V-19	SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Phenanthrene	ND	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Phenol	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Pyrene	0.50	0.32	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
1,2,4-Trichlorobenzene	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2,4,5-Trichlorophenol	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
2,4,6-Trichlorophenol	ND	0.65	mg/Kg dry	1		SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Surrogates	% Recovery		Recovery Limits		Flag				
2-Fluorophenol	59.7		30-130				10/19/10 12:12		
Phenol-d6	57.2		30-130				10/19/10 12:12		
Nitrobenzene-d5	52.1		30-130				10/19/10 12:12		
2-Fluorobiphenyl	57.1		30-130				10/19/10 12:12		
2,4,6-Tribromophenol	67.3		30-130				10/19/10 12:12		
Terphenyl-d14	62.5		30-130				10/19/10 12:12		

Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

**Tentatively Identified Compounds - Semivolatile Compounds (ESTIMATED VALUES REPORTED)**

Analyte	Results	Units	Response	RT	DF	CAS #	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzo[e]pyrene	0.31	mg/Kg dry	79648	20.012	1	000192-97-2	SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Octadecane	0.33	mg/Kg dry	84320	19.906	1	000593-45-3	SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Squalene	0.70	mg/Kg dry	179439	19.35	1	007683-64-9	SW-846 8270C	10/19/10	10/19/10 12:12	BGL
Vitamin E	0.87	mg/Kg dry	223642	21.976	1	010191-41-0	SW-846 8270C	10/19/10	10/19/10 12:12	BGL

Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

### Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
alpha-BHC [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
beta-BHC [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
delta-BHC [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
gamma-BHC (Lindane) [1]	ND	0.0038	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Chlordane [1]	ND	0.038	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
4,4'-DDD [1]	ND	0.0076	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
4,4'-DDE [2]	ND	0.0076	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
4,4'-DDT [2]	ND	0.0076	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Dieldrin [1]	ND	0.0076	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Endosulfan I [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Endosulfan II [1]	ND	0.015	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Endosulfan sulfate [1]	ND	0.015	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Endrin [1]	ND	0.015	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Endrin ketone [1]	ND	0.015	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Heptachlor [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Heptachlor epoxide [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Hexachlorobenzene [1]	ND	0.0095	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Methoxychlor [2]	ND	0.095	mg/Kg dry	1		SW-846 8081A	10/18/10	10/19/10 21:00	PJG
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	81.0	30-150							
Decachlorobiphenyl [2]	87.3	30-150							
Tetrachloro-m-xylene [1]	72.2	30-150							
Tetrachloro-m-xylene [2]	79.7	30-150							

Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

### Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.19	mg/Kg dry	1		SW-846 8082	10/18/10	10/19/10 14:47	PJG
Aroclor-1221 [1]	ND	0.19	mg/Kg dry	1		SW-846 8082	10/18/10	10/19/10 14:47	PJG
Aroclor-1232 [1]	ND	0.19	mg/Kg dry	1		SW-846 8082	10/18/10	10/19/10 14:47	PJG
Aroclor-1242 [1]	ND	0.19	mg/Kg dry	1		SW-846 8082	10/18/10	10/19/10 14:47	PJG
Aroclor-1248 [1]	ND	0.19	mg/Kg dry	1		SW-846 8082	10/18/10	10/19/10 14:47	PJG
Aroclor-1254 [1]	ND	0.19	mg/Kg dry	1		SW-846 8082	10/18/10	10/19/10 14:47	PJG
Aroclor-1260 [1]	ND	0.19	mg/Kg dry	1		SW-846 8082	10/18/10	10/19/10 14:47	PJG
Aroclor-1262 [1]	ND	0.19	mg/Kg dry	1		SW-846 8082	10/18/10	10/19/10 14:47	PJG
Aroclor-1268 [1]	ND	0.19	mg/Kg dry	1		SW-846 8082	10/18/10	10/19/10 14:47	PJG
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	77.6	30-150							
Decachlorobiphenyl [2]	79.6	30-150							
Tetrachloro-m-xylene [1]	89.8	30-150							
Tetrachloro-m-xylene [2]	94.2	30-150							

Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

### Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	4000	4.7	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Antimony	ND	4.7	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Arsenic	ND	4.7	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Barium	75	4.7	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Beryllium	ND	0.47	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Cadmium	ND	0.47	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Calcium	8700	14	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Chromium	7.9	0.95	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Cobalt	ND	4.7	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Copper	18	0.95	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Iron	7900	4.7	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Lead	14	1.4	mg/Kg dry	1		SW-846 6010B	10/19/10	10/20/10 11:20	OP
Magnesium	2900	14	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Manganese	450	0.95	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Mercury	0.021	0.016	mg/Kg dry	1		SW-846 7471B	10/19/10	10/19/10 14:24	CWB
Nickel	5.6	0.95	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Potassium	2300	190	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Selenium	ND	9.5	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Silver	ND	0.95	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Sodium	210	190	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 21:10	OP
Thallium	ND	4.7	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Vanadium	21	1.9	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP
Zinc	58	1.9	mg/Kg dry	1		SW-846 6010B	10/19/10	10/19/10 16:30	OP



Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

## Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	ND	0.87	mg/Kg dry	1		SW846 9014	10/19/10	10/19/10 12:00	VAK
pH @17.2°C	7.7		pH Units	1		SW-846 9045D	10/19/10	10/19/10 10:00	LL
% Solids	52.7		% Wt	1		SM 2540G	10/19/10	10/19/10 14:33	VAF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: W.R. Grace

Sample Description:

Work Order: 10J0533

Date Received: 10/18/2010

Field Sample #: Wetland Soil

Sampled: 10/18/2010 12:40

Sample ID: 10J0533-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-8

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Organic Carbon	79300	100	mg/Kg	1		SW 846 9060		10/20/10 0:00	NUS

### Sample Extraction Data

**Prep Method: % Solids-SM 2540G**

Lab Number [Field ID]	Batch	Date
10J0533-01 [Wetland Soil]	B020852	10/19/10

**Prep Method: SW-846 3050B-SW-846 6010B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
10J0533-01 [Wetland Soil]	B020860	1.00	50.0	10/19/10

**Prep Method: SW-846 3050B-SW-846 6010B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
10J0533-01RE1 [Wetland Soil]	B020922	1.01	50.0	10/19/10

**Prep Method: SW-846 7471-SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
10J0533-01 [Wetland Soil]	B020862	0.609	50.0	10/19/10

**Prep Method: SW-846 3546-SW-846 8081A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
10J0533-01 [Wetland Soil]	B020859	10.0	10.0	10/18/10

**Prep Method: SW-846 3546-SW-846 8082**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
10J0533-01 [Wetland Soil]	B020836	10.0	50.0	10/18/10

**Prep Method: SW-846 5035-SW-846 8260B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
10J0533-01 [Wetland Soil]	B020850	1.90	10.0	10/18/10

**Prep Method: SW-846 3546-SW-846 8270C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
10J0533-01 [Wetland Soil]	B020865	30.0	1.00	10/19/10

**SW846 9014**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
10J0533-01 [Wetland Soil]	B020885	1.09	50.0	10/19/10

**Sample Extraction Data**

**SW-846 9045D**

Lab Number [Field ID]	Batch	Initial [g]	Date
10J0533-01 [Wetland Soil]	B020904	20.0	10/19/10

**QUALITY CONTROL**
**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020850 - SW-846 5035</b>										
<b>Blank (B020850-BLK1)</b>				Prepared & Analyzed: 10/18/10						
Acetone	ND	0.10	mg/Kg wet							V-05, V-16
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							V-05
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							V-05, V-16
n-Butylbenzene	ND	0.0020	mg/Kg wet							R-05
sec-Butylbenzene	ND	0.0020	mg/Kg wet							R-05
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							R-05
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							R-05
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.010	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0040	mg/Kg wet							V-05
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg wet							R-05
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							R-05
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							R-05
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.010	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							V-05, V-16
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							R-05
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							V-05
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							R-05
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							R-05
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.010	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							V-05
Naphthalene	ND	0.0040	mg/Kg wet							V-05

**QUALITY CONTROL**
**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020850 - SW-846 5035</b>										
<b>Blank (B020850-BLK1)</b>				Prepared & Analyzed: 10/18/10						
n-Propylbenzene	ND	0.0020	mg/Kg wet							R-05
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							V-16
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0040	mg/Kg wet							V-05
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							R-05
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							V-05
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							R-05
Vinyl Chloride	ND	0.010	mg/Kg wet							R-05
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0464		mg/Kg wet	0.0500		92.9	70-130			
Surrogate: Toluene-d8	0.0490		mg/Kg wet	0.0500		97.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.0480		mg/Kg wet	0.0500		96.1	70-130			
<b>LCS (B020850-BS1)</b>				Prepared & Analyzed: 10/18/10						
Acetone	0.170	0.10	mg/Kg wet	0.200		85.2	40-160			V-05, V-16 †
tert-Amyl Methyl Ether (TAME)	0.0174	0.0010	mg/Kg wet	0.0200		87.2	70-130			V-05
Benzene	0.0215	0.0020	mg/Kg wet	0.0200		108	70-130			
Bromobenzene	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130			
Bromochloromethane	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
Bromodichloromethane	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130			
Bromoform	0.0223	0.0020	mg/Kg wet	0.0200		112	70-130			
Bromomethane	0.0104	0.010	mg/Kg wet	0.0200		51.8	40-160			L-14 †
2-Butanone (MEK)	0.157	0.040	mg/Kg wet	0.200		78.4	40-160			V-05, V-16 †
n-Butylbenzene	0.0260	0.0020	mg/Kg wet	0.0200		130	70-130			R-05
sec-Butylbenzene	0.0253	0.0020	mg/Kg wet	0.0200		126	70-130			R-05
tert-Butylbenzene	0.0245	0.0020	mg/Kg wet	0.0200		122	70-130			
tert-Butyl Ethyl Ether (TBEE)	0.0184	0.0010	mg/Kg wet	0.0200		92.0	70-130			
Carbon Disulfide	0.0245	0.0060	mg/Kg wet	0.0200		123	70-130			R-05
Carbon Tetrachloride	0.0246	0.0020	mg/Kg wet	0.0200		123	70-130			R-05
Chlorobenzene	0.0213	0.0020	mg/Kg wet	0.0200		107	70-130			
Chlorodibromomethane	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130			
Chloroethane	0.0195	0.010	mg/Kg wet	0.0200		97.5	70-130			
Chloroform	0.0221	0.0040	mg/Kg wet	0.0200		111	70-130			
Chloromethane	0.0160	0.010	mg/Kg wet	0.0200		80.2	40-160			†
2-Chlorotoluene	0.0226	0.0020	mg/Kg wet	0.0200		113	70-130			
4-Chlorotoluene	0.0235	0.0020	mg/Kg wet	0.0200		117	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0170	0.0040	mg/Kg wet	0.0200		85.0	70-130			V-05
1,2-Dibromoethane (EDB)	0.0190	0.0010	mg/Kg wet	0.0200		95.0	70-130			
Dibromomethane	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130			
1,2-Dichlorobenzene	0.0211	0.0020	mg/Kg wet	0.0200		105	70-130			
1,3-Dichlorobenzene	0.0219	0.0020	mg/Kg wet	0.0200		110	70-130			
1,4-Dichlorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			

## QUALITY CONTROL

## Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020850 - SW-846 5035</b>										
<b>LCS (B020850-BS1)</b>				Prepared & Analyzed: 10/18/10						
Dichlorodifluoromethane (Freon 12)	0.0155	0.010	mg/Kg wet	0.0200		77.5	40-160			R-05 †
1,1-Dichloroethane	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130			
1,2-Dichloroethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,1-Dichloroethylene	0.0246	0.0040	mg/Kg wet	0.0200		123	70-130			
cis-1,2-Dichloroethylene	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130			
trans-1,2-Dichloroethylene	0.0221	0.0020	mg/Kg wet	0.0200		110	70-130			
1,2-Dichloropropane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130			
1,3-Dichloropropane	0.0182	0.0010	mg/Kg wet	0.0200		91.2	70-130			
2,2-Dichloropropane	0.0246	0.0020	mg/Kg wet	0.0200		123	70-130			R-05
1,1-Dichloropropene	0.0234	0.0020	mg/Kg wet	0.0200		117	70-130			R-05
cis-1,3-Dichloropropene	0.0214	0.0010	mg/Kg wet	0.0200		107	70-130			
trans-1,3-Dichloropropene	0.0252	0.0010	mg/Kg wet	0.0200		126	70-130			
Diethyl Ether	0.0182	0.010	mg/Kg wet	0.0200		91.2	70-130			
Diisopropyl Ether (DIPE)	0.0185	0.0010	mg/Kg wet	0.0200		92.7	70-130			
1,4-Dioxane	0.159	0.10	mg/Kg wet	0.200		79.6	40-160			V-05, V-16 †
Ethylbenzene	0.0232	0.0020	mg/Kg wet	0.0200		116	70-130			
Hexachlorobutadiene	0.0255	0.0020	mg/Kg wet	0.0200		128	70-130			R-05
2-Hexanone (MBK)	0.142	0.020	mg/Kg wet	0.200		70.8	40-160			V-05 †
<b>Isopropylbenzene (Cumene)</b>	0.0283	0.0020	mg/Kg wet	0.0200		<b>141</b>	* 70-130			L-07A, R-05
p-Isopropyltoluene (p-Cymene)	0.0248	0.0020	mg/Kg wet	0.0200		124	70-130			R-05
Methyl tert-Butyl Ether (MTBE)	0.0188	0.0040	mg/Kg wet	0.0200		94.1	70-130			
Methylene Chloride	0.0191	0.010	mg/Kg wet	0.0200		95.6	70-130			
4-Methyl-2-pentanone (MIBK)	0.148	0.020	mg/Kg wet	0.200		74.1	40-160			V-05 †
Naphthalene	0.0160	0.0040	mg/Kg wet	0.0200		80.2	70-130			V-05
n-Propylbenzene	0.0241	0.0020	mg/Kg wet	0.0200		121	70-130			R-05
Styrene	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130			
1,1,1,2-Tetrachloroethane	0.0233	0.0020	mg/Kg wet	0.0200		116	70-130			
1,1,1,2,2-Tetrachloroethane	0.0184	0.0010	mg/Kg wet	0.0200		92.0	70-130			
Tetrachloroethylene	0.0236	0.0020	mg/Kg wet	0.0200		118	70-130			
Tetrahydrofuran	0.0172	0.010	mg/Kg wet	0.0200		86.2	70-130			V-16
Toluene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
1,2,3-Trichlorobenzene	0.0183	0.0040	mg/Kg wet	0.0200		91.3	70-130			V-05
1,2,4-Trichlorobenzene	0.0234	0.0020	mg/Kg wet	0.0200		117	70-130			
1,1,1-Trichloroethane	0.0240	0.0020	mg/Kg wet	0.0200		120	70-130			
1,1,2-Trichloroethane	0.0185	0.0020	mg/Kg wet	0.0200		92.4	70-130			
Trichloroethylene	0.0229	0.0020	mg/Kg wet	0.0200		114	70-130			
Trichlorofluoromethane (Freon 11)	0.0251	0.010	mg/Kg wet	0.0200		125	70-130			R-05
1,2,3-Trichloropropane	0.0165	0.0020	mg/Kg wet	0.0200		82.4	70-130			V-05
1,2,4-Trimethylbenzene	0.0239	0.0020	mg/Kg wet	0.0200		120	70-130			
1,3,5-Trimethylbenzene	0.0244	0.0020	mg/Kg wet	0.0200		122	70-130			R-05
Vinyl Chloride	0.0212	0.010	mg/Kg wet	0.0200		106	70-130			R-05
m+p Xylene	0.0462	0.0040	mg/Kg wet	0.0400		115	70-130			
o-Xylene	0.0228	0.0020	mg/Kg wet	0.0200		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0473		mg/Kg wet	0.0500		94.6	70-130			
Surrogate: Toluene-d8	0.0482		mg/Kg wet	0.0500		96.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.0487		mg/Kg wet	0.0500		97.5	70-130			

**QUALITY CONTROL**
**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020850 - SW-846 5035</b>										
<b>LCS Dup (B020850-BSD1)</b>				Prepared & Analyzed: 10/18/10						
Acetone	0.177	0.10	mg/Kg wet	0.200		88.7	40-160	4.01	20	V-05, V-16 †
tert-Amyl Methyl Ether (TAME)	0.0167	0.0010	mg/Kg wet	0.0200		83.3	70-130	4.57	20	V-05
Benzene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130	16.4	20	
Bromobenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130	8.70	20	
Bromochloromethane	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130	8.59	20	
Bromodichloromethane	0.0197	0.0020	mg/Kg wet	0.0200		98.7	70-130	9.83	20	
Bromoform	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130	3.55	20	
Bromomethane	0.0103	0.010	mg/Kg wet	0.0200		51.7	40-160	0.193	20	L-14 †
2-Butanone (MEK)	0.159	0.040	mg/Kg wet	0.200		79.6	40-160	1.44	20	V-05, V-16 †
n-Butylbenzene	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130	<b>24.5</b> *	20	R-05
sec-Butylbenzene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130	<b>20.8</b> *	20	R-05
tert-Butylbenzene	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130	18.7	20	
tert-Butyl Ethyl Ether (TBEE)	0.0176	0.0010	mg/Kg wet	0.0200		87.8	70-130	4.67	20	
Carbon Disulfide	0.0194	0.0060	mg/Kg wet	0.0200		97.2	70-130	<b>23.2</b> *	20	R-05
Carbon Tetrachloride	0.0194	0.0020	mg/Kg wet	0.0200		96.9	70-130	<b>23.6</b> *	20	R-05
Chlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		91.8	70-130	14.9	20	
Chlorodibromomethane	0.0198	0.0010	mg/Kg wet	0.0200		99.1	70-130	4.05	20	
Chloroethane	0.0166	0.010	mg/Kg wet	0.0200		83.0	70-130	16.1	20	
Chloroform	0.0194	0.0040	mg/Kg wet	0.0200		96.9	70-130	13.2	20	
Chloromethane	0.0137	0.010	mg/Kg wet	0.0200		68.6	40-160	15.6	20	L-14 †
2-Chlorotoluene	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130	15.9	20	
4-Chlorotoluene	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130	18.4	20	
1,2-Dibromo-3-chloropropane (DBCP)	0.0160	0.0040	mg/Kg wet	0.0200		80.1	70-130	5.94	20	V-05
1,2-Dibromoethane (EDB)	0.0194	0.0010	mg/Kg wet	0.0200		97.0	70-130	2.08	20	
Dibromomethane	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130	2.17	20	
1,2-Dichlorobenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.7	70-130	12.7	20	
1,3-Dichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130	15.0	20	
1,4-Dichlorobenzene	0.0177	0.0020	mg/Kg wet	0.0200		88.6	70-130	14.2	20	
Dichlorodifluoromethane (Freon 12)	0.0125	0.010	mg/Kg wet	0.0200		62.6	40-160	<b>21.3</b> *	20	L-14, R-05 †
1,1-Dichloroethane	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130	13.2	20	
1,2-Dichloroethane	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130	2.78	20	
1,1-Dichloroethylene	0.0204	0.0040	mg/Kg wet	0.0200		102	70-130	18.7	20	
cis-1,2-Dichloroethylene	0.0190	0.0020	mg/Kg wet	0.0200		95.0	70-130	14.6	20	
trans-1,2-Dichloroethylene	0.0184	0.0020	mg/Kg wet	0.0200		91.9	70-130	18.3	20	
1,2-Dichloropropane	0.0186	0.0020	mg/Kg wet	0.0200		92.8	70-130	12.1	20	
1,3-Dichloropropane	0.0178	0.0010	mg/Kg wet	0.0200		89.2	70-130	2.22	20	
2,2-Dichloropropane	0.0200	0.0020	mg/Kg wet	0.0200		99.8	70-130	<b>20.8</b> *	20	R-05
1,1-Dichloropropene	0.0186	0.0020	mg/Kg wet	0.0200		93.2	70-130	<b>22.6</b> *	20	R-05
cis-1,3-Dichloropropene	0.0197	0.0010	mg/Kg wet	0.0200		98.4	70-130	8.19	20	
trans-1,3-Dichloropropene	0.0236	0.0010	mg/Kg wet	0.0200		118	70-130	6.64	20	
Diethyl Ether	0.0181	0.010	mg/Kg wet	0.0200		90.3	70-130	0.992	20	
Diisopropyl Ether (DIPE)	0.0176	0.0010	mg/Kg wet	0.0200		88.1	70-130	5.09	20	
1,4-Dioxane	0.160	0.10	mg/Kg wet	0.200		80.2	40-160	0.626	20	V-05, V-16 †
Ethylbenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130	19.3	20	
Hexachlorobutadiene	0.0198	0.0020	mg/Kg wet	0.0200		99.1	70-130	<b>25.1</b> *	20	R-05
2-Hexanone (MBK)	0.152	0.020	mg/Kg wet	0.200		76.0	40-160	7.08	20	V-05 †
Isopropylbenzene (Cumene)	0.0231	0.0020	mg/Kg wet	0.0200		116	70-130	<b>20.1</b> *	20	R-05
p-Isopropyltoluene (p-Cymene)	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130	<b>23.0</b> *	20	R-05
Methyl tert-Butyl Ether (MTBE)	0.0185	0.0040	mg/Kg wet	0.0200		92.6	70-130	1.61	20	
Methylene Chloride	0.0174	0.010	mg/Kg wet	0.0200		87.1	70-130	9.30	20	
4-Methyl-2-pentanone (MIBK)	0.156	0.020	mg/Kg wet	0.200		78.1	40-160	5.24	20	V-05 †
Naphthalene	0.0161	0.0040	mg/Kg wet	0.0200		80.5	70-130	0.373	20	V-05



**QUALITY CONTROL**
**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020850 - SW-846 5035</b>										
<b>LCS Dup (B020850-BSD1)</b>				Prepared & Analyzed: 10/18/10						
n-Propylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	<b>20.2</b> *	20	R-05
Styrene	0.0192	0.0020	mg/Kg wet	0.0200		96.2	70-130	12.7	20	
1,1,1,2-Tetrachloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	12.2	20	
1,1,2,2-Tetrachloroethane	0.0179	0.0010	mg/Kg wet	0.0200		89.7	70-130	2.53	20	
Tetrachloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		99.7	70-130	16.8	20	
Tetrahydrofuran	0.0173	0.010	mg/Kg wet	0.0200		86.7	70-130	0.578	20	V-16
Toluene	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130	12.8	20	
1,2,3-Trichlorobenzene	0.0166	0.0040	mg/Kg wet	0.0200		82.9	70-130	9.64	20	V-05
1,2,4-Trichlorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	14.0	20	
1,1,1-Trichloroethane	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130	19.0	20	
1,1,2-Trichloroethane	0.0183	0.0020	mg/Kg wet	0.0200		91.5	70-130	0.979	20	
Trichloroethylene	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130	17.6	20	
Trichlorofluoromethane (Freon 11)	0.0198	0.010	mg/Kg wet	0.0200		98.8	70-130	<b>23.7</b> *	20	R-05
1,2,3-Trichloropropane	0.0158	0.0020	mg/Kg wet	0.0200		79.1	70-130	4.09	20	V-05
1,2,4-Trimethylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	17.5	20	
1,3,5-Trimethylbenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130	<b>20.5</b> *	20	R-05
Vinyl Chloride	0.0173	0.010	mg/Kg wet	0.0200		86.3	70-130	<b>20.4</b> *	20	R-05
m+p Xylene	0.0382	0.0040	mg/Kg wet	0.0400		95.6	70-130	18.8	20	
o-Xylene	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130	16.8	20	
Surrogate: 1,2-Dichloroethane-d4	0.0489		mg/Kg wet	0.0500		97.9	70-130			
Surrogate: Toluene-d8	0.0491		mg/Kg wet	0.0500		98.2	70-130			
Surrogate: 4-Bromofluorobenzene	0.0490		mg/Kg wet	0.0500		98.0	70-130			

## QUALITY CONTROL

## Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B020850 - SW-846 5035

Blank (B020850-BLK1)

Prepared &amp; Analyzed: 10/18/10

No TICs Found	0.0	mg/Kg wet
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**QUALITY CONTROL**
**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B020865 - SW-846 3546**
**Blank (B020865-BLK1)**

Prepared &amp; Analyzed: 10/19/10

Acenaphthene	ND	0.17	mg/Kg wet
Acenaphthylene	ND	0.17	mg/Kg wet
Acetophenone	ND	0.34	mg/Kg wet
Aniline	ND	0.34	mg/Kg wet
Anthracene	ND	0.17	mg/Kg wet
Benzo(a)anthracene	ND	0.17	mg/Kg wet
Benzo(a)pyrene	ND	0.17	mg/Kg wet
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet
4-Bromophenylphenylether	ND	0.34	mg/Kg wet
Butylbenzylphthalate	ND	0.66	mg/Kg wet
4-Chloroaniline	ND	0.66	mg/Kg wet
2-Chloronaphthalene	ND	0.34	mg/Kg wet
2-Chlorophenol	ND	0.34	mg/Kg wet
Chrysene	ND	0.17	mg/Kg wet
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet
Dibenzofuran	ND	0.34	mg/Kg wet
Di-n-butylphthalate	ND	0.34	mg/Kg wet
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet
2,4-Dichlorophenol	ND	0.34	mg/Kg wet
Diethylphthalate	ND	0.34	mg/Kg wet
2,4-Dimethylphenol	ND	0.34	mg/Kg wet
Dimethylphthalate	ND	0.66	mg/Kg wet
2,4-Dinitrophenol	ND	0.66	mg/Kg wet
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet
Di-n-octylphthalate	ND	0.66	mg/Kg wet
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.34	mg/Kg wet
Fluoranthene	ND	0.17	mg/Kg wet
Fluorene	ND	0.17	mg/Kg wet
Hexachlorobenzene	ND	0.34	mg/Kg wet
Hexachlorobutadiene	ND	0.34	mg/Kg wet
Hexachloroethane	ND	0.34	mg/Kg wet
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet
Isophorone	ND	0.34	mg/Kg wet
2-Methylnaphthalene	ND	0.17	mg/Kg wet
2-Methylphenol	ND	0.34	mg/Kg wet
3/4-Methylphenol	ND	0.34	mg/Kg wet
Naphthalene	ND	0.17	mg/Kg wet
Nitrobenzene	ND	0.34	mg/Kg wet
2-Nitrophenol	ND	0.34	mg/Kg wet
4-Nitrophenol	ND	0.66	mg/Kg wet
Pentachlorophenol	ND	0.34	mg/Kg wet
Phenanthrene	ND	0.17	mg/Kg wet

V-19

V-19

**QUALITY CONTROL**
**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020865 - SW-846 3546</b>										
<b>Blank (B020865-BLK1)</b>				Prepared & Analyzed: 10/19/10						
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	5.01		mg/Kg wet	6.67		75.2	30-130			
Surrogate: Phenol-d6	4.88		mg/Kg wet	6.67		73.2	30-130			
Surrogate: Nitrobenzene-d5	2.23		mg/Kg wet	3.33		67.0	30-130			
Surrogate: 2-Fluorobiphenyl	2.47		mg/Kg wet	3.33		74.0	30-130			
Surrogate: 2,4,6-Tribromophenol	4.53		mg/Kg wet	6.67		68.0	30-130			
Surrogate: Terphenyl-d14	2.58		mg/Kg wet	3.33		77.5	30-130			
<b>LCS (B020865-BS1)</b>				Prepared & Analyzed: 10/19/10						
Acenaphthene	1.23	0.17	mg/Kg wet	1.67		73.6	40-140			
Acenaphthylene	1.19	0.17	mg/Kg wet	1.67		71.5	40-140			
Acetophenone	0.653	0.34	mg/Kg wet	0.833		78.3	40-140			
Aniline	1.08	0.34	mg/Kg wet	1.67		65.0	40-140			
Anthracene	1.23	0.17	mg/Kg wet	1.67		73.9	40-140			
Benzo(a)anthracene	1.21	0.17	mg/Kg wet	1.67		72.7	40-140			
Benzo(a)pyrene	1.33	0.17	mg/Kg wet	1.67		79.5	40-140			
Benzo(b)fluoranthene	1.21	0.17	mg/Kg wet	1.67		72.4	40-140			
Benzo(g,h,i)perylene	1.21	0.17	mg/Kg wet	1.67		72.9	40-140			
Benzo(k)fluoranthene	1.33	0.17	mg/Kg wet	1.67		79.7	40-140			
Bis(2-chloroethoxy)methane	1.18	0.34	mg/Kg wet	1.67		70.5	40-140			
Bis(2-chloroethyl)ether	1.23	0.34	mg/Kg wet	1.67		73.9	40-140			
Bis(2-chloroisopropyl)ether	0.932	0.34	mg/Kg wet	1.67		55.9	40-140			
Bis(2-Ethylhexyl)phthalate	1.31	0.34	mg/Kg wet	1.67		78.5	40-140			
4-Bromophenylphenylether	1.29	0.34	mg/Kg wet	1.67		77.3	40-140			
Butylbenzylphthalate	1.22	0.66	mg/Kg wet	1.67		73.1	40-140			
4-Chloroaniline	0.508	0.66	mg/Kg wet	1.67		30.5	15-140			†
2-Chloronaphthalene	1.08	0.34	mg/Kg wet	1.67		65.0	40-140			
2-Chlorophenol	1.31	0.34	mg/Kg wet	1.67		78.7	30-130			
Chrysene	1.26	0.17	mg/Kg wet	1.67		75.7	40-140			
Dibenz(a,h)anthracene	1.35	0.17	mg/Kg wet	1.67		81.2	40-140			
Dibenzofuran	1.22	0.34	mg/Kg wet	1.67		73.3	40-140			
Di-n-butylphthalate	1.18	0.34	mg/Kg wet	1.67		71.0	40-140			
1,2-Dichlorobenzene	1.22	0.34	mg/Kg wet	1.67		73.3	40-140			
1,3-Dichlorobenzene	1.16	0.34	mg/Kg wet	1.67		69.6	40-140			
1,4-Dichlorobenzene	1.19	0.34	mg/Kg wet	1.67		71.7	40-140			
3,3-Dichlorobenzidine	1.02	0.17	mg/Kg wet	1.67		61.4	40-140			
2,4-Dichlorophenol	1.32	0.34	mg/Kg wet	1.67		78.9	30-130			
Diethylphthalate	1.14	0.34	mg/Kg wet	1.67		68.4	40-140			
2,4-Dimethylphenol	1.24	0.34	mg/Kg wet	1.67		74.4	30-130			
Dimethylphthalate	1.19	0.66	mg/Kg wet	1.67		71.6	40-140			
2,4-Dinitrophenol	1.15	0.66	mg/Kg wet	1.67		69.0	15-140			V-19 †
2,4-Dinitrotoluene	1.13	0.34	mg/Kg wet	1.67		67.7	40-140			
2,6-Dinitrotoluene	1.27	0.34	mg/Kg wet	1.67		76.2	40-140			
Di-n-octylphthalate	1.29	0.66	mg/Kg wet	1.67		77.1	40-140			
1,2-Diphenylhydrazine (as Azobenzene)	1.12	0.34	mg/Kg wet	1.67		66.9	40-140			
Fluoranthene	1.24	0.17	mg/Kg wet	1.67		74.4	40-140			
Fluorene	1.22	0.17	mg/Kg wet	1.67		73.4	40-140			
Hexachlorobenzene	1.30	0.34	mg/Kg wet	1.67		77.9	40-140			

**QUALITY CONTROL**
**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B020865 - SW-846 3546**
**LCS (B020865-BS1)**

Prepared &amp; Analyzed: 10/19/10

Hexachlorobutadiene	1.24	0.34	mg/Kg wet	1.67		74.7	40-140			
Hexachloroethane	1.13	0.34	mg/Kg wet	1.67		67.5	40-140			
Indeno(1,2,3-cd)pyrene	1.27	0.17	mg/Kg wet	1.67		76.4	40-140			
Isophorone	1.17	0.34	mg/Kg wet	1.67		70.4	40-140			
2-Methylnaphthalene	1.18	0.17	mg/Kg wet	1.67		71.0	40-140			
2-Methylphenol	1.28	0.34	mg/Kg wet	1.67		76.7	30-130			
3/4-Methylphenol	1.22	0.34	mg/Kg wet	1.67		73.4	30-130			
Naphthalene	1.11	0.17	mg/Kg wet	1.67		66.4	40-140			
Nitrobenzene	1.07	0.34	mg/Kg wet	1.67		64.3	40-140			
2-Nitrophenol	1.20	0.34	mg/Kg wet	1.67		71.8	30-130			
4-Nitrophenol	1.11	0.66	mg/Kg wet	1.67		66.6	15-140			†
Pentachlorophenol	1.12	0.34	mg/Kg wet	1.67		67.4	30-130			V-19
Phenanthrene	1.25	0.17	mg/Kg wet	1.67		74.9	40-140			
Phenol	1.48	0.34	mg/Kg wet	1.67		88.5	15-140			†
Pyrene	1.22	0.17	mg/Kg wet	1.67		73.0	40-140			
1,2,4-Trichlorobenzene	1.30	0.34	mg/Kg wet	1.67		77.9	40-140			
2,4,5-Trichlorophenol	1.41	0.34	mg/Kg wet	1.67		84.8	30-130			
2,4,6-Trichlorophenol	1.32	0.34	mg/Kg wet	1.67		79.4	30-130			
Surrogate: 2-Fluorophenol	4.65		mg/Kg wet	6.67		69.7	30-130			
Surrogate: Phenol-d6	4.54		mg/Kg wet	6.67		68.1	30-130			
Surrogate: Nitrobenzene-d5	2.06		mg/Kg wet	3.33		61.8	30-130			
Surrogate: 2-Fluorobiphenyl	2.41		mg/Kg wet	3.33		72.2	30-130			
Surrogate: 2,4,6-Tribromophenol	5.11		mg/Kg wet	6.67		76.7	30-130			
Surrogate: Terphenyl-d14	2.55		mg/Kg wet	3.33		76.4	30-130			

**LCS Dup (B020865-BSD1)**

Prepared &amp; Analyzed: 10/19/10

Acenaphthene	1.22	0.17	mg/Kg wet	1.67		73.2	40-140	0.545	30	
Acenaphthylene	1.20	0.17	mg/Kg wet	1.67		72.0	40-140	0.697	30	
Acetophenone	0.646	0.34	mg/Kg wet	0.833		77.5	40-140	1.08	30	
Aniline	1.02	0.34	mg/Kg wet	1.67		61.3	40-140	5.92	30	
Anthracene	1.23	0.17	mg/Kg wet	1.67		73.7	40-140	0.298	30	
Benzo(a)anthracene	1.21	0.17	mg/Kg wet	1.67		72.5	40-140	0.248	30	
Benzo(a)pyrene	1.33	0.17	mg/Kg wet	1.67		80.0	40-140	0.527	30	
Benzo(b)fluoranthene	1.24	0.17	mg/Kg wet	1.67		74.2	40-140	2.37	30	
Benzo(g,h,i)perylene	1.11	0.17	mg/Kg wet	1.67		66.5	40-140	9.12	30	
Benzo(k)fluoranthene	1.38	0.17	mg/Kg wet	1.67		82.6	40-140	3.65	30	
Bis(2-chloroethoxy)methane	1.19	0.34	mg/Kg wet	1.67		71.3	40-140	1.13	30	
Bis(2-chloroethyl)ether	1.23	0.34	mg/Kg wet	1.67		74.0	40-140	0.0811	30	
Bis(2-chloroisopropyl)ether	0.913	0.34	mg/Kg wet	1.67		54.8	40-140	1.99	30	
Bis(2-Ethylhexyl)phthalate	1.20	0.34	mg/Kg wet	1.67		72.3	40-140	8.30	30	
4-Bromophenylphenylether	1.28	0.34	mg/Kg wet	1.67		76.9	40-140	0.493	30	
Butylbenzylphthalate	1.13	0.66	mg/Kg wet	1.67		68.0	40-140	7.26	30	
4-Chloroaniline	0.584	0.66	mg/Kg wet	1.67		35.1	15-140	13.9	30	†
2-Chloronaphthalene	1.07	0.34	mg/Kg wet	1.67		64.3	40-140	1.11	30	
2-Chlorophenol	1.29	0.34	mg/Kg wet	1.67		77.3	30-130	1.85	30	
Chrysene	1.26	0.17	mg/Kg wet	1.67		75.5	40-140	0.159	30	
Dibenz(a,h)anthracene	1.19	0.17	mg/Kg wet	1.67		71.5	40-140	12.7	30	
Dibenzofuran	1.24	0.34	mg/Kg wet	1.67		74.2	40-140	1.17	30	
Di-n-butylphthalate	1.13	0.34	mg/Kg wet	1.67		67.7	40-140	4.76	30	
1,2-Dichlorobenzene	1.21	0.34	mg/Kg wet	1.67		72.4	40-140	1.24	30	
1,3-Dichlorobenzene	1.13	0.34	mg/Kg wet	1.67		67.8	40-140	2.68	30	
1,4-Dichlorobenzene	1.16	0.34	mg/Kg wet	1.67		69.5	40-140	3.03	30	

**QUALITY CONTROL**
**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020865 - SW-846 3546</b>										
<b>LCS Dup (B020865-BSD1)</b>				Prepared & Analyzed: 10/19/10						
3,3-Dichlorobenzidine	0.989	0.17	mg/Kg wet	1.67		59.4	40-140	3.38	30	
2,4-Dichlorophenol	1.32	0.34	mg/Kg wet	1.67		79.2	30-130	0.354	30	
Diethylphthalate	1.18	0.34	mg/Kg wet	1.67		71.1	40-140	3.84	30	
2,4-Dimethylphenol	1.25	0.34	mg/Kg wet	1.67		74.8	30-130	0.563	30	
Dimethylphthalate	1.23	0.66	mg/Kg wet	1.67		73.6	40-140	2.67	30	
2,4-Dinitrophenol	1.23	0.66	mg/Kg wet	1.67		73.8	15-140	6.64	30	V-19 †
2,4-Dinitrotoluene	1.19	0.34	mg/Kg wet	1.67		71.4	40-140	5.38	30	
2,6-Dinitrotoluene	1.30	0.34	mg/Kg wet	1.67		78.0	40-140	2.26	30	
Di-n-octylphthalate	1.32	0.66	mg/Kg wet	1.67		79.5	40-140	2.99	30	
1,2-Diphenylhydrazine (as Azobenzene)	1.10	0.34	mg/Kg wet	1.67		65.7	40-140	1.87	30	
Fluoranthene	1.20	0.17	mg/Kg wet	1.67		71.7	40-140	3.61	30	
Fluorene	1.26	0.17	mg/Kg wet	1.67		75.5	40-140	2.79	30	
Hexachlorobenzene	1.30	0.34	mg/Kg wet	1.67		78.0	40-140	0.0769	30	
Hexachlorobutadiene	1.23	0.34	mg/Kg wet	1.67		73.9	40-140	0.996	30	
Hexachloroethane	1.08	0.34	mg/Kg wet	1.67		65.0	40-140	3.80	30	
Indeno(1,2,3-cd)pyrene	1.17	0.17	mg/Kg wet	1.67		70.2	40-140	8.57	30	
Isophorone	1.19	0.34	mg/Kg wet	1.67		71.4	40-140	1.35	30	
2-Methylnaphthalene	1.19	0.17	mg/Kg wet	1.67		71.2	40-140	0.281	30	
2-Methylphenol	1.27	0.34	mg/Kg wet	1.67		76.0	30-130	0.996	30	
3/4-Methylphenol	1.22	0.34	mg/Kg wet	1.67		73.1	30-130	0.437	30	
Naphthalene	1.11	0.17	mg/Kg wet	1.67		66.8	40-140	0.691	30	
Nitrobenzene	1.12	0.34	mg/Kg wet	1.67		67.2	40-140	4.50	30	
2-Nitrophenol	1.22	0.34	mg/Kg wet	1.67		73.2	30-130	1.90	30	
4-Nitrophenol	1.17	0.66	mg/Kg wet	1.67		69.9	15-140	4.89	30	†
Pentachlorophenol	1.16	0.34	mg/Kg wet	1.67		69.4	30-130	2.93	30	V-19
Phenanthrene	1.25	0.17	mg/Kg wet	1.67		75.2	40-140	0.426	30	
Phenol	1.43	0.34	mg/Kg wet	1.67		86.0	15-140	2.86	30	†
Pyrene	1.12	0.17	mg/Kg wet	1.67		67.3	40-140	8.16	30	
1,2,4-Trichlorobenzene	1.30	0.34	mg/Kg wet	1.67		77.8	40-140	0.180	30	
2,4,5-Trichlorophenol	1.41	0.34	mg/Kg wet	1.67		84.9	30-130	0.0471	30	
2,4,6-Trichlorophenol	1.30	0.34	mg/Kg wet	1.67		78.1	30-130	1.60	30	
Surrogate: 2-Fluorophenol	4.47		mg/Kg wet	6.67		67.1	30-130			
Surrogate: Phenol-d6	4.44		mg/Kg wet	6.67		66.6	30-130			
Surrogate: Nitrobenzene-d5	2.17		mg/Kg wet	3.33		65.2	30-130			
Surrogate: 2-Fluorobiphenyl	2.36		mg/Kg wet	3.33		70.9	30-130			
Surrogate: 2,4,6-Tribromophenol	5.42		mg/Kg wet	6.67		81.3	30-130			
Surrogate: Terphenyl-d14	2.35		mg/Kg wet	3.33		70.6	30-130			

QUALITY CONTROL

Tentatively Identified Compounds - Semivolatile Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B020865 - SW-846 3546

Blank (B020865-BLK1)

Prepared & Analyzed: 10/19/10

No TICs Found	0.0	mg/Kg wet
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**QUALITY CONTROL**
**Organochloride Pesticides by GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020859 - SW-846 3546</b>										
<b>Blank (B020859-BLK1)</b>				Prepared: 10/18/10 Analyzed: 10/19/10						
Aldrin	ND	0.0050	mg/Kg wet							
Aldrin [2C]	ND	0.0050	mg/Kg wet							
alpha-BHC	ND	0.0050	mg/Kg wet							
alpha-BHC [2C]	ND	0.0050	mg/Kg wet							
beta-BHC	ND	0.0050	mg/Kg wet							
beta-BHC [2C]	ND	0.0050	mg/Kg wet							
delta-BHC	ND	0.0050	mg/Kg wet							
delta-BHC [2C]	ND	0.0050	mg/Kg wet							
gamma-BHC (Lindane)	ND	0.0020	mg/Kg wet							
gamma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
Chlordane	ND	0.020	mg/Kg wet							
Chlordane [2C]	ND	0.020	mg/Kg wet							
4,4'-DDD	ND	0.0040	mg/Kg wet							
4,4'-DDD [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDE	ND	0.0040	mg/Kg wet							
4,4'-DDE [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDT	ND	0.0040	mg/Kg wet							
4,4'-DDT [2C]	ND	0.0040	mg/Kg wet							
Dieldrin	ND	0.0040	mg/Kg wet							
Dieldrin [2C]	ND	0.0040	mg/Kg wet							
Endosulfan I	ND	0.0050	mg/Kg wet							
Endosulfan I [2C]	ND	0.0050	mg/Kg wet							
Endosulfan II	ND	0.0080	mg/Kg wet							
Endosulfan II [2C]	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
Endrin	ND	0.0080	mg/Kg wet							
Endrin [2C]	ND	0.0080	mg/Kg wet							
Endrin Ketone	ND	0.0080	mg/Kg wet							
Endrin Ketone [2C]	ND	0.0080	mg/Kg wet							
Heptachlor	ND	0.0050	mg/Kg wet							
Heptachlor [2C]	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
Hexachlorobenzene	ND	0.0050	mg/Kg wet							
Hexachlorobenzene [2C]	ND	0.0050	mg/Kg wet							
Methoxychlor	ND	0.050	mg/Kg wet							
Methoxychlor [2C]	ND	0.050	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.237		mg/Kg wet	0.200		119	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.248		mg/Kg wet	0.200		124	30-150			
Surrogate: Tetrachloro-m-xylene	0.223		mg/Kg wet	0.200		111	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.258		mg/Kg wet	0.200		129	30-150			



**QUALITY CONTROL**
**Organochloride Pesticides by GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B020859 - SW-846 3546**
**LCS (B020859-BS1)**

Prepared: 10/18/10 Analyzed: 10/19/10

Aldrin	0.022	0.0050	mg/Kg wet	0.0200		110	40-140			
Aldrin [2C]	0.024	0.0050	mg/Kg wet	0.0200		119	40-140			
alpha-BHC	0.023	0.0050	mg/Kg wet	0.0200		114	40-140			
alpha-BHC [2C]	0.024	0.0050	mg/Kg wet	0.0200		120	40-140			
beta-BHC	0.021	0.0050	mg/Kg wet	0.0200		104	40-140			
beta-BHC [2C]	0.022	0.0050	mg/Kg wet	0.0200		111	40-140			
delta-BHC	0.020	0.0050	mg/Kg wet	0.0200		101	40-140			
delta-BHC [2C]	0.022	0.0050	mg/Kg wet	0.0200		111	40-140			
gamma-BHC (Lindane)	0.022	0.0020	mg/Kg wet	0.0200		109	40-140			
gamma-BHC (Lindane) [2C]	0.024	0.0020	mg/Kg wet	0.0200		120	40-140			
4,4'-DDD	0.023	0.0040	mg/Kg wet	0.0200		113	40-140			
4,4'-DDD [2C]	0.024	0.0040	mg/Kg wet	0.0200		122	40-140			
4,4'-DDE	0.024	0.0040	mg/Kg wet	0.0200		120	40-140			
4,4'-DDE [2C]	0.024	0.0040	mg/Kg wet	0.0200		118	40-140			
4,4'-DDT	0.020	0.0040	mg/Kg wet	0.0200		101	40-140			
4,4'-DDT [2C]	0.022	0.0040	mg/Kg wet	0.0200		110	40-140			
Dieldrin	0.024	0.0040	mg/Kg wet	0.0200		121	40-140			
Dieldrin [2C]	0.024	0.0040	mg/Kg wet	0.0200		120	40-140			
Endosulfan I	0.021	0.0050	mg/Kg wet	0.0200		104	40-140			
Endosulfan I [2C]	0.023	0.0050	mg/Kg wet	0.0200		117	40-140			
Endosulfan II	0.021	0.0080	mg/Kg wet	0.0200		105	40-140			
Endosulfan II [2C]	0.023	0.0080	mg/Kg wet	0.0200		116	40-140			
Endosulfan Sulfate	0.023	0.0080	mg/Kg wet	0.0200		113	40-140			
Endosulfan Sulfate [2C]	0.023	0.0080	mg/Kg wet	0.0200		117	40-140			
Endrin	0.022	0.0080	mg/Kg wet	0.0200		111	40-140			
Endrin [2C]	0.022	0.0080	mg/Kg wet	0.0200		112	40-140			
Endrin Ketone	0.023	0.0080	mg/Kg wet	0.0200		115	40-140			
Endrin Ketone [2C]	0.024	0.0080	mg/Kg wet	0.0200		121	40-140			
Heptachlor	0.022	0.0050	mg/Kg wet	0.0200		108	40-140			
Heptachlor [2C]	0.024	0.0050	mg/Kg wet	0.0200		119	40-140			
Heptachlor Epoxide	0.022	0.0050	mg/Kg wet	0.0200		110	40-140			
Heptachlor Epoxide [2C]	0.024	0.0050	mg/Kg wet	0.0200		118	40-140			
Hexachlorobenzene	0.021	0.0050	mg/Kg wet	0.0200		106	40-140			
Hexachlorobenzene [2C]	0.022	0.0050	mg/Kg wet	0.0200		111	40-140			
Methoxychlor	0.024	0.050	mg/Kg wet	0.0200		119	40-140			
Methoxychlor [2C]	0.023	0.050	mg/Kg wet	0.0200		113	40-140			
Surrogate: Decachlorobiphenyl	0.242		mg/Kg wet	0.200		121	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.254		mg/Kg wet	0.200		127	30-150			
Surrogate: Tetrachloro-m-xylene	0.223		mg/Kg wet	0.200		112	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.259		mg/Kg wet	0.200		130	30-150			

**LCS Dup (B020859-BS1)**

Prepared: 10/18/10 Analyzed: 10/19/10

Aldrin	0.022	0.0050	mg/Kg wet	0.0200		112	40-140	1.75	30	
Aldrin [2C]	0.024	0.0050	mg/Kg wet	0.0200		122	40-140	2.77	30	
alpha-BHC	0.023	0.0050	mg/Kg wet	0.0200		116	40-140	2.17	30	
alpha-BHC [2C]	0.025	0.0050	mg/Kg wet	0.0200		123	40-140	2.93	30	
beta-BHC	0.021	0.0050	mg/Kg wet	0.0200		107	40-140	2.82	30	
beta-BHC [2C]	0.023	0.0050	mg/Kg wet	0.0200		114	40-140	2.23	30	
delta-BHC	0.021	0.0050	mg/Kg wet	0.0200		106	40-140	4.15	30	
delta-BHC [2C]	0.023	0.0050	mg/Kg wet	0.0200		114	40-140	2.54	30	
gamma-BHC (Lindane)	0.022	0.0020	mg/Kg wet	0.0200		112	40-140	2.23	30	
gamma-BHC (Lindane) [2C]	0.025	0.0020	mg/Kg wet	0.0200		123	40-140	2.55	30	

**QUALITY CONTROL**
**Organochloride Pesticides by GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020859 - SW-846 3546</b>										
<b>LCS Dup (B020859-BSD1)</b>				Prepared: 10/18/10 Analyzed: 10/19/10						
4,4'-DDD	0.023	0.0040	mg/Kg wet	0.0200		115	40-140	1.69	30	
4,4'-DDD [2C]	0.025	0.0040	mg/Kg wet	0.0200		124	40-140	1.42	30	
4,4'-DDE	0.024	0.0040	mg/Kg wet	0.0200		120	40-140	0.00	30	
4,4'-DDE [2C]	0.024	0.0040	mg/Kg wet	0.0200		121	40-140	2.19	30	
4,4'-DDT	0.021	0.0040	mg/Kg wet	0.0200		104	40-140	3.18	30	
4,4'-DDT [2C]	0.022	0.0040	mg/Kg wet	0.0200		111	40-140	1.23	30	
Dieldrin	0.024	0.0040	mg/Kg wet	0.0200		121	40-140	0.128	30	
Dieldrin [2C]	0.025	0.0040	mg/Kg wet	0.0200		123	40-140	2.25	30	
Endosulfan I	0.021	0.0050	mg/Kg wet	0.0200		104	40-140	0.0817	30	
Endosulfan I [2C]	0.024	0.0050	mg/Kg wet	0.0200		120	40-140	2.49	30	
Endosulfan II	0.022	0.0080	mg/Kg wet	0.0200		109	40-140	3.90	30	
Endosulfan II [2C]	0.024	0.0080	mg/Kg wet	0.0200		119	40-140	2.13	30	
Endosulfan Sulfate	0.023	0.0080	mg/Kg wet	0.0200		116	40-140	2.50	30	
Endosulfan Sulfate [2C]	0.024	0.0080	mg/Kg wet	0.0200		120	40-140	1.99	30	
Endrin	0.022	0.0080	mg/Kg wet	0.0200		110	40-140	1.25	30	
Endrin [2C]	0.022	0.0080	mg/Kg wet	0.0200		110	40-140	1.91	30	
Endrin Ketone	0.024	0.0080	mg/Kg wet	0.0200		119	40-140	3.01	30	
Endrin Ketone [2C]	0.025	0.0080	mg/Kg wet	0.0200		124	40-140	2.76	30	
Heptachlor	0.022	0.0050	mg/Kg wet	0.0200		112	40-140	2.86	30	
Heptachlor [2C]	0.024	0.0050	mg/Kg wet	0.0200		122	40-140	2.57	30	
Heptachlor Epoxide	0.022	0.0050	mg/Kg wet	0.0200		112	40-140	1.23	30	
Heptachlor Epoxide [2C]	0.024	0.0050	mg/Kg wet	0.0200		121	40-140	2.27	30	
Hexachlorobenzene	0.022	0.0050	mg/Kg wet	0.0200		108	40-140	1.96	30	
Hexachlorobenzene [2C]	0.023	0.0050	mg/Kg wet	0.0200		114	40-140	2.86	30	
Methoxychlor	0.024	0.050	mg/Kg wet	0.0200		122	40-140	2.24	30	
Methoxychlor [2C]	0.023	0.050	mg/Kg wet	0.0200		115	40-140	2.40	30	
Surrogate: Decachlorobiphenyl	0.238		mg/Kg wet	0.200		119	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.250		mg/Kg wet	0.200		125	30-150			
Surrogate: Tetrachloro-m-xylene	0.221		mg/Kg wet	0.200		111	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.258		mg/Kg wet	0.200		129	30-150			

**QUALITY CONTROL**
**Polychlorinated Biphenyls By GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B020836 - SW-846 3546</b>										
<b>Blank (B020836-BLK1)</b>										
Prepared: 10/18/10 Analyzed: 10/19/10										
Aroclor-1016	ND	0.10	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.10	mg/Kg wet							
Aroclor-1221	ND	0.10	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.10	mg/Kg wet							
Aroclor-1232	ND	0.10	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.10	mg/Kg wet							
Aroclor-1242	ND	0.10	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.10	mg/Kg wet							
Aroclor-1248	ND	0.10	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.10	mg/Kg wet							
Aroclor-1254	ND	0.10	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.10	mg/Kg wet							
Aroclor-1260	ND	0.10	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.10	mg/Kg wet							
Aroclor-1262	ND	0.10	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.10	mg/Kg wet							
Aroclor-1268	ND	0.10	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.10	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.248		mg/Kg wet	0.200		124	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.253		mg/Kg wet	0.200		126	30-150			
Surrogate: Tetrachloro-m-xylene	0.267		mg/Kg wet	0.200		133	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.276		mg/Kg wet	0.200		138	30-150			
<b>LCS (B020836-BS1)</b>										
Prepared: 10/18/10 Analyzed: 10/19/10										
Aroclor-1016	0.23	0.10	mg/Kg wet	0.200		113	40-140			
Aroclor-1016 [2C]	0.25	0.10	mg/Kg wet	0.200		123	40-140			
Aroclor-1260	0.23	0.10	mg/Kg wet	0.200		115	40-140			
Aroclor-1260 [2C]	0.25	0.10	mg/Kg wet	0.200		123	40-140			
Surrogate: Decachlorobiphenyl	0.250		mg/Kg wet	0.200		125	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.254		mg/Kg wet	0.200		127	30-150			
Surrogate: Tetrachloro-m-xylene	0.264		mg/Kg wet	0.200		132	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.269		mg/Kg wet	0.200		135	30-150			
<b>LCS Dup (B020836-BSD1)</b>										
Prepared: 10/18/10 Analyzed: 10/19/10										
Aroclor-1016	0.25	0.10	mg/Kg wet	0.200		125	40-140	10.2	30	
Aroclor-1016 [2C]	0.26	0.10	mg/Kg wet	0.200		132	40-140	6.81	30	
Aroclor-1260	0.26	0.10	mg/Kg wet	0.200		130	40-140	12.4	30	
Aroclor-1260 [2C]	0.27	0.10	mg/Kg wet	0.200		135	40-140	9.77	30	
Surrogate: Decachlorobiphenyl	0.280		mg/Kg wet	0.200		140	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.282		mg/Kg wet	0.200		141	30-150			
Surrogate: Tetrachloro-m-xylene	0.296		mg/Kg wet	0.200		148	30-150			
<b>Surrogate: Tetrachloro-m-xylene [2C]</b>	<b>0.302</b>		<b>mg/Kg wet</b>	<b>0.200</b>		<b>151</b>	<b>30-150</b>	<b>*</b>		S-23

**QUALITY CONTROL**
**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B020860 - SW-846 3050B**
**Blank (B020860-BLK1)**

Prepared &amp; Analyzed: 10/19/10

Aluminum	ND	2.5	mg/Kg wet
Antimony	ND	2.5	mg/Kg wet
Arsenic	ND	2.5	mg/Kg wet
Barium	ND	2.5	mg/Kg wet
Beryllium	ND	0.25	mg/Kg wet
Cadmium	ND	0.25	mg/Kg wet
Calcium	ND	7.5	mg/Kg wet
Chromium	ND	0.50	mg/Kg wet
Cobalt	ND	2.5	mg/Kg wet
Copper	ND	0.50	mg/Kg wet
Iron	ND	2.5	mg/Kg wet
Magnesium	ND	7.5	mg/Kg wet
Manganese	ND	0.50	mg/Kg wet
Nickel	ND	0.50	mg/Kg wet
Potassium	ND	100	mg/Kg wet
Selenium	ND	5.0	mg/Kg wet
Silver	ND	0.50	mg/Kg wet
Sodium	ND	100	mg/Kg wet
Thallium	ND	2.5	mg/Kg wet
Vanadium	ND	1.0	mg/Kg wet
Zinc	ND	1.0	mg/Kg wet

**LCS (B020860-BS1)**

Prepared &amp; Analyzed: 10/19/10

Aluminum	9230	5.0	mg/Kg wet	10600	87.1	55.2-142.3
Antimony	106	5.0	mg/Kg wet	103	103	30-203.7
Arsenic	109	5.0	mg/Kg wet	107	101	81.6-118.4
Barium	332	5.0	mg/Kg wet	331	100	80.7-119.3
Beryllium	74.3	0.50	mg/Kg wet	74.1	100	81.6-118.9
Cadmium	245	0.50	mg/Kg wet	244	100	82.4-117.6
Calcium	9040	15	mg/Kg wet	9690	93.3	80.8-119.2
Chromium	80.5	1.0	mg/Kg wet	80.6	99.9	78.8-120.7
Cobalt	86.2	5.0	mg/Kg wet	85.8	101	80.9-119.1
Copper	65.9	1.0	mg/Kg wet	65.3	101	83.7-117.1
Iron	15800	5.0	mg/Kg wet	18400	85.8	50.4-148.9
Magnesium	3810	15	mg/Kg wet	4100	92.9	78.7-121.3
Manganese	430	1.0	mg/Kg wet	452	95.2	81.8-118
Nickel	94.8	1.0	mg/Kg wet	96.8	97.9	81.2-119.2
Potassium	4840	200	mg/Kg wet	4490	108	73.6-126.4
Selenium	175	10	mg/Kg wet	177	98.7	78.4-120.9
Silver	40.2	1.0	mg/Kg wet	46.2	87.1	66.2-133.6
Sodium	1100	200	mg/Kg wet	1060	104	73.7-125.7
Thallium	255	5.0	mg/Kg wet	272	93.8	77.6-122.4
Vanadium	120	2.0	mg/Kg wet	115	104	79.4-120.1
Zinc	375	2.0	mg/Kg wet	378	99.3	80.5-119.3

**QUALITY CONTROL**
**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B020860 - SW-846 3050B**
**LCS Dup (B020860-BSD1)**

Prepared &amp; Analyzed: 10/19/10

Aluminum	9360	5.1	mg/Kg wet	10600		88.3	55.2-142.3	1.34	30	
Antimony	107	5.1	mg/Kg wet	103		104	30-203.7	1.52	30	
Arsenic	112	5.1	mg/Kg wet	107		105	81.6-118.4	3.34	30	
Barium	335	5.1	mg/Kg wet	331		101	80.7-119.3	0.850	30	
Beryllium	75.5	0.51	mg/Kg wet	74.1		102	81.6-118.9	1.61	30	
Cadmium	252	0.51	mg/Kg wet	244		103	82.4-117.6	3.04	30	
Calcium	9600	15	mg/Kg wet	9690		99.0	80.8-119.2	5.97	30	
Chromium	82.7	1.0	mg/Kg wet	80.6		103	78.8-120.7	2.71	30	
Cobalt	88.0	5.1	mg/Kg wet	85.8		103	80.9-119.1	2.02	30	
Copper	65.5	1.0	mg/Kg wet	65.3		100	83.7-117.1	0.522	30	
Iron	16700	5.1	mg/Kg wet	18400		90.6	50.4-148.9	5.47	30	
Magnesium	4010	15	mg/Kg wet	4100		97.7	78.7-121.3	5.09	30	
Manganese	434	1.0	mg/Kg wet	452		96.1	81.8-118	0.959	30	
Nickel	97.0	1.0	mg/Kg wet	96.8		100	81.2-119.2	2.37	30	
Potassium	4930	200	mg/Kg wet	4490		110	73.6-126.4	1.89	30	
Selenium	187	10	mg/Kg wet	177		106	78.4-120.9	6.72	30	
Silver	41.0	1.0	mg/Kg wet	46.2		88.8	66.2-133.6	1.99	30	
Sodium	1130	200	mg/Kg wet	1060		106	73.7-125.7	2.14	30	
Thallium	272	5.1	mg/Kg wet	272		100	77.6-122.4	6.45	30	
Vanadium	124	2.0	mg/Kg wet	115		108	79.4-120.1	3.51	30	
Zinc	395	2.0	mg/Kg wet	378		105	80.5-119.3	5.16	30	

**Batch B020862 - SW-846 7471**
**Blank (B020862-BLK1)**

Prepared &amp; Analyzed: 10/19/10

Mercury	ND	0.024	mg/Kg wet							
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**LCS (B020862-BS1)**

Prepared &amp; Analyzed: 10/19/10

Mercury	1.12	0.031	mg/Kg wet	1.25		90.0	66-132			
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**LCS Dup (B020862-BSD1)**

Prepared &amp; Analyzed: 10/19/10

Mercury	1.10	0.031	mg/Kg wet	1.25		87.8	66-132	2.48	30	
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**Batch B020922 - SW-846 3050B**
**Blank (B020922-BLK1)**

Prepared: 10/19/10 Analyzed: 10/20/10

Lead	ND	0.75	mg/Kg wet							
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**LCS (B020922-BS1)**

Prepared: 10/19/10 Analyzed: 10/20/10

Lead	97.8	1.5	mg/Kg wet	107		91.4	79.1-120.3			
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**QUALITY CONTROL**
**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B020922 - SW-846 3050B**
**LCS (B020922-BS2)**

Prepared: 10/19/10 Analyzed: 10/20/10

Lead	0.742	0.75	mg/Kg wet	0.749		99.1	80-120			
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**LCS Dup (B020922-BSD1)**

Prepared: 10/19/10 Analyzed: 10/20/10

Lead	97.3	1.5	mg/Kg wet	107		90.9	79.1-120.3	0.562	30	
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**QUALITY CONTROL**
**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B020852 - % Solids**
**Duplicate (B020852-DUP1)**
**Source: 10J0533-01**

Prepared &amp; Analyzed: 10/19/10

% Solids	58.5		% Wt		52.7			10.4	20	
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**Batch B020885 - SW846 9014**
**Blank (B020885-BLK1)**

Prepared &amp; Analyzed: 10/19/10

Cyanide	ND	0.49	mg/Kg wet							
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**LCS (B020885-BS1)**

Prepared &amp; Analyzed: 10/19/10

Cyanide	31	0.47	mg/Kg wet	31.5		99.2	80-120			
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**LCS Dup (B020885-BSD1)**

Prepared &amp; Analyzed: 10/19/10

Cyanide	30	0.47	mg/Kg wet	31.1		97.6	80-120	2.73	20	
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**Matrix Spike (B020885-MS1)**
**Source: 10J0533-01**

Prepared &amp; Analyzed: 10/19/10

Cyanide	33	0.90	mg/Kg dry	30.9	0.83	104	75-125			
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**Matrix Spike Dup (B020885-MSD1)**
**Source: 10J0533-01**

Prepared &amp; Analyzed: 10/19/10

Cyanide	34	0.87	mg/Kg dry	29.8	0.83	111	75-125	2.39	20	
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BREAKDOWN REPORT

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Lab Sample ID: S000519-PEM1 Analyzed: 10/19/2010

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Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	0.58
Endrin [1]	5.49

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Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	0.00
Endrin [2]	2.88

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**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
L-14	Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
S-23	Surrogate recovery outside of control limits in BS/MS spiked sample, all reported analytes are within control criteria, data not significantly affected.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Significant uncertainty is associated with the reported value which is likely to be biased on the low side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy are associated with reported result.
V-19	Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99.

# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 6010B in Soil</i></b>	
Aluminum	CT,NH,NY
Antimony	CT,NH,NY
Arsenic	CT,NH,NY
Barium	CT,NH,NY
Beryllium	CT,NH,NY
Cadmium	CT,NH,NY
Calcium	CT,NH,NY
Chromium	CT,NH,NY
Cobalt	CT,NH,NY
Copper	CT,NH,NY
Iron	CT,NH,NY
Lead	CT,NH,NY,AIHA
Magnesium	CT,NH,NY
Manganese	CT,NH,NY
Nickel	CT,NH,NY
Potassium	CT,NH,NY
Selenium	CT,NH,NY
Silver	CT,NH,NY
Sodium	CT,NH,NY
Thallium	CT,NH,NY
Vanadium	CT,NH,NY
Zinc	CT,NH,NY
<b><i>SW-846 7471A in Soil</i></b>	
Mercury	CT,NH,NY
<b><i>SW-846 7471B in Soil</i></b>	
Mercury	CT,NH,NY
<b><i>SW-846 8081A in Soil</i></b>	
Aldrin	CT,NC,NH,NY
Aldrin [2C]	CT,NC,NH,NY
alpha-BHC	CT,NC,NH,NY
alpha-BHC [2C]	CT,NC,NH,NY
beta-BHC	CT,NC,NH,NY
beta-BHC [2C]	CT,NC,NH,NY
delta-BHC	CT,NC,NH,NY
delta-BHC [2C]	CT,NC,NH,NY
gamma-BHC (Lindane)	CT,NC,NH,NY
gamma-BHC (Lindane) [2C]	CT,NC,NH,NY
Chlordane	CT,NC,NH,NY
Chlordane [2C]	CT,NC,NH,NY
4,4'-DDD	CT,NC,NH,NY
4,4'-DDD [2C]	CT,NC,NH,NY
4,4'-DDE	CT,NC,NH,NY
4,4'-DDE [2C]	CT,NC,NH,NY
4,4'-DDT	CT,NC,NH,NY
4,4'-DDT [2C]	CT,NC,NH,NY
Dieldrin	CT,NC,NH,NY

# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 8081A in Soil</i></b>	
Dieldrin [2C]	CT,NC,NH,NY
Endosulfan I	CT,NC,NH,NY
Endosulfan I [2C]	CT,NC,NH,NY
Endosulfan II	CT,NC,NH,NY
Endosulfan II [2C]	CT,NC,NH,NY
Endosulfan Sulfate	CT,NC,NH,NY
Endosulfan Sulfate [2C]	CT,NC,NH,NY
Endrin	CT,NC,NH,NY
Endrin [2C]	CT,NC,NH,NY
Heptachlor	CT,NC,NH,NY
Heptachlor [2C]	CT,NC,NH,NY
Heptachlor Epoxide	CT,NC,NH,NY
Heptachlor Epoxide [2C]	CT,NC,NH,NY
Hexachlorobenzene	NH
Hexachlorobenzene [2C]	NH
Methoxychlor	CT,NC,NH,NY
Methoxychlor [2C]	CT,NC,NH,NY
<b><i>SW-846 8082 in Soil</i></b>	
Aroclor-1016	CT,NH,NY,NC
Aroclor-1016 [2C]	CT,NH,NY,NC
Aroclor-1221	CT,NH,NY,NC
Aroclor-1221 [2C]	CT,NH,NY,NC
Aroclor-1232	CT,NH,NY,NC
Aroclor-1232 [2C]	CT,NH,NY,NC
Aroclor-1242	CT,NH,NY,NC
Aroclor-1242 [2C]	CT,NH,NY,NC
Aroclor-1248	CT,NH,NY,NC
Aroclor-1248 [2C]	CT,NH,NY,NC
Aroclor-1254	CT,NH,NY,NC
Aroclor-1254 [2C]	CT,NH,NY,NC
Aroclor-1260	CT,NH,NY,NC
Aroclor-1260 [2C]	CT,NH,NY,NC
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC
<b><i>SW-846 8260B in Soil</i></b>	
Acetone	CT,NH,NY,NC
tert-Amyl Methyl Ether (TAME)	NC
Benzene	CT,NH,NY,NC
Bromobenzene	NH,NY,NC
Bromochloromethane	NH,NY,NC
Bromodichloromethane	CT,NH,NY,NC
Bromoform	CT,NH,NY,NC
Bromomethane	CT,NH,NY,NC
2-Butanone (MEK)	CT,NH,NY,NC

# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 8260B in Soil</i></b>	
n-Butylbenzene	CT,NH,NY,NC
sec-Butylbenzene	CT,NH,NY,NC
tert-Butylbenzene	CT,NH,NY,NC
tert-Butyl Ethyl Ether (TBEE)	NC
Carbon Disulfide	CT,NH,NY,NC
Carbon Tetrachloride	CT,NH,NY,NC
Chlorobenzene	CT,NH,NY,NC
Chlorodibromomethane	CT,NH,NY,NC
Chloroethane	CT,NH,NY,NC
Chloroform	CT,NH,NY,NC
Chloromethane	CT,NH,NY,NC
2-Chlorotoluene	CT,NH,NY,NC
4-Chlorotoluene	CT,NH,NY,NC
1,2-Dibromo-3-chloropropane (DBCP)	NC
1,2-Dibromoethane (EDB)	NC
Dibromomethane	NH,NY,NC
1,2-Dichlorobenzene	CT,NH,NY,NC
1,3-Dichlorobenzene	CT,NH,NY,NC
1,4-Dichlorobenzene	CT,NH,NY,NC
Dichlorodifluoromethane (Freon 12)	NY,NC
1,1-Dichloroethane	CT,NH,NY,NC
1,2-Dichloroethane	CT,NH,NY,NC
1,1-Dichloroethylene	CT,NH,NY,NC
cis-1,2-Dichloroethylene	CT,NH,NY,NC
trans-1,2-Dichloroethylene	CT,NH,NY,NC
1,2-Dichloropropane	CT,NH,NY,NC
1,3-Dichloropropane	NH,NY,NC
2,2-Dichloropropane	NH,NY,NC
1,1-Dichloropropene	NH,NY,NC
cis-1,3-Dichloropropene	CT,NH,NY,NC
trans-1,3-Dichloropropene	CT,NH,NY,NC
Diethyl Ether	NC
Diisopropyl Ether (DIPE)	NC
1,4-Dioxane	NC
Ethylbenzene	CT,NH,NY,NC
Hexachlorobutadiene	NH,NY,NC
2-Hexanone (MBK)	CT,NH,NY,NC
Isopropylbenzene (Cumene)	CT,NH,NY,NC
p-Isopropyltoluene (p-Cymene)	NC
Methyl tert-Butyl Ether (MTBE)	NC
Methylene Chloride	CT,NH,NY,NC
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,NC
Naphthalene	NH,NY,NC
n-Propylbenzene	NC
Styrene	CT,NH,NY,NC
1,1,1,2-Tetrachloroethane	CT,NH,NY,NC
1,1,2,2-Tetrachloroethane	CT,NH,NY,NC

# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 8260B in Soil</i></b>	
Tetrachloroethylene	CT,NH,NY,NC
Tetrahydrofuran	NC
Toluene	CT,NH,NY,NC
1,2,3-Trichlorobenzene	NC
1,2,4-Trichlorobenzene	NH,NY,NC
1,1,1-Trichloroethane	CT,NH,NY,NC
1,1,2-Trichloroethane	CT,NH,NY,NC
Trichloroethylene	CT,NH,NY,NC
Trichlorofluoromethane (Freon 11)	CT,NH,NY,NC
1,2,3-Trichloropropane	NH,NY,NC
1,2,4-Trimethylbenzene	CT,NH,NY,NC
1,3,5-Trimethylbenzene	CT,NH,NY,NC
Vinyl Chloride	CT,NH,NY,NC
m+p Xylene	CT,NH,NY,NC
o-Xylene	CT,NH,NY,NC
<b><i>SW-846 8270C in Soil</i></b>	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
1,4-Dichlorobenzene	NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH

# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<b>SW-846 8270C in Soil</b>	
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine (as Azobenzene)	NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH

## SW846 9014 in Soil

Cyanide	NY,CT,NC
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The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	American Industrial Hygiene Association	100033	01/1/2012
MA	Massachusetts DEP	M-MA100	06/30/2011
CT	Connecticut Department of Public Health	PH-0567	09/30/2011
NY	New York State Department of Health	10899 NELAP	04/1/2011
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2011
RI	Rhode Island Department of Health	LAO00112	12/30/2010
NC	North Carolina Div. of Water Quality	652	12/31/2010
NJ	New Jersey DEP	MA007 NELAP	06/30/2011
FL	Florida Department of Health	E871027 NELAP	06/30/2011
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2011
WA	State of Washington Department of Ecology	C2065	02/23/2011



**con-test®**  
ANALYTICAL LABORATORY

Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com  
www.contestlabs.com

## CHAIN OF CUSTODY RECORD

39 SPRUCE ST, 2ND FLOOR  
EAST LONGMEADOW, MA 01028

Page 1 of 1

Company Name: OTO

Address: 293 Bridge St - Suite 500

Attention: Spangfield, MA 01103

Project Location: Kevin O'Reilly

Sampled By: AJT

Project Location: W.R. Grace

Proposal Provided? (For Billing purposes) ☐ yes ☐ no

State Form Required? ☐ yes ☐ no

Field ID Wetland Soil

Sample Description -d1

Lab # 10/18/10

Date/Time 10/18/10

Stop Date/Time 1240

Comp. Date/Time X

Conc. Code S U

\*Matrix Code 5 U

\*Matrix Code 5 U

\*Matrix Code 5 U

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\*Matrix Code 5 U

\*Matrix Code 5 U

### DATA DELIVERY (check one):

☐ FAX ☒ EMAIL ☐ WEBSITE CLIENT

Fax #:

Email: oreilly@oto-env.com

Format: ☐ EXCEL ☒ PDF ☐ GIS KEY

☐ OTHER

Client PO #

Project # 2118-01-02

Telephone: (413) 788-6222

1050533

ANALYSIS REQUESTED

CV, Pesticides, TIC, PH

VOC + TIC

SVOC + TIC

PCBs, metals - TAL-23

Client

Comments:

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

Matrix Code

### Detection Limit Requirements

Regulations? MAS DEP CAP

Data Enhancement Project/RCP? Y ☐ N

Special Requirements or DL's:

Turnaround \*\*

☐ 7-Day

☐ 10-Day

☐ Other

RUSH

\*24-Hr ☒ \*48-Hr

\*72-Hr ☐ \*4-Day

\* Require lab approval

Relinquished by: (signature)

Received by: (signature)

Relinquished by: (signature)

Received by: (signature)

Relinquished by: (signature)

Received by: (signature)

Relinquished by: (signature)

Received by: (signature)

Relinquished by: (signature)

Received by: (signature)

Relinquished by: (signature)

Received by: (signature)

AROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCOMPLETE, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.



## Sample Receipt Checklist

 CLIENT NAME: OTO RECEIVED BY: CEC DATE: 10/18/10

1) Was the chain(s) of custody relinquished and signed?

 Yes ☒ No ☐

2) Does the chain agree with the samples?

 Yes ☒ No ☐

If not, explain:

3) Are all the samples in good condition?

 Yes ☒ No ☐

If not, explain:

4) How were the samples received:

 On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

 Were the samples received in Temperature Compliance of (2-6°C)? Yes ☐ No ☐ N/A ☒

 Temperature °C by Temp blank \_\_\_\_\_ Temperature °C by Temp gun 8.4 °C

5) Are there Dissolved samples for the lab to filter?

 Yes ☐ No ☒

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

6) Are there any samples "On Hold"?

 Yes ☐ No ☒

 Stored where: 

7) Are there any RUSH or SHORT HOLDING TIME samples?

 Yes ☐ No ☒

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

8) Location where samples are stored:

14

 Permission to subcontract samples? Yes ☐ No ☐  
 (Walk-in clients only) if not already approved  
 Client Signature: \_\_\_\_\_

## Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)	<u>2</u>	2 oz amber/clear jar	
1 Liter Plastic		Other glass jar	
500 mL Plastic		Plastic Bag / Ziploc	
250 mL plastic		Air Cassette	
40 mL Vial - type listed below	<u>3</u>	SOC Kit	
Colisure / bacteria bottle		Tubes	
Dissolved Oxygen bottle		Non-ConTest Container	
Flashpoint bottle		Other	
Encore		PM 2.5 / PM 10	
Perchlorate Kit		PUF Cartridge	

Laboratory Comments:

 40 mL vials: # HCl \_\_\_\_\_ # Methanol 1  
 # Bisulfate 2 # DI Water \_\_\_\_\_  
 # Thiosulfate \_\_\_\_\_ Unpreserved \_\_\_\_\_

Time and Date Frozen:

 Do all samples have the proper Acid pH: Yes ☐ No ☐ N/A ☐

 Do all samples have the proper Base pH: Yes ☐ No ☐ N/A ☐



# MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory

Project #: 10J0533

Project Location: W.R. Grace

RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]  
10J0533-01

Matrices: Soil

## CAM Protocol (check all that below)

8260 VOC CAM II A (X)	7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B (X)	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B (X)	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A (X)	6020 Metals CAM III D ( )	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A (X)	6860 Perchlorate CAM VIII B ( )	

### Affirmative response to Questions A through F is required for "Presumptive Certainty" status

<b>A</b>	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>B</b>	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>C</b>	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>D</b>	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>E a</b>	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	<input type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>E b</b>	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>F</b>	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>

### A response to questions G, H and I below is required for "Presumptive Certainty" status

<b>G</b>	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
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**Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

<b>H</b>	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>
<b>I</b>	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>

<sup>1</sup> All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

**I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.**

Signature: 

Position: Laboratory Director

Printed Name: Michael A. Erickson

Date: 10/20/10

SAND & GRAVEL, TOPSOIL  
PROCESS FILL DATA

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 858-4800 Fax: (856) 786-5974 Email: [westmontaslab@EMSL.com](mailto:westmontaslab@EMSL.com)

Attn: **Bob Kirchherr**  
**O'Reilly, Talbot & Okun Associates, Inc.**  
**293 Bridge Street**  
**Suite 500**  
**Springfield, MA 01103**

Customer ID: ENVI07  
Customer PO:  
Received: 10/12/10 9:30 AM  
EMSL Order: 041023463

Fax: (413) 788-8830 Phone: (413) 788-6222  
Project: **2118-01-02**

EMSL Proj:  
Analysis Date: 10/12/2010

### Test Report: Asbestos Analysis of Soils via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
2"- 041023463-0004	SAND & GRAVEL MIX	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<b>None Detected</b>
SAND 041023463-0005	PROCESS SAND	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	<b>None Detected</b>
LEAF LITTER 041023463-0006	WETLANDS FILL	Brown Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	<b>None Detected</b>

This method is designed for relatively homogenous bulk building materials. Use of this method for other sample types can produce results that may not provide the analytical reliability for which the method was intended

Initial report from 10/13/2010 13:02:47

Analyst(s)

Melissa Klinedinst (3)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. 200 Route 130 North, Cinnaminson NJ



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS • TRAINING

# Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

041023463

EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 220-3675  
FAX: (856) 786-5974

Company: <u>O'Reilly Talent + OKun</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: <u>293 Bridge St. Suite 500</u>		Third Party Billing requires written authorization from third party	
City: <u>Springfield</u>	State/Province: <u>MA</u>	Zip/Postal Code: <u>01103</u>	Country: <u>USA</u>
Report To (Name): <u>Bob Kirchherr</u>		Fax #:	
Telephone #: <u>413-531-1122</u>		Email Address: <u>Kirchherr@OTO-ENV.com</u>	
Project Name/Number: <u>2118-01-02</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: <input type="checkbox"/> U.S. State Samples Taken: <u>MA</u>	
<b>Turnaround Time (TAT) Options* - Please Check</b>			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input checked="" type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
<small>*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.</small>			
<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <u>Quantitative</u> <input type="checkbox"/> PLM EPA NOB (<1%) <u>five</u> Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM - Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b>	
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name:		Samplers Signature:	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
2" -	Sand & Gravel Mix	SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.	RECEIVED OCT 12 AM 9:52 CINNAMINSON, N.J.
SAND	Process Sand		
leaf litter	Wetlands Litter		
Client Sample # (s):		Total # of Samples: <u>3</u>	
Relinquished (Client): <u>Chris R. ...</u> Date: <u>10/11/10</u>		Time: <u>14:30</u>	
Received (Lab): <u>DMB-UP-930A</u> Date: <u>10-12-10</u>		Time: <u> </u>	
Comments/Special Instructions:			

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 858-4800

Fax: (856) 786-5974

Email: [westmontasblab@EMSL.com](mailto:westmontasblab@EMSL.com)

Attn: **Bob Kirchherr**  
**O'Reilly, Talbot & Okun Associates, Inc.**  
**293 Bridge Street**  
**Suite 500**  
**Springfield, MA 01103**

Customer ID: ENV107  
Customer PO:  
Received: 10/15/10 10:15 AM  
EMSL Order: 041023809

Fax: (413) 788-8830 Phone: (413) 788-6222  
Project: **2118-01-02/GRACE**

EMSL Proj:  
Analysis Date: 10/17/2010

### Test Report: Asbestos Analysis of Soils via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
TOP SOIL 041023809-0003	TOP SOIL	Brown Non-Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	<b>None Detected</b>
NE PARK 041023809-0004	NORTHEAST PARKING AREA 12"-15"	Brown Non-Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	<b>None Detected</b>

This method is designed for relatively homogenous bulk building materials. Use of this method for other sample types can produce results that may not provide the analytical reliability for which the method was intended.

Initial report from 10/18/2010 09:28:21

Analyst(s)

Melissa Klinedinst (2)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. 200 Route 130 North, Cinnaminson NJ



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

041023809

EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 220-3675  
FAX: (856) 786-5974

Company: <u>O'Reilly Talbot &amp; O'Keefe</u>		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: <u>293 Bridge St. Suite 500</u>		Third Party Billing requires written authorization from third party	
City: <u>Springfield</u>	State/Province: <u>MA</u>	Zip/Postal Code: <u>01103</u>	Country: <u>USA</u>
Report To (Name): <u>Bob Kirchherr</u>		Fax #:	
Telephone #: <u>413-531-1122</u>		Email Address: <u>Kirchherr@OTO-ENV.COM</u>	
Project Name/Number: <u>Grace 218-01-02</u>		U.S. State Samples Taken: <u>MA</u>	
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Purchase Order:			
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input checked="" type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
<small>*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.</small>			
<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <i>Quantitative</i> <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM - Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b> <input type="checkbox"/>	
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: <u>Chris Streeter</u>		Samplers Signature: <u>Chris Streeter</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
<u>Top Soil</u>	<u>Top Soil</u>		<u>10/13/10 14:45</u>
<u>NE Park</u>	<u>Northeast Parking Area 12</u>		<u>10/14/10 7:50</u>
			<u>10 OCT 15 AM 10:13</u>
Client Sample # (s):		Total # of Samples: <u>2</u>	
Relinquished (Client): <u>Chris Streeter</u> Date: <u>10/14/10</u>		Time: <u>8:35</u>	
Received (Lab): <u>DMB-UPS-915A</u> Date: <u>10-15-10</u>		Time:	
Comments/Special Instructions:			

041023809

**Bayer, Danielle**

---

**From:** Siegel, Stephen  
**Sent:** Wednesday, October 13, 2010 1:19 PM  
**To:** Corporate - Asbestos Login  
**Cc:** Corporate - PLM; Nardozzi, Chris  
**Subject:** ENVI07 O'Reilly, Talbot & Okun Associates, Inc.  
**Follow Up Flag:** Follow up  
**Flag Status:** Red  
**Attachments:** 041023346\_coc.pdf

Please note that for this client- WE ARE DOING PLM SOIL login as matrix bulk test PLM

For the final report we add the following report comment

This method is designed for relatively homogenous bulk building materials. Use of this method for other sample types can produce results that may not provide the analytical reliability for which the method was intended

Please also note that this exception is being made based on prior EPA contracts and test protocols. For any other clients/soils we do not normally do PLM QUANT but we do PLM CARB, TEM CARB, PLM ASTM Sieving Etc.

Steve

10/14/2010

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (800) 220-3675 Fax: (856) 786-5974 Email: [westmontaslab@EMSL.com](mailto:westmontaslab@EMSL.com)

Attn: **O'Reilly, Talbot & Okun Associates, Inc.**  
**293 Bridge Street**  
**Suite 500**  
**Springfield, MA 01103**

Fax: (413) 788-8830 Phone: (413) 788-6222  
Project: **J2118-01-02**

Customer ID: ENV107  
Customer PO:  
Received: 10/19/10 9:40 AM  
EMSL Order: 041024049  
EMSL Proj:  
Analysis Date: 10/19/2010

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
WETLAND SOIL 041024049-0001	- SOIL	Brown Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (other)	<b>None Detected</b>
SUGGEST TEM					

Initial report from 10/20/2010 06:18:25

Analyst(s)

Nancy Stalter (1)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAC unless otherwise specified. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. 200 Route 130 North, Cinnaminson NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036





EMSL ANALYTICAL, INC.  
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# Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

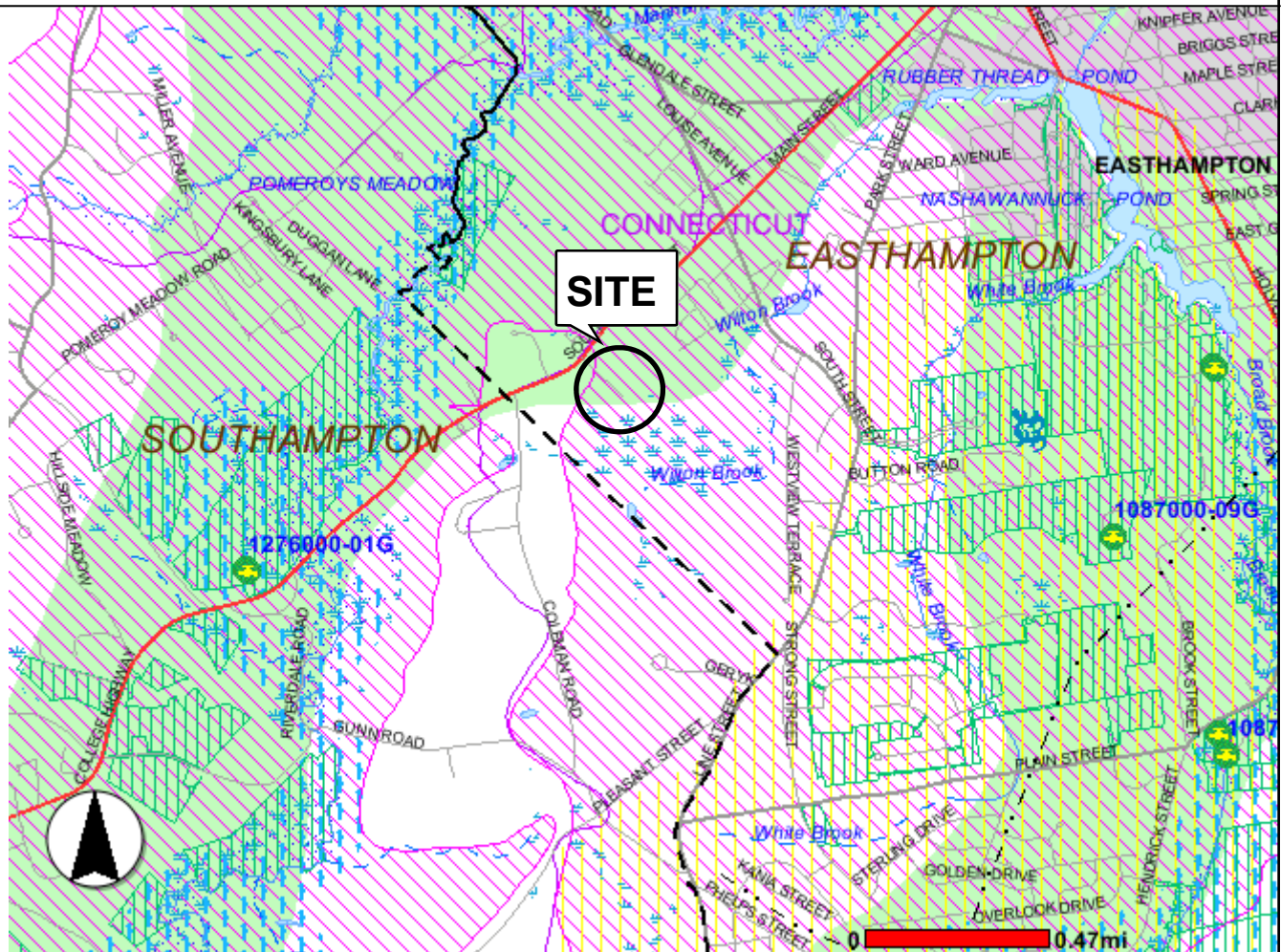
041024049

EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 220-3675  
FAX: (856) 786-5974

Company : O.Reilly, Talbot & Okun Assoc, Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 293 Bridge Street		Third Party Billing requires written authorization from third party	
City: Springfield	State/Province: MA	Zip/Postal Code: 01103	Country: USA
Report To (Name): Same		Fax #:	
Telephone #: 413-788-6222		Email Address: tillinghast@oto-env.com	
Project Name/Number: J2118-01-02			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: U.S. State Samples Taken: CT	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input checked="" type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <i>Quantitative</i> <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b> <input type="checkbox"/>	
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: Joel A. Harris		Samplers Signature: <i>Harris</i>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
WETLAND SOIL	Soil	10 OCT 19 AHID: 52	10/18/10 12:40PM
		SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.	RECEIVED EMSL CINNAMINSON, N.J.
Client Sample # (s): <i>1</i>		Total # of Samples: <i>1</i>	
Relinquished (Client): <i>Harris</i>		Date: <i>10/18/10</i>	Time: <i>3pm</i>
Received (Lab): <i>DTLB-UPS-940A</i>		Date: <i>10-19-10</i>	Time:
Comments/Special Instructions:			



Massachusetts Department of Environmental Protection  
MCP 21e Map  
April, 2011



DEP MCP 21e Map Legend

<p> Zone IIs</p> <p> IWPAs</p> <p> Zone A</p> <p> Sole Source Aquifers</p> <p> Solid Waste Sites</p> <p> Protected Openspace</p> <p> ACECs</p> <p> NHESP Estimated Habitat of Rare Wildlife in Wetland Areas</p> <p> Certified Vernal Pools 2003 NHESP</p> <p> Subbasins</p> <p> Mass Major Basins</p> <p> DEP Region</p> <p> Town Arcs</p> <p> County Boundaries</p>	<p><b>Aquifers, By Yield</b></p> <p> HIGH YIELD</p> <p> MEDIUM YIELD</p> <p><b>Non Potential Drinking Water Source Area</b></p> <p> HIGH YIELD</p> <p> MEDIUM YIELD</p> <p><b>FEMA Floodplains</b></p> <p> 100 YEAR FLOODPLAIN</p>	<p><b>Hydrography</b></p> <p> WATER</p> <p> RESERVOIR</p> <p> WETLANDS</p> <p> SALTWATER WETLANDS</p> <p> FLATS, SHOALS</p> <p><b>Rivers and Streams</b></p> <p> PERENNIAL</p> <p> INTERMITTENT</p> <p> SHORELINE</p> <p> MAN MADE SHORE</p> <p> DAM</p> <p> AQUEDUCT</p>	<p><b>EOT-OTP Roads</b></p> <p> LIMITED ACCESS HIGHWAY</p> <p> MULTILANE HWY, NOT LIMITED ACCESS</p> <p> OTHER NUMBERED HWY</p> <p> MAJOR ROAD - COLLECTOR</p> <p> MINOR STREET OR ROAD, RAMP</p> <p><b>Tracks and Trails MHD</b></p> <p> TRACK</p> <p> TRAIL</p> <p><b>Transmission Lines</b></p> <p> PIPELINE</p> <p> POWERLINE</p> <p> TRAIN</p>
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