con-test®
ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

June 18, 2014

Rob Smith
Cardno ATC Associates - West Springfield
73 Williams Franks Drive
West Springfield, MA 01089

Project Location: Chestnut St. School
Client Job Number:
Project Number: 081-28126.0287
Laboratory Work Order Number: 14F0442

Enclosed are results of analyses for samples received by the laboratory on June 10, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James M. Georgantas
Project Manager

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

Cardno ATC Associates - West Springfield
73 Williams Franks Drive
West Springfield, MA 01089
ATTN: Rob Smith

REPORT DATE: 6/18/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 081-28126.0287

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14F0442

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

PROJECT LOCATION: Chestnut St. School

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Stockpile	14F0442-01	Product/Solid		SW-846 1311	
				SW-846 6010C	
				SW-846 7470A	
				SW-846 8260C	
				SW-846 8270D	

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

CASE NARRATIVE SUMMARY

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

SW-846 8260C

Qualifications:

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Bromochloromethane

B097757-BS1, B097757-BSD1

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

B097757-BS1, B097757-BSD1

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased 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, 2-Butanone (MEK), Naphthalene, Tetrahydrofuran

14F0442-01[Stockpile], B097757-BLK1, B097757-BS1, B097757-BSD1

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

Analyte & Samples(s) Qualified:

1,4-Dioxane

14F0442-01[Stockpile], B097757-BLK1, B097757-BS1, B097757-BSD1

SW-846 8270D

Qualifications:

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Dibenz(a,h)anthracene, Indeno(1,2,3-cd)pyrene

14F0442-01[Stockpile], B097988-BLK1

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

SW-846 8260C

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.

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.

Daren J. Damboragian
Laboratory Manager

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Chestnut St. School | Sample Description: | Work Order: 14F0442

Date Received: 6/10/2014

Field Sample #: Stockpile | Sampled: 6/9/2014 13:30

Sample ID: 14F0442-01

Sample Matrix: Product/Solid

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Benzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Bromobenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Bromochloromethane	ND	0.0037	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Bromodichloromethane	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Bromoform	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Bromomethane	ND	0.0092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
2-Butanone (MEK)	ND	0.037	mg/Kg	1	V-05	SW-846 8260C	6/13/14	6/13/14 10:47	MFF
n-Butylbenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
sec-Butylbenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
tert-Butylbenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Carbon Disulfide	ND	0.018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Carbon Tetrachloride	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Chlorobenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Chlorodibromomethane	ND	0.00092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Chloroethane	ND	0.0092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Chloroform	ND	0.0037	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Chloromethane	ND	0.0092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
2-Chlorotoluene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
4-Chlorotoluene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,2-Dibromoethane (EDB)	ND	0.00092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Dibromomethane	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,2-Dichlorobenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,3-Dichlorobenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,4-Dichlorobenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,1-Dichloroethane	ND	0.0092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,2-Dichloroethane	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,1-Dichloroethylene	ND	0.0037	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
cis-1,2-Dichloroethylene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
trans-1,2-Dichloroethylene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,2-Dichloropropane	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,3-Dichloropropane	ND	0.00092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
2,2-Dichloropropane	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,1-Dichloropropene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
cis-1,3-Dichloropropene	ND	0.00092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
trans-1,3-Dichloropropene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Diethyl Ether	ND	0.0092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Diisopropyl Ether (DIPE)	ND	0.00092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,4-Dioxane	ND	0.092	mg/Kg	1	V-16	SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Ethylbenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Chestnut St. School | Sample Description: | Work Order: 14F0442

Date Received: 6/10/2014

Field Sample #: Stockpile | Sampled: 6/9/2014 13:30

Sample ID: 14F0442-01

Sample Matrix: Product/Solid

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
2-Hexanone (MBK)	ND	0.018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Isopropylbenzene (Cumene)	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0037	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Methylene Chloride	ND	0.0092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Naphthalene	ND	0.0092	mg/Kg	1	V-05	SW-846 8260C	6/13/14	6/13/14 10:47	MFF
n-Propylbenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Styrene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,1,2,2-Tetrachloroethane	ND	0.00092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Tetrachloroethylene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Tetrahydrofuran	ND	0.0092	mg/Kg	1	V-05	SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Toluene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,2,3-Trichlorobenzene	ND	0.0037	mg/Kg	1	V-05	SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,2,4-Trichlorobenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,1,1-Trichloroethane	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,1,2-Trichloroethane	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Trichloroethylene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,2,3-Trichloropropane	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,2,4-Trimethylbenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
1,3,5-Trimethylbenzene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
Vinyl Chloride	ND	0.0092	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
m+p Xylene	ND	0.0037	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF
o-Xylene	ND	0.0018	mg/Kg	1		SW-846 8260C	6/13/14	6/13/14 10:47	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	90.8	70-130		6/13/14 10:47
Toluene-d8	95.2	70-130		6/13/14 10:47
4-Bromofluorobenzene	82.6	70-130		6/13/14 10:47

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Chestnut St. School | Sample Description: | Work Order: 14F0442

Date Received: 6/10/2014

Field Sample #: Stockpile | Sampled: 6/9/2014 13:30

Sample ID: 14F0442-01

Sample Matrix: Product/Solid

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Acenaphthylene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Anthracene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Benzo(a)anthracene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Benzo(a)pyrene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Benzo(b)fluoranthene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Benzo(g,h,i)perylene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Benzo(k)fluoranthene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Chrysene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Dibenz(a,h)anthracene	ND	0.84	mg/Kg	1	V-20	SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Fluoranthene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Fluorene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Indeno(1,2,3-cd)pyrene	ND	0.84	mg/Kg	1	V-20	SW-846 8270D	6/17/14	6/17/14 18:49	CMR
2-Methylnaphthalene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Naphthalene	0.84	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Phenanthrene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR
Pyrene	ND	0.84	mg/Kg	1		SW-846 8270D	6/17/14	6/17/14 18:49	CMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Nitrobenzene-d5	80.3	30-130		6/17/14 18:49
2-Fluorobiphenyl	89.0	30-130		6/17/14 18:49
p-Terphenyl-d14	71.1	30-130		6/17/14 18:49

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Chestnut St. School | Sample Description: | Work Order: 14F0442

Date Received: 6/10/2014

Field Sample #: Stockpile | Sampled: 6/9/2014 13:30

Sample ID: 14F0442-01

Sample Matrix: Product/Solid

TCLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	0.010	mg/L	1		SW-846 6010C	6/14/14	6/16/14 12:09	OP
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	6/14/14	6/16/14 12:00	AMP
Barium	ND	0.050	mg/L	1		SW-846 6010C	6/17/14	6/18/14 12:28	OP
Cadmium	ND	0.0040	mg/L	1		SW-846 6010C	6/14/14	6/16/14 12:09	OP
Chromium	ND	0.010	mg/L	1		SW-846 6010C	6/14/14	6/16/14 12:09	OP
Lead	ND	0.010	mg/L	1		SW-846 6010C	6/14/14	6/16/14 12:09	OP
Selenium	ND	0.050	mg/L	1		SW-846 6010C	6/14/14	6/16/14 12:09	OP
Silver	ND	0.0050	mg/L	1		SW-846 6010C	6/14/14	6/16/14 12:09	OP

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

Sample Extraction Data

Prep Method: SW-846 3010A-SW-846 6010C **Leachates were extracted on 6/13/2014 per SW-846 1311 in Batch B097749**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14F0442-01RE1 [Stockpile]	B098040	50.0	50.0	06/17/14

Prep Method: SW-846 3010A-SW-846 6010C **Leachates were extracted on 6/13/2014 per SW-846 1311 in Batch B097749**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14F0442-01 [Stockpile]	B097859	50.0	50.0	06/14/14

Prep Method: SW-846 7470A Prep-SW-846 7470A **Leachates were extracted on 6/13/2014 per SW-846 1311 in Batch B097749**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14F0442-01 [Stockpile]	B097867	6.00	6.00	06/14/14

Prep Method: SW-846 5035-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14F0442-01 [Stockpile]	B097757	5.43	10.0	06/13/14

Prep Method: SW-846 3546-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14F0442-01 [Stockpile]	B097988	6.08	1.00	06/17/14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

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
Batch B097757 - SW-846 5035										
Blank (B097757-BLK1)				Prepared & Analyzed: 06/13/14						
Acetone	ND	0.10	mg/Kg							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg							
Benzene	ND	0.0020	mg/Kg							
Bromobenzene	ND	0.0020	mg/Kg							
Bromochloromethane	ND	0.0040	mg/Kg							
Bromodichloromethane	ND	0.0020	mg/Kg							
Bromoform	ND	0.0020	mg/Kg							
Bromomethane	ND	0.010	mg/Kg							
2-Butanone (MEK)	ND	0.040	mg/Kg							V-05
n-Butylbenzene	ND	0.0020	mg/Kg							
sec-Butylbenzene	ND	0.0020	mg/Kg							
tert-Butylbenzene	ND	0.0020	mg/Kg							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg							
Carbon Disulfide	ND	0.020	mg/Kg							
Carbon Tetrachloride	ND	0.0020	mg/Kg							
Chlorobenzene	ND	0.0020	mg/Kg							
Chlorodibromomethane	ND	0.0010	mg/Kg							
Chloroethane	ND	0.010	mg/Kg							
Chloroform	ND	0.0040	mg/Kg							
Chloromethane	ND	0.010	mg/Kg							
2-Chlorotoluene	ND	0.0020	mg/Kg							
4-Chlorotoluene	ND	0.0020	mg/Kg							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg							
Dibromomethane	ND	0.0020	mg/Kg							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg							
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg							
1,1-Dichloroethane	ND	0.010	mg/Kg							
1,2-Dichloroethane	ND	0.0020	mg/Kg							
1,1-Dichloroethylene	ND	0.0040	mg/Kg							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg							
1,2-Dichloropropane	ND	0.0020	mg/Kg							
1,3-Dichloropropane	ND	0.0010	mg/Kg							
2,2-Dichloropropane	ND	0.0020	mg/Kg							
1,1-Dichloropropene	ND	0.0020	mg/Kg							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg							
trans-1,3-Dichloropropene	ND	0.0020	mg/Kg							
Diethyl Ether	ND	0.010	mg/Kg							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg							
1,4-Dioxane	ND	0.10	mg/Kg							V-16
Ethylbenzene	ND	0.0020	mg/Kg							
Hexachlorobutadiene	ND	0.0020	mg/Kg							
2-Hexanone (MBK)	ND	0.020	mg/Kg							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg							
Methylene Chloride	ND	0.010	mg/Kg							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg							
Naphthalene	ND	0.010	mg/Kg							V-05

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

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	
Batch B097757 - SW-846 5035												
Blank (B097757-BLK1)				Prepared & Analyzed: 06/13/14								
n-Propylbenzene	ND	0.0020	mg/Kg									
Styrene	ND	0.0020	mg/Kg									
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg									
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg									
Tetrachloroethylene	ND	0.0020	mg/Kg									
Tetrahydrofuran	ND	0.010	mg/Kg								V-05	
Toluene	ND	0.0020	mg/Kg									
1,2,3-Trichlorobenzene	ND	0.0040	mg/Kg								V-05	
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg									
1,1,1-Trichloroethane	ND	0.0020	mg/Kg									
1,1,2-Trichloroethane	ND	0.0020	mg/Kg									
Trichloroethylene	ND	0.0020	mg/Kg									
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg									
1,2,3-Trichloropropane	ND	0.0020	mg/Kg									
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg									
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg									
Vinyl Chloride	ND	0.010	mg/Kg									
m+p Xylene	ND	0.0040	mg/Kg									
o-Xylene	ND	0.0020	mg/Kg									
Surrogate: 1,2-Dichloroethane-d4	*0.0502*		mg/Kg	0.0500		100		70-130				
Surrogate: Toluene-d8	*0.0482*		mg/Kg	0.0500		96.4		70-130				
Surrogate: 4-Bromofluorobenzene	*0.0453*		mg/Kg	0.0500		90.6		70-130				
LCS (B097757-BS1)				Prepared & Analyzed: 06/13/14								
Acetone	0.157	0.10	mg/Kg	0.200		78.7		40-160				†
tert-Amyl Methyl Ether (TAME)	0.0191	0.0010	mg/Kg	0.0200		95.5		70-130				
Benzene	0.0207	0.0020	mg/Kg	0.0200		103		70-130				
Bromobenzene	0.0206	0.0020	mg/Kg	0.0200		103		70-130				
Bromochloromethane	0.0280	0.0040	mg/Kg	0.0200		**140**	*	70-130			L-02	
Bromodichloromethane	0.0201	0.0020	mg/Kg	0.0200		101		70-130				
Bromoform	0.0193	0.0020	mg/Kg	0.0200		96.5		70-130				
Bromomethane	0.00898	0.010	mg/Kg	0.0200		44.9		40-160			L-14	†
2-Butanone (MEK)	0.149	0.040	mg/Kg	0.200		74.5		40-160			V-05	†
n-Butylbenzene	0.0209	0.0020	mg/Kg	0.0200		104		70-130				
sec-Butylbenzene	0.0243	0.0020	mg/Kg	0.0200		122		70-130				
tert-Butylbenzene	0.0241	0.0020	mg/Kg	0.0200		121		70-130				
tert-Butyl Ethyl Ether (TBEE)	0.0217	0.0010	mg/Kg	0.0200		108		70-130				
Carbon Disulfide	0.0204	0.020	mg/Kg	0.0200		102		70-130				
Carbon Tetrachloride	0.0232	0.0020	mg/Kg	0.0200		116		70-130				
Chlorobenzene	0.0208	0.0020	mg/Kg	0.0200		104		70-130				
Chlorodibromomethane	0.0201	0.0010	mg/Kg	0.0200		101		70-130				
Chloroethane	0.0225	0.010	mg/Kg	0.0200		113		70-130				
Chloroform	0.0189	0.0040	mg/Kg	0.0200		94.5		70-130				
Chloromethane	0.0120	0.010	mg/Kg	0.0200		59.9		40-160			L-14	†
2-Chlorotoluene	0.0217	0.0020	mg/Kg	0.0200		108		70-130				
4-Chlorotoluene	0.0226	0.0020	mg/Kg	0.0200		113		70-130				
1,2-Dibromo-3-chloropropane (DBCP)	0.0189	0.0020	mg/Kg	0.0200		94.6		70-130				
1,2-Dibromoethane (EDB)	0.0194	0.0010	mg/Kg	0.0200		97.0		70-130				
Dibromomethane	0.0197	0.0020	mg/Kg	0.0200		98.4		70-130				
1,2-Dichlorobenzene	0.0210	0.0020	mg/Kg	0.0200		105		70-130				
1,3-Dichlorobenzene	0.0212	0.0020	mg/Kg	0.0200		106		70-130				
1,4-Dichlorobenzene	0.0211	0.0020	mg/Kg	0.0200		105		70-130				

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

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	
Batch B097757 - SW-846 5035											
LCS (B097757-BS1)				Prepared & Analyzed: 06/13/14							
Dichlorodifluoromethane (Freon 12)	0.0209	0.010	mg/Kg	0.0200		104	40-160				†
1,1-Dichloroethane	0.0181	0.010	mg/Kg	0.0200		90.7	70-130				
1,2-Dichloroethane	0.0204	0.0020	mg/Kg	0.0200		102	70-130				
1,1-Dichloroethylene	0.0231	0.0040	mg/Kg	0.0200		116	70-130				
cis-1,2-Dichloroethylene	0.0200	0.0020	mg/Kg	0.0200		99.8	70-130				
trans-1,2-Dichloroethylene	0.0214	0.0020	mg/Kg	0.0200		107	70-130				
1,2-Dichloropropane	0.0205	0.0020	mg/Kg	0.0200		103	70-130				
1,3-Dichloropropane	0.0194	0.0010	mg/Kg	0.0200		96.8	70-130				
2,2-Dichloropropane	0.0176	0.0020	mg/Kg	0.0200		87.8	70-130				
1,1-Dichloropropene	0.0227	0.0020	mg/Kg	0.0200		114	70-130				
cis-1,3-Dichloropropene	0.0202	0.0010	mg/Kg	0.0200		101	70-130				
trans-1,3-Dichloropropene	0.0191	0.0020	mg/Kg	0.0200		95.6	70-130				
Diethyl Ether	0.0205	0.010	mg/Kg	0.0200		102	70-130				
Diisopropyl Ether (DIPE)	0.0215	0.0010	mg/Kg	0.0200		107	70-130				
1,4-Dioxane	0.162	0.10	mg/Kg	0.200		80.9	40-160			V-16	†
Ethylbenzene	0.0233	0.0020	mg/Kg	0.0200		117	70-130				
Hexachlorobutadiene	0.0241	0.0020	mg/Kg	0.0200		121	70-130				
2-Hexanone (MBK)	0.172	0.020	mg/Kg	0.200		85.8	40-160				†
Isopropylbenzene (Cumene)	0.0232	0.0020	mg/Kg	0.0200		116	70-130				
p-Isopropyltoluene (p-Cymene)	0.0242	0.0020	mg/Kg	0.0200		121	70-130				
Methyl tert-Butyl Ether (MTBE)	0.0186	0.0040	mg/Kg	0.0200		92.8	70-130				
Methylene Chloride	0.0160	0.010	mg/Kg	0.0200		79.9	70-130				
4-Methyl-2-pentanone (MIBK)	0.176	0.020	mg/Kg	0.200		88.1	40-160				†
Naphthalene	0.0153	0.010	mg/Kg	0.0200		76.5	70-130			V-05	
n-Propylbenzene	0.0225	0.0020	mg/Kg	0.0200		112	70-130				
Styrene	0.0225	0.0020	mg/Kg	0.0200		112	70-130				
1,1,1,2-Tetrachloroethane	0.0219	0.0020	mg/Kg	0.0200		110	70-130				
1,1,2,2-Tetrachloroethane	0.0187	0.0010	mg/Kg	0.0200		93.7	70-130				
Tetrachloroethylene	0.0228	0.0020	mg/Kg	0.0200		114	70-130				
Tetrahydrofuran	0.0176	0.010	mg/Kg	0.0200		88.1	70-130			V-05	
Toluene	0.0215	0.0020	mg/Kg	0.0200		107	70-130				
1,2,3-Trichlorobenzene	0.0177	0.0040	mg/Kg	0.0200		88.4	70-130			V-05	
1,2,4-Trichlorobenzene	0.0175	0.0020	mg/Kg	0.0200		87.6	70-130				
1,1,1-Trichloroethane	0.0217	0.0020	mg/Kg	0.0200		108	70-130				
1,1,2-Trichloroethane	0.0190	0.0020	mg/Kg	0.0200		95.2	70-130				
Trichloroethylene	0.0220	0.0020	mg/Kg	0.0200		110	70-130				
Trichlorofluoromethane (Freon 11)	0.0216	0.010	mg/Kg	0.0200		108	70-130				
1,2,3-Trichloropropane	0.0185	0.0020	mg/Kg	0.0200		92.3	70-130				
1,2,4-Trimethylbenzene	0.0243	0.0020	mg/Kg	0.0200		121	70-130				
1,3,5-Trimethylbenzene	0.0226	0.0020	mg/Kg	0.0200		113	70-130				
Vinyl Chloride	0.0207	0.010	mg/Kg	0.0200		104	70-130				
m+p Xylene	0.0466	0.0040	mg/Kg	0.0400		116	70-130				
o-Xylene	0.0224	0.0020	mg/Kg	0.0200		112	70-130				
Surrogate: 1,2-Dichloroethane-d4	*0.0475*		mg/Kg	0.0500		95.1	70-130				
Surrogate: Toluene-d8	*0.0491*		mg/Kg	0.0500		98.1	70-130				
Surrogate: 4-Bromofluorobenzene	*0.0483*		mg/Kg	0.0500		96.6	70-130				

con-test® ANALYTICAL LABORATORY

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

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	
Batch B097757 - SW-846 5035												
LCS Dup (B097757-BSD1)				Prepared & Analyzed: 06/13/14								
Acetone	0.159	0.10	mg/Kg	0.200		79.5		40-160	1.07	20		†
tert-Amyl Methyl Ether (TAME)	0.0195	0.0010	mg/Kg	0.0200		97.6		70-130	2.18	20		
Benzene	0.0209	0.0020	mg/Kg	0.0200		104		70-130	0.867	20		
Bromobenzene	0.0209	0.0020	mg/Kg	0.0200		104		70-130	1.45	20		
Bromochloromethane	0.0314	0.0040	mg/Kg	0.0200		**157**	*	70-130	11.5	20	L-02	
Bromodichloromethane	0.0212	0.0020	mg/Kg	0.0200		106		70-130	5.42	20		
Bromoform	0.0200	0.0020	mg/Kg	0.0200		99.8		70-130	3.36	20		
Bromomethane	0.0102	0.010	mg/Kg	0.0200		51.1		40-160	12.9	20	L-14	†
2-Butanone (MEK)	0.152	0.040	mg/Kg	0.200		75.9		40-160	1.81	20	V-05	†
n-Butylbenzene	0.0202	0.0020	mg/Kg	0.0200		101		70-130	3.02	20		
sec-Butylbenzene	0.0233	0.0020	mg/Kg	0.0200		116		70-130	4.37	20		
tert-Butylbenzene	0.0231	0.0020	mg/Kg	0.0200		116		70-130	4.15	20		
tert-Butyl Ethyl Ether (TBEE)	0.0224	0.0010	mg/Kg	0.0200		112		70-130	3.00	20		
Carbon Disulfide	0.0204	0.020	mg/Kg	0.0200		102		70-130	0.196	20		
Carbon Tetrachloride	0.0233	0.0020	mg/Kg	0.0200		116		70-130	0.430	20		
Chlorobenzene	0.0207	0.0020	mg/Kg	0.0200		103		70-130	0.771	20		
Chlorodibromomethane	0.0205	0.0010	mg/Kg	0.0200		102		70-130	1.77	20		
Chloroethane	0.0233	0.010	mg/Kg	0.0200		116		70-130	3.23	20		
Chloroform	0.0188	0.0040	mg/Kg	0.0200		94.1		70-130	0.424	20		
Chloromethane	0.0123	0.010	mg/Kg	0.0200		61.5		40-160	2.64	20	L-14	†
2-Chlorotoluene	0.0217	0.0020	mg/Kg	0.0200		108		70-130	0.185	20		
4-Chlorotoluene	0.0227	0.0020	mg/Kg	0.0200		114		70-130	0.530	20		
1,2-Dibromo-3-chloropropane (DBCP)	0.0185	0.0020	mg/Kg	0.0200		92.6		70-130	2.14	20		
1,2-Dibromoethane (EDB)	0.0198	0.0010	mg/Kg	0.0200		98.8		70-130	1.84	20		
Dibromomethane	0.0208	0.0020	mg/Kg	0.0200		104		70-130	5.34	20		
1,2-Dichlorobenzene	0.0206	0.0020	mg/Kg	0.0200		103		70-130	2.21	20		
1,3-Dichlorobenzene	0.0209	0.0020	mg/Kg	0.0200		104		70-130	1.52	20		
1,4-Dichlorobenzene	0.0203	0.0020	mg/Kg	0.0200		102		70-130	3.68	20		
Dichlorodifluoromethane (Freon 12)	0.0211	0.010	mg/Kg	0.0200		105		40-160	0.953	20		†
1,1-Dichloroethane	0.0186	0.010	mg/Kg	0.0200		92.8		70-130	2.29	20		
1,2-Dichloroethane	0.0209	0.0020	mg/Kg	0.0200		104		70-130	2.52	20		
1,1-Dichloroethylene	0.0230	0.0040	mg/Kg	0.0200		115		70-130	0.347	20		
cis-1,2-Dichloroethylene	0.0196	0.0020	mg/Kg	0.0200		98.2		70-130	1.62	20		
trans-1,2-Dichloroethylene	0.0216	0.0020	mg/Kg	0.0200		108		70-130	0.838	20		
1,2-Dichloropropane	0.0213	0.0020	mg/Kg	0.0200		106		70-130	3.44	20		
1,3-Dichloropropane	0.0200	0.0010	mg/Kg	0.0200		99.8		70-130	3.05	20		
2,2-Dichloropropane	0.0167	0.0020	mg/Kg	0.0200		83.3		70-130	5.26	20		
1,1-Dichloropropene	0.0224	0.0020	mg/Kg	0.0200		112		70-130	1.33	20		
cis-1,3-Dichloropropene	0.0207	0.0010	mg/Kg	0.0200		103		70-130	2.35	20		
trans-1,3-Dichloropropene	0.0200	0.0020	mg/Kg	0.0200		100		70-130	4.70	20		
Diethyl Ether	0.0211	0.010	mg/Kg	0.0200		106		70-130	3.08	20		
Diisopropyl Ether (DIPE)	0.0218	0.0010	mg/Kg	0.0200		109		70-130	1.48	20		
1,4-Dioxane	0.184	0.10	mg/Kg	0.200		91.9		40-160	12.8	20	V-16	†
Ethylbenzene	0.0233	0.0020	mg/Kg	0.0200		116		70-130	0.343	20		
Hexachlorobutadiene	0.0231	0.0020	mg/Kg	0.0200		116		70-130	4.23	20		
2-Hexanone (MBK)	0.180	0.020	mg/Kg	0.200		90.2		40-160	4.92	20		†
Isopropylbenzene (Cumene)	0.0229	0.0020	mg/Kg	0.0200		115		70-130	1.13	20		
p-Isopropyltoluene (p-Cymene)	0.0237	0.0020	mg/Kg	0.0200		118		70-130	2.17	20		
Methyl tert-Butyl Ether (MTBE)	0.0188	0.0040	mg/Kg	0.0200		93.9		70-130	1.18	20		
Methylene Chloride	0.0164	0.010	mg/Kg	0.0200		82.2		70-130	2.84	20		
4-Methyl-2-pentanone (MIBK)	0.184	0.020	mg/Kg	0.200		92.0		40-160	4.28	20		†
Naphthalene	0.0156	0.010	mg/Kg	0.0200		78.2		70-130	2.20	20	V-05	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

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
Batch B097757 - SW-846 5035										
LCS Dup (B097757-BSD1)				Prepared & Analyzed: 06/13/14						
n-Propylbenzene	0.0223	0.0020	mg/Kg	0.0200		112	70-130	0.804	20	
Styrene	0.0228	0.0020	mg/Kg	0.0200		114	70-130	1.33	20	
1,1,1,2-Tetrachloroethane	0.0221	0.0020	mg/Kg	0.0200		110	70-130	0.818	20	
1,1,2,2-Tetrachloroethane	0.0192	0.0010	mg/Kg	0.0200		96.0	70-130	2.42	20	
Tetrachloroethylene	0.0229	0.0020	mg/Kg	0.0200		114	70-130	0.526	20	
Tetrahydrofuran	0.0193	0.010	mg/Kg	0.0200		96.6	70-130	9.20	20	V-05
Toluene	0.0214	0.0020	mg/Kg	0.0200		107	70-130	0.373	20	
1,2,3-Trichlorobenzene	0.0175	0.0040	mg/Kg	0.0200		87.4	70-130	1.14	20	V-05
1,2,4-Trichlorobenzene	0.0171	0.0020	mg/Kg	0.0200		85.5	70-130	2.43	20	
1,1,1-Trichloroethane	0.0213	0.0020	mg/Kg	0.0200		106	70-130	1.77	20	
1,1,2-Trichloroethane	0.0191	0.0020	mg/Kg	0.0200		95.6	70-130	0.419	20	
Trichloroethylene	0.0220	0.0020	mg/Kg	0.0200		110	70-130	0.273	20	
Trichlorofluoromethane (Freon 11)	0.0228	0.010	mg/Kg	0.0200		114	70-130	5.49	20	
1,2,3-Trichloropropane	0.0195	0.0020	mg/Kg	0.0200		97.7	70-130	5.68	20	
1,2,4-Trimethylbenzene	0.0234	0.0020	mg/Kg	0.0200		117	70-130	3.61	20	
1,3,5-Trimethylbenzene	0.0224	0.0020	mg/Kg	0.0200		112	70-130	0.800	20	
Vinyl Chloride	0.0202	0.010	mg/Kg	0.0200		101	70-130	2.25	20	
m+p Xylene	0.0463	0.0040	mg/Kg	0.0400		116	70-130	0.603	20	
o-Xylene	0.0225	0.0020	mg/Kg	0.0200		112	70-130	0.268	20	
Surrogate: 1,2-Dichloroethane-d4	*0.0488*		mg/Kg	0.0500		97.6	70-130			
Surrogate: Toluene-d8	*0.0493*		mg/Kg	0.0500		98.5	70-130			
Surrogate: 4-Bromofluorobenzene	*0.0490*		mg/Kg	0.0500		98.1	70-130			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

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
Batch B097988 - SW-846 3546										
Blank (B097988-BLK1)				Prepared & Analyzed: 06/17/14						
Acenaphthene	ND	0.85	mg/Kg							
Acenaphthylene	ND	0.85	mg/Kg							
Anthracene	ND	0.85	mg/Kg							
Benzo(a)anthracene	ND	0.85	mg/Kg							
Benzo(a)pyrene	ND	0.85	mg/Kg							
Benzo(b)fluoranthene	ND	0.85	mg/Kg							
Benzo(g,h,i)perylene	ND	0.85	mg/Kg							
Benzo(k)fluoranthene	ND	0.85	mg/Kg							
Chrysene	ND	0.85	mg/Kg							
Dibenz(a,h)anthracene	ND	0.85	mg/Kg							V-20
Fluoranthene	ND	0.85	mg/Kg							
Fluorene	ND	0.85	mg/Kg							
Indeno(1,2,3-cd)pyrene	ND	0.85	mg/Kg							V-20
2-Methylnaphthalene	ND	0.85	mg/Kg							
Naphthalene	ND	0.85	mg/Kg							
Phenanthrene	ND	0.85	mg/Kg							
Pyrene	ND	0.85	mg/Kg							
Surrogate: Nitrobenzene-d5	*10.2*		mg/Kg	16.7		61.2	30-130			
Surrogate: 2-Fluorobiphenyl	*11.1*		mg/Kg	16.7		66.7	30-130			
Surrogate: p-Terphenyl-d14	*13.1*		mg/Kg	16.7		78.9	30-130			
LCS (B097988-BS1)				Prepared: 06/17/14 Analyzed: 06/18/14						
Acenaphthene	6.93	0.85	mg/Kg	8.33		83.2	40-140			
Acenaphthylene	6.88	0.85	mg/Kg	8.33		82.6	40-140			
Anthracene	7.68	0.85	mg/Kg	8.33		92.2	40-140			
Benzo(a)anthracene	7.83	0.85	mg/Kg	8.33		94.0	40-140			
Benzo(a)pyrene	9.66	0.85	mg/Kg	8.33		116	40-140			
Benzo(b)fluoranthene	8.64	0.85	mg/Kg	8.33		104	40-140			
Benzo(g,h,i)perylene	7.31	0.85	mg/Kg	8.33		87.7	40-140			
Benzo(k)fluoranthene	10.3	0.85	mg/Kg	8.33		124	40-140			
Chrysene	7.64	0.85	mg/Kg	8.33		91.7	40-140			
Dibenz(a,h)anthracene	7.40	0.85	mg/Kg	8.33		88.8	40-140			
Fluoranthene	7.46	0.85	mg/Kg	8.33		89.6	40-140			
Fluorene	7.56	0.85	mg/Kg	8.33		90.7	40-140			
Indeno(1,2,3-cd)pyrene	6.56	0.85	mg/Kg	8.33		78.8	40-140			
2-Methylnaphthalene	9.51	0.85	mg/Kg	8.33		114	40-140			
Naphthalene	6.39	0.85	mg/Kg	8.33		76.7	40-140			
Phenanthrene	6.86	0.85	mg/Kg	8.33		82.3	40-140			
Pyrene	9.12	0.85	mg/Kg	8.33		109	40-140			
Surrogate: Nitrobenzene-d5	*14.9*		mg/Kg	16.7		89.7	30-130			
Surrogate: 2-Fluorobiphenyl	*15.4*		mg/Kg	16.7		92.3	30-130			
Surrogate: p-Terphenyl-d14	*18.5*		mg/Kg	16.7		111	30-130			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

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
Batch B097988 - SW-846 3546										
LCS Dup (B097988-BSD1)				Prepared: 06/17/14 Analyzed: 06/18/14						
Acenaphthene	6.57	0.85	mg/Kg	8.33		78.9	40-140	5.33	30	
Acenaphthylene	6.56	0.85	mg/Kg	8.33		78.7	40-140	4.89	30	
Anthracene	7.21	0.85	mg/Kg	8.33		86.5	40-140	6.35	30	
Benzo(a)anthracene	7.42	0.85	mg/Kg	8.33		89.0	40-140	5.42	30	
Benzo(a)pyrene	9.19	0.85	mg/Kg	8.33		110	40-140	5.07	30	
Benzo(b)fluoranthene	8.38	0.85	mg/Kg	8.33		101	40-140	3.11	30	
Benzo(g,h,i)perylene	6.66	0.85	mg/Kg	8.33		79.9	40-140	9.33	30	
Benzo(k)fluoranthene	9.99	0.85	mg/Kg	8.33		120	40-140	3.31	30	
Chrysene	7.35	0.85	mg/Kg	8.33		88.2	40-140	3.91	30	
Dibenz(a,h)anthracene	7.23	0.85	mg/Kg	8.33		86.8	40-140	2.35	30	
Fluoranthene	6.91	0.85	mg/Kg	8.33		82.9	40-140	7.70	30	
Fluorene	7.02	0.85	mg/Kg	8.33		84.3	40-140	7.27	30	
Indeno(1,2,3-cd)pyrene	6.33	0.85	mg/Kg	8.33		76.0	40-140	3.57	30	
2-Methylnaphthalene	9.10	0.85	mg/Kg	8.33		109	40-140	4.39	30	
Naphthalene	6.29	0.85	mg/Kg	8.33		75.5	40-140	1.60	30	
Phenanthrene	6.33	0.85	mg/Kg	8.33		75.9	40-140	8.02	30	
Pyrene	8.75	0.85	mg/Kg	8.33		105	40-140	4.08	30	
Surrogate: Nitrobenzene-d5	*14.2*		mg/Kg	16.7		85.5	30-130			
Surrogate: 2-Fluorobiphenyl	*14.2*		mg/Kg	16.7		85.0	30-130			
Surrogate: p-Terphenyl-d14	*17.5*		mg/Kg	16.7		105	30-130			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

TCLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B097859 - SW-846 3010A										
Blank (B097859-BLK1)				Prepared: 06/14/14 Analyzed: 06/16/14						
Arsenic	ND	0.010	mg/L							
Cadmium	ND	0.0040	mg/L							
Chromium	ND	0.010	mg/L							
Lead	ND	0.010	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.0050	mg/L							
LCS (B097859-BS1)				Prepared: 06/14/14 Analyzed: 06/16/14						
Arsenic	0.563	0.010	mg/L	0.500		113	80-120			
Cadmium	0.513	0.0040	mg/L	0.500		103	80-120			
Chromium	0.495	0.010	mg/L	0.500		98.9	80-120			
Lead	0.474	0.010	mg/L	0.500		94.8	80-120			
Selenium	0.574	0.050	mg/L	0.500		115	80-120			
Silver	0.492	0.0050	mg/L	0.500		98.4	80-120			
LCS Dup (B097859-BSD1)				Prepared: 06/14/14 Analyzed: 06/16/14						
Arsenic	0.551	0.010	mg/L	0.500		110	80-120	2.13	20	
Cadmium	0.505	0.0040	mg/L	0.500		101	80-120	1.55	20	
Chromium	0.487	0.010	mg/L	0.500		97.4	80-120	1.55	20	
Lead	0.465	0.010	mg/L	0.500		93.1	80-120	1.86	20	
Selenium	0.562	0.050	mg/L	0.500		112	80-120	1.98	20	
Silver	0.485	0.0050	mg/L	0.500		96.9	80-120	1.54	20	
Batch B097867 - SW-846 7470A Prep										
Blank (B097867-BLK1)				Prepared: 06/14/14 Analyzed: 06/16/14						
Mercury	ND	0.00010	mg/L							
LCS (B097867-BS1)				Prepared: 06/14/14 Analyzed: 06/16/14						
Mercury	0.00206	0.00010	mg/L	0.00200		103	80-120			
LCS Dup (B097867-BSD1)				Prepared: 06/14/14 Analyzed: 06/16/14						
Mercury	0.00213	0.00010	mg/L	0.00200		106	80-120	3.34	20	
Batch B098040 - SW-846 3010A										
Blank (B098040-BLK1)				Prepared: 06/17/14 Analyzed: 06/18/14						
Barium	ND	0.050	mg/L							
LCS (B098040-BS1)				Prepared: 06/17/14 Analyzed: 06/18/14						
Barium	0.507	0.050	mg/L	0.500		101	80-120			

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

QUALITY CONTROL

TCLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B098040 - SW-846 3010A										
LCS Dup (B098040-BSD1)				Prepared: 06/17/14 Analyzed: 06/18/14						
Barium	0.506	0.050	mg/L	0.500		101	80-120	0.0462	20	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

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.
	No results have been blank subtracted unless specified in the case narrative section.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
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.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased 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 may be associated with reported result.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010C in Soil	
Barium	NY,CT,ME,NC,NH,VA,NJ
SW-846 6010C in Water	
Arsenic	NY,CT,NC,ME,NH,VA,NJ
Barium	NY,CT,ME,NC,NH,VA,NJ
Cadmium	NY,CT,ME,NC,NH,VA,NJ
Chromium	NY,CT,ME,NC,NH,VA,NJ
Lead	NY,CT,ME,NC,NH,VA,NJ
Selenium	CT,ME,NC,NH,NY,VA,NJ
Silver	CT,ME,NC,NH,NY,VA,NJ
SW-846 7470A in Water	
Mercury	CT,ME,NC,NH,NY,VA,NJ
SW-846 8260C in Product/Solid	
Acetone	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Product/Solid	
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NY
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
SW-846 8270D in Product/Solid	
Acenaphthene	CT,NY,NH,ME,NC,VA,NJ
Acenaphthylene	CT,NY,NH,ME,NC,VA,NJ
Anthracene	CT,NY,NH,ME,NC,VA,NJ
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA,NJ
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA,NJ
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA,NJ
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA,NJ
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA,NJ
Chrysene	CT,NY,NH,ME,NC,VA,NJ
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA,NJ
Fluoranthene	CT,NY,NH,ME,NC,VA,NJ
Fluorene	CT,NY,NH,ME,NC,VA,NJ
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA,NJ
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA,NJ
Naphthalene	CT,NY,NH,ME,NC,VA,NJ
Phenanthrene	CT,NY,NH,ME,NC,VA,NJ
Pyrene	CT,NY,NH,ME,NC,VA,NJ

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

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

CHAIN OF CUSTODY RECORD

14F0442

Rev 04.05.12

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

Company Name: Cardno ATC
Address: 73 William Franks Dr. West Springfield
Attention: Rob Smith
Project Location: Chestnut St School
Sampled By: Elizabeth O'Connor

Telephone: (413) 781-0070
Project #: 081.28126.0287
Client PO#:

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

DATA DELIVERY (check all that apply)
○ FAX ○ EMAIL ○ WEBSITE
Fax #:
Email:
Format: ○ PDF ○ EXCEL ○ GIS ○ OTHER _____
○ "Enhanced Data Package"

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	# of Containers	** Preservation	***Container Code	ANALYSIS REQUESTED: TCLP RCRA 8	8270 PAH only	8260
								2	H	A			
								2	I	A			
								5	~	V			
01	Stockpile	6.9.14	1330		X	O	U	X	X	X			

Comments: Rec: Other Lab 4.4°C 17:00

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfa
X = Na hydroxide
T = Na thiosulfate
O = Other _____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other coal

Dissolved Meta
○ Field Filtered
○ Lab to Filter

Relinquished by: (signature)	Date/Time:
Elizabeth K. O'Connor	6/9/14 1500
Received by: (signature)	Date/Time:
Sample to refrigerator	6/9/14 1500
Relinquished by: (signature)	Date/Time:
sample from refrigerator	6/10 1600
Received by: (signature)	Date/Time:
	6-10-14 1600

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5 day RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

6-10-14 16:00

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

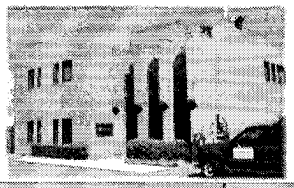
†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

6-10-14 1700

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

con-test® ANALYTICAL LABORATORY



Sample Receipt Checklist

CLIENT NAME: Cardno ATC RECEIVED BY: EZK DATE: 6-10-14

1) **Was the chain(s) of custody relinquished and signed?** (Yes) No No CoC Included

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 4.4 °C

5) **Are there Dissolved samples for the lab to filter?** Yes (No)

Who was notified _____ Date _____ Time _____

6) **Are there any RUSH or SHORT HOLDING TIME samples?** Yes (No)

Who was notified _____ Date _____ Time _____

7) **Location where samples are stored:** 19

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

8) **Do all samples have the proper Acid pH:** Yes No (N/A) _____

9) **Do all samples have the proper Base pH:** Yes No (N/A) _____

10) **Was the PC notified of any discrepancies with the CoC vs the samples:** Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	4
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	5	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol 1

Bisulfate 2 # DI Water 2

Thiosulfate _____ Unpreserved

Time and Date Frozen: 6-10-14 16:00

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	T	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	NA	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** EZK **Date/Time:** 6-10-14 1600