March 20, 2025 BEC Project No. 25119

Mr. George Defelice
Defelice Corporation
28 Silva Lane
Dracut, Massachusetts 01826

Transmitted via email: gdefelice@defelicecorp.com

Re: Soil Sampling Results for Soil Stockpile on Chicopee Road
For EPA Method 8260 (Volatile Organic Compounds- VOCs)
Chicopee Road
Groton, Massachusetts

Boston Environmental Corporation (BEC) on behalf of the Defelice Corporation 28 Silva Lane Dracut, Massachusetts visited the Construction area and Stockpile Pile location on Chicopee Road on Friday March 14, 2025 to collect samples from a soil stockpile for Volatile Organic Compounds (VOCs) via EPA Method 8260 per the request of the project engineer and the Town of Groton.. The stockpile was generated from excavations across the construction site along Chicopee Road in Groton. There was no suspect contamination identified during the excavation. This sampling was performed strictly to satisfy the Town of Groton's request. VOCs were not considered to be a Contaminate of Concern (COC) for the project.

BEC collected 1 composite sample to characterize the stockpile. In addition. The composite sample was comprised of 5 grab samples. Each grab sample was screened for the presence of total volatile organic compounds (VOCs) using a photoionization detector (PID). All 5 grab samples had PID results of 0.0 parts per million (ppm). The samples were submitted for laboratory analysis by a Massachusetts Department of Environmental Protection (MassDEP) certified lab (Pace New England). The laboratory analysis consisted of parameters required to satisfy the EPA Method 8260 requirements for VOCs.

There is no evidence of a reportable release of VOCs nor is there any reason to believe any of the substances would be present above their respective reportable concentration.

338 Howard Street
Brockton, MA 02302
P: 508.897.8033 F: 508.897.8533
www.bostonenvironmentalcorp.com

The result of the laboratory analysis is summarized on the attached Table 1 and the complete laboratory reports can be found in Attachment A. All VOC parameters were below Massachusetts' most stringent RC-1 standards.

We trust this information to be sufficient, however, should you have any questions please do not hesitate to contact me.

Sincerely yours,

Andrew Eckhardt, LSP#7123
Boston Environmental Corporation

CC: Mike Toomey, Bill Podolski (BEC)

Attachments:
Table 1 – Soil Precharacterization Results
Attachment A – Soil Laboratory Data Package

Tables

Soil Results Table

Groton, MA

Parameter	ortable Concentrations (RCs)		MCP - Method 1 Cleanup Standards		SAMPLING LOCATION
	RCS-1	RCS-2	S-1/GW-1	S-1/GW-2	193 Chicopee Row-5
Sampling Date					3/14/2025 9:20:00 AM
Sample Depth					- Feet
SM 2540G (% Wt)					
% Solids	~	~	~	~	85.7
SW-846 8260D (mg/Kg dry)					
ACETONE	6	50	6	50	ND (0.090)
TERT-AMYL METHYL ETHER	~	~	~	~	ND (0.00090)
BENZENE	2	200	2	40	ND (0.0018)
BROMOBENZENE	100	1000	~	~	ND (0.0018)
BROMOCHLOROMETHANE	~	~	~	~	ND (0.0018)
BROMODICHLOROMETHANE	0.1	0.1	0.1	0.1	ND (0.0018)
BROMOFORM	0.1	1	0.1	1	ND (0.0018)
BROMOMETHANE	0.5	0.5	0.5	0.5	ND (0.0090)
2-BUTANONE (MEK)	4	50	4	50	ND (0.036)
N-BUTYLBENZENE	~	~	~	~	ND (0.0018)
SEC-BUTYLBENZENE	~	~	~	~	ND (0.0018)
TERT-BUTYLBENZENE	100	1000	~	~	ND (0.0018)
TERT-BUTYLETHYL ETHER	~	~	~	~	ND (0.00090)
CARBON DISULFIDE	100	1000	~	~	ND (0.018)
CARBON TETRACHLORIDE	5	5	10	5	ND (0.0018)
CHLOROBENZENE	1	3	1	3	ND (0.0018)
CHLORODIBROMOMETHANE	0.005	0.03	0.005	0.03	ND (0.00090)
CHLOROETHANE	100	1000	~	~	ND (0.018)
CHLOROFORM	0.2	0.2	0.4	0.2	ND (0.0036)
CHLOROMETHANE	100	1000	~	~	ND (0.0090)
2-CHLOROTOLUENE	100	1000	~	~	ND (0.0018)
4-CHLOROTOLUENE	100	1000	~	~	ND (0.0018)
1,2-DIBROMO-3-CHLOROPROPANE	10	100	~	~	ND (0.0018)
1,2-DIBROMOETHANE (EDB)	0.1	0.1	0.1	0.1	ND (0.00090)
DIBROMOMETHANE	500	5000	~	~	ND (0.0018)
1,2-DICHLOROBENZENE	9	100	9	100	ND (0.0018)
1,3-DICHLOROBENZENE	3	200	3	100	ND (0.0018)
1,4-DICHLOROBENZENE	0.7	1	0.7	1	ND (0.0018)
DICHLORODIFLUOROMETHANE	1000	10000	~	~	ND (0.018)
1,1-DICHLOROETHANE	0.4	9	0.4	9	ND (0.0018)
1,2-DICHLOROETHANE	0.1	0.1	0.1	0.1	ND (0.0018)
1,1-DICHLOROETHYLENE	3	40	3	40	ND (0.0036)
CIS-1,2-DICHLOROETHYLENE	0.1	0.1	0.3	0.1	ND (0.0018)
TRANS-1,2-DICHLOROETHYLENE	1	1	1	1	ND (0.0018)
1,2-DICHLOROPROPANE	0.1	0.1	0.1	0.1	ND (0.0018)
1,3-DICHLOROPROPANE	500	5000	~	~	ND (0.00090)
2,2-DICHLOROPROPANE	0.1	0.2	~	~	ND (0.0018)
1,1-DICHLOROPROPENE	0.01	0.1	~	~	ND (0.0018)
CIS-1,3-DICHLOROPROPENE	0.01	0.1	0.01	0.4	ND (0.00090)
TRANS-1,3-DICHLOROPROPENE	0.01	0.4	0.01	0.4	ND (0.00090)
DIETHYL ETHER	100	1000	~	~	ND (0.018)
DIISOPROPYL ETHER	100	1000	~	~	ND (0.00090)
1,4-DIOXANE	0.2	5	0.2	5	ND (0.090)
ETHYLBENZENE	40	1000	40	500	ND (0.0018)
HEXACHLOROBUTADIENE	30	100	30	30	ND (0.0018)
2-HEXANONE	100	1000	~	~	ND (0.018)
ISOPROPYLBENZENE	1000	10000	~	~	ND (0.0018)
P-ISOPROPYLTOLUENE	100	1000	~	~	ND (0.0018)
METHYL TERT-BUTYL ETHER (MTBE)	0.1	100	0.1	100	ND (0.0036)
METHYLENE CHLORIDE	0.1	3	0.1	0.1	ND (0.018)
4-METHYL-2-PENTANONE (MIBK)	0.4	50	0.4	50	ND (0.018)
NAPHTHALENE	4	20	4	20	ND (0.0036)
N-PROPYLBENZENE	100	1000	~	~	ND (0.0018)
STYRENE	3	4	3	4	ND (0.0018)
1,1,1,2-TETRACHLOROETHANE	0.1	0.1	0.1	0.1	ND (0.0018)
1,1,2,2-TETRACHLOROETHANE	0.005	0.02	0.005	0.02	ND (0.00090)
TETRACHLOROETHYLENE	1	4	1	4	ND (0.0018)
TETRAHYDROFURAN	500	5000	~	~	ND (0.0090)
TOLUENE	30	1000	30	500	ND (0.0018)
1,2,3-TRICHLOROBENZENE	~	~	~	~	ND (0.0018)
1,2,4-TRICHLOROBENZENE	2	6	2	6	ND (0.0018)
1,1,1-TRICHLOROETHANE	30	600	30	500	ND (0.0018)
1,1,2-TRICHLOROETHANE	0.1	2	0.1	2	ND (0.0018)
TRICHLOROETHYLENE	0.3	0.3	0.3	0.3	ND (0.0018)
TRICHLOROFLUOROMETHANE	1000	10000	~	~	ND (0.0090)
1,2,3-TRICHLOROPROPANE	100	1000	~	~	ND (0.0018)
1,2,4-TRIMETHYLBENZENE	1000	10000	~	~	ND (0.0018)
1,3,5-TRIMETHYLBENZENE	10	100	~	~	ND (0.0018)
VINYL CHLORIDE	0.3	0.7	0.3	0.3	ND (0.0090)
M/P-XYLENE	100	100	400	100	ND (0.0036)
O-XYLENE	100	100	400	100	ND (0.0018)
SW-846 8270E (mg/Kg dry)					
BIPHENYL	0.05	6	0.05	6	**ND (0.078) ***
ACENAPHTHENE	4	3000	4	1000	ND (0.20)
ACENAPHTHYLENE	2	10	2	600	ND (0.20)
ACETOPHENONE	1000	10000	~	~	ND (0.40)
ANILINE	1000	10000	~	~	ND (0.40)
ANTHRACENE	1000	3000	1000	1000	ND (0.20)
BENZO(A)ANTHRACENE	20	300	20	20	ND (0.20)
BENZO(A)PYRENE	2	30	2	2	ND (0.20)
BENZO(B)FLUORANTHENE	20	300	20	20	ND (0.20)
BENZO(G,H,I)PERYLENE	1000	3000	1000	1000	ND (0.20)
BENZO(K)FLUORANTHENE	200	3000	200	200	ND (0.20)
BIS(2-CHLOROETHOXY)METHANE	500	5000	~	~	ND (0.40)
BIS(2-CHLOROETHYL)ETHER	0.7	0.7	0.7	0.7	ND (0.40)
BIS(2-CHLOROISOPROPYL)ETHER	0.7	0.7	0.7	0.7	ND (0.40)
BIS(2-ETHYLHEXYL)PHTHALATE	100	700	100	100	ND (0.40)
4-BROMOPHENYL PHENYL ETHER	100	1000	~	~	ND (0.40)
BUTYLBENZYLPHTHALATE	100	1000	~	~	ND (0.40)
4-CHLOROANILINE	1	3	1	7	ND (0.77)
2-CHLORONAPHTHALENE	1000	10000	~	~	ND (0.40)
2-CHLOROPHENOL	0.7	100	0.7	100	ND (0.40)
CHRYSENE	200	3000	200	200	ND (0.20)
DIBENZ(a,h)ANTHRACENE	2	30	2	2	ND (0.20)
DIBENZOFURAN	100	1000	~	~	ND (0.40)
DI-N-BUTYLPHTHALATE	50	500	~	~	ND (0.40)
1,2-DICHLOROBENZENE	9	100	9	100	ND (0.40)
1,3-DICHLOROBENZENE	3	200	3	100	ND (0.40)
1,4-DICHLOROBENZENE	0.7	1	0.7	1	ND (0.40)
3,3'-DICHLOROBENZIDINE	3	20	3	3	ND (0.20)
2,4-DICHLOROPHENOL	0.7	40	0.7	70	ND (0.40)
DIETHYLPHTHALATE	10	200	10	200	ND (0.40)
2,4-DIMETHYLPHENOL	0.7	100	0.7	100	ND (0.40)
DIMETHYLPHTHALATE	0.7	50	0.7	50	ND (0.40)
2,4-DINITROPHENOL	3	50	3	50	ND (0.77)
2,4-DINITROTOLUENE	0.7	10	0.7	2	ND (0.40)
2,6-DINITROTOLUENE	100	1000	~	~	ND (0.40)
DI-N-OCTYLPHTHALATE	1000	10000	~	~	ND (0.40)
1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	50	500	~	~	ND (0.40)
FLUORANTHENE	1000	3000	1000	1000	ND (0.20)
FLUORENE	1000	3000	1000	1000	ND (0.20)
HEXACHLOROBENZENE	0.7	0.9	0.7	0.7	ND (0.40)
HEXACHLOROBUTADIENE	30	100	30	30	ND (0.40)
HEXACHLOROETHANE	0.7	3	0.7	3	ND (0.40)
INDENO(1,2,3-CD)PYRENE	20	300	20	20	ND (0.20)
ISOPHORONE	100	1000	~	~	ND (0.40)
2-METHYLNAPHTHALENE	0.7	80	0.7	80	ND (0.20)
O-CRESOL	500	5000	~	~	ND (0.40)
M/P-CRESOL	500	5000	~	~	ND (0.40)
NAPHTHALENE	4	20	4	20	ND (0.20)
NITROBENZENE	500	5000	~	~	ND (0.40)
2-NITROPHENOL	100	1000	~	~	ND (0.40)
4-NITROPHENOL	100	1000	~	~	ND (0.77)
PENTACHLOROPHENOL	3	10	3	3	ND (0.40)
PHENANTHRENE	10	1000	10	500	ND (0.20)
PHENOL	0.9	20	0.9	50	ND (0.40)
PYRENE	1000	3000	1000	1000	ND (0.20)
PYRIDINE	500	5000	~	~	ND (0.40)
1,2,4-TRICHLOROBENZENE	2	6	2	6	ND (0.40)
2,4,5-TRICHLOROPHENOL	4	600	4	1000	ND (0.40)
2,4,6-TRICHLOROPHENOL	0.7	20	0.7	20	ND (0.40)

NOTES:
1. An asterisk (*) following a detection limit indicates that the minimum laboratory reporting limit exceeds one or more of the regulatory criteria
2. ND = Not detected above the lab reporting limits shown in parenthesis.
3. NT = Not tested.
4. ~ = No Method 1 Standard or M3CL available
5. Shaded values exceed the MCP Reportable Concentrations (RCs).
6. Bolded values exceed the Method 1 Cleanup Standards.
7. Bold Red values exceed the TCLP limits.
8. Con-Test Laboratory is not responsible for the regulatory content, data comparisons with regulations, or decisions made based on data comparisons shown in this deliverable

* Con-Test Laboratory is not responsible for the regulatory content listed in this deliverable. Please notify us should you be aware of any regulatory information that may not be correct or has changed.

Attachment A
Soil Laboratory Data Package

Pace Analytical Services, LLC - East Longmeadow, Ma

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

March 19, 2025

Andy Eckhardt
Boston Environmental Corp. - Brockton, MA
7 Fenner Grant Lane
Cumberland, RI 02864

Project Location: Groton, MA
Client Job Number:
Project Number: BEC25119
Laboratory Work Order Number: 25C0876

Enclosed are results of analyses for samples as received by the laboratory on March 14, 2025. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rebecca Faust
Project Manager

Table of Contents

Pace Analytical Services, LLC - East Longmeadow, Ma

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

Boston Environmental Corp. - Brockton, MA
7 Fenner Grant Lane
Cumberland, RI 02864
ATTN: Andy Eckhardt

REPORT DATE: 3/19/2025

PURCHASE ORDER NUMBER:

PROJECT NUMBER: BEC25119

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 25C0876

The results of analyses performed on the following samples submitted to Pace Analytical Services, LLC - East Longmeadow, Ma, are found in this report.

PROJECT LOCATION: Groton, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
193 Chicopee Row-5	25C0876-01	Soil		SM 2540G SW-846 8260D SW-846 8270E	

Pace Analytical Services, LLC - East Longmeadow, Ma

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.

Pace Analytical Services, LLC - East Longmeadow, Ma

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

SW-846 8260D

Qualifications:

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Chlorobenzene

B400960-BSD1

V-16

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

S119194-CCV1

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

Bromomethane

25C0876-01[193 Chicopee Row-5], B400960-BLK1, B400960-BS1, B400960-BSD1, S119194-CCV1

V-36

Initial calibration verification (ICV) 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:

Carbon Disulfide

B400960-BS1, B400960-BSD1, S119194-CCV1

Dichlorodifluoromethane (Freon 12)

B400960-BS1, B400960-BSD1, S119194-CCV1

SW-846 8270E

Qualifications:

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

Pyridine

B400998-MSD1

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

3,3-Dichlorobenzidine

B400998-MS1, B400998-MSD1

4-Chloroaniline

B400998-MS1, B400998-MSD1

Aniline

B400998-MS1, B400998-MSD1

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

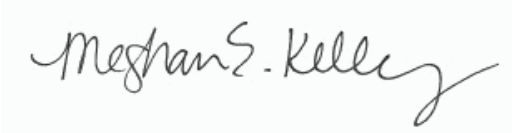
Pyridine

25C0876-01RE1[193 Chicopee Row-5], B400998-BLK1, B400998-BS1, B400998-BSD1, B400998-MS1, B400998-MSD1, S117513-ICV1, S119159-CCV1, S119213-CCV1

Pace Analytical Services, LLC - East Longmeadow, Ma

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

The results of analyses reported only relate to samples submitted to Pace Analytical Services, LLC - East Longmeadow, Ma, 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.



Meghan E. Kelley
Reporting Specialist

Pace Analytical Services, LLC - East Longmeadow, Ma

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

Project Location: Groton, MA | Sample Description: | Work Order: 25C0876

Date Received: 3/14/2025

Field Sample #: 193 Chicopee Row-5 | Sampled: 3/14/2025 09:20

Sample ID: 25C0876-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.090	0.046	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00090	0.00084	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Benzene	ND	0.0018	0.00056	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Bromobenzene	ND	0.0018	0.00054	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Bromochloromethane	ND	0.0018	0.00077	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Bromodichloromethane	ND	0.0018	0.00046	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Bromoform	ND	0.0018	0.00079	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Bromomethane	ND	0.0090	0.0016	mg/Kg dry	1	V-34	SW-846 8260D	3/17/25	3/17/25 8:08	MFF
2-Butanone (MEK)	ND	0.036	0.0076	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
n-Butylbenzene	ND	0.0018	0.00065	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
sec-Butylbenzene	ND	0.0018	0.00072	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
tert-Butylbenzene	ND	0.0018	0.00065	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00090	0.00078	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Carbon Disulfide	ND	0.018	0.0090	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Carbon Tetrachloride	ND	0.0018	0.00052	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Chlorobenzene	ND	0.0018	0.00043	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Chlorodibromomethane	ND	0.00090	0.00059	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Chloroethane	ND	0.018	0.0013	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Chloroform	ND	0.0036	0.00059	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Chloromethane	ND	0.0090	0.0011	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
2-Chlorotoluene	ND	0.0018	0.00046	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
4-Chlorotoluene	ND	0.0018	0.00052	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0018	0.00073	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,2-Dibromoethane (EDB)	ND	0.00090	0.00065	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Dibromomethane	ND	0.0018	0.00055	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,2-Dichlorobenzene	ND	0.0018	0.00057	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,3-Dichlorobenzene	ND	0.0018	0.00052	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,4-Dichlorobenzene	ND	0.0018	0.00056	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.018	0.00079	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,1-Dichloroethane	ND	0.0018	0.00055	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,2-Dichloroethane	ND	0.0018	0.00062	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,1-Dichloroethylene	ND	0.0036	0.00086	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
cis-1,2-Dichloroethylene	ND	0.0018	0.00062	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
trans-1,2-Dichloroethylene	ND	0.0018	0.00053	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,2-Dichloropropane	ND	0.0018	0.00055	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,3-Dichloropropane	ND	0.00090	0.00050	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
2,2-Dichloropropane	ND	0.0018	0.00066	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,1-Dichloropropene	ND	0.0018	0.00066	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
cis-1,3-Dichloropropene	ND	0.00090	0.00068	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
trans-1,3-Dichloropropene	ND	0.00090	0.00069	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Diethyl Ether	ND	0.018	0.00098	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Diisopropyl Ether (DIPE)	ND	0.00090	0.00073	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,4-Dioxane	ND	0.090	0.041	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Ethylbenzene	ND	0.0018	0.00052	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF

Pace Analytical Services, LLC - East Longmeadow, Ma

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

Project Location: Groton, MA | Sample Description: | Work Order: 25C0876

Date Received: 3/14/2025

Field Sample #: 193 Chicopee Row-5 | Sampled: 3/14/2025 09:20

Sample ID: 25C0876-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0018	0.00074	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
2-Hexanone (MBK)	ND	0.018	0.0062	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Isopropylbenzene (Cumene)	ND	0.0018	0.00069	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	0.00058	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0036	0.00079	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Methylene Chloride	ND	0.018	0.00084	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	0.0079	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Naphthalene	ND	0.0036	0.00089	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
n-Propylbenzene	ND	0.0018	0.00059	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Styrene	ND	0.0018	0.00057	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	0.00051	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,1,2,2-Tetrachloroethane	ND	0.00090	0.00069	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Tetrachloroethylene	ND	0.0018	0.00078	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Tetrahydrofuran	ND	0.0090	0.0033	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Toluene	ND	0.0018	0.00053	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,2,3-Trichlorobenzene	ND	0.0018	0.00059	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,2,4-Trichlorobenzene	ND	0.0018	0.00059	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,1,1-Trichloroethane	ND	0.0018	0.00053	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,1,2-Trichloroethane	ND	0.0018	0.00046	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Trichloroethylene	ND	0.0018	0.00068	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0090	0.0011	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,2,3-Trichloropropane	ND	0.0018	0.00073	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,2,4-Trimethylbenzene	ND	0.0018	0.00086	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
1,3,5-Trimethylbenzene	ND	0.0018	0.00072	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
Vinyl Chloride	ND	0.0090	0.00070	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
m+p Xylene	ND	0.0036	0.0013	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF
o-Xylene	ND	0.0018	0.00061	mg/Kg dry	1		SW-846 8260D	3/17/25	3/17/25 8:08	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	104	70-130		3/17/25 8:08
Toluene-d8	97.3	70-130		3/17/25 8:08
4-Bromofluorobenzene	97.0	70-130		3/17/25 8:08

Pace Analytical Services, LLC - East Longmeadow, Ma

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

Project Location: Groton, MA | Sample Description: | Work Order: 25C0876

Date Received: 3/14/2025

Field Sample #: 193 Chicopee Row-5 | Sampled: 3/14/2025 09:20

Sample ID: 25C0876-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biphenyl	ND	0.078	0.050	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Acenaphthene	ND	0.20	0.038	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Acenaphthylene	ND	0.20	0.036	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Acetophenone	ND	0.40	0.041	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Aniline	ND	0.40	0.069	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Anthracene	ND	0.20	0.035	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Benzo(a)anthracene	ND	0.20	0.032	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Benzo(a)pyrene	ND	0.20	0.036	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Benzo(b)fluoranthene	ND	0.20	0.032	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Benzo(g,h,i)perylene	ND	0.20	0.057	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Benzo(k)fluoranthene	ND	0.20	0.036	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Bis(2-chloroethoxy)methane	ND	0.40	0.042	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Bis(2-chloroethyl)ether	ND	0.40	0.056	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2,2'-oxybis(1-Chloropropane)	ND	0.40	0.25	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Bis(2-Ethylhexyl)phthalate	ND	0.40	0.047	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
4-Bromophenylphenylether	ND	0.40	0.036	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Butylbenzylphthalate	ND	0.40	0.044	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
4-Chloroaniline	ND	0.77	0.070	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2-Chloronaphthalene	ND	0.40	0.035	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2-Chlorophenol	ND	0.40	0.040	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Chrysene	ND	0.20	0.035	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Dibenz(a,h)anthracene	ND	0.20	0.054	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Dibenzofuran	ND	0.40	0.035	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Di-n-butylphthalate	ND	0.40	0.15	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
1,2-Dichlorobenzene	ND	0.40	0.035	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
1,3-Dichlorobenzene	ND	0.40	0.035	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
1,4-Dichlorobenzene	ND	0.40	0.034	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
3,3-Dichlorobenzidine	ND	0.20	0.085	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2,4-Dichlorophenol	ND	0.40	0.037	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Diethylphthalate	ND	0.40	0.038	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2,4-Dimethylphenol	ND	0.40	0.091	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Dimethylphthalate	ND	0.40	0.037	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2,4-Dinitrophenol	ND	0.77	0.30	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2,4-Dinitrotoluene	ND	0.40	0.040	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2,6-Dinitrotoluene	ND	0.40	0.042	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Di-n-octylphthalate	ND	0.40	0.056	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
1,2-Diphenylhydrazine/Azobenzene	ND	0.40	0.050	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Fluoranthene	ND	0.20	0.032	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Fluorene	ND	0.20	0.035	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Hexachlorobenzene	ND	0.40	0.038	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Hexachlorobutadiene	ND	0.40	0.036	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Hexachloroethane	ND	0.40	0.036	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Indeno(1,2,3-cd)pyrene	ND	0.20	0.064	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Isophorone	ND	0.40	0.042	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC

Pace Analytical Services, LLC - East Longmeadow, Ma

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

Project Location: Groton, MA | Sample Description: | Work Order: 25C0876

Date Received: 3/14/2025

Field Sample #: 193 Chicopee Row-5 | Sampled: 3/14/2025 09:20

Sample ID: 25C0876-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylnaphthalene	ND	0.20	0.034	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2-Methylphenol	ND	0.40	0.053	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
3/4-Methylphenol	ND	0.40	0.052	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Naphthalene	ND	0.20	0.069	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Nitrobenzene	ND	0.40	0.050	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2-Nitrophenol	ND	0.40	0.039	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
4-Nitrophenol	ND	0.77	0.11	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Pentachlorophenol	ND	0.40	0.14	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Phenanthrene	ND	0.20	0.035	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Phenol	ND	0.40	0.050	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Pyrene	ND	0.20	0.041	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
Pyridine	ND	0.40	0.046	mg/Kg dry	1	V-34	SW-846 8270E	3/17/25	3/18/25 13:36	KMC
1,2,4-Trichlorobenzene	ND	0.40	0.034	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2,4,5-Trichlorophenol	ND	0.40	0.040	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC
2,4,6-Trichlorophenol	ND	0.40	0.037	mg/Kg dry	1		SW-846 8270E	3/17/25	3/18/25 13:36	KMC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	61.5	30-130		3/18/25 13:36
Phenol-d6	58.2	30-130		3/18/25 13:36
Nitrobenzene-d5	59.1	30-130		3/18/25 13:36
2-Fluorobiphenyl	60.5	30-130		3/18/25 13:36
2,4,6-Tribromophenol	61.8	30-130		3/18/25 13:36
p-Terphenyl-d14	66.0	30-130		3/18/25 13:36

Pace Analytical Services, LLC - East Longmeadow, Ma

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

Project Location: Groton, MA | Sample Description: | Work Order: 25C0876

Date Received: 3/14/2025

Field Sample #: 193 Chicopee Row-5 | Sampled: 3/14/2025 09:20

Sample ID: 25C0876-01

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	85.7		% Wt	1		SM 2540G	3/14/25	3/14/25 18:52	TMR

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Sample Extraction Data

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

Lab Number [Field ID]	Batch	Date
25C0876-01 [193 Chicopee Row-5]	B400901	03/14/25

Prep Method:SW-846 5035 **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
25C0876-01 [193 Chicopee Row-5]	B400960	6.50	10.0	03/17/25

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
25C0876-01RE1 [193 Chicopee Row-5]	B400998	30.1	1.00	03/17/25

Pace Analytical Services, LLC - East Longmeadow, Ma

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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 B400960 - SW-846 5035										
Blank (B400960-BLK1)				Prepared & Analyzed: 03/17/25						
Acetone	ND	0.10	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
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							V-34
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.020	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	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	0.0020	mg/Kg wet							
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	0.020	mg/Kg wet							
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							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							

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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 B400960 - SW-846 5035											
Blank (B400960-BLK1)				Prepared & Analyzed: 03/17/25							
n-Propylbenzene	ND	0.0020	mg/Kg wet								
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								
Toluene	ND	0.0020	mg/Kg wet								
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet								
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								
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet								
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet								
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet								
Vinyl Chloride	ND	0.010	mg/Kg wet								
m+p Xylene	ND	0.0040	mg/Kg wet								
o-Xylene	ND	0.0020	mg/Kg wet								
Surrogate: 1,2-Dichloroethane-d4	*0.0522*		mg/Kg wet	0.05000		104	70-130				
Surrogate: Toluene-d8	*0.0499*		mg/Kg wet	0.05000		99.9	70-130				
Surrogate: 4-Bromofluorobenzene	*0.0492*		mg/Kg wet	0.05000		98.4	70-130				
LCS (B400960-BS1)				Prepared & Analyzed: 03/17/25							
Acetone	0.186	0.10	mg/Kg wet	0.2000		92.8	40-160				†
tert-Amyl Methyl Ether (TAME)	0.0182	0.0010	mg/Kg wet	0.02000		91.1	70-130				
Benzene	0.0181	0.0020	mg/Kg wet	0.02000		90.5	70-130				
Bromobenzene	0.0154	0.0020	mg/Kg wet	0.02000		76.8	70-130				
Bromochloromethane	0.0174	0.0020	mg/Kg wet	0.02000		86.9	70-130				
Bromodichloromethane	0.0150	0.0020	mg/Kg wet	0.02000		75.1	70-130				
Bromoform	0.0176	0.0020	mg/Kg wet	0.02000		87.8	70-130				
Bromomethane	0.0161	0.010	mg/Kg wet	0.02000		80.5	40-160			V-34	†
2-Butanone (MEK)	0.186	0.040	mg/Kg wet	0.2000		93.0	40-160				†
n-Butylbenzene	0.0149	0.0020	mg/Kg wet	0.02000		74.7	70-130				
sec-Butylbenzene	0.0155	0.0020	mg/Kg wet	0.02000		77.6	70-130				
tert-Butylbenzene	0.0156	0.0020	mg/Kg wet	0.02000		78.2	70-130				
tert-Butyl Ethyl Ether (TBEE)	0.0170	0.0010	mg/Kg wet	0.02000		85.1	70-130				
Carbon Disulfide	0.187	0.020	mg/Kg wet	0.2000		93.3	70-130			V-36	
Carbon Tetrachloride	0.0176	0.0020	mg/Kg wet	0.02000		87.9	70-130				
Chlorobenzene	0.0141	0.0020	mg/Kg wet	0.02000		70.5	70-130				
Chlorodibromomethane	0.0154	0.0010	mg/Kg wet	0.02000		77.2	70-130				
Chloroethane	0.0198	0.020	mg/Kg wet	0.02000		98.8	70-130			J	
Chloroform	0.0178	0.0040	mg/Kg wet	0.02000		88.9	70-130				
Chloromethane	0.0186	0.010	mg/Kg wet	0.02000		93.2	40-160				†
2-Chlorotoluene	0.0154	0.0020	mg/Kg wet	0.02000		76.8	70-130				
4-Chlorotoluene	0.0151	0.0020	mg/Kg wet	0.02000		75.4	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	0.0162	0.0020	mg/Kg wet	0.02000		80.8	70-130				
1,2-Dibromoethane (EDB)	0.0166	0.0010	mg/Kg wet	0.02000		83.2	70-130				
Dibromomethane	0.0179	0.0020	mg/Kg wet	0.02000		89.7	70-130				
1,2-Dichlorobenzene	0.0158	0.0020	mg/Kg wet	0.02000		79.0	70-130				
1,3-Dichlorobenzene	0.0156	0.0020	mg/Kg wet	0.02000		78.0	70-130				
1,4-Dichlorobenzene	0.0154	0.0020	mg/Kg wet	0.02000		76.8	70-130				

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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 B400960 - SW-846 5035											
LCS (B400960-BS1)				Prepared & Analyzed: 03/17/25							
Dichlorodifluoromethane (Freon 12)	0.0210	0.020	mg/Kg wet	0.02000		105	40-160			V-36	†
1,1-Dichloroethane	0.0175	0.0020	mg/Kg wet	0.02000		87.5	70-130				
1,2-Dichloroethane	0.0154	0.0020	mg/Kg wet	0.02000		77.0	70-130				
1,1-Dichloroethylene	0.0180	0.0040	mg/Kg wet	0.02000		89.8	70-130				
cis-1,2-Dichloroethylene	0.0165	0.0020	mg/Kg wet	0.02000		82.6	70-130				
trans-1,2-Dichloroethylene	0.0166	0.0020	mg/Kg wet	0.02000		83.0	70-130				
1,2-Dichloropropane	0.0149	0.0020	mg/Kg wet	0.02000		74.7	70-130				
1,3-Dichloropropane	0.0159	0.0010	mg/Kg wet	0.02000		79.5	70-130				
2,2-Dichloropropane	0.0170	0.0020	mg/Kg wet	0.02000		84.9	70-130				
1,1-Dichloropropene	0.0183	0.0020	mg/Kg wet	0.02000		91.5	70-130				
cis-1,3-Dichloropropene	0.0146	0.0010	mg/Kg wet	0.02000		72.9	70-130				
trans-1,3-Dichloropropene	0.0150	0.0010	mg/Kg wet	0.02000		75.1	70-130				
Diethyl Ether	0.0172	0.020	mg/Kg wet	0.02000		85.8	70-130			J	
Diisopropyl Ether (DIPE)	0.0159	0.0010	mg/Kg wet	0.02000		79.4	70-130				
1,4-Dioxane	0.232	0.10	mg/Kg wet	0.2000		116	40-160				†
Ethylbenzene	0.0161	0.0020	mg/Kg wet	0.02000		80.6	70-130				
Hexachlorobutadiene	0.0141	0.0020	mg/Kg wet	0.02000		70.7	70-130				
2-Hexanone (MBK)	0.167	0.020	mg/Kg wet	0.2000		83.6	40-160				†
Isopropylbenzene (Cumene)	0.0156	0.0020	mg/Kg wet	0.02000		78.2	70-130				
p-Isopropyltoluene (p-Cymene)	0.0154	0.0020	mg/Kg wet	0.02000		77.2	70-130				
Methyl tert-Butyl Ether (MTBE)	0.0177	0.0040	mg/Kg wet	0.02000		88.6	70-130				
Methylene Chloride	0.0151	0.020	mg/Kg wet	0.02000		75.4	70-130			J	
4-Methyl-2-pentanone (MIBK)	0.168	0.020	mg/Kg wet	0.2000		84.1	40-160				†
Naphthalene	0.0169	0.0040	mg/Kg wet	0.02000		84.6	70-130				
n-Propylbenzene	0.0159	0.0020	mg/Kg wet	0.02000		79.7	70-130				
Styrene	0.0151	0.0020	mg/Kg wet	0.02000		75.6	70-130				
1,1,1,2-Tetrachloroethane	0.0157	0.0020	mg/Kg wet	0.02000		78.6	70-130				
1,1,2,2-Tetrachloroethane	0.0174	0.0010	mg/Kg wet	0.02000		87.0	70-130				
Tetrachloroethylene	0.0155	0.0020	mg/Kg wet	0.02000		77.5	70-130				
Tetrahydrofuran	0.0198	0.010	mg/Kg wet	0.02000		99.1	70-130				
Toluene	0.0146	0.0020	mg/Kg wet	0.02000		72.9	70-130				
1,2,3-Trichlorobenzene	0.0150	0.0020	mg/Kg wet	0.02000		74.9	70-130				
1,2,4-Trichlorobenzene	0.0143	0.0020	mg/Kg wet	0.02000		71.5	70-130				
1,1,1-Trichloroethane	0.0178	0.0020	mg/Kg wet	0.02000		89.0	70-130				
1,1,2-Trichloroethane	0.0161	0.0020	mg/Kg wet	0.02000		80.7	70-130				
Trichloroethylene	0.0158	0.0020	mg/Kg wet	0.02000		79.2	70-130				
Trichlorofluoromethane (Freon 11)	0.0169	0.010	mg/Kg wet	0.02000		84.6	70-130				
1,2,3-Trichloropropane	0.0173	0.0020	mg/Kg wet	0.02000		86.4	70-130				
1,2,4-Trimethylbenzene	0.0152	0.0020	mg/Kg wet	0.02000		76.1	70-130				
1,3,5-Trimethylbenzene	0.0155	0.0020	mg/Kg wet	0.02000		77.6	70-130				
Vinyl Chloride	0.0183	0.010	mg/Kg wet	0.02000		91.6	70-130				
m+p Xylene	0.0308	0.0040	mg/Kg wet	0.04000		77.0	70-130				
o-Xylene	0.0155	0.0020	mg/Kg wet	0.02000		77.5	70-130				
Surrogate: 1,2-Dichloroethane-d4	*0.0508*		mg/Kg wet	0.05000		102	70-130				
Surrogate: Toluene-d8	*0.0488*		mg/Kg wet	0.05000		97.5	70-130				
Surrogate: 4-Bromofluorobenzene	*0.0470*		mg/Kg wet	0.05000		94.0	70-130				

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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 B400960 - SW-846 5035												
LCS Dup (B400960-BSD1)				Prepared & Analyzed: 03/17/25								
Acetone	0.192	0.10	mg/Kg wet	0.2000		96.0		40-160	3.43	20		†
tert-Amyl Methyl Ether (TAME)	0.0181	0.0010	mg/Kg wet	0.02000		90.3		70-130	0.882	20		
Benzene	0.0178	0.0020	mg/Kg wet	0.02000		88.8		70-130	1.90	20		
Bromobenzene	0.0153	0.0020	mg/Kg wet	0.02000		76.7		70-130	0.130	20		
Bromochloromethane	0.0170	0.0020	mg/Kg wet	0.02000		85.2		70-130	1.98	20		
Bromodichloromethane	0.0147	0.0020	mg/Kg wet	0.02000		73.5		70-130	2.15	20		
Bromoform	0.0177	0.0020	mg/Kg wet	0.02000		88.3		70-130	0.568	20		
Bromomethane	0.0157	0.010	mg/Kg wet	0.02000		78.5		40-160	2.52	20	V-34	†
2-Butanone (MEK)	0.180	0.040	mg/Kg wet	0.2000		90.2		40-160	3.08	20		†
n-Butylbenzene	0.0146	0.0020	mg/Kg wet	0.02000		73.1		70-130	2.17	20		
sec-Butylbenzene	0.0154	0.0020	mg/Kg wet	0.02000		76.8		70-130	1.04	20		
tert-Butylbenzene	0.0155	0.0020	mg/Kg wet	0.02000		77.4		70-130	1.03	20		
tert-Butyl Ethyl Ether (TBEE)	0.0166	0.0010	mg/Kg wet	0.02000		83.1		70-130	2.38	20		
Carbon Disulfide	0.177	0.020	mg/Kg wet	0.2000		88.4		70-130	5.38	20	V-36	
Carbon Tetrachloride	0.0171	0.0020	mg/Kg wet	0.02000		85.6		70-130	2.65	20		
Chlorobenzene	0.0137	0.0020	mg/Kg wet	0.02000		**68.4**	*	70-130	3.02	20	L-07	
Chlorodibromomethane	0.0150	0.0010	mg/Kg wet	0.02000		75.1		70-130	2.76	20		
Chloroethane	0.0198	0.020	mg/Kg wet	0.02000		99.0		70-130	0.202	20	J	
Chloroform	0.0168	0.0040	mg/Kg wet	0.02000		84.0		70-130	5.67	20		
Chloromethane	0.0184	0.010	mg/Kg wet	0.02000		91.9		40-160	1.40	20		†
2-Chlorotoluene	0.0155	0.0020	mg/Kg wet	0.02000		77.7		70-130	1.17	20		
4-Chlorotoluene	0.0151	0.0020	mg/Kg wet	0.02000		75.5		70-130	0.133	20		
1,2-Dibromo-3-chloropropane (DBCP)	0.0152	0.0020	mg/Kg wet	0.02000		76.2		70-130	5.86	20		
1,2-Dibromoethane (EDB)	0.0164	0.0010	mg/Kg wet	0.02000		82.1		70-130	1.33	20		
Dibromomethane	0.0169	0.0020	mg/Kg wet	0.02000		84.6		70-130	5.85	20		
1,2-Dichlorobenzene	0.0159	0.0020	mg/Kg wet	0.02000		79.5		70-130	0.631	20		
1,3-Dichlorobenzene	0.0153	0.0020	mg/Kg wet	0.02000		76.7		70-130	1.68	20		
1,4-Dichlorobenzene	0.0152	0.0020	mg/Kg wet	0.02000		75.8		70-130	1.31	20		
Dichlorodifluoromethane (Freon 12)	0.0204	0.020	mg/Kg wet	0.02000		102		40-160	2.81	20	V-36	†
1,1-Dichloroethane	0.0170	0.0020	mg/Kg wet	0.02000		85.2		70-130	2.66	20		
1,2-Dichloroethane	0.0149	0.0020	mg/Kg wet	0.02000		74.7		70-130	3.03	20		
1,1-Dichloroethylene	0.0179	0.0040	mg/Kg wet	0.02000		89.3		70-130	0.558	20		
cis-1,2-Dichloroethylene	0.0162	0.0020	mg/Kg wet	0.02000		80.9		70-130	2.08	20		
trans-1,2-Dichloroethylene	0.0159	0.0020	mg/Kg wet	0.02000		79.6		70-130	4.18	20		
1,2-Dichloropropane	0.0152	0.0020	mg/Kg wet	0.02000		75.9		70-130	1.59	20		
1,3-Dichloropropane	0.0159	0.0010	mg/Kg wet	0.02000		79.3		70-130	0.252	20		
2,2-Dichloropropane	0.0165	0.0020	mg/Kg wet	0.02000		82.7		70-130	2.63	20		
1,1-Dichloropropene	0.0176	0.0020	mg/Kg wet	0.02000		88.1		70-130	3.79	20		
cis-1,3-Dichloropropene	0.0145	0.0010	mg/Kg wet	0.02000		72.3		70-130	0.826	20		
trans-1,3-Dichloropropene	0.0150	0.0010	mg/Kg wet	0.02000		75.1		70-130	0.00	20		
Diethyl Ether	0.0164	0.020	mg/Kg wet	0.02000		82.1		70-130	4.41	20	J	
Diisopropyl Ether (DIPE)	0.0166	0.0010	mg/Kg wet	0.02000		82.8		70-130	4.19	20		
1,4-Dioxane	0.191	0.10	mg/Kg wet	0.2000		95.4		40-160	19.5	20		†
Ethylbenzene	0.0160	0.0020	mg/Kg wet	0.02000		79.9		70-130	0.872	20		
Hexachlorobutadiene	0.0141	0.0020	mg/Kg wet	0.02000		70.6		70-130	0.142	20		
2-Hexanone (MBK)	0.167	0.020	mg/Kg wet	0.2000		83.4		40-160	0.227	20		†
Isopropylbenzene (Cumene)	0.0155	0.0020	mg/Kg wet	0.02000		77.7		70-130	0.641	20		
p-Isopropyltoluene (p-Cymene)	0.0151	0.0020	mg/Kg wet	0.02000		75.7		70-130	1.96	20		
Methyl tert-Butyl Ether (MTBE)	0.0175	0.0040	mg/Kg wet	0.02000		87.7		70-130	1.02	20		
Methylene Chloride	0.0153	0.020	mg/Kg wet	0.02000		76.5		70-130	1.45	20	J	
4-Methyl-2-pentanone (MIBK)	0.168	0.020	mg/Kg wet	0.2000		83.8		40-160	0.429	20		†
Naphthalene	0.0166	0.0040	mg/Kg wet	0.02000		83.1		70-130	1.79	20		

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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 B400960 - SW-846 5035										
LCS Dup (B400960-BSD1)				Prepared & Analyzed: 03/17/25						
n-Propylbenzene	0.0158	0.0020	mg/Kg wet	0.02000		79.0	70-130	0.882	20	
Styrene	0.0151	0.0020	mg/Kg wet	0.02000		75.6	70-130	0.00	20	
1,1,1,2-Tetrachloroethane	0.0154	0.0020	mg/Kg wet	0.02000		77.1	70-130	1.93	20	
1,1,2,2-Tetrachloroethane	0.0177	0.0010	mg/Kg wet	0.02000		88.5	70-130	1.71	20	
Tetrachloroethylene	0.0153	0.0020	mg/Kg wet	0.02000		76.4	70-130	1.43	20	
Tetrahydrofuran	0.0192	0.010	mg/Kg wet	0.02000		96.2	70-130	2.97	20	
Toluene	0.0155	0.0020	mg/Kg wet	0.02000		77.6	70-130	6.25	20	
1,2,3-Trichlorobenzene	0.0147	0.0020	mg/Kg wet	0.02000		73.3	70-130	2.16	20	
1,2,4-Trichlorobenzene	0.0143	0.0020	mg/Kg wet	0.02000		71.4	70-130	0.140	20	
1,1,1-Trichloroethane	0.0176	0.0020	mg/Kg wet	0.02000		87.9	70-130	1.24	20	
1,1,2-Trichloroethane	0.0159	0.0020	mg/Kg wet	0.02000		79.3	70-130	1.75	20	
Trichloroethylene	0.0164	0.0020	mg/Kg wet	0.02000		82.0	70-130	3.47	20	
Trichlorofluoromethane (Freon 11)	0.0170	0.010	mg/Kg wet	0.02000		85.2	70-130	0.707	20	
1,2,3-Trichloropropane	0.0174	0.0020	mg/Kg wet	0.02000		86.8	70-130	0.462	20	
1,2,4-Trimethylbenzene	0.0150	0.0020	mg/Kg wet	0.02000		74.8	70-130	1.72	20	
1,3,5-Trimethylbenzene	0.0155	0.0020	mg/Kg wet	0.02000		77.4	70-130	0.258	20	
Vinyl Chloride	0.0189	0.010	mg/Kg wet	0.02000		94.7	70-130	3.33	20	
m+p Xylene	0.0307	0.0040	mg/Kg wet	0.04000		76.7	70-130	0.390	20	
o-Xylene	0.0156	0.0020	mg/Kg wet	0.02000		78.0	70-130	0.643	20	
Surrogate: 1,2-Dichloroethane-d4	*0.0509*		mg/Kg wet	0.05000		102	70-130			
Surrogate: Toluene-d8	*0.0497*		mg/Kg wet	0.05000		99.4	70-130			
Surrogate: 4-Bromofluorobenzene	*0.0479*		mg/Kg wet	0.05000		95.7	70-130			

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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
Batch B400998 - SW-846 3546										
Blank (B400998-BLK1)				Prepared: 03/17/25 Analyzed: 03/18/25						
Biphenyl	ND	0.066	mg/Kg wet							
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							
2,2'-oxybis(1-Chloropropane)	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	0.34	mg/Kg wet							
4-Chloroaniline	ND	0.65	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	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.65	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	0.34	mg/Kg wet							
1,2-Diphenylhydrazine/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	0.65	mg/Kg wet							
Pentachlorophenol	ND	0.34	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	
Batch B400998 - SW-846 3546											
Blank (B400998-BLK1)				Prepared: 03/17/25 Analyzed: 03/18/25							
Phenanthrene	ND	0.17	mg/Kg wet								
Phenol	ND	0.34	mg/Kg wet								
Pyrene	ND	0.17	mg/Kg wet								
Pyridine	ND	0.34	mg/Kg wet							V-34	
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	*4.62*		mg/Kg wet	6.592		70.1	30-130				
Surrogate: Phenol-d6	*4.69*		mg/Kg wet	6.592		71.2	30-130				
Surrogate: Nitrobenzene-d5	*2.14*		mg/Kg wet	3.296		64.9	30-130				
Surrogate: 2-Fluorobiphenyl	*2.39*		mg/Kg wet	3.296		72.6	30-130				
Surrogate: 2,4,6-Tribromophenol	*4.99*		mg/Kg wet	6.592		75.7	30-130				
Surrogate: p-Terphenyl-d14	*2.86*		mg/Kg wet	3.296		86.8	30-130				
LCS (B400998-BS1)				Prepared: 03/17/25 Analyzed: 03/18/25							
Biphenyl	1.27	0.066	mg/Kg wet	1.649		76.9	40-140				
Acenaphthene	1.22	0.17	mg/Kg wet	1.649		74.3	40-140				
Acenaphthylene	1.25	0.17	mg/Kg wet	1.649		76.0	40-140				
Acetophenone	1.25	0.34	mg/Kg wet	1.649		75.6	40-140				
Aniline	0.890	0.34	mg/Kg wet	1.649		54.0	40-140				
Anthracene	1.27	0.17	mg/Kg wet	1.649		77.3	40-140				
Benzo(a)anthracene	1.27	0.17	mg/Kg wet	1.649		77.1	40-140				
Benzo(a)pyrene	1.29	0.17	mg/Kg wet	1.649		78.2	40-140				
Benzo(b)fluoranthene	1.28	0.17	mg/Kg wet	1.649		77.5	40-140				
Benzo(g,h,i)perylene	1.35	0.17	mg/Kg wet	1.649		82.0	40-140				
Benzo(k)fluoranthene	1.28	0.17	mg/Kg wet	1.649		77.6	40-140				
Bis(2-chloroethoxy)methane	1.29	0.34	mg/Kg wet	1.649		78.5	40-140				
Bis(2-chloroethyl)ether	1.31	0.34	mg/Kg wet	1.649		79.5	40-140				
2,2'-oxybis(1-Chloropropane)	1.73	0.34	mg/Kg wet	1.649		105	40-140				
Bis(2-Ethylhexyl)phthalate	1.38	0.34	mg/Kg wet	1.649		83.6	40-140				
4-Bromophenylphenylether	1.22	0.34	mg/Kg wet	1.649		74.1	40-140				
Butylbenzylphthalate	1.31	0.34	mg/Kg wet	1.649		79.5	40-140				
4-Chloroaniline	0.652	0.65	mg/Kg wet	1.649		39.6	15-140			J	†
2-Chloronaphthalene	1.09	0.34	mg/Kg wet	1.649		66.3	40-140				
2-Chlorophenol	1.19	0.34	mg/Kg wet	1.649		72.2	30-130				
Chrysene	1.26	0.17	mg/Kg wet	1.649		76.7	40-140				
Dibenz(a,h)anthracene	1.30	0.17	mg/Kg wet	1.649		79.0	40-140				
Dibenzofuran	1.25	0.34	mg/Kg wet	1.649		75.7	40-140				
Di-n-butylphthalate	1.24	0.34	mg/Kg wet	1.649		75.3	40-140				
1,2-Dichlorobenzene	1.12	0.34	mg/Kg wet	1.649		68.0	40-140				
1,3-Dichlorobenzene	1.05	0.34	mg/Kg wet	1.649		63.9	40-140				
1,4-Dichlorobenzene	1.08	0.34	mg/Kg wet	1.649		65.7	40-140				
3,3-Dichlorobenzidine	1.06	0.17	mg/Kg wet	1.649		64.1	40-140				
2,4-Dichlorophenol	1.18	0.34	mg/Kg wet	1.649		71.8	30-130				
Diethylphthalate	1.14	0.34	mg/Kg wet	1.649		69.3	40-140				
2,4-Dimethylphenol	1.12	0.34	mg/Kg wet	1.649		68.0	30-130				
Dimethylphthalate	1.16	0.34	mg/Kg wet	1.649		70.2	40-140				
2,4-Dinitrophenol	1.24	0.65	mg/Kg wet	1.649		75.4	15-140				†
2,4-Dinitrotoluene	1.23	0.34	mg/Kg wet	1.649		74.6	40-140				
2,6-Dinitrotoluene	1.23	0.34	mg/Kg wet	1.649		74.8	40-140				
Di-n-octylphthalate	1.31	0.34	mg/Kg wet	1.649		79.7	40-140				
1,2-Diphenylhydrazine/Azobenzene	1.50	0.34	mg/Kg wet	1.649		91.2	40-140				

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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	
Batch B400998 - SW-846 3546											
LCS (B400998-BS1)				Prepared: 03/17/25 Analyzed: 03/18/25							
Fluoranthene	1.24	0.17	mg/Kg wet	1.649		75.0	40-140				
Fluorene	1.23	0.17	mg/Kg wet	1.649		74.8	40-140				
Hexachlorobenzene	1.33	0.34	mg/Kg wet	1.649		81.0	40-140				
Hexachlorobutadiene	1.17	0.34	mg/Kg wet	1.649		71.1	40-140				
Hexachloroethane	1.19	0.34	mg/Kg wet	1.649		72.0	40-140				
Indeno(1,2,3-cd)pyrene	1.34	0.17	mg/Kg wet	1.649		81.5	40-140				
Isophorone	1.40	0.34	mg/Kg wet	1.649		84.6	40-140				
2-Methylnaphthalene	1.10	0.17	mg/Kg wet	1.649		66.9	40-140				
2-Methylphenol	1.28	0.34	mg/Kg wet	1.649		77.5	30-130				
3/4-Methylphenol	1.25	0.34	mg/Kg wet	1.649		75.5	30-130				
Naphthalene	1.20	0.17	mg/Kg wet	1.649		72.9	40-140				
Nitrobenzene	1.22	0.34	mg/Kg wet	1.649		74.3	40-140				
2-Nitrophenol	1.24	0.34	mg/Kg wet	1.649		75.0	30-130				
4-Nitrophenol	1.14	0.65	mg/Kg wet	1.649		68.9	15-140				†
Pentachlorophenol	1.31	0.34	mg/Kg wet	1.649		79.6	30-130				
Phenanthrene	1.26	0.17	mg/Kg wet	1.649		76.5	40-140				
Phenol	1.19	0.34	mg/Kg wet	1.649		72.2	15-140				†
Pyrene	1.34	0.17	mg/Kg wet	1.649		81.5	40-140				
Pyridine	0.908	0.34	mg/Kg wet	1.649		55.1	30-140			V-34	†
1,2,4-Trichlorobenzene	1.15	0.34	mg/Kg wet	1.649		69.5	40-140				
2,4,5-Trichlorophenol	1.24	0.34	mg/Kg wet	1.649		75.4	30-130				
2,4,6-Trichlorophenol	1.24	0.34	mg/Kg wet	1.649		75.3	30-130				
Surrogate: 2-Fluorophenol	*5.03*		mg/Kg wet	6.594		76.2	30-130				
Surrogate: Phenol-d6	*5.00*		mg/Kg wet	6.594		75.9	30-130				
Surrogate: Nitrobenzene-d5	*2.47*		mg/Kg wet	3.297		74.9	30-130				
Surrogate: 2-Fluorobiphenyl	*2.60*		mg/Kg wet	3.297		78.8	30-130				
Surrogate: 2,4,6-Tribromophenol	*5.43*		mg/Kg wet	6.594		82.3	30-130				
Surrogate: p-Terphenyl-d14	*2.84*		mg/Kg wet	3.297		86.0	30-130				
LCS Dup (B400998-BSD1)				Prepared: 03/17/25 Analyzed: 03/18/25							
Biphenyl	1.22	0.066	mg/Kg wet	1.649		74.0	40-140	3.78	20		
Acenaphthene	1.15	0.17	mg/Kg wet	1.649		69.8	40-140	6.22	30		
Acenaphthylene	1.20	0.17	mg/Kg wet	1.649		72.6	40-140	4.57	30		
Acetophenone	1.18	0.34	mg/Kg wet	1.649		71.6	40-140	5.29	30		
Aniline	1.00	0.34	mg/Kg wet	1.649		60.8	40-140	12.0	30		
Anthracene	1.21	0.17	mg/Kg wet	1.649		73.3	40-140	5.33	30		
Benzo(a)anthracene	1.20	0.17	mg/Kg wet	1.649		72.9	40-140	5.52	30		
Benzo(a)pyrene	1.22	0.17	mg/Kg wet	1.649		74.2	40-140	5.30	30		
Benzo(b)fluoranthene	1.22	0.17	mg/Kg wet	1.649		73.7	40-140	4.94	30		
Benzo(g,h,i)perylene	1.27	0.17	mg/Kg wet	1.649		76.8	40-140	6.51	30		
Benzo(k)fluoranthene	1.22	0.17	mg/Kg wet	1.649		73.7	40-140	5.07	30		
Bis(2-chloroethoxy)methane	1.22	0.34	mg/Kg wet	1.649		74.2	40-140	5.70	30		
Bis(2-chloroethyl)ether	1.24	0.34	mg/Kg wet	1.649		75.5	40-140	5.13	30		
2,2'-oxybis(1-Chloropropane)	1.65	0.34	mg/Kg wet	1.649		100	40-140	4.71	30		
Bis(2-Ethylhexyl)phthalate	1.29	0.34	mg/Kg wet	1.649		78.1	40-140	6.80	30		
4-Bromophenylphenylether	1.15	0.34	mg/Kg wet	1.649		69.4	40-140	6.46	30		
Butylbenzylphthalate	1.24	0.34	mg/Kg wet	1.649		75.4	40-140	5.26	30		
4-Chloroaniline	0.872	0.65	mg/Kg wet	1.649		52.9	15-140	28.8	30		†
2-Chloronaphthalene	1.05	0.34	mg/Kg wet	1.649		64.0	40-140	3.53	30		
2-Chlorophenol	1.11	0.34	mg/Kg wet	1.649		67.5	30-130	6.72	30		
Chrysene	1.20	0.17	mg/Kg wet	1.649		72.5	40-140	5.60	30		
Dibenz(a,h)anthracene	1.21	0.17	mg/Kg wet	1.649		73.5	40-140	7.13	30		

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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	
Batch B400998 - SW-846 3546											
LCS Dup (B400998-BSD1)				Prepared: 03/17/25 Analyzed: 03/18/25							
Dibenzofuran	1.18	0.34	mg/Kg wet	1.649		71.8	40-140	5.28	30		
Di-n-butylphthalate	1.17	0.34	mg/Kg wet	1.649		71.0	40-140	5.93	30		
1,2-Dichlorobenzene	1.09	0.34	mg/Kg wet	1.649		66.2	40-140	2.65	30		
1,3-Dichlorobenzene	1.03	0.34	mg/Kg wet	1.649		62.2	40-140	2.73	30		
1,4-Dichlorobenzene	1.04	0.34	mg/Kg wet	1.649		63.3	40-140	3.69	30		
3,3-Dichlorobenzidine	1.20	0.17	mg/Kg wet	1.649		72.7	40-140	12.6	30		
2,4-Dichlorophenol	1.11	0.34	mg/Kg wet	1.649		67.5	30-130	6.23	30		
Diethylphthalate	1.11	0.34	mg/Kg wet	1.649		67.1	40-140	3.22	30		
2,4-Dimethylphenol	1.06	0.34	mg/Kg wet	1.649		64.0	30-130	6.09	30		
Dimethylphthalate	1.10	0.34	mg/Kg wet	1.649		66.6	40-140	5.14	30		
2,4-Dinitrophenol	1.21	0.65	mg/Kg wet	1.649		73.5	15-140	2.47	30		†
2,4-Dinitrotoluene	1.18	0.34	mg/Kg wet	1.649		71.4	40-140	4.29	30		
2,6-Dinitrotoluene	1.19	0.34	mg/Kg wet	1.649		72.1	40-140	3.64	30		
Di-n-octylphthalate	1.24	0.34	mg/Kg wet	1.649		74.9	40-140	6.13	30		
1,2-Diphenylhydrazine/Azobenzene	1.43	0.34	mg/Kg wet	1.649		86.6	40-140	5.12	30		
Fluoranthene	1.17	0.17	mg/Kg wet	1.649		71.0	40-140	5.47	30		
Fluorene	1.19	0.17	mg/Kg wet	1.649		71.9	40-140	3.89	30		
Hexachlorobenzene	1.26	0.34	mg/Kg wet	1.649		76.5	40-140	5.68	30		
Hexachlorobutadiene	1.10	0.34	mg/Kg wet	1.649		66.7	40-140	6.44	30		
Hexachloroethane	1.16	0.34	mg/Kg wet	1.649		70.2	40-140	2.61	30		
Indeno(1,2,3-cd)pyrene	1.25	0.17	mg/Kg wet	1.649		75.9	40-140	7.13	30		
Isophorone	1.33	0.34	mg/Kg wet	1.649		80.5	40-140	5.01	30		
2-Methylnaphthalene	1.05	0.17	mg/Kg wet	1.649		63.5	40-140	5.09	30		
2-Methylphenol	1.20	0.34	mg/Kg wet	1.649		72.5	30-130	6.63	30		
3/4-Methylphenol	1.18	0.34	mg/Kg wet	1.649		71.8	30-130	4.99	30		
Naphthalene	1.12	0.17	mg/Kg wet	1.649		68.0	40-140	7.01	30		
Nitrobenzene	1.16	0.34	mg/Kg wet	1.649		70.4	40-140	5.30	30		
2-Nitrophenol	1.17	0.34	mg/Kg wet	1.649		70.7	30-130	5.95	30		
4-Nitrophenol	1.09	0.65	mg/Kg wet	1.649		65.9	15-140	4.42	30		†
Pentachlorophenol	1.24	0.34	mg/Kg wet	1.649		75.1	30-130	5.86	30		
Phenanthrene	1.20	0.17	mg/Kg wet	1.649		72.6	40-140	5.15	30		
Phenol	1.12	0.34	mg/Kg wet	1.649		67.9	15-140	6.16	30		†
Pyrene	1.27	0.17	mg/Kg wet	1.649		77.0	40-140	5.62	30		
Pyridine	0.935	0.34	mg/Kg wet	1.649		56.7	30-140	3.00	30	V-34	†
1,2,4-Trichlorobenzene	1.08	0.34	mg/Kg wet	1.649		65.8	40-140	5.47	30		
2,4,5-Trichlorophenol	1.18	0.34	mg/Kg wet	1.649		71.5	30-130	5.25	30		
2,4,6-Trichlorophenol	1.18	0.34	mg/Kg wet	1.649		71.7	30-130	4.87	30		
Surrogate: 2-Fluorophenol	*4.73*		mg/Kg wet	6.596		71.7	30-130				
Surrogate: Phenol-d6	*4.69*		mg/Kg wet	6.596		71.2	30-130				
Surrogate: Nitrobenzene-d5	*2.33*		mg/Kg wet	3.298		70.7	30-130				
Surrogate: 2-Fluorobiphenyl	*2.47*		mg/Kg wet	3.298		74.9	30-130				
Surrogate: 2,4,6-Tribromophenol	*5.26*		mg/Kg wet	6.596		79.7	30-130				
Surrogate: p-Terphenyl-d14	*2.69*		mg/Kg wet	3.298		81.5	30-130				

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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
Batch B400998 - SW-846 3546										
Matrix Spike (B400998-MS1)	**Source: 25C0876-01RE1**		Prepared: 03/17/25 Analyzed: 03/18/25							
Biphenyl	1.31	0.078	mg/Kg dry	1.938	ND	67.4	40-140			
Acenaphthene	1.29	0.20	mg/Kg dry	1.938	ND	66.5	40-140			
Acenaphthylene	1.31	0.20	mg/Kg dry	1.938	ND	67.8	40-140			
Acetophenone	1.28	0.40	mg/Kg dry	1.938	ND	66.3	40-140			
Aniline	0.807	0.40	mg/Kg dry	1.938	ND	41.6	40-140			MS-23
Anthracene	1.32	0.20	mg/Kg dry	1.938	ND	68.2	40-140			
Benzo(a)anthracene	1.33	0.20	mg/Kg dry	1.938	ND	68.6	40-140			
Benzo(a)pyrene	1.34	0.20	mg/Kg dry	1.938	ND	68.9	40-140			
Benzo(b)fluoranthene	1.40	0.20	mg/Kg dry	1.938	ND	72.2	40-140			
Benzo(g,h,i)perylene	1.46	0.20	mg/Kg dry	1.938	ND	75.5	40-140			
Benzo(k)fluoranthene	1.41	0.20	mg/Kg dry	1.938	ND	72.5	40-140			
Bis(2-chloroethoxy)methane	1.34	0.40	mg/Kg dry	1.938	ND	69.3	40-140			
Bis(2-chloroethyl)ether	1.32	0.40	mg/Kg dry	1.938	ND	68.1	40-140			
2,2'-oxybis(1-Chloropropane)	1.74	0.40	mg/Kg dry	1.938	ND	89.7	40-140			
Bis(2-Ethylhexyl)phthalate	1.39	0.40	mg/Kg dry	1.938	ND	71.9	40-140			
4-Bromophenylphenylether	1.26	0.40	mg/Kg dry	1.938	ND	65.1	40-140			
Butylbenzylphthalate	1.37	0.40	mg/Kg dry	1.938	ND	70.5	40-140			
4-Chloroaniline	0.943	0.77	mg/Kg dry	1.938	ND	48.7	40-140			MS-23
2-Chloronaphthalene	1.12	0.40	mg/Kg dry	1.938	ND	58.0	40-140			
2-Chlorophenol	1.22	0.40	mg/Kg dry	1.938	ND	63.1	30-130			
Chrysene	1.32	0.20	mg/Kg dry	1.938	ND	67.9	40-140			
Dibenz(a,h)anthracene	1.36	0.20	mg/Kg dry	1.938	ND	70.3	40-140			
Dibenzofuran	1.33	0.40	mg/Kg dry	1.938	ND	68.4	40-140			
Di-n-butylphthalate	1.27	0.40	mg/Kg dry	1.938	ND	65.7	40-140			
1,2-Dichlorobenzene	1.20	0.40	mg/Kg dry	1.938	ND	61.8	40-140			
1,3-Dichlorobenzene	1.13	0.40	mg/Kg dry	1.938	ND	58.4	40-140			
1,4-Dichlorobenzene	1.15	0.40	mg/Kg dry	1.938	ND	59.3	40-140			
3,3-Dichlorobenzidine	1.19	0.20	mg/Kg dry	1.938	ND	61.5	40-140			MS-23
2,4-Dichlorophenol	1.28	0.40	mg/Kg dry	1.938	ND	65.9	30-130			
Diethylphthalate	1.25	0.40	mg/Kg dry	1.938	ND	64.3	40-140			
2,4-Dimethylphenol	1.14	0.40	mg/Kg dry	1.938	ND	58.9	30-130			
Dimethylphthalate	1.24	0.40	mg/Kg dry	1.938	ND	63.7	40-140			
2,4-Dinitrophenol	1.43	0.77	mg/Kg dry	1.938	ND	73.8	30-130			
2,4-Dinitrotoluene	1.35	0.40	mg/Kg dry	1.938	ND	69.6	40-140			
2,6-Dinitrotoluene	1.33	0.40	mg/Kg dry	1.938	ND	68.5	40-140			
Di-n-octylphthalate	1.62	0.40	mg/Kg dry	1.938	ND	83.4	40-140			
1,2-Diphenylhydrazine/Azobenzene	1.51	0.40	mg/Kg dry	1.938	ND	77.9	40-140			
Fluoranthene	1.30	0.20	mg/Kg dry	1.938	ND	67.0	40-140			
Fluorene	1.34	0.20	mg/Kg dry	1.938	ND	69.3	40-140			
Hexachlorobenzene	1.41	0.40	mg/Kg dry	1.938	ND	72.7	40-140			
Hexachlorobutadiene	1.22	0.40	mg/Kg dry	1.938	ND	62.8	40-140			
Hexachloroethane	1.24	0.40	mg/Kg dry	1.938	ND	63.9	40-140			
Indeno(1,2,3-cd)pyrene	1.40	0.20	mg/Kg dry	1.938	ND	72.0	40-140			
Isophorone	1.47	0.40	mg/Kg dry	1.938	ND	75.7	40-140			
2-Methylnaphthalene	1.17	0.20	mg/Kg dry	1.938	ND	60.6	40-140			
2-Methylphenol	1.30	0.40	mg/Kg dry	1.938	ND	66.8	30-130			
3/4-Methylphenol	1.31	0.40	mg/Kg dry	1.938	ND	67.5	30-130			
Naphthalene	1.24	0.20	mg/Kg dry	1.938	ND	64.1	40-140			
Nitrobenzene	1.27	0.40	mg/Kg dry	1.938	ND	65.5	40-140			
2-Nitrophenol	1.31	0.40	mg/Kg dry	1.938	ND	67.5	30-130			
4-Nitrophenol	1.28	0.77	mg/Kg dry	1.938	ND	66.0	30-130			
Pentachlorophenol	1.41	0.40	mg/Kg dry	1.938	ND	72.8	30-130			

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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
Batch B400998 - SW-846 3546												
Matrix Spike (B400998-MS1)	**Source: 25C0876-01RE1**			Prepared: 03/17/25 Analyzed: 03/18/25								
Phenanthrene	1.33	0.20	mg/Kg dry	1.938	ND	68.5		40-140				
Phenol	1.23	0.40	mg/Kg dry	1.938	ND	63.7		30-130				
Pyrene	1.44	0.20	mg/Kg dry	1.938	ND	74.4		40-140				
Pyridine	0.872	0.40	mg/Kg dry	1.938	ND	45.0		40-140				V-34
1,2,4-Trichlorobenzene	1.20	0.40	mg/Kg dry	1.938	ND	62.0		40-140				
2,4,5-Trichlorophenol	1.34	0.40	mg/Kg dry	1.938	ND	69.3		30-130				
2,4,6-Trichlorophenol	1.32	0.40	mg/Kg dry	1.938	ND	68.0		30-130				
Surrogate: 2-Fluorophenol	*5.27*		mg/Kg dry	7.753		67.9		30-130				
Surrogate: Phenol-d6	*5.25*		mg/Kg dry	7.753		67.7		30-130				
Surrogate: Nitrobenzene-d5	*2.57*		mg/Kg dry	3.877		66.2		30-130				
Surrogate: 2-Fluorobiphenyl	*2.68*		mg/Kg dry	3.877		69.2		30-130				
Surrogate: 2,4,6-Tribromophenol	*6.08*		mg/Kg dry	7.753		78.4		30-130				
Surrogate: p-Terphenyl-d14	*3.04*		mg/Kg dry	3.877		78.5		30-130				
Matrix Spike Dup (B400998-MSD1)	**Source: 25C0876-01RE1**			Prepared: 03/17/25 Analyzed: 03/18/25								
Biphenyl	1.10	0.078	mg/Kg dry	1.938	ND	56.7		40-140	17.2		30	
Acenaphthene	1.07	0.20	mg/Kg dry	1.938	ND	55.4		40-140	18.3		30	
Acenaphthylene	1.03	0.20	mg/Kg dry	1.938	ND	53.3		40-140	24.0		30	
Acetophenone	1.12	0.40	mg/Kg dry	1.938	ND	57.9		40-140	13.5		30	
Aniline	0.344	0.40	mg/Kg dry	1.938	ND	**17.7**	*	40-140	**80.5**	*	30	MS-23, J
Anthracene	1.08	0.20	mg/Kg dry	1.938	ND	55.9		40-140	19.9		30	
Benzo(a)anthracene	1.10	0.20	mg/Kg dry	1.938	ND	56.6		40-140	19.2		30	
Benzo(a)pyrene	1.09	0.20	mg/Kg dry	1.938	ND	56.3		40-140	20.2		30	
Benzo(b)fluoranthene	1.16	0.20	mg/Kg dry	1.938	ND	60.0		40-140	18.4		30	
Benzo(g,h,i)perylene	1.17	0.20	mg/Kg dry	1.938	ND	60.5		40-140	22.0		30	
Benzo(k)fluoranthene	1.17	0.20	mg/Kg dry	1.938	ND	60.3		40-140	18.4		30	
Bis(2-chloroethoxy)methane	1.02	0.40	mg/Kg dry	1.938	ND	52.8		40-140	27.0		30	
Bis(2-chloroethyl)ether	1.10	0.40	mg/Kg dry	1.938	ND	56.9		40-140	17.9		30	
2,2'-oxybis(1-Chloropropane)	1.50	0.40	mg/Kg dry	1.938	ND	77.3		40-140	14.9		30	
Bis(2-Ethylhexyl)phthalate	1.16	0.40	mg/Kg dry	1.938	ND	59.9		40-140	18.4		30	
4-Bromophenylphenylether	1.05	0.40	mg/Kg dry	1.938	ND	54.2		40-140	18.3		30	
Butylbenzylphthalate	1.13	0.40	mg/Kg dry	1.938	ND	58.1		40-140	19.3		30	
4-Chloroaniline	0.540	0.77	mg/Kg dry	1.938	ND	**27.9**	*	40-140	**54.3**	*	30	MS-23, J
2-Chloronaphthalene	0.961	0.40	mg/Kg dry	1.938	ND	49.6		40-140	15.6		30	
2-Chlorophenol	1.05	0.40	mg/Kg dry	1.938	ND	54.2		30-130	15.2		30	
Chrysene	1.10	0.20	mg/Kg dry	1.938	ND	56.5		40-140	18.3		30	
Dibenz(a,h)anthracene	1.09	0.20	mg/Kg dry	1.938	ND	56.1		40-140	22.5		30	
Dibenzofuran	1.10	0.40	mg/Kg dry	1.938	ND	57.0		40-140	18.2		30	
Di-n-butylphthalate	1.07	0.40	mg/Kg dry	1.938	ND	55.2		40-140	17.4		30	
1,2-Dichlorobenzene	1.04	0.40	mg/Kg dry	1.938	ND	53.4		40-140	14.5		30	
1,3-Dichlorobenzene	0.984	0.40	mg/Kg dry	1.938	ND	50.8		40-140	13.9		30	
1,4-Dichlorobenzene	1.01	0.40	mg/Kg dry	1.938	ND	51.9		40-140	13.3		30	
3,3-Dichlorobenzidine	0.641	0.20	mg/Kg dry	1.938	ND	**33.1**	*	40-140	**60.0**	*	30	MS-23
2,4-Dichlorophenol	1.06	0.40	mg/Kg dry	1.938	ND	54.5		30-130	18.9		30	
Diethylphthalate	1.01	0.40	mg/Kg dry	1.938	ND	52.3		40-140	20.6		30	
2,4-Dimethylphenol	0.856	0.40	mg/Kg dry	1.938	ND	44.2		30-130	28.6		30	
Dimethylphthalate	1.02	0.40	mg/Kg dry	1.938	ND	52.9		40-140	18.7		30	
2,4-Dinitrophenol	1.16	0.77	mg/Kg dry	1.938	ND	59.6		30-130	21.3		30	
2,4-Dinitrotoluene	1.12	0.40	mg/Kg dry	1.938	ND	57.7		40-140	18.8		30	
2,6-Dinitrotoluene	1.10	0.40	mg/Kg dry	1.938	ND	56.6		40-140	19.1		30	
Di-n-octylphthalate	1.33	0.40	mg/Kg dry	1.938	ND	68.6		40-140	19.5		30	
1,2-Diphenylhydrazine/Azobenzene	1.24	0.40	mg/Kg dry	1.938	ND	63.8		40-140	20.0		30	

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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
Batch B400998 - SW-846 3546											
Matrix Spike Dup (B400998-MSD1)		**Source: 25C0876-01RE1**		Prepared: 03/17/25 Analyzed: 03/18/25							
Fluoranthene	1.09	0.20	mg/Kg dry	1.938	ND	56.1		40-140	17.9	30	
Fluorene	1.11	0.20	mg/Kg dry	1.938	ND	57.4		40-140	18.8	30	
Hexachlorobenzene	1.15	0.40	mg/Kg dry	1.938	ND	59.2		40-140	20.6	30	
Hexachlorobutadiene	1.05	0.40	mg/Kg dry	1.938	ND	54.1		40-140	14.8	30	
Hexachloroethane	1.08	0.40	mg/Kg dry	1.938	ND	55.6		40-140	13.8	30	
Indeno(1,2,3-cd)pyrene	1.11	0.20	mg/Kg dry	1.938	ND	57.4		40-140	22.7	30	
Isophorone	1.24	0.40	mg/Kg dry	1.938	ND	63.8		40-140	17.2	30	
2-Methylnaphthalene	0.988	0.20	mg/Kg dry	1.938	ND	51.0		40-140	17.3	30	
2-Methylphenol	1.08	0.40	mg/Kg dry	1.938	ND	55.7		30-130	18.3	30	
3/4-Methylphenol	1.10	0.40	mg/Kg dry	1.938	ND	56.7		30-130	17.5	30	
Naphthalene	1.06	0.20	mg/Kg dry	1.938	ND	54.9		40-140	15.4	30	
Nitrobenzene	1.09	0.40	mg/Kg dry	1.938	ND	56.5		40-140	14.9	30	
2-Nitrophenol	1.10	0.40	mg/Kg dry	1.938	ND	57.0		30-130	16.9	30	
4-Nitrophenol	1.28	0.77	mg/Kg dry	1.938	ND	66.1		30-130	0.0576	30	
Pentachlorophenol	1.11	0.40	mg/Kg dry	1.938	ND	57.1		30-130	24.3	30	
Phenanthrene	1.10	0.20	mg/Kg dry	1.938	ND	56.7		40-140	18.8	30	
Phenol	1.07	0.40	mg/Kg dry	1.938	ND	55.4		30-130	13.9	30	
Pyrene	1.19	0.20	mg/Kg dry	1.938	ND	61.2		40-140	19.5	30	
Pyridine	0.710	0.40	mg/Kg dry	1.938	ND	**36.6**	*	40-140	20.5	30	MS-22, V-34
1,2,4-Trichlorobenzene	1.03	0.40	mg/Kg dry	1.938	ND	53.2		40-140	15.3	30	
2,4,5-Trichlorophenol	1.06	0.40	mg/Kg dry	1.938	ND	54.9		30-130	23.2	30	
2,4,6-Trichlorophenol	1.07	0.40	mg/Kg dry	1.938	ND	55.4		30-130	20.5	30	
Surrogate: 2-Fluorophenol	*4.55*		mg/Kg dry	7.750		58.7		30-130			
Surrogate: Phenol-d6	*4.41*		mg/Kg dry	7.750		56.9		30-130			
Surrogate: Nitrobenzene-d5	*2.19*		mg/Kg dry	3.875		56.4		30-130			
Surrogate: 2-Fluorobiphenyl	*2.26*		mg/Kg dry	3.875		58.4		30-130			
Surrogate: 2,4,6-Tribromophenol	*4.85*		mg/Kg dry	7.750		62.6		30-130			
Surrogate: p-Terphenyl-d14	*2.50*		mg/Kg dry	3.875		64.5		30-130			

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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
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant 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.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-36	Initial calibration verification (ICV) 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.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Soil	
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
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
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
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
1,4-Dioxane	NY
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)	NH,NY
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Soil	
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
1,2,3-Trichlorobenzene	NY
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 8270E in Soil	
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
2,2'-oxybis(1-Chloropropane)	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

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Soil	
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
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/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
SW-846 8270E in Water	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY
Aniline	CT,NY
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
2,2'-oxybis(1-Chloropropane)	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
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	CT,NY,NH
1,3-Dichlorobenzene	CT,NY,NH
1,4-Dichlorobenzene	CT,NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
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/Azobenzene	NY
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

Pace Analytical Services, LLC - East Longmeadow, Ma

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

Pace Analytical Services, LLC - East Longmeadow, Ma, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2026
NY	New York State Department of Health	10899 NELAP	04/1/2025
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2026
ME	State of Maine	MA00100	06/9/2025

25C0876 RF

Pace Analytical®

Phone: 413-525-2332
Fax: 413-525-6405
Access COC's and Support Requests

http://www.pacelabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Doc # 381 Rev 5_07/13/2021

Page 1 of 1

Company Name:	Boston Env. Corp.
Address:	338 Howard St., Brockton
Phone:	774 257 0720
Project Name:	
Project Location:	Chicopee Row, Groton, MA
Project Number:	BEC125119
Project Manager:	A. Eckhardt
Pace Quote Name/Number:	
Invoice Recipient:	Josh Bednarz
Sampled By:	AJE

Requested Turnaround Time
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☐ Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☒
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☒ EXCEL ☒
Other:
CLP Like Data Pkg Required: ☐
Email To: aeckhardt@bostonenvcorp.com
Fax To #:

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

PCB ONLY
SOXHLET ☐
NON SOXHLET ☐

ANALYSIS REQUESTED

Pace Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	VOCs 8260	SVOCs 8270	RCRA-5
1	193 Chicopee Row-5	3/14/25	920	Comp.	SO	U	3	2				X	X	X

[2] Preservation Code

Courier Use Only
Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N

*Pace Analytical is not responsible for missing samples from prepacked coolers

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

3-14-25
3/14/25 13:30
3/14/25 16:30
3.1 3/14/25 1630

Client Comments:
VOCs collected as grab sample.
Run TCLP on anything that fails the RCRA 20X rule

Detection Limit Requirements
MA
RCS-1
CT
Other:

Special Requirements
MA MCP Required ☒
MCP Certification Form Required
CT RCP Required ☐
RCP Certification Form Required
MA State DW Required ☐
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

Lab Comments:

Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Analytical values your partnership on each project and will try to assist with missing information, but will not be held accountable.

Table of Contents

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Sample																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
																				16oz Amb/Clear (Circle Amb/Clear) — Soils Jars
																				8oz Amb/Clear — Soils Jars
																				4oz Amb/Clear — Soils Jars
																				2oz Amb/Clear — Soils Jars
																				Unpreserved — Ambers — 1 Liter
																				HCL — Ambers — 1 Liter
																				Sulfuric — Ambers — 1 Liter
																				Sulfuric — Ambers — 250ml
																				Phosphoric — Ambers — 250ml
																				HCl — Ambers — 250ml
																				Unpreserved — Ambers — 100ml
																				Unpreserved — Plastics — 1 Liter
																				Sulfuric — Plastics — 1 Liter
																				Unpreserved — Plastics — 500mL
																				Sulfuric — Plastics — 500mL
																				Unpreserved — Plastics — 250mL
																				Trizma — Plastics — 250mL
																				Sulfuric — Plastics — 250mL
																				Nitric — Plastics — 250mL
																				NaOH — Plastics — 250mL
																				Ammonium Acetate — Plastics — 250mL
																				NaOH/Zinc — Plastics — 250mL
																				Unpreserved — VOA Vials
																				HCl — VOA Vials
																				MeOH — VOA Vials
																				D.I. Water — VOA Vials
																				BiSulfate — VOA Vials
																				Col/Bact — Other / Fill in
																				— Other / Fill in
																				— Other / Fill in
																				— Other / Fill in
																				— Other / Fill in

Qualtrax ID: 120836

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Log In Back-Sheet

Client Boston Env. Corp.

Project BEC125119

MCP/RCP Required

Deliverable Package Requirement

Location Chicopee Row, Groton, MA.

PWSID# (When Applicable)

Arrival Method:

Courier ☒ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time SMW 3-14-25 1630

Back-Sheet By / Date / Time SMW 3-14-25 1744

Temperature Method Gun # 4

WV samples: Yes (see note*) / No (follow normal procedure)

Temp X < 6° C Actual Temperature 3.4

Rush Samples: Yes / No Notify

Short Hold: Yes / No Notify

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☐	☒
Trip Blanks	☐	☒
Lab to Filters	☐	☒
COC Legible	☒	☐

COC Included: (Check all included)

Client ☒ Analysis ☒ Sampler Name ☒

Project ☒ IDs ☒ Collection Date/Time ☒

All Samples Proper pH: N/A ☒ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Qualtrax ID: 120836

ANALYTICAL REPORT

Lab Number:	L2515202
Client:	Pace New England 39 Spruce St. East Longmeadow, MA 01028
ATTN:	Rebecca Faust
Phone:	(413) 525-2332
Project Name:	25C0876
Project Number:	25C0876
Report Date:	03/19/25

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Project Name: 25C0876
Project Number: 25C0876

Lab Number: L2515202
Report Date: 03/19/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2515202-01	193 CHICOPEE ROW-5	SOIL	Not Specified	03/14/25 09:20	03/17/25

Project Name: 25C0876 **Lab Number:** L2515202

Project Number: 25C0876 **Report Date:** 03/19/25

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	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?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	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?"	YES
E a.	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).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	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)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name:	25C0876	**Lab Number:**	L2515202
Project Number:	25C0876	**Report Date:**	03/19/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 25C0876 **Lab Number:** L2515202
Project Number: 25C0876 **Report Date:** 03/19/25

Case Narrative (continued)

MCP Related Narratives

Sample Receipt

The Total Solids results were supplied by the client.

In reference to question H:

A Matrix Spike was not submitted for the analysis of Total Metals.

Total Metals

L2515202-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

In reference to question I:

All samples were analyzed for a subset of MCP analytes per client request.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly O'Neill

Title: Technical Director/Representative Date: 03/19/25

QC OUTLIER SUMMARY REPORT

Project Name: 25C0876
Project Number: 25C0876

Lab Number: L2515202
Report Date: 03/19/25

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment

There are no QC Outliers associated with this report.

METALS

Project Name: 25C0876 **Lab Number:** L2515202

Project Number: 25C0876 **Report Date:** 03/19/25

SAMPLE RESULTS

Lab ID: L2515202-01 Date Collected: 03/14/25 09:20

Client ID: 193 CHICOPEE ROW-5 Date Received: 03/17/25

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Arsenic, Total	11.2		mg/kg	0.928	--	2	03/18/25 10:42	03/18/25 21:41	EPA 3050B	97,6010D	EFM
Cadmium, Total	ND		mg/kg	0.928	--	2	03/18/25 10:42	03/18/25 21:41	EPA 3050B	97,6010D	EFM
Chromium, Total	23.3		mg/kg	0.928	--	2	03/18/25 10:42	03/18/25 21:41	EPA 3050B	97,6010D	EFM
Lead, Total	5.51		mg/kg	4.64	--	2	03/18/25 10:42	03/18/25 21:41	EPA 3050B	97,6010D	EFM
Mercury, Total	ND		mg/kg	0.077	--	1	03/18/25 12:19	03/18/25 19:02	EPA 7471B	97,7471B	CME

Project Name: 25C0876 **Lab Number:** L2515202

Project Number: 25C0876 **Report Date:** 03/19/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01 Batch: WG2041787-1										
Arsenic, Total	ND		mg/kg	0.400	--	1	03/18/25 10:42	03/18/25 19:45	97,6010D	EFM
Cadmium, Total	ND		mg/kg	0.400	--	1	03/18/25 10:42	03/18/25 19:45	97,6010D	EFM
Chromium, Total	ND		mg/kg	0.400	--	1	03/18/25 10:42	03/18/25 19:45	97,6010D	EFM
Lead, Total	ND		mg/kg	2.00	--	1	03/18/25 10:42	03/18/25 19:45	97,6010D	EFM

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01 Batch: WG2041788-1										
Mercury, Total	ND		mg/kg	0.083	--	1	03/18/25 12:19	03/18/25 17:59	97,7471B	CME

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25C0876
Project Number: 25C0876
Lab Number: L2515202
Report Date: 03/19/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2041787-2 WG2041787-3 SRM Lot Number: D123-540								
Arsenic, Total	105		105		82-118	0		30
Cadmium, Total	108		108		83-118	0		30
Chromium, Total	109		109		81-118	0		30
Lead, Total	109		110		82-119	1		30
MCP Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG2041788-2 WG2041788-3 SRM Lot Number: D123-540								
Mercury, Total	100		104		67-132	4		30

INORGANICS
&
MISCELLANEOUS

Project Name: 25C0876
Project Number: 25C0876

Lab Number: L2515202
Report Date: 03/19/25

SAMPLE RESULTS

Lab ID: L2515202-01
Client ID: 193 CHICOPEE ROW-5
Sample Location: Not Specified

Date Collected: 03/14/25 09:20
Date Received: 03/17/25
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.7		%	0.100	NA	1	-		121,2540G	

Project Name: 25C0876
Project Number: 25C0876

Lab Number: L2515202
Report Date: 03/19/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2515202-01A	Glass 120ml/4oz unpreserved	B	NA		2.9	Y	Absent		MCP-CR-6010T-10(180),MCP-AS-6010T-10(180),MCP-CD-6010T-10(180),MCP-7471T-10(28),MCP-PB-6010T-10(180)

*Values in parentheses indicate holding time in days

Project Name:	25C0876	**Lab Number:**	L2515202
Project Number:	25C0876	**Report Date:**	03/19/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	25C0876	**Lab Number:**	L2515202
Project Number:	25C0876	**Report Date:**	03/19/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report

Project Name:	25C0876	**Lab Number:**	L2515202
Project Number:	25C0876	**Report Date:**	03/19/25

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 25C0876 **Lab Number:** L2515202

Project Number: 25C0876 **Report Date:** 03/19/25

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSCCAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010; WSC-CAM-IIIA and IIID, January 2024; WSC-CAM-IIIB and VA, February 2024; WSC-CAM-VB and VC, April 2024; and WSC-CAM-VIA, VIB, IXA, and IXB, October 2024.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

SUBCONTRACT CHAIN OF CUSTODY

Pace New England

25C0876

L2515202

SENDING LABORATORY:

Pace New England
39 Spruce Street
East Longmeadow, MA 01028
Phone: 413.525.2332
Fax: 413.525.6405
Project Manager: Rebecca Faust

RECEIVING LABORATORY:

Pace Analytical Services - Westborough, MA
8 Walkup Drive
Westborough, MA 01581
Phone :(508) 898-9220
Fax: (508) 898-9193

Project Location: Massachusetts

Analysis	Sample Name	Due		Expires	Comments
Sample ID: 25C0876-01	193 Chicopee Row-5	**Soil**	**Sampled:**	**03/14/25 09:20**	**MA MCP, RCS-1**
SG-RCRA 5 6010 Total		03/19/25 14:00		03/21/25 09:20	report to MDL - 20x rule
Containers Supplied:					
4 oz amber glass jar (B)					

RUSH
3-day TAT

Released By	3/17/25	1140	Received By	3-17-25	1530
Released By	3-17-25	1810	Received By	3/17/25	1810

Page 1 of 1

25C0876 RF

Pace Analytical

Phone: 413-525-2332
Fax: 413-525-6405
Access COC's and Support Requests

http://www.pacelabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

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Page 1 of 1

Company Name:	Boston Env. Corp.
Address:	338 Howard St., Brockton
Phone:	774 257 0720
Project Name:	
Project Location:	Chicopee Row, Groton, MA
Project Number:	BEC 25119
Project Manager:	A. Eckhardt
Pace Quote Name/Number:	
Invoice Recipient:	Josh Bednarz
Sampled By:	AJE

Requested Turnaround Time
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☐ Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☒
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☒ EXCEL ☒
Other:
CLP Like Data Pkg Required: ☐
Email To: aeckhardt@bostonenvcorp.com
Fax To #:

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

PCB ONLY
SOXHLET ☐
NON SOXHLET ☐

ANALYSIS REQUESTED

Pace Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	VOCs 8260	SVOCs 8270	RCRA-5
1	193 Chicopee Row-5	3/14/25	920	Comp.	SO	U	3	2				X	X	X

[2] Preservation Code
- Courier Use Only
Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Pace Analytical is not responsible for missing samples from prepacked coolers

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature)	Date/Time:	3-14-25
Received by: (signature)	Date/Time:	3/14/25 13:30
Relinquished by: (signature)	Date/Time:	3/14/25 16:30
Received by: (signature)	Date/Time:	3/14/25 1630
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Client Comments:
VOCs collected as grab sample.
Run TCLP on anything that fails the RCRA 20X rule

Detection Limit Requirements
MA: RCS-1
CT:
Other:

Special Requirements
☒ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

ELAC-NELAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

Comments:

Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Analytical values your partnership on each project and will try to assist with missing information, but will not be held accountable.

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Pace New England	Project #: 25C0876
Project Location: Groton, MA	RTN:

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

25C0876-01

Matrices: Soil

CAM Protocol (check all that below)

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

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	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?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	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).	☐ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

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

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

<u>Data User Note:</u> 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.

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

[1] *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: Meghan E. Kelley Position: Reporting Specialist

Printed Name: Meghan E. Kelley Date: 03/19/25