



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 1**

Laboratory Services and Applied Science Division  
11 Technology Drive  
North Chelmsford, Massachusetts 01863-2431

**Drafted Date:** November 18, 2020

**Finalized Date:** December 17, 2020

**Subject:** Reconnaissance and Sampling Inspection Report  
Clean Water Act – National Pollutant Discharge Elimination System  
City of Bridgeport, CT

**From:** Michelle Coombs, Investigator \MRC\  
Field Services Branch (FSB)  
Laboratory Services and Applied Science Division (LSASD)

**Reviewed By:** Jerome Keefe, Investigations Team Leader, LSASD-FSB \JCK\  
Jerome Keefe, Investigations Team Leader, LSASD-FSB

**To:** Denny Dart, Water Compliance Section Chief,  
Enforcement and Compliance Assurance Division (ECAD-EWC)

**CC:** Alex Rosenberg, Inspector, ECAD-EWC

**I. Facility Information**

*A. Facility Name:* City of Bridgeport, CT  
*B. Facility Location:* 45 Lyon Terrace, Rm 216, Bridgeport, CT 06604  
*C. Facility Contact:* Jon Urquidi, PE, City Engineer, 203-576-7211,  
[Jon.Urquidi@bridgeportct.gov](mailto:Jon.Urquidi@bridgeportct.gov)  
*D. NPDES Permit ID:* GSM000017 (MS4)  
CT0100056 (CSO-Westside Pollution Control Facility)  
CT0101010 (CSO-Eastside Pollution Control Facility)

**II. Background Information**

*A. Date/Start time of recon inspection:* 11/16/2020, 13:30 hrs.  
*B. Weather conditions:* Sunny, ~55°F  
*C. USEPA Representatives:* Michelle Coombs & Shannon Brunelle (FSB)  
*D. State/Local Representatives:* None  
*E. Date/Start time of sampling inspection:* 11/17/2020, 07:00 hrs.  
*F. Weather conditions:* Partly cloudy, ~45°F  
*G. USEPA Representatives:* Michelle Coombs & Shannon Brunelle (FSB)  
*H. State/Local Representatives:* None  
*I. Federally Enforceable Requirements Investigated:*

Stormwater discharges and certain non-stormwater discharges from the City of Bridgeport (the City's) Municipal Separate Storm Sewer (MS4) are authorized by the National Pollutant Discharge Elimination System (NPDES) General Permit for the Discharge of Stormwater from Small MS4s, issued by the Environmental Protection Agency (EPA) Region 1. The City obtained coverage under the Permit with NPDES Permit ID GSM000017. Municipal wastewater discharges are authorized by the NPDES Program. The City obtained coverage under the following Permits: CT0100056 and CT0101010.

*J. Pollutants Sampled:*

Pharmaceuticals and Personal Care Products (PPCPs), E. coli/Enterococcus, Ammonia (nitrogen), Total Chlorine, and Surfactants

*K. Previous Enforcement Actions:*

Order on Consent with Environmental Protection Agency (Docket No. CWA-AO-R01-FY16-04, "Order") issued September 25, 2016, pursuant to Sections 308(a) and 309(a)(3) of the Clean Water Act, that provides compliance requirements for both Capacity Management Operations and Maintenance "CMOM" for the City's sanitary sewers, as well as MS4 illicit discharge detection and elimination ("IDDE") planning and implementation.

### **III. Disclaimer:**

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

### **IV. Type and Purpose of Inspection(s)**

The purpose of the reconnaissance inspection was to locate stormwater outfalls, associated manholes, and/or catch basins which discharge into the Long Island Sound, Island Brook, Ash Creek, Johnson's Creek, and the Pequonnock River, while noting appearance, presence of flow, and access requirements for one or more sampling inspections.

The purpose of the compliance sampling inspection was to identify potential illicit connections or illegal discharges within the City of Bridgeport, CT MS4 and Combined Sewer System that may adversely impact the water quality in the receiving waters named above. Samples were collected from nine (9) locations in accordance with the FSB Investigations Team Stormwater Program Plan. One (1) of the samples collected was from a Combined Sewer Outfall (CSO). Sample sites were identified during a reconnaissance inspection conducted on November 16, 2020.

### **V. Permittee Details**

The City of Bridgeport, CT occupies approximately 19.4 square miles in Fairfield County, Connecticut, approximately 50 miles southwest of Hartford, CT. The City shares borders with the municipalities of Trumbull to the north, Fairfield to the west, and Stratford to the east. According to the 2010 U.S. Census, the population of Bridgeport was 144,229. The City consists primarily of residential and industrial areas with some office/retail and downtown district areas. The City of Bridgeport's MS4 and CSO discharges are authorized under NPDES permit CT0100056 (Westside Pollution Control Facility) and CT0101010 (Eastside Pollution Control Facility).

### **VI. 11/16/2020 Reconnaissance Inspection Summary**

On November 16, 2020, EPA employees Michelle Coombs and Shannon Brunelle ("the EPA Inspection Team") conducted a reconnaissance inspection of the City of Bridgeport MS4. They were not accompanied by any city or state representatives. The inspection was unannounced.

The inspection started at the Seaside Park beach at approximately 13:30 hrs. At the time of the inspection, the weather was sunny and approximately 55°F. According to the National Weather Service

for Station KBDR, the last precipitation event occurred on November 15, 2020, with 0.16 inches recorded.

None of the locations visited during this inspection were field screened for test kits or the YSI meter. Locations visited were noted for appearance, presence of flow, and access requirements.

## **VII. 11/17/2020 Sampling Inspection Summary**

On November 17, 2020, EPA employees Michelle Coombs and Shannon Brunelle (“the EPA Inspection Team”) conducted a compliance sampling inspection of the City of Bridgeport MS4 at the locations described in Section VIII. They were not accompanied by any city or state representatives. The inspection was unannounced. The inspection started at Johnson’s Creek on Central Avenue and Eagle Street at approximately 07:00 hrs. At the time of the inspection, the weather was partly cloudy and approximately 45°F.

According to the National Weather Service for Station KBDR, the last precipitation event prior to the inspection occurred on November 15, 2020, with 0.16 inches recorded. According to the National Weather Service, in the month (to date) of November, the City observed 1.58 inches of precipitation, which is approximately 87% of the 30-year normal value of 1.82 inches (representing a 13% departure from the normal). According to the US Drought Monitor, as of November 17, 2020, Fairfield County is experiencing no drought conditions. Based on the National Oceanic and Atmospheric Administration tide predictions, low tide was recorded at 06:14 hrs. at Station ID 8467150 Bridgeport, CT.

The sampling locations described in Section VIII were field screened using test kits for ammonia (nitrogen), surfactants, and total chlorine, where applicable. In-situ measurements for specific conductivity, salinity, and temperature were also measured and recorded. Samples were delivered to and analyzed for E. coli and Enterococcus at the South-Central CT Regional Water Authority in New Haven, CT, and PPCPs at the EPA New England Regional Laboratory (NERL) in North Chelmsford, MA. Table 1 below summarizes the sampling and analytical data.

## **VIII. Description of Sampling Locations**

*Photographs depicting each sample location are included in Appendix A of this report.*

- **Eagle**: A single CSO outfall approximately 30 inches in diameter located at the east end of Eagle Street. Discharge flow was approximately 15-20 gallons per minute (gpm) into Johnson’s Creek. Sample was collected from the outfall pipe.
- **Soundview**: Discharge was observed upwelling from below the surface of the sand and flowing into Long Island Sound at the location where discoloration of the water can be viewed on satellite imagery (see Appendix A). Sample was collected after digging approximately 6 inches into the sand. Sample site is located at the Seaside Park beach, on the west side adjacent to Soundview Drive. No outfall pipe could be seen near the upwelling area or along the rip rap.
- **Davidson**: A single reinforced concrete outfall approximately 36 inches in diameter located at the end of Davidson Street. Discharge was flowing at approximate 10-15 gpm into Ash Creek. Some trash and leaf litter were observed downstream and inside the pipe. Sample was collected from the outfall pipe.
- **Scofield**: A singular reinforced concrete outfall approximately 36 inches in diameter located on the southeast bank of the Scofield Avenue bridge. Discharge was flowing at approximately 10 gpm into Ash Creek. Leaf litter and trash was observed around the opening of the pipe. Sample was collected from the outfall pipe.
- **Hawley**: A single reinforced concrete outfall approximately 36 inches in diameter located at the end of Hawley Avenue near Ezra Street. Discharge was flowing at approximately greater than 50

gpm into Island Brook. Slight grey staining was observed in the pipe. Sample was collected from the outfall pipe.

- **Hart:** A single concrete outfall approximately 48 inches in diameter located near the corner of Hart Street and Lindley Avenue. Discharge flow was approximately less than 1 gpm into Island Brook. Oil sheen fragments were observed downstream of the pipe, along with some trash. Sample was collected from the outfall pipe.
- **Ashley:** A single reinforced concrete outfall approximately 36 inches in diameter located at the corner of Ashley Street and Glenwood Avenue. Discharge was flowing at approximately greater than 50 gpm into the Pequonnock River. A slight petroleum odor was detected, green algae growth and tan colored staining was observed on the pipe and rocks downstream. The joints of the outfall were cracked, causing discharge to flow underneath the mouth of the pipe. Sample was collected from the outfall pipe.
- **Slawson:** A pair of reinforced concrete outfalls, both approximately 30 inches in diameter located at the corner of Slawson Street and Summit Street. Both outfalls were flowing, however, due to the high depth of the water, the outfall furthest away, under the bridge, could not be accessed to sample. This outfall was flowing at approximately 20 gpm into Island Brook. The sample was collected at the outfall pipe downstream of the outfall under the bridge. This outfall was flowing at approximately 5-7 gpm into Island Brook.
- **IBrook:** In-stream sample of Island Brook collected approximately 30 feet downstream of the “Slawson” outfall. No photograph was taken at this location.

### Map of Sample Locations

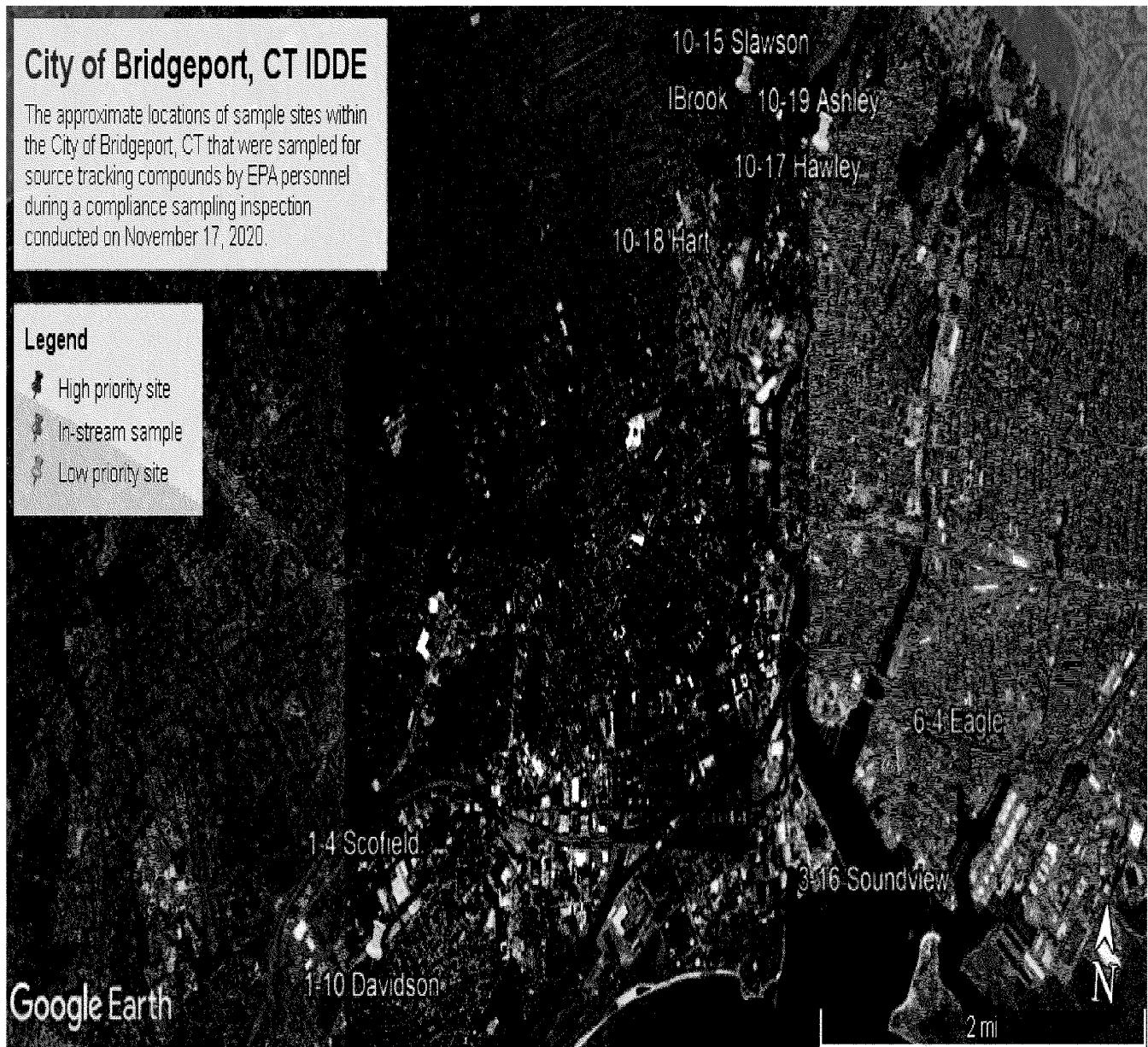


Table 1: Summary of Sampling and Analytical Data

| Location                         | Site ID             | Eagle      | Soundview  | Davidson      | Scofield      | Hawley       | Hart          | Ashley     | Slawson      | IBrook     |
|----------------------------------|---------------------|------------|------------|---------------|---------------|--------------|---------------|------------|--------------|------------|
|                                  | Sample Date         | 11/17/2020 | 11/17/2020 | 11/17/2020    | 11/17/2020    | 11/17/2020   | 11/17/2020    | 11/17/2020 | 11/17/2020   | 11/17/2020 |
|                                  | Sample Time         | 07:12      | 07:45      | 08:13         | 08:35         | 09:52        | 10:35         | 11:02      | 11:38        | 11:59      |
| Coordinates<br>(decimal degrees) | North               | 41.172941  | 41.164021  | 41.157326998  | 41.164342145  | 41.201859205 | 41.199620416  | 41.205272  | 41.20758998  | 41.207482  |
|                                  | West                | -73.165303 | -73.184680 | -73.232994838 | -73.226873947 | 73.197779706 | -73.197378595 | -73.186822 | -73.19624959 | -73.196282 |
| YSI Meter                        | Salinity, ppt.      | 9.2        | 2.7        | 5.4           | 16.6          | 0.5          | 0.3           | 0.3        | 0.2          | 0.2        |
|                                  | Temperature, °C     | 14.1       | 14.1       | 13.3          | 12.6          | 15.3         | 11.9          | 15.5       | 11.0         | 10.3       |
|                                  | Conductivity, µS/cm | 15.56 mS   | 4,008      | 9.63 mS       | 27.36 mS      | 1,082        | 650           | 588        | 383.1        | 365.7      |
| Field Test Kits<br>(mg/L)        | Ammonia             | 1.0        | 0.0        | 0.0           | 0.5           | 0.5          | 0.0           | 2.0        | 0.25         | 0.25       |
|                                  | Total Chlorine      | 0.00       | 0.03       | 0.03          | 0.02          | 0.00         | 0.03          | 0.02       | 0.04         | 0.04       |
|                                  | Surfactants         | NA         | NA         | NA            | NA            | 0.50         | 0.50          | 0.30       | 0.30         | 0.50       |
| Bacteria<br>(MPN/100mL)          | E. coli             | 517.2      | 285.1      | 152.9         | >2,419.6      | >2,419.6     | 196.8         | >2,419.6   | >2,419.6     | >2,419.6   |
|                                  | Enterococcus        | 85.0       | 301.1      | 0.0           | 798.0         | 867.0        | 146.0         |            | 565.0        | 530.0      |
| PPCPs (ng/L)                     | Cotinine            | 3.1        | 7.4        | 0.8           | 28            | 52           | 0.81          | 250        | 17           | 15         |
|                                  | Acetaminophen       | 4.1        | 4          | 4.2           | 1,500         | 300          | ND            |            | 10           | 92         |
|                                  | Paraxanthine        | 30         | 7.7        | 2.9           | 180           | 580          | ND            | 1,800      | 59           | 64         |
|                                  | Atenolol            | ND         | ND         | ND            | 3.6           | 17           | ND            | ND         | 3.5          | 3.4        |
|                                  | Caffeine            | 63         | 28         | 5.3           | 160           | 2,400        | 14            | 4,400      | 120          | 100        |
|                                  | Metoprolol          | ND         | ND         | ND            | 11            | 51           | ND            | 100        | 27           | 6.5        |
|                                  | Diphenhydramine     | ND         | ND         | 0.53          | 1.6           | 2.4          | 0.79          | 33         | 2.3          | 1.8        |
|                                  | Carbamazepine       | 1.1        | ND         | 0.52          | 2.5           | 2.4          | 0.96          | 7.6        | 5.1          | 0.88       |

Abbreviations and Notes:

ND: Not Detected above Reporting Limit

E. Coli: Red ≥ 10,000 col/100ml, Orange ≥ 1,260 col/100ml, Yellow ≥ 235 col/100ml, Black < 235 col/100ml

Enterococcus: Red ≥ 1,000 col/100ml, Orange ≥ 350 Yellow ≥ 61 col/100ml, Black < 61 col/100ml

NH<sub>3</sub>: Red ≥ 6 mg/L, Orange ≥ 0.5 mg/L, Yellow ≥ 0.25 mg/L, Black < 0.25 mg/L

Cl<sub>2</sub>: Red ≥ 1.0 mg/L, Orange ≥ 0.3 mg/L, Yellow ≥ 0.02 mg/L, Black < 0.02 mg/L

Surfactants: Red ≥ 1.0 mg/L, Orange ≥ 0.5 mg/L, Yellow ≥ 0.25 mg/L, Black < 0.25 mg/L (may give false positive at salinity greater than 1 ppt)

PPCPs:  Pink ≥ 10x the RL;  Light Pink ≥ 3x the RL; No Pink < 3x the RL \*

\*See Reporting Limit (RL) values for each compound in attached Laboratory Report for Source Tracking

EPA notes while there are currently no numerical standards to compare pharmaceutical results against, it is EPA's experience that acetaminophen is the single best bacterial source tracking compound of those listed above, and any detection of this compound may indicate a source of sanitary sewage. With respect to all of the above compounds, when a sanitary sewage source is present, depending on the type of source, distance from the sample location, and the strength of the source, concentrations of these compounds may range from the low ng/l range up to thousands of ng/L.

## **IX. Appendix**

Appendix A: Photograph Log

## **X. Attachments**

Attachment A: Laboratory Report for PPCPs (Source Tracking) Analysis

Attachment B: Laboratory Report for E. coli/Entero Analysis

**End of Report**

## **Appendix A** **Photograph Log**



**Eagle**: CSO outfall located on the east side of Central Avenue near the corner of Eagle Street. Sample point is indicated by a red "x".



**Soundview:** Beach sample located along Soundview Drive, on the west side of Seaside Park Beach. Sample point is indicated by a red “x” at the spot where the discharge was upwelling from the sand. The screenshot of satellite imagery displays the sample collection point, where the discoloration of the water is visible. No outfall pipe was found on the beach near this location.





**Davidson:** Outfall located at the north end of Davidson Street. Sample point is indicated by a red “x”.



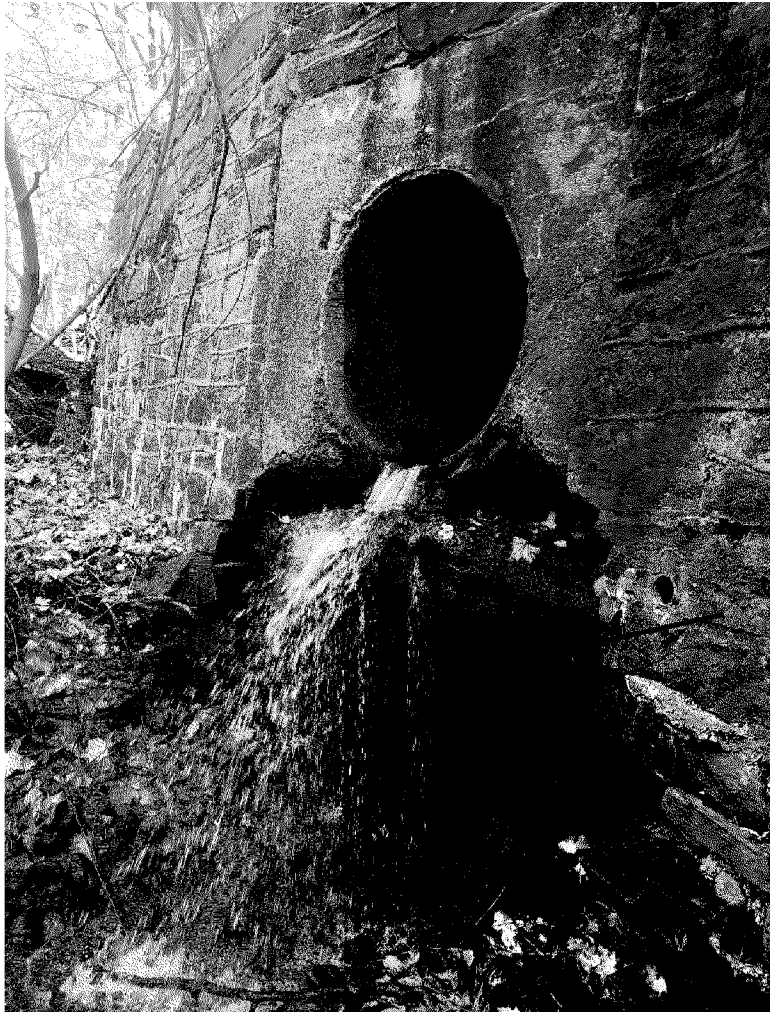
**Scofield:** Outfall located on the south east bank of the bridge at the north end of Scofield Avenue. Sample point is indicated by a red "x".



**Hawley:** Outfall located on the northeast end of Hawley Avenue near Ezra Street. Sample point is indicated by a red "x".



**Hart:** Outfall located near the corner of Hart Street and Lindley Avenue. Sample point is indicated by a red “x”.



**Ashley:** Outfall located along Glenwood Avenue near the corner of Ashley Street. Note the discharge flowing under and behind the mouth of the outfall (red arrow), due to cracks in the piping joint and degradation of the reinforcement blocks. Sample point is indicated by a red “x”.



**Slawson:** Pair of outfalls located at the corner of Slawson Street and Summit Street. Note the second outfall under the bridge. Sample point is indicated by a red “x”.

**Attachment A**  
**Laboratory Report for**  
**Source Tracking Analysis**

**Author: LSASD Laboratory Services Branch**  
**Pages: 17**

## Laboratory Report

December 15, 2020

Michelle Coombs - LFSB  
US EPA New England R1

Project Number: 20110028  
Project: MS4 Bridgeport, CT  
Analysis: HPLC/MS/MS Source Tracking Analysis  
EPA Chemist: Peter Philbrook

Date Samples Received by the Laboratory: 11/17/2020

### Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, LSBSOP-LCMS\_STA..

The SOP is based on an EPA Regional Analytical Method developed at the EPA New England Laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

20110028\$STA

**Qualifiers:**

**RL** = Reporting limit

**ND** = Not Detected above Reporting limit

**NA** = Not Applicable due to high sample dilutions or sample interferences

**NC** = Not calculated since analyte concentration is ND.

**J** = Estimated value

**J1** = Estimated value due to MS recovery outside acceptance criteria

**J2** = Estimated value due to LFB result outside acceptance criteria

**J3** = Estimated value due to RPD result outside acceptance criteria

**J4** = Estimated value due to LCS result outside acceptance criteria

**E** = Estimated value exceeds the calibration range

**L** = Estimated value is below the calibration range

**B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

**R** = No recovery was calculated since the analyte concentration is greater than four times the spike level.

**P** = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

**C** = The identification has been confirmed by GC/MS.

**A** = Suspected Aldol condensation product.

**N** = Tentatively identified compound.

**MS4 Bridgeport, CT**

**HPLC/MS/MS Source Tracking Analysis**

|                      |            |                   |            |
|----------------------|------------|-------------------|------------|
| Client Sample ID:    | Eagle      | Lab Sample ID:    | AB90096    |
| Date of Collection:  | 11/17/2020 | Matrix:           | Stormwater |
| Date of Preparation: | 11/23/2020 | Amount Prepared:  | 500 mL     |
| Date of Analysis:    | 11/24/2020 | Percent Solids:   | N/A        |
| Dry Weight Prepared: | N/A        | Extract Dilution: | 1          |
| Wet Weight Prepared: | N/A        | pH:               | N/A        |

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 3.1                   | 1        | 0.40       |           |
| 103-90-2   | Acetaminophen   | 4.1                   | 1        | 2.0        |           |
| 611-59-6   | Paraxanthine    | 30                    | 1        | 2.0        |           |
| 29122-68-7 | Atenolol        | ND                    | 1        | 2.0        |           |
| 58-08-2    | Caffeine        | 63                    | 1        | 4.0        |           |
| 56392-17-7 | Metoprolol      | ND                    | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | ND                    | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | 1.1                   | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 92             | 59 - 137  |
| Diphenhydramine-D3  | 87             | 19 - 135  |

**Comments:**

**MS4 Bridgeport, CT**

**HPLC/MS/MS Source Tracking Analysis**

Client Sample ID: Soundview  
Date of Collection: 11/17/2020  
Date of Preparation: 11/23/2020  
Date of Analysis: 11/24/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A

Lab Sample ID: AB90097  
Matrix: Stormwater  
Amount Prepared: 500 mL  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 7.4                   | 1        | 0.40       |           |
| 103-90-2   | Acetaminophen   | 4.0                   | 1        | 2.0        |           |
| 611-59-6   | Paraxanthine    | 7.7                   | 1        | 2.0        |           |
| 29122-68-7 | Atenolol        | ND                    | 1        | 2.0        |           |
| 58-08-2    | Caffeine        | 28                    | 1        | 4.0        |           |
| 56392-17-7 | Metoprolol      | ND                    | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | ND                    | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | ND                    | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 86             | 59 - 137  |
| Diphenhydramine-D3  | 87             | 19 - 135  |

**Comments:**

**MS4 Bridgeport, CT**

**HPLC/MS/MS Source Tracking Analysis**

|                      |            |                   |            |
|----------------------|------------|-------------------|------------|
| Client Sample ID:    | Davidson   | Lab Sample ID:    | AB90098    |
| Date of Collection:  | 11/17/2020 | Matrix:           | Stormwater |
| Date of Preparation: | 11/23/2020 | Amount Prepared:  | 500 mL     |
| Date of Analysis:    | 11/24/2020 | Percent Solids:   | N/A        |
| Dry Weight Prepared: | N/A        | Extract Dilution: | 1          |
| Wet Weight Prepared: | N/A        | pH:               | N/A        |

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 0.80                  | 1        | 0.40       |           |
| 103-90-2   | Acetaminophen   | 4.2                   | 1        | 2.0        |           |
| 611-59-6   | Paraxanthine    | 2.9                   | 1        | 2.0        |           |
| 29122-68-7 | Atenolol        | ND                    | 1        | 2.0        |           |
| 58-08-2    | Caffeine        | 5.3                   | 1        | 4.0        |           |
| 56392-17-7 | Metoprolol      | ND                    | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | 0.53                  | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | 0.52                  | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 88             | 59 - 137  |
| Diphenhydramine-D3  | 74             | 19 - 135  |

**Comments:**

**MS4 Bridgeport, CT**

**HPLC/MS/MS Source Tracking Analysis**

|                      |            |                   |            |
|----------------------|------------|-------------------|------------|
| Client Sample ID:    | Scofield   | Lab Sample ID:    | AB90099    |
| Date of Collection:  | 11/17/2020 | Matrix:           | Stormwater |
| Date of Preparation: | 11/23/2020 | Amount Prepared:  | 500 mL     |
| Date of Analysis:    | 11/24/2020 | Percent Solids:   | N/A        |
| Dry Weight Prepared: | N/A        | Extract Dilution: | 1          |
| Wet Weight Prepared: | N/A        | pH:               | N/A        |

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 28                    | 1        | 0.40       |           |
| 103-90-2   | Acetaminophen   | 1500                  | 10       | 20         |           |
| 611-59-6   | Paraxanthine    | 180                   | 1        | 2.0        |           |
| 29122-68-7 | Atenolol        | 3.6                   | 1        | 2.0        | J1        |
| 58-08-2    | Caffeine        | 160                   | 1        | 4.0        |           |
| 56392-17-7 | Metoprolol      | 11                    | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | 1.6                   | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | 2.5                   | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 103            | 59 - 137  |
| Diphenhydramine-D3  | 76             | 19 - 135  |

**Comments:** J1 = Atenolol matrix spike and LFB recoveries were below QC limits

MS4 Bridgeport, CT

HPLC/MS/MS Source Tracking Analysis

|                      |            |                   |            |
|----------------------|------------|-------------------|------------|
| Client Sample ID:    | Hawley     | Lab Sample ID:    | AB90100    |
| Date of Collection:  | 11/17/2020 | Matrix:           | Stormwater |
| Date of Preparation: | 11/23/2020 | Amount Prepared:  | 500 mL     |
| Date of Analysis:    | 11/24/2020 | Percent Solids:   | N/A        |
| Dry Weight Prepared: | N/A        | Extract Dilution: | 1          |
| Wet Weight Prepared: | N/A        | pH:               | N/A        |

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 52                    | 10       | 4.0        |           |
| 103-90-2   | Acetaminophen   | 300                   | 10       | 20         |           |
| 611-59-6   | Paraxanthine    | 580                   | 10       | 20         |           |
| 29122-68-7 | Atenolol        | 17                    | 1        | 2.0        | J1        |
| 58-08-2    | Caffeine        | 2400                  | 10       | 40         |           |
| 56392-17-7 | Metoprolol      | 51                    | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | 2.4                   | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | 2.4                   | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 88             | 59 - 137  |
| Diphenhydramine-D3  | 65             | 19 - 135  |

Comments: J1=Atenolol recoveries for both the LFB and matrix spike were below QC criteria

**MS4 Bridgeport, CT**

**HPLC/MS/MS Source Tracking Analysis**

|                      |            |                   |            |
|----------------------|------------|-------------------|------------|
| Client Sample ID:    | Hart       | Lab Sample ID:    | AB90101    |
| Date of Collection:  | 11/17/2020 | Matrix:           | Stormwater |
| Date of Preparation: | 11/23/2020 | Amount Prepared:  | 500 mL     |
| Date of Analysis:    | 11/24/2020 | Percent Solids:   | N/A        |
| Dry Weight Prepared: | N/A        | Extract Dilution: | 1          |
| Wet Weight Prepared: | N/A        | pH:               | N/A        |

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 0.81                  | 1        | 0.40       |           |
| 103-90-2   | Acetaminophen   | ND                    | 1        | 2.0        |           |
| 611-59-6   | Paraxanthine    | ND                    | 1        | 2.0        |           |
| 29122-68-7 | Atenolol        | ND                    | 1        | 2.0        |           |
| 58-08-2    | Caffeine        | 14                    | 1        | 4.0        |           |
| 56392-17-7 | Metoprolol      | ND                    | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | 0.79                  | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | 0.96                  | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 86             | 59 - 137  |
| Diphenhydramine-D3  | 76             | 19 - 135  |

**Comments:**

**MS4 Bridgeport, CT**

**HPLC/MS/MS Source Tracking Analysis**

|                      |            |                   |            |
|----------------------|------------|-------------------|------------|
| Client Sample ID:    | Ashley     | Lab Sample ID:    | AB90102    |
| Date of Collection:  | 11/17/2020 | Matrix:           | Stormwater |
| Date of Preparation: | 11/23/2020 | Amount Prepared:  | 500 mL     |
| Date of Analysis:    | 11/24/2020 | Percent Solids:   | N/A        |
| Dry Weight Prepared: | N/A        | Extract Dilution: | 1          |
| Wet Weight Prepared: | N/A        | pH:               | N/A        |

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 250                   | 100      | 40         |           |
| 103-90-2   | Acetaminophen   | 22000                 | 100      | 200        |           |
| 611-59-6   | Paraxanthine    | 1800                  | 100      | 200        |           |
| 29122-68-7 | Atenolol        | ND                    | 1        | 2.0        |           |
| 58-08-2    | Caffeine        | 4400                  | 100      | 400        |           |
| 56392-17-7 | Metoprolol      | 100                   | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | 33                    | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | 7.6                   | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 91             | 59 - 137  |
| Diphenhydramine-D3  | 105            | 19 - 135  |

**Comments:**

**MS4 Bridgeport, CT**

**HPLC/MS/MS Source Tracking Analysis**

Client Sample ID: Dup-01  
Date of Collection: 11/17/2020  
Date of Preparation: 11/23/2020  
Date of Analysis: 11/24/2020  
Dry Weight Prepared: N/A  
Wet Weight Prepared: N/A

Lab Sample ID: AB90103  
Matrix: Stormwater  
Amount Prepared: 500 mL  
Percent Solids: N/A  
Extract Dilution: 1  
pH: N/A

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 190                   | 100      | 40         |           |
| 103-90-2   | Acetaminophen   | 14000                 | 100      | 200        |           |
| 611-59-6   | Paraxanthine    | 1600                  | 100      | 200        |           |
| 29122-68-7 | Atenolol        | ND                    | 1        | 2.0        |           |
| 58-08-2    | Caffeine        | 3700                  | 100      | 400        |           |
| 56392-17-7 | Metoprolol      | 100                   | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | 32                    | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | 7.8                   | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 87             | 59 - 137  |
| Diphenhydramine-D3  | 97             | 19 - 135  |

**Comments:**

**MS4 Bridgeport, CT**

**HPLC/MS/MS Source Tracking Analysis**

|                      |            |                   |            |
|----------------------|------------|-------------------|------------|
| Client Sample ID:    | Slawson    | Lab Sample ID:    | AB90104    |
| Date of Collection:  | 11/17/2020 | Matrix:           | Stormwater |
| Date of Preparation: | 11/23/2020 | Amount Prepared:  | 500 mL     |
| Date of Analysis:    | 11/24/2020 | Percent Solids:   | N/A        |
| Dry Weight Prepared: | N/A        | Extract Dilution: | 1          |
| Wet Weight Prepared: | N/A        | pH:               | N/A        |

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 17                    | 1        | 0.40       |           |
| 103-90-2   | Acetaminophen   | 10                    | 1        | 2.0        |           |
| 611-59-6   | Paraxanthine    | 59                    | 1        | 2.0        |           |
| 29122-68-7 | Atenolol        | 3.5                   | 1        | 2.0        | J1        |
| 58-08-2    | Caffeine        | 120                   | 1        | 4.0        |           |
| 56392-17-7 | Metoprolol      | 27                    | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | 2.3                   | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | 5.1                   | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 79             | 59 - 137  |
| Diphenhydramine-D3  | 78             | 19 - 135  |

**Comments:** J1=Atenolol recoveries for both the LFB and matrix spike were below QC criteria

**MS4 Bridgeport, CT**

**HPLC/MS/MS Source Tracking Analysis**

|                      |            |                   |            |
|----------------------|------------|-------------------|------------|
| Client Sample ID:    | I Brook    | Lab Sample ID:    | AB90105    |
| Date of Collection:  | 11/17/2020 | Matrix:           | Stormwater |
| Date of Preparation: | 11/23/2020 | Amount Prepared:  | 500 mL     |
| Date of Analysis:    | 11/24/2020 | Percent Solids:   | N/A        |
| Dry Weight Prepared: | N/A        | Extract Dilution: | 1          |
| Wet Weight Prepared: | N/A        | pH:               | N/A        |

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | 15                    | 1        | 0.40       |           |
| 103-90-2   | Acetaminophen   | 92                    | 1        | 2.0        |           |
| 611-59-6   | Paraxanthine    | 64                    | 1        | 2.0        |           |
| 29122-68-7 | Atenolol        | 3.4                   | 1        | 2.0        | J1        |
| 58-08-2    | Caffeine        | 100                   | 1        | 4.0        |           |
| 56392-17-7 | Metoprolol      | 6.5                   | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | 1.8                   | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | 0.88                  | 1        | 0.40       |           |

| Surrogate Compounds | Recoveries (%) | QC Ranges |
|---------------------|----------------|-----------|
| Phentermine-D5      | 85             | 59 - 137  |
| Diphenhydramine-D3  | 73             | 19 - 135  |

**Comments:** J1=Atenolol recoveries for both the LFB and matrix spike were below QC criteria

**MS4 Bridgeport, CT**

**Laboratory Blank**

|                      |            |                   |            |
|----------------------|------------|-------------------|------------|
| Client Sample ID:    | N/A        | Lab Sample ID:    | N/A        |
| Date of Collection:  | N/A        | Matrix:           | Stormwater |
| Date of Preparation: | 11/23/2020 | Amount Prepared:  | 500 mL     |
| Date of Analysis:    | 11/24/2020 | Percent Solids:   | N/A        |
| Dry Weight Prepared: | N/A        | Extract Dilution: | 1          |
| Wet Weight Prepared: | N/A        | pH:               | N/A        |

| CAS Number | Compound        | Concentration<br>ng/L | Dilution | RL<br>ng/L | Qualifier |
|------------|-----------------|-----------------------|----------|------------|-----------|
| 486-56-6   | Cotinine        | ND                    | 1        | 0.40       |           |
| 103-90-2   | Acetaminophen   | ND                    | 1        | 2.0        |           |
| 611-59-6   | Paraxanthine    | ND                    | 1        | 2.0        |           |
| 29122-68-7 | Atenolol        | ND                    | 1        | 2.0        |           |
| 58-08-2    | Caffeine        | ND                    | 1        | 4.0        |           |
| 56392-17-7 | Metoprolol      | ND                    | 1        | 2.0        |           |
| 58-73-1    | Diphenhydramine | ND                    | 1        | 0.40       |           |
| 298-46-4   | Carbamazepine   | ND                    | 1        | 0.40       |           |

**Surrogate Compounds**

**Recoveries (%)**

**QC Ranges**

Phentermine-D5

88

59 - 137

Diphenhydramine-D3

88

19 - 135

**Comments:**

**MS4 Bridgeport, CT**

**MATRIX SPIKE (MS) RECOVERY**

Sample ID: AB90105

| PARAMETER       | SPIKE<br>ADDED<br>ng/L | SAMPLE<br>CONCENTRATION<br>ng/L | MS<br>CONCENTRATION<br>ng/L | MS<br>%<br>REC | QC<br>LIMITS<br>(% REC) |
|-----------------|------------------------|---------------------------------|-----------------------------|----------------|-------------------------|
| Acetaminophen   | 120                    | 92.0                            | 177                         | 71             | 61 - 100                |
| Atenolol        | 120                    | 3.4                             | 52.6                        | 41             | 59 - 122                |
| Caffeine        | 240                    | 100                             | 315                         | 90             | 54 - 128                |
| Carbamazepine   | 24.0                   | 0.88                            | 20.3                        | 81             | 61 - 120                |
| Cotinine        | 24.0                   | 15.0                            | 35.8                        | 87             | 48 - 124                |
| Diphenhydramine | 24.0                   | 1.8                             | 19.8                        | 75             | 30 - 130                |
| Metoprolol      | 120                    | 6.5                             | 104                         | 81             | 59 - 128                |
| Paraxanthine    | 120                    | 64.0                            | 160                         | 80             | 42 - 125                |

**MS4 Bridgeport, CT**

**Laboratory Duplicate Results**

Sample ID: AB90104

| PARAMETER       | SAMPLE<br>RESULT<br>ng/L | SAMPLE DUPLICATE<br>RESULT<br>ng/L | PRECISION<br>RPD<br>% | QC<br>LIMITS |
|-----------------|--------------------------|------------------------------------|-----------------------|--------------|
| Acetaminophen   | 10.0                     | 9.55                               | 4.6                   | 50           |
| Atenolol        | 3.5                      | 3.24                               | 7.7                   | 50           |
| Caffeine        | 120                      | 115                                | 4.3                   | 50           |
| Carbamazepine   | 5.1                      | 5.02                               | 1.6                   | 50           |
| Cotinine        | 17.0                     | 17.2                               | 1.2                   | 50           |
| Diphenhydramine | 2.3                      | 2.31                               | 0.43                  | 50           |
| Metoprolol      | 27.0                     | 26.5                               | 1.9                   | 50           |
| Paraxanthine    | 59.0                     | 56.4                               | 4.5                   | 50           |

**MS4 Bridgeport, CT**

**Laboratory Fortified Blank (LFB) Results**

| PARAMETER       | LFB AMOUNT<br>SPIKED<br>ng/L | LFB<br>RESULT<br>ng/L | LFB<br>RECOVERY<br>% | QC<br>LIMITS<br>% |
|-----------------|------------------------------|-----------------------|----------------------|-------------------|
| Acetaminophen   | 120                          | 87.5                  | 73                   | 53 - 105          |
| Atenolol        | 120                          | 41.3                  | 34                   | 62 - 117          |
| Caffeine        | 240                          | 176                   | 73                   | 50 - 127          |
| Carbamazepine   | 24                           | 20.2                  | 84                   | 28 - 126          |
| Cotinine        | 24                           | 20.2                  | 84                   | 52 - 134          |
| Diphenhydramine | 24                           | 16.8                  | 70                   | 30 - 130          |
| Metoprolol      | 120                          | 90.2                  | 75                   | 33 - 139          |
| Paraxanthine    | 120                          | 93.9                  | 78                   | 61 - 113          |

**Comments:**

**Samples in Batch:** AB90096, AB90097, AB90098, AB90099, AB90100, AB90101, AB90102, AB90103, AB90104, AB90105



## CHAIN OF CUSTODY RECORD

| PROJ. NO.                    |       | PROJECT NAME                    |       | NO. OF CONTAINERS |                  | REMARKS          |   |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|------------------------------|-------|---------------------------------|-------|-------------------|------------------|------------------|---|-----------------------------------------|--|--|--|------------------------------|--|-------------|--|--------------------------|--|--|--|--|
| 20110028                     |       | Bridgeport MS4 - Bridgeport, CT |       |                   |                  |                  |   |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
| SAMPLERS: (Signature)        |       |                                 |       |                   |                  |                  |   |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
| STA. NO.                     | DATE  | TIME                            | COMP. | GRAB              | STATION LOCATION |                  |   |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 0712                            |       | X                 | Eagle            | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 0745                            |       | X                 | Soundview        | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 0813                            |       | X                 | Davidson         | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 0835                            |       | X                 | Scofield         | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 0952                            |       | X                 | Hawley           | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 1035                            |       | X                 | Hart             | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 1102                            |       | X                 | Ashley           | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 1102                            |       | X                 | DUP-81           | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 1138                            |       | X                 | Slawson          | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
|                              | 11/17 | 1159                            |       | X                 | IBrook           | 1                | ✓ |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
| Relinquished by: (Signature) |       |                                 |       |                   |                  | Date / Time      |   | Received by: (Signature)                |  |  |  | Relinquished by: (Signature) |  | Date / Time |  | Received by: (Signature) |  |  |  |  |
| [Signature]                  |       |                                 |       |                   |                  | 11/17/2010 15:32 |   | [Signature]                             |  |  |  |                              |  |             |  |                          |  |  |  |  |
| Relinquished by: (Signature) |       |                                 |       |                   |                  | Date / Time      |   | Received by: (Signature)                |  |  |  | Relinquished by: (Signature) |  | Date / Time |  | Received by: (Signature) |  |  |  |  |
|                              |       |                                 |       |                   |                  |                  |   |                                         |  |  |  |                              |  |             |  |                          |  |  |  |  |
| Relinquished by: (Signature) |       |                                 |       |                   |                  | Date / Time      |   | Received for Laboratory by: (Signature) |  |  |  | Date / Time                  |  | Remarks     |  |                          |  |  |  |  |
| [Signature]                  |       |                                 |       |                   |                  |                  |   | [Signature]                             |  |  |  | 11-17-20 15:32               |  | 3°C         |  |                          |  |  |  |  |

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

**Attachment B**  
**Laboratory Report for**  
**E. coli/Entero Analysis**

**Author: South Central CT Regional Water Authority**  
**Pages: 10**



90 Sargent Dr, New Haven, CT 06511  
Phone: 203-401-2700  
Fax 203-401-6799

### Chain of Custody Form

**Company Name**  
US Environmental Protection Agency

**Company Address**  
11 Technology Drive  
North Chelmsford, MA  
01863

**Sampler**  
Michelle Coombs

**PO Number**

Number of Bottles

Test Requested, Container, & Preservative

State Sample Collected:

CT ☒ NY ☐ Other (specify)

Evidence of Cooling (Circle): Y or N

Cooler Temp °C: 5.2

Container & Preservative Meet Criteria

(Circle): Yes/ No

Salinity

Remarks

9.2 ppt

2.7 ppt

5.4 ppt

16.6 ppt

0.5 ppt

0.3 ppt

0.3 ppt

0.2 ppt

0.2 ppt

Comments:

Report (EDS) to : coombs.michelle@epa.gov

Relinquished by (Signature):

Relinquished By (Signature):

Date & Time: 11/17/2020 @ 12:58

Date & Time:

Received By (Signature):

Date & Time:

Received By (Signature):

Date & Time:

Date & Time: 11/17 @ 1:00 P

## FINAL REPORT

Report Date: 20-NOV-2020 09:02 AM

Sample Number: 200598438

Subm #: 100200067  
Study : FEE SERVICE -  
MISCELLANEOUS  
Logged : 17-Nov-2020 02:04 pm  
By : GIGLIETTI  
Categ. : FEE - MISC.  
FEE - MISC.

Type : -FEE- MISC OTHER  
(Loca) : -LOGIN  
ID : US ENVIRONMENTAL - EAGLE

Customer : US ENVIRONMENTAL  
PROTECTION AGENCY  
Attn : n/a  
Samp Addr: EAGLE  
Samp City : N/A  
Collected : 11/17/20 07:12  
Loca Desc : EAGLE

| PARAMETER                 | RESULT   | UNITS      | RL | METHOD                | COMMENTS |
|---------------------------|----------|------------|----|-----------------------|----------|
| ESCHERICHIA COLI (MPN)    | 517.2    | cfu/100 mL | 0  | STM 9223B             |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |
| ENTEROCOCCI (MPN)         | 85.0     | cfu/100 mL | 0  | STM 9223A & STM 9230A |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |

All parameters were analyzed in accordance with EPA approved methods EXCEPT where noted in 'COMMENTS' column or in the discussion below. This report is not valid without the cover sheet.

Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.  
Perfluorinated compounds performed by isotope dilution (PFC Isotope) are not certified and New York NELAP only provides certification for PFOA and PFOS by method 537. RWA does maintain certifications in other states for perfluorinated compounds encompassing the entire list found in EPA method 537 and 537.1.

RL - Reporting Limits

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the calculated method detection limit (MDL)

Approved by and Date



NOV 23 2020

## FINAL REPORT

Report Date: 20-NOV-2020 09:02 AM

Sample Number: 200598442

Subm #: 100200067  
Study : FEE SERVICE -  
MISCELLANEOUS  
Logged : 17-Nov-2020 02:04 pm  
By : GIGLIETTI  
Categ. : FEE - MISC.  
FEE - MISC.

Type : -FEE- MISC OTHER  
(Loca) : -LOGIN  
ID : US ENVIRONMENTAL -  
SOUNDVIEW

Customer : US ENVIRONMENTAL  
PROTECTION AGENCY  
Attn : n/a  
Samp Addr: SOUNDVIEW  
Samp City : N/A  
Collected : 11/17/20 07:45  
Loca Desc : SOUNDVIEW

| PARAMETER                 | RESULT   | UNITS      | RL | METHOD                | COMMENTS |
|---------------------------|----------|------------|----|-----------------------|----------|
| ESCHERICHIA COLI (MPN)    | 285.1    | cfu/100 mL | 0  | STM 9223B             |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |
| ENTEROCOCCI (MPN)         | 301.0    | cfu/100 mL | 0  | STM 9223A & STM 9230A |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |

All parameters were analyzed in accordance with EPA approved methods EXCEPT where noted in 'COMMENTS' column or in the discussion below. This report is not valid without the cover sheet.

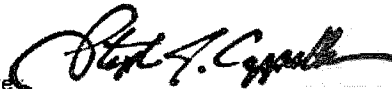
Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.

Perfluorinated compounds performed by isotope dilution (PFC Isotope) are not certified and New York NELAP only provides certification for PFOA and PFOS by method 537. RWA does maintain certifications in other states for perfluorinated compounds encompassing the entire list found in EPA method 537 and 537.1.

RL - Reporting Limits

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the calculated method detection limit (MDL)

Approved by and Date



NOV 23 2020

## FINAL REPORT

Report Date: 20-NOV-2020 09:02 AM

Sample Number: 200598443

Subm #: 100200067      Type: -FEE- MISC OTHER      Customer: US ENVIRONMENTAL  
Study: FEE SERVICE -      (Loca): -LOGIN      PROTECTION AGENCY  
         MISCELLANEOUS      ID: US ENVIRONMENTAL - DAVIDSON      Attn: n/a  
Logged: 17-Nov-2020 02:04 pm      Samp Addr: DAVIDSON  
By: GIGLIETTI      Samp City: N/A  
Categ.: FEE - MISC.      Collected: 11/17/20      08:13  
         FEE - MISC.      Loca Desc: DAVIDSON

| PARAMETER                 | RESULT   | UNITS      | RL | METHOD                | COMMENTS                                      |
|---------------------------|----------|------------|----|-----------------------|-----------------------------------------------|
| ESCHERICHIA COLI (MPN)    | 152.9    | cfu/100 mL | 0  | STM 9223B             |                                               |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |                                               |
| ENTEROCOCCI (MPN)         | 0.0      | cfu/100 mL | 0  | STM 9223A & STM 9230A | Note: Actual result is<br><10.0 CFU's/100mLs. |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |                                               |

All parameters were analyzed in accordance with EPA approved methods EXCEPT where noted in 'COMMENTS' column or in the discussion below. This report is not valid without the cover sheet.

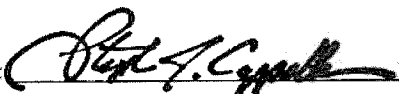
Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.

Perfluorinated compounds performed by isotope dilution (PFC Isotope) are not certified and New York NELAP only provides certification for PFOA and PFOS by method 537. RWA does maintain certifications in other states for perfluorinated compounds encompassing the entire list found in EPA method 537 and 537.1.

RL - Reporting Limits

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the calculated method detection limit (MDL)

Approved by and Date:



NOV 23 2020

## FINAL REPORT

Report Date: 20-NOV-2020 09:02 AM

Sample Number: 200598444

Subm # : 100200067  
Study : FEE SERVICE -  
MISCELLANEOUS  
Logged : 17-Nov-2020 02:04 pm  
By : GIGLIETTI  
Categ. : FEE - MISC.  
FEE - MISC.

Type : -FEE- MISC OTHER  
(Loca) : -LOGIN  
ID : US ENVIRONMENTAL - SCOFIELD

Customer : US ENVIRONMENTAL  
PROTECTION AGENCY  
Attn : n/a  
Samp Addr: SCOFIELD  
Samp City : N/A  
Collected : 11/17/20 08:35  
Loca Desc : SCOFIELD

| PARAMETER                 | RESULT   | UNITS      | RL | METHOD                | COMMENTS |
|---------------------------|----------|------------|----|-----------------------|----------|
| ESCHERICHIA COLI (MPN)    | >2419.6  | cfu/100 mL | 0  | STM 9223B             |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |
| ENTEROCOCCI (MPN)         | 798.0    | cfu/100 mL | 0  | STM 9223A & STM 9230A |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |

All parameters were analyzed in accordance with EPA approved methods EXCEPT where noted in 'COMMENTS' column or in the discussion below. This report is not valid without the cover sheet.

Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.

Perfluorinated compounds performed by isotope dilution (PFC Isotope) are not certified and New York NELAP only provides certification for PFOA and PFOS by method 537. RWA does maintain certifications in other states for perfluorinated compounds encompassing the entire list found in EPA method 537 and 537.1.

RL - Reporting Limits

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the calculated method detection limit (MDL)

Approved by and Date



NOV 23 2020

## FINAL REPORT

Report Date: 20-NOV-2020 09:02 AM

Sample Number: 200598445

Subm #: 100200067  
Study : FEE SERVICE -  
MISCELLANEOUS  
Logged : 17-Nov-2020 02:04 pm  
By : GIGLIETTI  
Categ. : FEE - MISC.  
FEE - MISC.

Type : -FEE- MISC OTHER  
(Loca) : -LOGIN  
ID : US ENVIRONMENTAL - HAWLEY

Customer : US ENVIRONMENTAL  
PROTECTION AGENCY  
Attn : n/a  
Samp Addr: HAWLEY  
Samp City : N/A  
Collected : 11/17/20 09:52  
Loca Desc : HAWLEY

| PARAMETER                 | RESULT   | UNITS      | RL | METHOD                | COMMENTS |
|---------------------------|----------|------------|----|-----------------------|----------|
| ESCHERICHIA COLI (MPN)    | >2419.6  | cfu/100 mL | 0  | STM 9223B             |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |
| ENTEROCOCCI (MPN)         | 867.0    | cfu/100 mL | 0  | STM 9223A & STM 9230A |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |

All parameters were analyzed in accordance with EPA approved methods EXCEPT where noted in 'COMMENTS' column or in the discussion below. This report is not valid without the cover sheet.

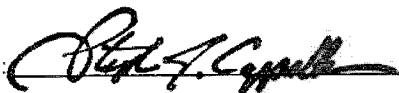
Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.

Perfluorinated compounds performed by isotope dilution (PFC Isotope) are not certified and New York NELAP only provides certification for PFOA and PFOS by method 537. RWA does maintain certifications in other states for perfluorinated compounds encompassing the entire list found in EPA method 537 and 537.1.

RL - Reporting Limits

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the calculated method detection limit (MDL)

Approved by and Date :



NOV 23 2020

## FINAL REPORT

Report Date: 20-NOV-2020 09:02 AM

Sample Number: 200598446

Subm #: 100200067  
Study : FEE SERVICE -  
MISCELLANEOUS  
Logged : 17-Nov-2020 02:04 pm  
By : GIGLIETTI  
Categ. : FEE - MISC.  
FEE - MISC.

Type : -FEE- MISC OTHER  
(Loca) : -LOGIN  
ID : US ENVIRONMENTAL - HART

Customer : US ENVIRONMENTAL  
PROTECTION AGENCY  
Attn : n/a  
Samp Addr: HART  
Samp City : N/A  
Collected : 11/17/20 10:35  
Loca Desc : HART

| PARAMETER                 | RESULT   | UNITS      | RL | METHOD                | COMMENTS |
|---------------------------|----------|------------|----|-----------------------|----------|
| ESCHERICHIA COLI (MPN)    | 196.8    | cfu/100 mL | 0  | STM 9223B             |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |
| ENTEROCOCCI (MPN)         | 146.0    | cfu/100 mL | 0  | STM 9223A & STM 9230A |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |

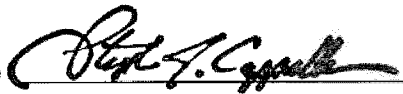
All parameters were analyzed in accordance with EPA approved methods EXCEPT where noted in 'COMMENTS' column or in the discussion below. This report is not valid without the cover sheet.

Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.  
Perfluorinated compounds performed by isotope dilution (PFC Isotope) are not certified and New York NELAP only provides certification for PFOA and PFOS by method 537. RWA does maintain certifications in other states for perfluorinated compounds encompassing the entire list found in EPA method 537 and 537.1.

RL - Reporting Limits

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the calculated method detection limit (MDL)

Approved by and Date



NOV 23 2020

## FINAL REPORT

Report Date: 20-NOV-2020 09:03 AM

Sample Number: 200598447

Subm #: 100200067

Type: -FEE- MISC OTHER

Customer: US ENVIRONMENTAL  
PROTECTION AGENCY

Study: FEE SERVICE -  
MISCELLANEOUS

(Loca): -LOGIN

Attn: n/a

Logged: 17-Nov-2020 02:04 pm

ID: US ENVIRONMENTAL - ASHLEY

Samp Addr: ASHLEY

By: GIGLIETTI

Samp City: N/A

Categ.: FEE - MISC.

Collected: 11/17/20 11:02

FEE - MISC.

Loca Desc: ASHLEY

| PARAMETER                 | RESULT   | UNITS      | RL | METHOD                | COMMENTS |
|---------------------------|----------|------------|----|-----------------------|----------|
| ESCHERICHIA COLI (MPN)    | >2419.6  | cfu/100 mL | 0  | STM 9223B             |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |
| ENTEROCOCCI (MPN)         | 9804.0   | cfu/100 mL | 0  | STM 9223A & STM 9230A |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |

All parameters were analyzed in accordance with EPA approved methods EXCEPT where noted in 'COMMENTS' column or in the discussion below. This report is not valid without the cover sheet.

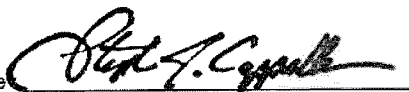
Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.

Perfluorinated compounds performed by isotope dilution (PFC Isotope) are not certified and New York NELAP only provides certification for PFOA and PFOS by method 537. RWA does maintain certifications in other states for perfluorinated compounds encompassing the entire list found in EPA method 537 and 537.1.

RL - Reporting Limits

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the calculated method detection limit (MDL)

Approved by and Date



NOV 23 2020

## FINAL REPORT

Report Date: 20-NOV-2020 09:03 AM

Sample Number: 200598448

Subm #: 100200067  
Study : FEE SERVICE -  
MISCELLANEOUS  
Logged : 17-Nov-2020 02:04 pm  
By : GIGLIETTI  
Categ. : FEE - MISC.  
FEE - MISC.

Type : -FEE- MISC OTHER  
(Loca) : -LOGIN  
ID : US ENVIRONMENTAL - SLAWSON

Customer : US ENVIRONMENTAL  
PROTECTION AGENCY  
Attn : n/a  
Samp Addr: SLAWSON  
Samp City : N/A  
Collected : 11/17/20 11:38  
Loca Desc : SLAWSON

| PARAMETER                 | RESULT   | UNITS      | RL | METHOD                | COMMENTS |
|---------------------------|----------|------------|----|-----------------------|----------|
| ESCHERICHIA COLI (MPN)    | >2419.6  | cfu/100 mL | 0  | STM 9223B             |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |
| ENTEROCOCCI (MPN)         | 565.0    | cfu/100 mL | 0  | STM 9223A & STM 9230A |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |

All parameters were analyzed in accordance with EPA approved methods EXCEPT where noted in 'COMMENTS' column or in the discussion below. This report is not valid without the cover sheet.

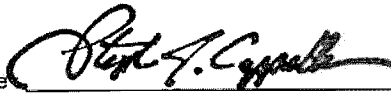
Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.

Perfluorinated compounds performed by isotope dilution (PFC Isotope) are not certified and New York NELAP only provides certification for PFOA and PFOS by method 537. RWA does maintain certifications in other states for perfluorinated compounds encompassing the entire list found in EPA method 537 and 537.1.

RL - Reporting Limits

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the calculated method detection limit (MDL)

Approved by and Date



NOV 23 2020

## FINAL REPORT

Report Date: 20-NOV-2020 09:03 AM

Sample Number: 200598449

Subm # : 100200067  
Study : FEE SERVICE -  
MISCELLANEOUS  
Logged : 17-Nov-2020 02:04 pm  
By : GIGLIETTI  
Categ. : FEE - MISC.  
FEE - MISC.

Type : -FEE- MISC OTHER  
(Loca) : -LOGIN  
ID : US ENVIRONMENTAL - I BROOK

Customer : US ENVIRONMENTAL  
PROTECTION AGENCY  
Attn : n/a  
Samp Addr: I BROOK  
Samp City : N/A  
Collected : 11/17/20 11:59  
Loca Desc : I BROOK

| PARAMETER                 | RESULT   | UNITS      | RL | METHOD                | COMMENTS |
|---------------------------|----------|------------|----|-----------------------|----------|
| ESCHERICHIA COLI (MPN)    | >2419.6  | cfu/100 mL | 0  | STM 9223B             |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |
| ENTEROCOCCI (MPN)         | 530.0    | cfu/100 mL | 0  | STM 9223A & STM 9230A |          |
| DATE OF ANALYSIS REQUIRED | 11/17/20 | MM/DD/YY   |    |                       |          |

All parameters were analyzed in accordance with EPA approved methods EXCEPT where noted in 'COMMENTS' column or in the discussion below. This report is not valid without the cover sheet.

Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.

Perfluorinated compounds performed by isotope dilution (PFC Isotope) are not certified and New York NELAP only provides certification for PFOA and PFOS by method 537. RWA does maintain certifications in other states for perfluorinated compounds encompassing the entire list found in EPA method 537 and 537.1.

RL - Reporting Limits

J - The reported result is an estimate. The value is less than the minimum calibration level but greater than the calculated method detection limit (MDL)

Approved by and Date



NOV 23 2020