



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\
City of Bridgeport, CT

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
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

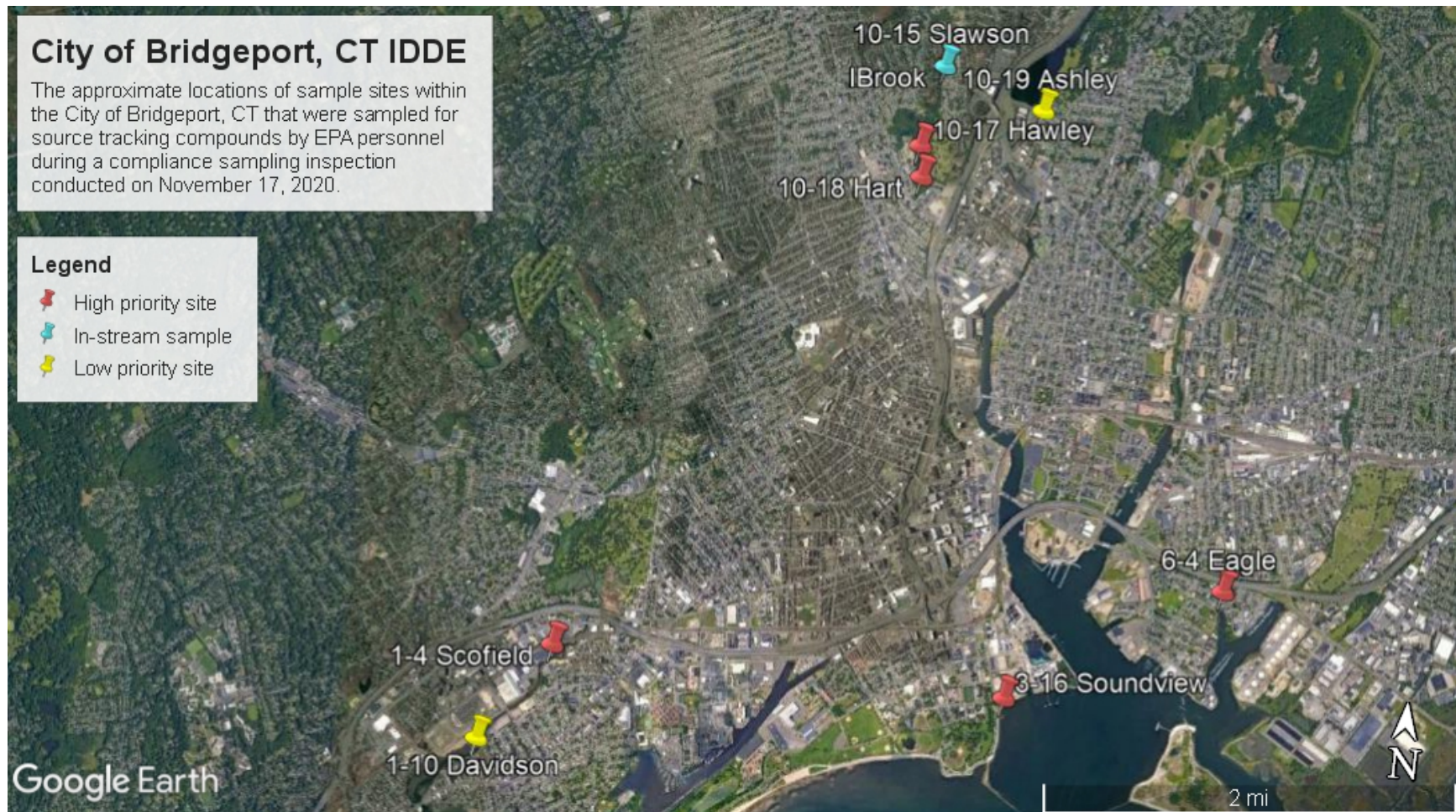


Table 1: Summary of Sampling and Analytical Data

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 (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 (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 (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	9,804.0	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	22,000	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

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

NH₃: Red ≥ 6 mg/L, Orange ≥ 0.5 mg/L, Yellow ≥ 0.25 mg/L, Black < 0.25 mg/L

Cl₂: 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: Dark Pink ≥ 100x the RL; 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 ng/L	Dilution	RL 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 ng/L	Dilution	RL 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 ng/L	Dilution	RL 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 ng/L	Dilution	RL 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 ng/L	Dilution	RL 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 ng/L	Dilution	RL 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 ng/L	Dilution	RL 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	Lab Sample ID:	AB90103
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 ng/L	Dilution	RL 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 ng/L	Dilution	RL 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
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: AB90105
Matrix: Stormwater
Amount Prepared: 500 mL
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration ng/L	Dilution	RL 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 ng/L	Dilution	RL 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 ADDED ng/L	SAMPLE CONCENTRATION ng/L	MS CONCENTRATION ng/L	MS % REC	QC LIMITS (% 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 RESULT ng/L	SAMPLE DUPLICATE RESULT ng/L	PRECISION RPD %	QC 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 SPIKED ng/L	LFB RESULT ng/L	LFB RECOVERY %	QC LIMITS %
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

[illegible]

Attachment B
Laboratory Report for
E. coli/Entero Analysis

Author: South Central CT Regional Water Authority
Pages: 10

Chain of Custody Form

<u>Company Name</u> US Environmental Protection Agency	<u>Company Address</u> 11 Technology Drive North Chelmsford, MA 01863
--	--

PO Number	
Sampler	

Michelle Coombs

RWALIMS Number	Date Collected	Time Collected	Sample ID/ Sample Location
200598438	11/17/2020	07:12	Eagle
442	11/17/2020	07:45	Soundview
443	11/17/2020	08:13	Davidson
444	11/17/2020	08:35	Scotfield
445	11/17/2020	0:952	Hawley
446	11/17/2020	10:35	Hart
447	11/17/2020	11:02	Ashley
448	11/17/2020	11:38	Slawson
449	11/17/2020	11:59	IBrook

Relinquished By (Signature): 	Relinquished by (Signature):
Date & Time: 11/17/2000 @ 12:58	Date & Time:
Received By (Signature): 	Received By (Signature):
Date & Time: 11/17 @ 1:00 P	Date & Time:

Test Requested, Container, & Preservative

State Sample Collected:		CT ☒ NY ☐ Other (specify) _____		Evidence of Cooling (Circle): ☒ Y or ☐ N		Cooler Temp °C: <u>3.6</u>		Container & Preservative Meet Criteria (Circle): Yes/ No		Salinity Remarks	
E. Coli (125mL, thio)	✓	✓	✓	✓	✓	✓	✓	✓	9.2 ppt		
E. Coli (125mL, thio)	✓	✓	✓	✓	✓	✓	✓	✓	2.7 ppt		
E. Coli (125mL, thio)	✓	✓	✓	✓	✓	✓	✓	✓	5.4 ppt		
E. Coli (125mL, thio)	✓	✓	✓	✓	✓	✓	✓	✓	16.6 ppt		
E. Coli (125mL, thio)	✓	✓	✓	✓	✓	✓	✓	✓	0.5 ppt		
E. Coli (125mL, thio)	✓	✓	✓	✓	✓	✓	✓	✓	0.3 ppt		
E. Coli (125mL, thio)	✓	✓	✓	✓	✓	✓	✓	✓	0.3 ppt		
E. Coli (125mL, thio)	✓	✓	✓	✓	✓	✓	✓	✓	0.2 ppt		
E. Coli (125mL, thio)	✓	✓	✓	✓	✓	✓	✓	✓	0.2 ppt		

Comments:
Report (EDs) to : coombs.michelle@epa.gov

FINAL REPORT

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

Sample Number: 200598438

Subm # : 100200067 Type : -FEE- MISC OTHER Customer : US ENVIRONMENTAL
Study : FEE SERVICE - (Loca) : -LOGIN PROTECTION AGENCY
 MISCELLANEOUS ID : US ENVIRONMENTAL - EAGLE Attn : n/a
Logged : 17-Nov-2020 02:04 pm Samp Addr: EAGLE
By : GIGLIETTI Samp City : N/A
Categ. : FEE - MISC. Collected : 11/17/20 07:12
 FEE - MISC. 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 <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 Type : -FEE- MISC OTHER Customer : US ENVIRONMENTAL
Study : FEE SERVICE - (Loca) : -LOGIN PROTECTION AGENCY
 MISCELLANEOUS Attn : n/a
Logged : 17-Nov-2020 02:04 pm ID : US ENVIRONMENTAL - SCOFIELD Samp Addr: SCOFIELD
By : GIGLIETTI Samp City : N/A
Categ. : FEE - MISC. Collected : 11/17/20 08:35
 FEE - MISC. 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 Type : -FEE- MISC OTHER Customer : US ENVIRONMENTAL
Study : FEE SERVICE - (Loca) : -LOGIN PROTECTION AGENCY
 MISCELLANEOUS ID : US ENVIRONMENTAL - HAWLEY Attn : n/a
Logged : 17-Nov-2020 02:04 pm Samp Addr: HAWLEY
By : GIGLIETTI Samp City : N/A
Categ. : FEE - MISC. Collected : 11/17/20 09:52
 FEE - MISC. 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
Study : FEE SERVICE - (Loca) : -LOGIN PROTECTION AGENCY
 MISCELLANEOUS ID : US ENVIRONMENTAL - ASHLEY Attn : n/a
Logged : 17-Nov-2020 02:04 pm 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.

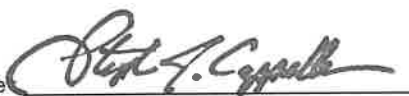
Please note that not all the analytes listed above are NELAP certified. For identification of specific analytes maintaining this certification please contact the Laboratory Manager.

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 Type : -FEE- MISC OTHER Customer : US ENVIRONMENTAL
Study : FEE SERVICE - (Loca) : -LOGIN PROTECTION AGENCY
 MISCELLANEOUS ID : US ENVIRONMENTAL - SLAWSON Attn : n/a
Logged : 17-Nov-2020 02:04 pm Samp Addr: SLAWSON
By : GIGLIETTI Samp City : N/A
Categ. : FEE - MISC. Collected : 11/17/20 11:38
 FEE - MISC. 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