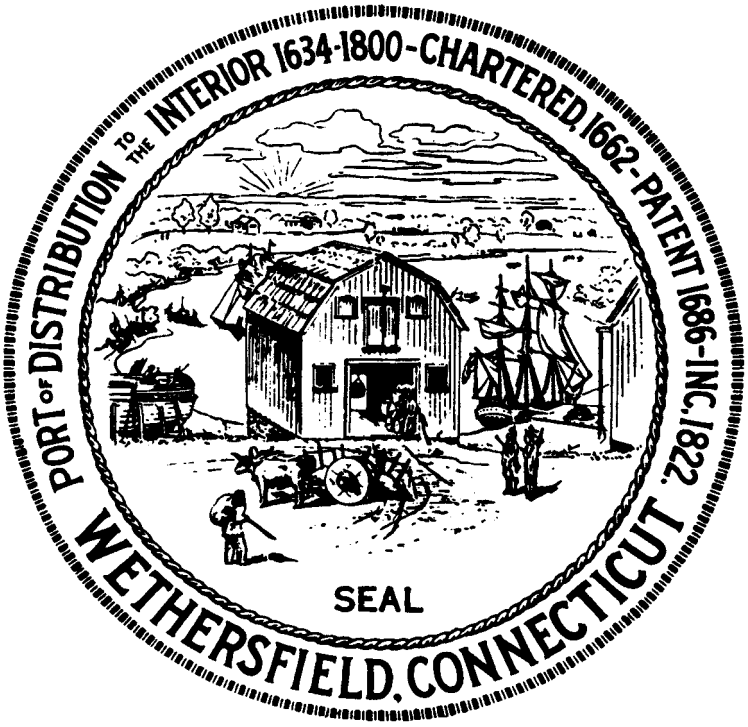
TOWN OF WETHERSFIELD, CONNECTICUT

General Permit for the Discharge of Stormwater

from Small Municipal Separate Storm Sewer Systems (MS4)

2016 Annual Report



Prepared by

Wethersfield Engineering Division

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Introduction

This Annual report has been prepared by the Town of Wethersfield Engineering Division, as described in the **General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems** (**MS4**), to outline progress the Town has made in complying with the CTDEEP MS4 program relative to implementing minimum control measures.

Minimum control measures required by the MS4 that are expounded upon in this report are:

- Public Education and Outreach on Stormwater Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Eliminations (IDDE)
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations

Current Permit Data

Stormwater Program Permit Information	
Permitting Authority:	Commissioner of DEEP
Permit Number:	GSM000031
Permit Type:	General
Permit Name:	General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems
Date Issued:	1/9/2004
Date Expired:	

General Information for MS4 Operator	
Operator Name:	Jeff Bridges
Operator Title:	Town Manager
Represented Entity:	Town of Wethersfield
Mailing Address:	Attn: Derrick Gregor, P.E., 505 Silas Deane Highway
Mail City:	Wethersfield, CT 06109
Phone Number:	860-721-2801
E-Mail Address:	Jeff.Bridges@wethersfieldct.gov
Co- Permitting With:	Commissioner of CTDEEP
Population:	26,700
Households:	11,100
Area (sq mi):	12
Official Website:	www.wethersfieldct.com

***General Information for Primary Contact* Person**	
Name:	Derrick Gregor, P.E.
Title:	Town Engineer
Phone Number:	860-721-2853
E-Mail Address:	Derrick.Gregor@wethersfieldct.gov

General Information for Secondary Contact Person	
Name:	Donald Moisa, L.S.
Title:	Operations Coordinator
Phone Number:	860-721-2852
E-Mail Address:	Don.Mosia@wethersfieldct.gov

General Information for Receiving Waters		
Receiving Water Lists: Listed below are all the identified receiving waterbodies to which outfalls discharge		
Receiving Streams (creek, stream, river etc.)	**Receiving Waterbodies** (lake, wetland, ocean, etc)	**Receiving Watersheds**
Beaver Brook Cemetery Brook Collier Brook Fairlane Brook Folly Brook Goff Brook Two Stone Brook	Bell Pond Millwoods Pond Murphy Pond Wethersfield Cove	Connecticut River Long Island Sound

Minimum Control Measures – Best Management Practices (BMPs)

1. Public Education and Outreach on Stormwater Impacts

Responsible Party: Donald Moisa (Operations Coordinator)

1.1 Public Service Announcements are broadcast on the Local Government Access Channel and available on the Engineering Division page of the Town website, to educate audiences about problems and solutions in stormwater discharges and to generate interest and awareness in stormwater management.

1.2 A Brochure/Fact Sheet developed by the Wethersfield Engineering Division, Wetlands Officer and Health Department is available at numerous locations throughout Town offices, the Town website and available at public meetings and events.

1.3 Stormwater related material is available on the engineering page of the Town website: http://wethersfieldct.com/content/398/408/499.aspx

1.4 The staff of the Wethersfield Engineering Division, Wetlands Officer and Health Department routinely evaluate alternative information sources and make valuable information available to the public.

1.5 The Wethersfield Engineering Division maintains a Library of educational material related to Stormwater discharge. This material is available to the public upon request.

1.6 Staff of the Wethersfield Engineer Division, Physical Services, Wetlands Official, Health Department and Planning Office routinely field stormwater related questions asked by our residents. Our personnel strive to stay current on policies, procedures and BMPs.

1.6.1 During 2016 the town's Engineering Division fielded over 30 phone and email requests for information pertaining to stormwater issues within the town. Engineering staff responded to each request in a timely and professional manner.

1.7 Information pertaining to the Town's recycling program is available on the Town website and brochures are available in Town offices: http://wethersfieldct.com/content/398/4594/4717.aspx

2. Public Participation / Involvement

Responsible Party: Donald Moisa (Operations Coordinator)

2.1 Our Brochure / Fact Sheet and Public Service Announcements (PSAs) on the Local Government Access Channel encourages residents to participate in stormwater BMPs including reporting of violations.

2.2 Residents are encouraged to participate in annual cleanup events, to help ensure that accumulated household chemicals, cleaning supplies, batteries, paints, yard waste, pesticides and organic material are disposed of properly.

2.3 Information for the proper disposal of various materials is available on the Town website: http://wethersfieldct.com/physical-services

2.4 The Town of Wethersfield encourages its residents to participate in special events that are geared towards environmental improvements including stormwater discharge enhancements. These special events include:

2.4.1 Saturday, September 24, 2016 8:00 am to 11:00 am, "Wethersfield Cove & Connecticut River Source-to-sea Clean-up
2.4.2 Earth Day Clean up
2.4.3 Heritage Trail Day-June 6, 2016
2.4.4 Household hazardous waste collection
2.4.5 Media Relations
2.4.6 Millwooods Park Swimming Area

2.5 To promote the recovery of stormwater, the Town encourages residents to participate in 'rain barrel' sales. The recycled plastic barrels can be used as cisterns to store rain runoff from house leaders to use for lawn watering and gardening.

3. Illicit Discharge Detection and Elimination (IDDE)

Responsible Party: Donald Moisa (Operations Coordinator)

3.1 Continually updating field data and monitoring permit applications within the Town provides opportunity to detect Illicit Discharge.

3.2 Visual Inspections of existing stormwater pipes and outfalls are periodically conducted to aid in the detection of illicit discharge to the stormwater system.

3.3 Visual Inspections conducted by the staff of the Engineering Division, Physical Services, and Health Department are conducted in an effort to detect and address future non-stormwater discharges.

3.4 Town policy regarding Stormwater Discharges is clear and available to residents. It is posted on the Engineering Section of the Town website: http://wethersfieldct.com/content/398/408/499.aspx

3.5 Mapping of the Wethersfield stormwater system is maintained in the Town Engineering Division Offices and is available to the public.

3.6 The Town manages waste collection to minimize illegal dumping. Information pertaining to the disposal of non-household waste, i.e., old tires, batteries, waste oil, antifreeze is available on the Town website and on posters located in Town offices.

4. Construction Site Runoff Control

Responsible Party: Derrick Gregor (Town Engineer)

4.1 Wethersfield requires contractors to adhere to specific engineering standards and specifications in all facets of their work, including erosion and sediment control. All measures deemed necessary to prevent silt from exiting the site will be implemented by the contractor prior to construction.

4.2 All proposed construction projects are reviewed by Town staff to ensure adequate measures have been included to control site runoff and protect adjoining properties, downstream wetlands, watercourses and waterbodies.

4.3 All proposed construction projects disturbing > 0.5 acres are required to obtain an erosion and sediment control plan that has been approved by the Town Engineering Division and Wetlands Officer.

4.4 Continual interaction between contractors and Town staff assures all preventative measures are properly implemented and maintained.

4.5 All information pertaining to the Town's stormwater discharge requirements is communicated to the contractor prior to the beginning of construction.

4.6 Construction site inspections are conducted by Town staff to monitor progress, note discrepancies and offer solutions to any and all potential problems that could lead to a failure of an erosion and sedimentation control measure. Inspections also allow the Town to enforce required BMPs.

4.7 For any stormwater discharge issue that is not covered by Town ordinance, contractors are required to adopt all measures outlined in the **Connecticut *Erosion and Sediment Control Guidelines (2002)***, as amended.

4.8 Construction contractors are encouraged to keep their sites clean. This reduces the possibility of garbage and debris from inadvertently being introduced to stormwater runoff.

4.9 For Contractors who violate Town ordinances or circumvent stormwater discharge regulations, sanctions can be applied.

4.10 All new development in the town requires stormwater treatment technology to be used, and the technology must be approved prior to construction.

5. Post-Construction Stormwater Management in New Development and Redevelopment

Responsible Party: Donald Moisa (Operations Coordinator)

5.1 Recurring review of land use regulations by Town staff ensures BMPs are current and competently employed.

5.2 Town staff is familiar with requirements for ensuring long term operation and maintenance of stormwater discharge BMPs. The Town works with land owners to ensure proper maintenance is performed and any violations are reported.

5.3 Continued site monitoring after construction allows Town staff to monitor the performance of stormwater BMPs and detect any irregularities or potential failure of systems that would impact downstream areas.

6. Pollution Prevention / Good Housekeeping for Municipal Operations

Responsible Party: Derrick Gregor (Town Engineer)

6.1 The Town of Wethersfield has an aggressive program to maintain its stormwater system. The system is monitored and components are repaired/replaced as needed and kept free of debris. Catch basins, stormwater treatment units, storm structures and culverts are inspected and cleaned as required. Ongoing operation and maintenance is an integral component of the stormwater system.

6.1.1 During the 2016 spring, summer and fall seasons, Wethersfield oversaw the cleaning and maintenance of 2,450 catch basin. Basins that were found to be in need of repair were noted and repaired.

6.2 Town employees are trained in their jobs to be safe and immediately report any damaged structure or culvert system. They are also taught the necessity of proper record keeping, proper internal reporting, maintenance, preventative measures and how their actions (or inaction) can affect stormwater pollution.

6.3 The Town employs a road sweeping program to ensure stormwater system structures are not inundated with road debris during rain events. Road sweeping is scheduled as needed as some areas require sweeping more often than others.

6.3.1 During the 2016 spring, summer and fall seasons, Wethersfield swept 110 miles of our roads.

6.4 The Town maintains its transfer station at 100 Marsh Street. The site is kept litter free and drainage is monitored to ensure it does not become a source of pollution. Employees are taught how to locate potential sources of contaminates, to be proactive, how to react to incidents using best management practices and to report discrepancies immediately.

6.5 Wethersfield hires a professional testing company to collect stormwater samples at specific outfalls and report results to the Town. This information is provided to CTDEEP via the MS4 permit annual report.

7. Additional Requirements

Responsible Party: Derrick Gregor (Town Engineer)

7.1 The Town accepts its responsibility to correct and report any and all deficiencies detected in its stormwater collection system.

7.2 Staff of the Engineering Division, Health Department and the Wetlands Officer are competent and will be able to provide information to the Connecticut Department of Energy & Environmental Protection (DEEP) Commissioner when required.

7.3 The Wethersfield Engineering Division maintains plans and drawings that are accurate and current. This information is available to the public upon request.

7.4 Copies of the Town's MS4 permit, Stormwater Pollution Control Plan, wetland ordinances and the **Connecticut *Erosion and Sediment Control Guidelines (2002)*** are maintained and available in the Engineering Division offices.

7.5 Upon learning of a violation to the MS4 permit, all Town employees are instructed to take all reasonable action to determine the cause of such violation, correct and mitigate the results of the violation and take action to prevent further violations. Town employees are made cognizant of laws and regulations regarding stormwater discharge. When required, these violations will be reported to the Commissioner of the CTDEEP in writing within five (5) days.

7.6 Recordkeeping for activities involving stormwater discharges within the Town of Wethersfield will be maintained by the Engineering Division and the Physical Services Department. These records, including the Town's Stormwater Management Plan and Wethersfield's total maximum daily load (TMDL) allocations, are available to the public for viewing during normal business hours.

7.7 Annual monitoring of designated stormwater outlets is completed by an outside vendor and associated test results are provided to the Town for retention and reporting.

7.8 During 2016 no new BMPs were required or implemented.

7.9 The Town is currently developing plans to modify the following stormwater conveyance systems to include enhanced outlet controls:

7.9.1 Cloverdale Pond - Dam and Pond Renovations
Cloverdale Circle
Wethersfield, CT 06109
Lat: 41˚ 40’ 27.10” N
Long: 72˚ 40’ 19.84” W

7.9.2 Safety and Drainage Improvements
Middletown Avenue
Wethersfield, CT 06109
Lat: 41˚ 41’ 09.50” N
Long: 72˚ 38’ 57.97” W

7.10 The Town does not have any impaired waters based on the 2014 State of Connecticut Integrated Water Quality Report published by the DEEP; however initial outfall screenings will be completed at outfalls to Wethersfield Cove and the Connecticut River. Appropriate measures will be implemented based on the results of the screenings and BMPs outlined in the town’s SMP.

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Stormwater Sampling

Responsible Party: Derrick Gregor (Town Engineer)

Results are attached:

AEGIS inc.
Environmental Consultants

December 12, 2016

Mr. Derrick Gregor, PE
Director of Engineering
Town of Wethersfield
505 Silas Deane Highway
Wethersfield, CT 06109

Re: Municipal Separate Storm Water Monitoring (MS4) – Year 2016 Reporting
Aegis Project #1933087A

Dear Mr. Gregor:

Enclosed please find the MS4 Reporting form / laboratory report package for the six storm water sampling points chosen by the Town. The storm water runoff samples were collected on November 15, 2016 to satisfy the calendar year 2016 MS4 reporting requirement.

Elevated E-Coli of 1,500 E-coli/100mL was reported in sample R-1; sample R-2 at 2,500 E-coli/100mL; sample I-1 at 11,500 E-coli/100mL; sample I-2 at 15,000 E-coli/100mL: sample C-1 at 800 E-coli/100mL; and C-2 at 1,000 E-coli/100mL. No odors, sheen or foam were noted this sampling event. E-Coli counts may be associated with limited run-off due to the lack of rain this year.

The Total Kjeldahl Nitrogen (TKN) analyses reported all results as non-detect, in-spite of Ammonia being detected. TKN is the sum of organic nitrogen, ammonia (NH3), and ammonium (NH4+). The laboratory digested and repeated the TKN with no difference in results. The TKN was reported using the Ammonia result this event. Per the laboratory the TKN analyses can be affected by a high mineral content. The mineral content could also be due to the limited run-off.

Submit a signed copy of the MS4 form / laboratory report package to:

MS4 REPORTING
PEMITTING AND ENFORCEMENT DIVISION
BUREAU OF WATER MANAGEMENT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Please call or email me with any questions.

Aegis, Inc.

Michael D. Zaliznock, LEP
Enclosures

/Volumes/2ND BACKUP/C/WORKIN/1933 TOWN OF WETHERSFIELD/1933 WETH MS4/2016 MS4/1933087A 2016 Wethersfield MS4 SMR Reporting form.docx

965 Folly Brook Boulevard, Wethersfield, Connecticut 06109
♦ Phone (860) 563-1041 • FAX (860) 529-5124 • e-mail mdz@aegisinc.us ♦

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Wethersfield

Mailing Address: 505 Silas Deane Highway

Contact Person: Derrick Gregor Title: Town Engineer Phone: (860) 721-2853

Permit Registration #GSM000031

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Sample R-1 N41.67749110°, W72.675529591° (NAD 83)

Please circle the appropriate area description: Industrial, Commercial, or Residential

Receiving Water (name, basin): Unnamed Tributary to Goff Brook (A), Local Basin - Goff Brook

Time of Start of Discharge: ~1000

Date/Time Collected: 11/15/2016 @ 1400 Water Temperature: 9.5 C

Person Collecting Sample: Mike Zaliznock (Aegis, Inc.)

Storm Magnitude (inches): 0.73" Storm Duration (hours): ~8 hours

Date of Previous Storm Event: 11/09/2016

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	EPA 150.1	6.3 Units	FIELD
Rain pH	EPA 150.1	6.9 Units	FIELD
Hardness	EPA 200.7	8.5 mg/L	CET
Conductivity	SM 2510 B	41 µmhos/cm	CET
Oil & Grease	EPA 1664 A	ND<5.0 mg/L	CET
COD	EPA 410.4	110 mg/L	CET
Turbidity	EPA 180.1	4.6 NTU	CET
TSS	SM 2540 D	12 mg/L	CET
TP	EPA 365.4	0.30 mg/L	CET
Ammonia	EPA 350.2	11 mg/L	CET
TKN	EPA 351.2	11 mg/L	CET
NO_3+NO_2	EPA 300.0	0.29 mg/L	CET
E. coli	SM 9231D	1550 COLONIES	Northeast Lab PH-0404

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Derrick Gregor, P.E.

Signature: [signature] Date: 12/22/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Wethersfield

Mailing Address: 505 Silas Deane Highway

Contact Person: Derrick Gregor Title: Town Engineer Phone: (860) 721-2853

Permit Registration #GSM000031

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Sample R-2 N41.715927°, W72.680389° (NAD 83)

Please circle the appropriate area description: Industrial, Commercial, or Residential

Receiving Water (name, basin): Folly Brook – (A), Local Basin Folly Brook

Time of Start of Discharge: ~1000

Date/Time Collected: 11/15/2016 @ 1325 Water Temperature: 10.0 C

Person Collecting Sample: Mike Zaliznock (Aegis, Inc.)

Storm Magnitude (inches): 0.73" Storm Duration (hours): ~8 hours

Date of Previous Storm Event: 11/09/2016

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	EPA 150.1	7.4 Units	FIELD
Rajn pH	EPA 150.1	6.9 Units	FIELD
Hardness	EPA 200.7	16 mg/L	CET
Conductivity	SM 2510 B	120 µmhos/cm	CET
Oil & Grease	EPA 1664 A	ND<5.0 mg/L	CET
COD	EPA 410.4	64 mg/L	CET
Turbidity	EPA 180.1	23 NTU	CET
TSS	SM 2540 D	29 mg/L	CET
TP	EPA 365.4	0.30 mg/L	CET
Ammonia	EPA 350.2	5.0 mg/L	CET
TKN	EPA 351.2	5.0 mg/L	CET
NO_3+NO_2	EPA 300.0	0.32 mg/L	CET
E. coli	SM 9231D	1450 COLONIES	Northeast Lab PH-0404

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Derrick Gregor, P.E

Signature: Derrick Gregor Date: 12/22/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Wethersfield

Mailing Address: 505 Silas Deane Highway

Contact Person: Derrick Gregor Title: Town Engineer Phone: (860) 721-2853

Permit Registration #GSM000031

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Sample I-1 N41.70111584°, W72.70157687° (NAD 83)

Please circle the appropriate area description: *Industrial*, Commercial, or Residential

Receiving Water (name, basin): Colier Brook (A), Local Basin Goff Brook

Time of Start of Discharge: ~1000

Date/Time Collected: 11/15/2016 @ 1335 Water Temperature: 8.5 C

Person Collecting Sample: Mike Zaliznock (Aegis, Inc.)

Storm Magnitude (inches): 0.73" Storm Duration (hours): ~8 hours

Date of Previous Storm Event: 11/09/2016

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	EPA 150.1	7.4 Units	FIELD
Rain pH	EPA 150.1	6.9 Units	FIELD
Hardness	EPA 200.7	3.6 mg/L	CET
Conductivity	SM 2510 B	10 µmhos/cm	CET
Oil & Grease	EPA 1664 A	ND< 5.0 mg/L	CET
COD	EPA 410.4	21 mg/L	CET
Turbidity	EPA 180.1	5.0 NTU	CET
TSS	SM 2540 D	7.0 mg/L	CET
TP	EPA 365.4	0.10 mg/L	CET
Ammonia	EPA 350.2	3.8 mg/L	CET
TKN	EPA 351.2	3.8 mg/L	CET
NO_3+NO_2	EPA 300.0	0.13 mg/L	CET
E. coli	SM 9231D	11500 COLONIES	Northeast lab PH-0404

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Derrick Gregor, P.E

Signature: Derrick Gregor Date: 12/22/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Wethersfield

Mailing Address: 505 Silas Deane Highway

Contact Person: Derrick Gregor Title: Town Engineer Phone: (860) 721-2853

Permit Registration #GSM000031

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Sample I-2 N41.70235039°, W72.70312373° (NAD83)

Please circle the appropriate area description: Industrial, Commercial, or Residential

Receiving Water (name, basin): Unnamed Tributary to Colier Brook, (A), Local Basin Goff Brook

Time of Start of Discharge: ~1000

Date/Time Collected: 11/15/2016 @ 1350 Water Temperature: 8.4 C

Person Collecting Sample: Mike Zaliznock (Aegis, Inc.)

Storm Magnitude (inches): 0.73" Storm Duration (hours): ~8 hours

Date of Previous Storm Event: 11/09/2016

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	EPA 150.1	7.6 Units	FIELD
Rain pH	EPA 150.1	6.9 Units	FIELD
Hardness	EPA 200.7	7.6 mg/L	CET
Conductivity	SM 2510 B	12 µmhos/cm	CET
Oil & Grease	EPA 1664 A	ND<5.0 mg/L	CET
COD	EPA 410.4	53 mg/L	CET
Turbidity	EPA 180.1	14 NTU	CET
TSS	SM 2540 D	73 mg/L	CET
TP	EPA 365.4	0.26 mg/L	CET
Ammonia	EPA 350.2	4.0 mg/L	CET
TKN	EPA 351.2	4.0 mg/L	CET
NO_3+NO_2	EPA 300.0	0.10 mg/L	CET
E. coli	SM 9231D	15000 COLONIES	Northeast Lab PH-0404

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Derrick Gregor, P.E

Signature: Derrick Gregor Date: 12/22/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Wethersfield

Mailing Address: 505 Silas Deane Highway

Contact Person: Derrick Gregor Title: Town Engineer Phone: (860) 721-2853

Permit Registration #GSM000031

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Sample C-1 N41.72098°, W72.66657° (NAD 83)

Please circle the appropriate area description: Industrial, Commercial, or Residential

Receiving Water (name, basin): Beaver Brook (A), Local Basin Goff Brook

Time of Start of Discharge: ~1000

Date/Time Collected: 11/15/2016 @ 1300 Water Temperature: 9.3 C

Person Collecting Sample: Mike Zaliznock (Aegis, Inc.)

Storm Magnitude (inches): 0.73" Storm Duration (hours): ~8 hours

Date of Previous Storm Event: 11/09/2016

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	EPA 150.1	6.5 Units	FIELD
Rain pH	EPA 150.1	6.9 Units	FIELD
Hardness	EPA 200.7	7.5 mg/L	CET
Conductivity	SM 2510 B	37 µmhos/cm	CET
Oil & Grease	EPA 1664 A	ND<5.0 mg/L	CET
COD	EPA 410.4	78 mg/L	CET
Turbidity	EPA 180.1	18 NTU	CET
TSS	SM 2540 D	18 mg/L	CET
TP	EPA 365.4	0.21 mg/L	CET
Ammonia	EPA 350.2	12 mg/L	CET
TKN	EPA 351.2	12 mg/L	CET
NO_3+NO_2	EPA 300.0	0.25 mg/L	CET
E. coli	SM 9231D	800 COLONIES	Northeast Lab PH-0404

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Derrick Gregor, P.E

Signature: Derrick Gregor Date: 12/22/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Wethersfield

Mailing Address: 505 Silas Deane Highway

Contact Person: Derrick Gregor Title: Town Engineer Phone: (860) 721-2853

Permit Registration #GSM000031

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Sample C-2 N41.70109117°, W72.65872976° (NAD 83)

Please circle the appropriate area description: Industrial, Commercial, or Residential

Receiving Water (name, basin): Beaver Brook (B/A), Local Basin Goff Brook

Time of Start of Discharge: ~1000

Date/Time Collected: 11/15/2016 @ 1315 Water Temperature: 9.1 C

Person Collecting Sample: Mike Zaliznock (Aegis, Inc.)

Storm Magnitude (inches): 0.73" Storm Duration (hours): ~8 hours

Date of Previous Storm Event: 11/09/2016

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	EPA 150.1	6.7 Units	FIELD
Rajn pH	EPA 150.1	6.9 Units	FIELD
Hardness	EPA 200.7	11 mg/L	CET
Conductivity	SM 2510 B	51 µmhos/cm	CET
Oil & Grease	EPA 1664 A	ND<5.0 mg/L	CET
COD	EPA 410.4	80 mg/L	CET
Turbidity	EPA 180.1	19 NTU	CET
TSS	SM 2540 D	37 mg/L	CET
TP	EPA 365.4	0.21 mg/L	CET
Ammonia	EPA 350.2	17 mg/L	CET
TKN	EPA 351.2	17 mg/L	CET
NO_3+NO_2	EPA 300.0	0.40 mg/L	CET
E. coli	SM 9231 D	1000 COLONIES	Northeast Lab PH-0404

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Derrick Gregor, P.E

Signature: Derrick Gregor Date: 12/22/16

ATTACHMENT A

Laboratory Report and Chain of Custody

80 Lupes Drive
Stratford, CT 06615

Tel: (203) 377-9984
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Client: Mr. Mike Zaliznock
AEGIS Environmental Consulting
965 Folly Brook BLVD
Wethersfield, CT 06109

Analytical Report

CET# 6110423

Report Date:December 07, 2016
Project: 2016 MS4 Weth
Project Number: 1933087A

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York NELAP Accreditation: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 1.1°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
R1	6110423-01	Water	11/15/2016	11/16/2016
R2	6110423-02	Water	11/15/2016	11/16/2016
I1	6110423-03	Water	11/15/2016	11/16/2016
I2	6110423-04	Water	11/15/2016	11/16/2016
C1	6110423-05	Water	11/15/2016	11/16/2016
C2	6110423-06	Water	11/15/2016	11/16/2016

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Analyte: Chemical Oxygen Demand [SM 5220 D]

Analyst: KP

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	**110**	5.0	mg/L	1	B6K1831	11/18/2016	11/18/2016 16:02	
6110423-02	R2	**64**	5.0	mg/L	1	B6K1831	11/18/2016	11/18/2016 16:02	
6110423-03	I1	**21**	5.0	mg/L	1	B6K1831	11/18/2016	11/18/2016 16:02	
6110423-04	I2	**53**	5.0	mg/L	1	B6K1831	11/18/2016	11/18/2016 16:02	
6110423-05	C1	**78**	5.0	mg/L	1	B6K1831	11/18/2016	11/18/2016 16:02	
6110423-06	C2	**80**	5.0	mg/L	1	B6K1831	11/18/2016	11/18/2016 16:02	

Analyte: Nitrite as N [EPA 300.0]

Analyst: ED

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	ND	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 21:34	
6110423-02	R2	ND	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 21:51	
6110423-03	I1	ND	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 22:07	
6110423-04	I2	ND	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 22:24	
6110423-05	C1	ND	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 22:41	
6110423-06	C2	ND	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 22:57	

CET # : 6110423
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Analyte: Nitrate as N [EPA 300.0]

Analyst: ED

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	**0.29**	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 21:34	
6110423-02	R2	**0.32**	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 21:51	
6110423-03	I1	**0.13**	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 22:07	
6110423-04	I2	**0.10**	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 22:24	
6110423-05	C1	**0.25**	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 22:41	
6110423-06	C2	**0.40**	0.10	mg/L	1	B6K1722	11/16/2016	11/16/2016 22:57	

Analyte: Ammonia as N [EPA 350.1]

Analyst: ED

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	**11**	0.10	mg/L	1	B6K2326	11/23/2016	11/23/2016 17:34	
6110423-02	R2	**5.0**	0.10	mg/L	1	B6K2326	11/23/2016	11/23/2016 17:34	
6110423-03	I1	**3.8**	0.10	mg/L	1	B6K2326	11/23/2016	11/23/2016 17:34	
6110423-04	I2	**4.0**	0.10	mg/L	1	B6K2326	11/23/2016	11/23/2016 17:34	
6110423-05	C1	**12**	0.10	mg/L	1	B6K2326	11/23/2016	11/23/2016 17:34	
6110423-06	C2	**17**	0.10	mg/L	1	B6K2326	11/23/2016	11/23/2016 17:34	

Analyte: Phosphorous, Total [EPA 365.4] **Analyst: CC**

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	**0.30**	0.10	mg/L	1	B6K2110	11/22/2016	11/22/2016 17:41	
6110423-02	R2	**0.30**	0.10	mg/L	1	B6K2110	11/22/2016	11/22/2016 17:41	
6110423-03	I1	**0.10**	0.10	mg/L	1	B6K2110	11/22/2016	11/22/2016 17:41	
6110423-04	I2	**0.26**	0.10	mg/L	1	B6K2110	11/22/2016	11/22/2016 17:41	
6110423-05	C1	**0.21**	0.10	mg/L	1	B6K3028	12/01/2016	12/01/2016 17:05	
6110423-06	C2	**0.21**	0.10	mg/L	1	B6K3028	12/01/2016	12/01/2016 17:05	

Analyte: Oil and Grease [EPA 1664A] **Analyst: ED**

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	ND	5.0	mg/L	1	B6K2310	11/23/2016	11/23/2016 10:30	
6110423-02	R2	ND	5.0	mg/L	1	B6K2310	11/23/2016	11/23/2016 10:30	
6110423-03	I1	ND	5.0	mg/L	1	B6K2310	11/23/2016	11/23/2016 10:30	
6110423-04	I2	ND	5.0	mg/L	1	B6K2310	11/23/2016	11/23/2016 10:30	
6110423-05	C1	ND	5.0	mg/L	1	B6K2310	11/23/2016	11/23/2016 10:30	
6110423-06	C2	ND	5.0	mg/L	1	B6K2310	11/23/2016	11/23/2016 10:30	

Analyte: Total Suspended Solids [SM 2540 D]

Analyst: DH

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	**12**	5.0	mg/L	1	B6K2224	11/22/2016	11/22/2016 13:00	
6110423-02	R2	**29**	5.0	mg/L	1	B6K2224	11/22/2016	11/22/2016 13:00	
6110423-03	I1	**7.0**	5.0	mg/L	1	B6K2224	11/22/2016	11/22/2016 13:00	
6110423-04	I2	**73**	5.0	mg/L	1	B6K2224	11/22/2016	11/22/2016 13:00	
6110423-05	C1	**18**	5.0	mg/L	1	B6K2224	11/22/2016	11/22/2016 13:00	
6110423-06	C2	**37**	5.0	mg/L	1	B6K2224	11/22/2016	11/22/2016 13:00	

Analyte: Total Kjeldahl Nitrogen (TKN) [EPA 351.2]

Analyst: CC

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	**11**	1.0	mg/L	1	B6K2111	11/22/2016	11/22/2016 17:37	
6110423-02	R2	**5.0**	1.0	mg/L	1	B6K2111	11/22/2016	11/22/2016 17:37	
6110423-03	I1	**3.8**	1.0	mg/L	1	B6K2111	11/22/2016	11/22/2016 17:37	
6110423-04	I2	**4.0**	1.0	mg/L	1	B6K2111	11/22/2016	11/22/2016 17:37	
6110423-05	C1	**12**	1.0	mg/L	1	B6K3029	12/02/2016	12/02/2016 12:20	
6110423-06	C2	**17**	1.0	mg/L	1	B6K3029	12/02/2016	12/02/2016 12:20	

Analyte: Turbidity [EPA 180.1]

Analyst: MH

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	**4.6**	NA	NTU	1	B6K1615	11/16/2016	11/16/2016 16:59	
6110423-02	R2	**23**	NA	NTU	1	B6K1615	11/16/2016	11/16/2016 16:59	
6110423-03	I1	**5.0**	NA	NTU	1	B6K1615	11/16/2016	11/16/2016 16:59	
6110423-04	I2	**14**	NA	NTU	1	B6K1615	11/16/2016	11/16/2016 16:59	
6110423-05	C1	**18**	NA	NTU	1	B6K1615	11/16/2016	11/16/2016 16:59	
6110423-06	C2	**19**	NA	NTU	1	B6K1615	11/16/2016	11/16/2016 16:59	

Analyte: Conductivity [SM 2510 B]

Analyst: MH

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	**41**	1.0	umhos/cm	1	B6K1614	11/16/2016	11/16/2016 17:00	
6110423-02	R2	**120**	1.0	umhos/cm	1	B6K1614	11/16/2016	11/16/2016 17:00	
6110423-03	I1	**10**	1.0	umhos/cm	1	B6K1614	11/16/2016	11/16/2016 17:00	
6110423-04	I2	**12**	1.0	umhos/cm	1	B6K1614	11/16/2016	11/16/2016 17:00	
6110423-05	C1	**37**	1.0	umhos/cm	1	B6K1614	11/16/2016	11/16/2016 17:00	
6110423-06	C2	**51**	1.0	umhos/cm	1	B6K1614	11/16/2016	11/16/2016 17:00	

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Analyte: Total Hardness [EPA 200.7]

Analyst: Various

Matrix: Water

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110423-01	R1	**8.5**	0.46	mg/L	1				
6110423-02	R2	**16**	0.46	mg/L	1				
6110423-03	I1	**3.6**	0.46	mg/L	1				
6110423-04	I2	**7.6**	0.46	mg/L	1				
6110423-05	C1	**7.5**	0.46	mg/L	1				
6110423-06	C2	**11**	0.46	mg/L	1				

QUALITY CONTROL SECTION

Batch B6K1614 - SM 2510 B

Analyte	Result (umhos/cm)	RL (umhos/cm)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K1614-BLK1)					Prepared: 11/16/2016 Analyzed: 11/16/2016				
Conductivity	**1.6**	1.0							**B**

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K1615 - EPA 180.1

Analyte	Result (NTU)	RL (NTU)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K1615-BLK1)					Prepared: 11/16/2016 Analyzed: 11/16/2016				
Turbidity	**0.260**								

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K1722 - EPA 300.0

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K1722-BLK1)					Prepared: 11/16/2016 Analyzed: 11/16/2016				
Nitrate as N	ND	0.10							
Nitrite as N	ND	0.10							
LCS (B6K1722-BS1)					Prepared: 11/16/2016 Analyzed: 11/16/2016				
Nitrate as N	5.8	0.10	5.000		117	80 - 120			
Nitrite as N	5.6	0.10	5.000		112	80 - 120			

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K1802 - EPA 200.7

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K1802-BLK1)					Prepared: 11/18/2016 Analyzed: 11/18/2016				
Calcium	ND	0.10							
Magnesium	ND	0.050							
LCS (B6K1802-BS1)					Prepared: 11/18/2016 Analyzed: 11/18/2016				
Calcium	4.86	0.10	5.000		97.2	85 - 115			
Magnesium	4.63	0.050	5.000		92.6	85 - 115			

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K1831 - SM 5220 D

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K1831-BLK1)					Prepared: 11/18/2016 Analyzed: 11/18/2016				
Chemical Oxygen Demand	ND	5.0							
LCS (B6K1831-BS1)					Prepared: 11/18/2016 Analyzed: 11/18/2016				
Chemical Oxygen Demand	120	5.0	125.000		98.4	90 - 110			
LCS (B6K1831-BS2)					Prepared: 11/18/2016 Analyzed: 11/18/2016				
Chemical Oxygen Demand	720	5.0	750.000		96.4	90 - 110			

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K2110 - EPA 365.4

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K2110-BLK1)					Prepared: 11/22/2016 Analyzed: 11/22/2016				
Phosphorous, Total	ND	0.10							
LCS (B6K2110-BS1)					Prepared: 11/22/2016 Analyzed: 11/22/2016				
Phosphorous, Total	0.521	0.10	0.509		102	80 - 120			

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K2111 - EPA 351.2

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K2111-BLK1)					Prepared: 11/22/2016 Analyzed: 11/22/2016				
Total Kjeldahl Nitrogen (TKN)	ND	1.0							
LCS (B6K2111-BS1)					Prepared: 11/22/2016 Analyzed: 11/22/2016				
Total Kjeldahl Nitrogen (TKN)	5.25	1.0	5.000		105	80 - 120			

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K2224 - SM 2540 D

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K2224-BLK1)					Prepared: 11/22/2016 Analyzed: 11/22/2016				
Total Suspended Solids	ND	5.0							

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K2310 - EPA 1664A

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K2310-BLK1)					Prepared: 11/23/2016 Analyzed: 11/23/2016				
Oil and Grease	ND	5.0							
LCS (B6K2310-BS1)					Prepared: 11/23/2016 Analyzed: 11/23/2016				
Oil and Grease	18.3	5.0	20.000		91.5	80 - 120			

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K2326 - EPA 350.1

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K2326-BLK1)					Prepared: 11/23/2016 Analyzed: 11/23/2016				
Ammonia as N	ND	0.10							
LCS (B6K2326-BS1)					Prepared: 11/23/2016 Analyzed: 11/23/2016				
Ammonia as N	5.0	0.10	5.000		101	80 - 120			

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K3028 - EPA 365.4

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K3028-BLK1)					Prepared: 12/1/2016 Analyzed: 12/1/2016				
Phosphorous, Total	ND	0.10							
LCS (B6K3028-BS1)					Prepared: 12/1/2016 Analyzed: 12/1/2016				
Phosphorous, Total	0.514	0.10	0.509		101	80 - 120			
Duplicate (B6K3028-DUP1)		**Source: 6110423-05**			Prepared: 12/1/2016 Analyzed: 12/1/2016				
Phosphorous, Total	0.227	0.10		0.210			7.78	20	
Matrix Spike (B6K3028-MS1)		**Source: 6110423-05**			Prepared: 12/1/2016 Analyzed: 12/1/2016				
Phosphorous, Total	0.808	0.10	0.509	0.210	118	80 - 120			

CET # : 6110423
Project: 2016 MS4 Weth
Project Number: 1933087A

Batch B6K3029 - EPA 351.2

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6K3029-BLK1)					Prepared: 12/2/2016 Analyzed: 12/2/2016				
Total Kjeldahl Nitrogen (TKN)	ND	1.0							
LCS (B6K3029-BS1)					Prepared: 12/2/2016 Analyzed: 12/2/2016				
Total Kjeldahl Nitrogen (TKN)	4.50	1.0	5.000		90.1	80 - 120			
Duplicate (B6K3029-DUP1)		**Source: 6110423-05**			Prepared: 12/2/2016 Analyzed: 12/2/2016				
Total Kjeldahl Nitrogen (TKN)	ND	1.0		12.0				20	

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COMPLETE ENVIRONMENTAL TESTING, INC.

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Quality Control Definitions and Abbreviations

Internal Standard (IS)	An Analyte added to each sample or sample extract. An internal standard is used to monitor retention time, calculate relative response, and quantify analytes of interest.
Surrogate Recovery	The % recovery for non-target organic compounds that are spiked into all samples. Used to determine method performance.
Continuing Calibration	An analytical standard analyzed with each set of samples to verify initial calibration of the system.
Batch	Samples that are analyzed together with the same method, sequence and lot of reagents within the same time period.
ND	Not detected
RL	Reporting Limit
Dilution	Multiplier added to detection levels (MDL) and/or sample results due to interferences and/or high concentration of target compounds.
Duplicate	Result from the duplicate analysis of a sample.
Result	Amount of analyte found in a sample.
Spike Level	Amount of analyte added to a sample
Matrix Spike Result	Amount of analyte found including amount that was spiked.
Matrix Spike Dup	Amount of analyte found in duplicate spikes including amount that was spike.
Matrix Spike % Recovery	% Recovery of spiked amount in sample.
Matrix Spike Dup % Recovery	% Recovery of spiked duplicate amount in sample.
RPD	Relative percent difference between Matrix Spike and Matrix Spike Duplicate.
Blank	Method Blank that has been taken through all steps of the analysis.
LCS % Recovery	Laboratory Control Sample percent recovery. The amount of analyte recovered from a fortified sample.
Recovery Limits	A range within which specified measurements results must fall to be compliant.
CC	Calibration Verification

Flags:

H-	Recovery is above the control limits
L-	Recovery is below the control limits
B-	Compound detected in the Blank
P-	RPD of dual column results exceeds 40%
#-	Sample result too high for accurate spike recovery.

NELAP ACCREDITED TNI LABORATORY

Connecticut Laboratory Certification PH0116
Massachussets Laboratory Certification M-CT903

New York Certification 11982
Rhode Island Certification 199

CASE NARRATIVE

Due to digestion issues with the TKN procedure, the ammonia values were used to represent the TKN value.

Questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at the specified detection limit
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 1664A in Water	
Oil and Grease	CT,NY
EPA 180.1 in Water	
Turbidity	CT
EPA 300.0 in Water	
Nitrate as N	CT
Nitrite as N	CT
EPA 350.1 in Water	
Ammonia as N	CT
EPA 351.2 in Water	
Total Kjeldahl Nitrogen (TKN)	CT
EPA 365.4 in Water	
Phosphorous, Total	CT
SM 2510 B in Water	
Conductivity	CT
SM 2540 D in Water	
Total Suspended Solids	CT,NY
SM 5220 D in Water	
Chemical Oxygen Demand	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018
NY	New York Certification (NELAC)	11982	04/01/2017

6110423

CET

COMPLETE ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY

Volatile Soils Only:

Date and Time in Freezer

Client:

CET:

80 Lupes Drive
Stratford, CT 06615
Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com
Bottle Request e-mail: bottleorders@cetlabs.com

Matrix: A=Air, S=Soil, W=Water, DW=Drinking Water, C=Cassette Solid, Wipe, Other (Specify)

Turnaround Time ** (check one): Same Day *, Next Day *, 2-3 Days *, Std (5-7 Days)

Organics: 8260 CT List, 8260 Aromatics, 8260 Halogens, 624, ~~CT ETPH~~ Oil & G, 8270 CT List, 8270 PNAs, PCBs, Pesticides

Metals (check all that apply): 13 Priority Poll, 8 RCRA, TOTAL, TCLP, SPLP, Field Filtered, Lab To Filter

Additional Analysis: COD, TSS, Sp Cond, TKN, NO_3-N, NO_2-N, Turbidity, NH_3, ~~[illegible]~~, Hardness

Sample ID	Sample Depths (Units)	Collection Date/Time	Matrix	Same Day *	Next Day *	2-3 Days *	Std (5-7 Days)	8260 CT List	8260 Aromatics	8260 Halogens	624	~~CT ETPH~~ Oil & G	8270 CT List	8270 PNAs	PCBs	Pesticides	13 Priority Poll	8 RCRA	TOTAL	TCLP	SPLP	Field Filtered	Lab To Filter	COD	TSS	Sp Cond	TKN	NO_3-N	NO_2-N	Turbidity	NH_3	~~[illegible]~~	Hardness			TOTAL # OF CONT.	NOTE #
R1							✓					✓												✓	✓	✓	✓	✓		✓		✓	✓			5	
R2							✓					✓												✓	✓	✓	✓	✓		✓		✓	✓			4	
I1							✓					✓												✓	✓	✓	✓	✓		✓		✓	✓			5	
I2							✓					✓												✓	✓	✓	✓	✓		✓		✓	✓			5	
C1							✓					✓												✓	✓	✓	✓	✓		✓		✓	✓			4	
C2							✓					✓												✓	✓	✓	✓	✓		✓		✓	✓			4	

Analytical Report

Report To:
AEGIS INC.
Attn: Mike Zaliznock, LEP, CHMM
965 Folly Brook Boulevard
Wethersfield CT 06109

Date Received: **11/15/2016 14:18**
Tested By Laboratory#: **PH-0404**
Laboratory Report#: **N1667995**
Report Date: **11/22/2016**

Email Address: mdz@aegisinc.us

Purchase Order #:	**Town of Wethersfield = 1933087A**
Sample I.D. #:	**R1**
Sample Description:	**Storm Water**
Date Collected:	**11/15/2016 14:00**
Analysis for:	**Total Coliform & E.coli**

	RESULTS				
Laboratory ID #	Total Coliform	E.coli	Units	Method	Date + Time Tested
1667995 – 01	2,300	1,550	per 100 mL	SM9213D	11/15/2016 15:30

Purchase Order #:	**Town of Wethersfield = 1933087A**
Sample I.D. #:	**R2**
Sample Description:	**Storm Water**
Date Collected:	**11/15/2016 13:25**
Analysis for:	**Total Coliform & E.coli**

	RESULTS				
Laboratory ID #	Total Coliform	E.coli	Units	Method	Date + Time Tested
1667995 – 02	2,500	1,450	per 100 mL	SM9213D	11/15/2016 15:30

mL = milliliter
< = Less Than
> = Greater Than

Comments:
- All holding times (were) met.
  Temperature @ Receipt: 6.8°C, chilling process had begun.
- Results are based on samples submitted to Northeast Laboratories, Inc. on: 11/15/2016

Approved by: Alan C. Johnson
Alan C. Johnson, Laboratory Director

Analytical Report

Report To:
AEGIS INC.
Attn: Mike Zaliznock, LEP, CHMM
965 Folly Brook Boulevard
Wethersfield CT 06109

Date Received: **11/15/2016 14:18**
Tested By Laboratory#: **PH-0404**
Laboratory Report#: **N1667995**
Report Date: **11/22/2016**

Email Address: mdz@aegisinc.us

Purchase Order #:	**Town of Wethersfield = 1933087A**
Sample I.D. #:	**I1**
Sample Description:	**Storm Water**
Date Collected:	**11/15/2016 13:35**
Analysis for:	**Total Coliform & E.coli**

	RESULTS				
Laboratory ID #	Total Coliform	E.coli	Units	Method	Date + Time Tested
1667995 – 01	15,000	11,500	per 100 mL	SM9213D	11/15/2016 15:30

Purchase Order #:	**Town of Wethersfield = 1933087A**
Sample I.D. #:	**I2**
Sample Description:	**Storm Water**
Date Collected:	**11/15/2016 13:50**
Analysis for:	**Total Coliform & E.coli**

	RESULTS				
Laboratory ID #	Total Coliform	E.coli	Units	Method	Date + Time Tested
1667995 – 02	20,000	15,000	per 100 mL	SM9213D	11/15/2016 15:30

mL = milliliter
< = Less Than
> = Greater Than

Comments:

- All holding times (were) met.
  Temperature @ Receipt: 6.8°C, chilling process had begun.
- Results are based on samples submitted to Northeast Laboratories, Inc. on: 11/15/2016

Approved by: Alan C. Johnson
Alan C. Johnson, Laboratory Director

Analytical Report

Report To:
AEGIS INC.
Attn: Mike Zaliznock, LEP, CHMM
965 Folly Brook Boulevard
Wethersfield CT 06109

Date Received: **11/15/2016 14:18**
Tested By Laboratory#: **PH-0404**
Laboratory Report#: **N1667995**
Report Date: **11/22/2016**

Email Address: mdz@aegisinc.us

Purchase Order #:	**Town of Wethersfield = 1933087A**
Sample I.D. #:	**C1**
Sample Description:	**Storm Water**
Date Collected:	**11/15/2016 13:00**
Analysis for:	**Total Coliform & E.coli**

	RESULTS				
Laboratory ID #	Total Coliform	E.coli	Units	Method	Date + Time Tested
1667995 – 01	1,250	800	per 100 mL	SM9213D	11/15/2016 15:30

Purchase Order #:	**Town of Wethersfield = 1933087A**
Sample I.D. #:	**C2**
Sample Description:	**Storm Water**
Date Collected:	**11/15/2016 13:15**
Analysis for:	**Total Coliform & E.coli**

	RESULTS				
Laboratory ID #	Total Coliform	E.coli	Units	Method	Date + Time Tested
1667995 – 02	1,450	1,000	per 100 mL	SM9213D	11/15/2016 15:30

mL = milliliter
< = Less Than
> = Greater Than

Comments:
- All holding times (were) met.
  Temperature @ Receipt: 6.8°C, chilling process had begun.
- Results are based on samples submitted to Northeast Laboratories, Inc. on: 11/15/2016

Approved by: Alan C. Johnson
Alan C. Johnson, Laboratory Director

Northeast Laboratories, Inc.

CHAIN OF CUSTODY

Page ____ of ____ (Rev: 11/01/2012)

Telephone #: (860) 563-1041

FAX #: (860) 529-5124 EMAIL: (see below)

CLIENT/COMPANY NAME:
AEGIS INC

Client's Town of Wethersfield
Purchase Order #: 1933087A

ADDRESS:
965 FOLLY BROOK BOULEVARD
WETHERSFIELD, CT 06109

SAMPLED BY:

------MIKE ZALIZNOCK-------

REPORTS:
1) EMAIL 1st: Mike Zaliznock, LEP,CHMM @ AEGIS =email: mdz@aegisinc.us
2) FAX (Rpt+COC) to: Mike Zaliznock, LEP, CHMM @ AEGIS = fax#: 860-529-5124
3) HARD COPIES TO: MIKE ZALIZNOCK

INVOICE TO:
AEGIS INC, 965 FOLLY BROOK BOULEVARD, WETHERSFIELD, CT 06109
PROJECT: 1933087A - WETHERSFIELD

ANALYSIS REQUESTED *

* = Note: Some testing parameters may be outsourced to a certified laboratory

COPY

SAMPLE I.D. (Description and/or ID #)	Date Collected	Time Collected	Type of SAMPLE	# OF CONTAINERS	Type of Container (e.g. poly, glass, etc)	Preservative	E-COLI
R1	11-15-16	1400	STRM WATER	1	P	C	✓
R2	"	1325	STRM WATER	1	P	C	✓
I1	"	1335	STRM WATER	1	P	C	✓
I2	"	1350	STRM WATER	1	P	C	✓
C1	"	1300	STRM WATER	1	P	C	✓
C2	"	1315	STRM WATER	1	P	C	✓

Temperature @ Receipt: _____ = Chilling Process (had) (had not) begun; *Sample Temperature, as received (did__) (did not__) meet regulatory spec. of 4.0 deg C or lower*

RELINQUISHED BY:	DATE / TIME:	RECEIVED BY:	DATE / TIME:	
[signature]	11-15-16 @ 1418	[signature] NEL	11/15/16 14:18	1.8°C – 2.3°C
RELINQUISHED BY:	DATE / TIME:	RECEIVED BY:	DATE / TIME:	