



Town of Swampscott Department of Public Works

22 Monument Avenue

Swampscott, Massachusetts 01907

Tel: 781-596-8860

Fax: 781-596-8828

Gino A. Cresta Jr., Director
gcresta@swampscottma.gov

Kelly Stevens, Assistant Engineer
kstevens@swampscottma.gov

September 1, 2020

Mr. Neil Handler
Senior Enforcement Officer
Water Technical Unit
U.S. Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100
Mail Code OES04-4
Boston, MA 02109-3912

**SUBJECT: Consent Decree Compliance Report
Period 2/1/2020 to 7/31/2020**

Dear Mr. Handler:

Pursuant to Paragraph 66 of the Consent Decree between the U.S. EPA and the Town of Swampscott, MA, I am providing the following certification statement with regard to the preparation and submittal of: **Compliance Reporting – Period 2/1/2020 to 7/31/2020**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Gino A. Cresta, Jr.
Director of Public Works



MEMORANDUM

TO: Neil Handler | US EPA

FROM: David Peterson | Kleinfelder

DATE: September 01, 2020

CC: Gino Cresta, Kelly Stevens | Town of Swampscott
Mark Thompson, Cecilia Carmona, Dan Scott | Kleinfelder

**SUBJECT: COMPLIANCE REPORTING - CASE 1:15-CV-13388-DJC
SWAMPSCOTT, MASSACHUSETTS**

Purpose:

This Compliance Report is provided pursuant to Paragraph 33 of the subject Consent Decree between the United States of America and the Town of Swampscott, MA. This report covers the reporting period noted below:

Reporting Period: February 1, 2020 through July 31, 2020

Through this reporting period, activities primarily included:

- Phase 1B post construction water quality monitoring in the Stacy's Brook area,
- Submission of the design of infrastructure improvements of areas outside of Stacy's Brook (Article 19 of Consent Decree), and
- Beginning the Phase 1C sewer rehabilitation project.

The following report summarizes the activities performed during the Reporting Period.

Phase 1B Construction Update

As previously reported, the Town issued Substantial Completion for the Phase 1B construction contract to Rapid Flow on January 21, 2020. The final quantities for the major sewer rehabilitation items include the cured in place pipe (CIPP) lining of 17,000 linear feet of mainline sewer, CIPP lining of 214 laterals and cementitious lining of 168 manholes and 16 Type 2 underdrain manholes.

During the current reporting period, Kleinfelder and the Town completed two rounds of dry weather post construction water quality monitoring. The intention was to also complete two rounds



of wet weather post construction water quality monitoring, but the weather was not conducive to testing. The two rounds of wet weather testing are planned to be completed during the next reporting period.

The water quality monitoring performed was consistent with the IDDE procedure detailed in the Consent Decree between the Town and the US EPA. The post construction monitoring was conducted at six (6) locations, including the drainage manhole immediately upstream of the intersection of Stetson Avenue and Norfolk Avenue and at the Stacy's Brook outfall during low tide. A map showing the water quality monitoring locations and the lab results from the two rounds of dry weather post construction water quality monitoring are included in Appendix A.

Design of Improvements Beyond Stacy's Brook

As you are aware, Kleinfelder and the Town completed an IDDE program in 2019 to inform a design to remove non-stormwater discharges to the MS4 within areas not tributary to Stacy's Brook. On July 16, 2019, Dan Scott of Kleinfelder submitted to Neil Handler, a memorandum outlining the specific details of the IDDE program. This memorandum is a detailed follow up to the September 29, 2017 memorandum from Kleinfelder to Neil Handler required by paragraph 18 of the Consent Decree.

The IDDE program consisted of sewer, drain and underdrain investigations, water quality testing of drain manholes/outfalls, targeted drain manhole inspections, stormwater quality testing, smoke testing of the drainage system, building inspections/dye testing, and CCTV of sewer and drain mainlines.

During the current reporting period (ending July 31, 2020), Kleinfelder completed the final design of the improvements the areas beyond Stacey's Brook. The final design documents were submitted to EPA on April 1, 2020. In general, the sewer infrastructure improvements included in the design are 1,190 linear feet of cured in place (CIPP) mainline sewer rehabilitation, 1,155 linear feet of sewer mainline replacement, CIPP rehabilitation of approximately 56 sewer lateral service connections, cementitious lining of 26 sewer manholes and 2 sewer mainline spot repairs.

Phase 1C Sewer Rehabilitation Project

The Town allocated funds for the bidding and construction of the Phase 1C sewer rehabilitation project at Annual Town Meeting on June 22, 2020. The Town and Kleinfelder entered an agreement to update the Phase 1C bid documents, bid, and construct the work. Kleinfelder is scheduled to begin this work during the upcoming reporting period. It is anticipated that the Phase 1C contract documents will be released for bidding and awarded during this reporting period.



Tracking Data Tables:

In accordance with Paragraph 33 of the Consent Decree, a series of tracking tables are presented furnishing the information requested.

- a) Chronology of SSO Events Occurring during Reporting Period
- b) Catchment Area Inspections completed during Reporting Period
- c) Percentage of Catchment Area Investigated and Addressed
- d) Listing of Illicit Discharges Verified during Reporting Period
 - i) Illicit Connections
 - ii) Sanitary Sewer Defects
- e) Map of Location of Each Illicit Discharge Verified during Reporting Period
- f) Chart of Inspections Completed and Enforcement Actions Taken during Reporting Period
- g) List of Plans, Reports and other Submissions Required by this Consent Decree made during the Reporting Period
- h) Copies of Sampling Results Received during Reporting Period
- i) Planned Activities during the 6 Months Following the Reporting Period
- j) Summary of Non-Compliance with this Consent Decree during the Reporting Period



a) Chronology of SSO Events Occurring during Reporting Period

i.	i.	i.	ii.	iii.	iii.	iii.	iv.	iv.	v.	vi.	vii.	vii.	viii.	ix.	ix.	xi.	xii.
Date/Time Reported	Date/Time Event Stopped	Date Reported to EPA and DEP	Location	Final Disposition	Property Backup (address)	Receiving Drainage Structure	Receiving Surface Water	Location Release Reached Surface Water	Source of Notification	Cause(s) of Release	Cause = Blockage	Cause = Capacity Issue	Measures Taken to Stop Discharge	Volume of Release (Gallons)	Basis of Estimate	Measures Taken to Prevent Future SSOs	Date of Last SSO at this Location
2/19/2020 13:30	2/19/2020 14:30	2/24/2020	Manhole in front of 10 and 12 Puritan Lane	Town jetted main and washed the street.	None	None	None	None	Resident	Blockage in Town side of sewer.	✓	N/A	Town jetted main and washed the street.	50	Visual Estimate	Construct manhole downstream where this run connects perpendicular to the main.	None Known

xiii. GIS Map Locating each Illicit Discharge and SSO Event
See attached map in Appendix B



b) Catchment Area Inspections completed during Reporting Period

c) Percentage of Catchment Area Investigated and Addressed

Note that this reporting is in relation to meeting the Remedial Measures stipulated in Section VII of the consent decree. In order to meet the objectives of the consent decree, the Town's scope of work is not specifically following an IDDE Plan, but rather, is directly following the Remedial Measures themselves, and the Scope of Work for the Stacy's Brook drainage area that was submitted to the EPA on 10/26/2015.

33.b.i, ii	Sub-Catchment Area ID	Number of Drain Manholes in Sub-Catchment	Number of Drain Manholes Inspected						Number of Drain Manholes Addressed					
			Previous Reporting Periods		This Reporting Period		To-Date		Previous Reporting Periods		This Reporting Period		To-Date	
			QTY	%	QTY	%	QTY	%	QTY	%	QTY	%	QTY	%
1	Stacey's Brook	236	21	9%	0	0%	21	9%	6	3%	0	0%	6	3%
2	Other	372	69	19%	0	0%	69	19%	0	0%	0	0%	0	0%
		TOTAL	90	15%	0	0%	90	15%	6	1%	0	0%	6	1%

33.b.iii, 33.c	Sub-Catchment Area ID	Length of Drain in Sub-Catchment	Length of Drain Inspected						Length of Drain Addressed					
			Previous Reporting Periods		This Reporting Period		To-Date		Previous Reporting Periods		This Reporting Period		To-Date	
			FT	%	FT	%	FT	%	FT	%	FT	%	FT	%
1	Stacey's Brook	55,600	21,000	38%	0	0%	21,000	38%	650	1%	0	0%	650	1%
2	Other	95,000	2,263	2%	0	0%	2,263	2%	0	0%	0	0%	0	0%
		TOTAL	23,263	15%	0	0%	23,263	15%	650	0%	0	0%	650	0%



d) Listing of Illicit Discharges Verified during Reporting Period

									Total Volume Removed (Gallons)								
									Prior Reporting Periods	269,126							
									This Reporting Period	50							
									Cumulative To Date	269,176							
Discharge Type	Date Verified	Location / Address	SOURCE if: Building Type	SOURCE if: Sewer Exfiltration	Estimated Flow (GPM)	Actions Taken to Remove	Date Removed	Cost to Remove	Volume Removed (Gallons) (Reporting Period)	Actively Discharging > 60 Days	Explanation	Schedule for Removal	Private Discharges Persisting > 90 days	Town's Legal Enforcement Actions	Reasons for Delay		
Paragraph ->	i.	i.	i.	i.	ii.	iii.	iv.	v.	vi.	vii.	vii.	viii.	ix.	ix.	x.		
Sewer Defect	6/11/2020	190 Norfolk Ave	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	6/11/2020	unknown	unknown	No	n/a	completed	No	None	n/a		
Sewer Defect	6/9/2020	91 Farragut Rd	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	6/9/2020	unknown	unknown	No	n/a	completed	No	None	n/a		
Sewer Defect	6/4/2020	12 Banks Ter	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	6/4/2020	unknown	unknown	No	n/a	completed	No	None	n/a		
Sewer Defect	4/28/2020	38 Grant Rd	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	4/28/2020	unknown	unknown	No	n/a	completed	No	None	n/a		



Discharge Type	Date Verified	Location / Address	SOURCE if: Building Type	SOURCE if: Sewer Exfiltration	Estimated Flow (GPM)	Actions Taken to Remove	Date Removed	Cost to Remove	Volume Removed (Gallons) (Reporting Period)	Actively Discharging > 60 Days	Explanation	Schedule for Removal	Private Discharges Persisting > 90 days	Town's Legal Enforcement Actions	Reasons for Delay
Paragraph ->	i.	i.	i.	i.	ii.	iii.	iv.	v.	vi.	vii.	vii.	viii.	ix.	ix.	x.
Sewer Defect	4/13/2020	11 Mineva St	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	4/13/2020	unknown	unknown	No	n/a	completed	No	None	n/a
Sewer Defect	3/30/2020	20 Beach Ave	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	3/30/2020	unknown	unknown	No	n/a	completed	No	None	n/a
Sewer Defect	2/28/2020	2 Paleschi Dr	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	2/28/2020	unknown	unknown	No	n/a	completed	No	None	n/a
Sewer Defect	2/21/2020	3 Boynton St	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	2/21/2020	unknown	unknown	No	n/a	completed	No	None	n/a
Sewer Defect	2/19/2020	Manhole in front of 10 and 12 Puritan Lane	n/a	Blockage in Town side of sewer	<1	Town jetted main and washed street. Constructed manhole downstream where this run connects perpendicular to main.	2/19/2020	unknown	50	No	n/a	completed	No	Reported to EPA and DEP on 2/24/20	n/a



Discharge Type	Date Verified	Location / Address	SOURCE if: Building Type	SOURCE if: Sewer Exfiltration	Estimated Flow (GPM)	Actions Taken to Remove	Date Removed	Cost to Remove	Volume Removed (Gallons) (Reporting Period)	Actively Discharging > 60 Days	Explanation	Schedule for Removal	Private Discharges Persisting > 90 days	Town's Legal Enforcement Actions	Reasons for Delay
Paragraph ->	i.	i.	i.	i.	ii.	iii.	iv.	v.	vi.	vii.	vii.	viii.	ix.	ix.	x.
Sewer Defect	2/5/2020	53 Blodgett St	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	2/5/2020	unknown	unknown	No	n/a	completed	No	None	n/a
Sewer Defect	1/29/2020	85 Linden Ave	Residential	Sewer Service Repair	not estimated	Private contractor performed repair	1/29/2020	unknown	unknown	No	n/a	completed	No	None	n/a



e) Map of Location of Each Illicit Discharge Verified during Reporting Period

A map showing the locations of all illicit discharges and SSOs is included in Appendix B.

f) Chart of Inspections Completed and Enforcement Actions Taken during Reporting Period

Number of Routine Inspections	Number of Complaint-Response Related Inspections	Number of Total Construction Inspections
227	2	10

Enforcement Actions Taken (Type)	Enforcement Actions Taken (Number)
Notifications to Property Owner	0
Entry To Perform Duties	0
Penalty (Fines)	0
Orders	0
Civil Relief	0
Town Resolved using own means (no enforcement)	0



g) List of Plans, Reports and other Submissions Required by this Consent Decree made during the Reporting Period

Submission Description	Date Completed	Consent Decree Paragraph Reference
Bi-Annual Progress Report	9/1/2020	33
Final Design of Improvements to Areas Beyond Stacey's Brook	4/1/2020	19

h) Copies of Sampling Results Received during Reporting Period

Results from two dry weather rounds of Phase 1B post construction water quality monitoring are provided in Appendix A.

i) Planned Activities during the 6 Months Following the Reporting Period

During the period August 1, 2020 through January 31, 2021 the following activities are anticipated:

- Completion of two rounds of wet weather Phase 1B post construction water quality monitoring. The results of this testing will be submitted to the US EPA in the report for this period.
- Prepare the Phase 1C sewer rehabilitation bid documents for bidding. Bidding is anticipated to be completed and the construction construct awarded during this reporting period.

j) Summary of Non-Compliance with this Consent Decree during the Reporting Period

There has been no non-compliance during this report period.

Appendix A

Laboratory Results for Phase 1B Post-Construction Dry Weather Monitoring



ANALYTICAL REPORT

Lab Number:	L2023768
Client:	Kleinfelder One Beacon Street Suite 8100 Boston, MA 02108
ATTN:	Doris Jenkins
Phone:	(617) 497-7800
Project Name:	SWAMPSCOTT
Project Number:	Not Specified
Report Date:	06/16/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: SWAMPSCOTT
Project Number: Not Specified

Lab Number: L2023768
Report Date: 06/16/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2023768-01	KLF-7	WATER	Not Specified	06/09/20 08:15	06/09/20
L2023768-02	KLF-4	WATER	Not Specified	06/09/20 09:15	06/09/20
L2023768-03	KLF-6	WATER	Not Specified	06/09/20 10:10	06/09/20
L2023768-04	KLF-5	WATER	Not Specified	06/09/20 10:30	06/09/20

Project Name: SWAMPSCOTT
Project Number: Not Specified

Lab Number: L2023768
Report Date: 06/16/20

Case Narrative

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

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

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

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

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

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

Project Name: SWAMPSCOTT
Project Number: Not Specified

Lab Number: L2023768
Report Date: 06/16/20

Case Narrative (continued)

Report Submission

June 16, 2020: This final report includes the results of all requested analyses.

June 15, 2020: This is a preliminary report.

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

Authorized Signature:  Tiffani Morrissey

Title: Technical Director/Representative

Date: 06/16/20

INORGANICS & MISCELLANEOUS

Project Name: SWAMPSCOTT
Project Number: Not Specified

Lab Number: L2023768
Report Date: 06/16/20

SAMPLE RESULTS

Lab ID: L2023768-01
Client ID: KLF-7
Sample Location: Not Specified

Date Collected: 06/09/20 08:15
Date Received: 06/09/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
ENTEROCOCCUS	560		col/100ml	10	--	10	-	06/09/20 15:08	23,1600	AA
Anions by Ion Chromatography - Westborough Lab										
Chloride	601.		mg/l	12.5	--	25	-	06/13/20 11:09	44,300.0	JT



Project Name: SWAMPSCOTT

Project Number: Not Specified

Lab Number: L2023768

Report Date: 06/16/20

SAMPLE RESULTS

Lab ID: L2023768-02

Client ID: KLF-4

Sample Location: Not Specified

Date Collected: 06/09/20 09:15

Date Received: 06/09/20

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
ENTEROCOCCUS	16		col/100ml	2.0	--	2	-	06/09/20 15:08	23,1600	AA
Anions by Ion Chromatography - Westborough Lab										
Chloride	321.		mg/l	12.5	--	25	-	06/13/20 11:21	44,300.0	JT



Project Name: SWAMPSCOTT

Project Number: Not Specified

Lab Number: L2023768

Report Date: 06/16/20

SAMPLE RESULTS

Lab ID: L2023768-03

Client ID: KLF-6

Sample Location: Not Specified

Date Collected: 06/09/20 10:10

Date Received: 06/09/20

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
ENTEROCOCCUS	350		col/100ml	10	--	10	-	06/09/20 15:08	23,1600	AA
Anions by Ion Chromatography - Westborough Lab										
Chloride	212.		mg/l	12.5	--	25	-	06/13/20 11:57	44,300.0	JT



Project Name: SWAMPSCOTT

Project Number: Not Specified

Lab Number: L2023768

Report Date: 06/16/20

SAMPLE RESULTS

Lab ID: L2023768-04

Client ID: KLF-5

Sample Location: Not Specified

Date Collected: 06/09/20 10:30

Date Received: 06/09/20

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
ENTEROCOCCUS	410		col/100ml	10	--	10	-	06/09/20 15:08	23,1600	AA
Anions by Ion Chromatography - Westborough Lab										
Chloride	161.		mg/l	12.5	--	25	-	06/13/20 12:09	44,300.0	JT



Project Name: SWAMPSCOTT

Lab Number: L2023768

Project Number: Not Specified

Report Date: 06/16/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab for sample(s): 01-04 Batch: WG1379543-1										
ENTEROCOCCUS	ND		col/100ml	1.0	--	1	-	06/09/20 15:08	23,1600	AA
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-04 Batch: WG1381370-1										
Chloride	ND		mg/l	0.500	--	1	-	06/13/20 13:46	44,300.0	JT

Lab Control Sample Analysis

Batch Quality Control

Project Name: SWAMPSCOTT

Project Number: Not Specified

Lab Number: L2023768

Report Date: 06/16/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04 Batch: WG1381370-2								
Chloride	93		-		90-110	-		

Matrix Spike Analysis Batch Quality Control

Project Name: SWAMPSCOTT
Project Number: Not Specified

Lab Number: L2023768
Report Date: 06/16/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1381370-3 QC Sample: L2023858-02 Client ID: MS Sample												
Chloride	70.8	20	87.0	81	Q	-	-		90-110	-		18

Lab Duplicate Analysis

Batch Quality Control

Project Name: SWAMPSCOTT

Project Number: Not Specified

Lab Number: L2023768

Report Date: 06/16/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1381370-4 QC Sample: L2023858-02 Client ID: DUP Sample						
Chloride	70.8	71.0	mg/l	0		18

Project Name: SWAMPSCOTT**Lab Number:** L2023768**Project Number:** Not Specified**Report Date:** 06/16/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2023768-01A	Plastic 60ml unpreserved	A	7	7	3.9	Y	Absent		CL-300(28)
L2023768-01B	Bacteria Cup Na2S2O3 preserved	A	NA		3.9	Y	Absent		ENTRO-MF(.33)
L2023768-01C	Bacteria Cup Na2S2O3 preserved	A	NA		3.9	Y	Absent		ENTRO-MF(.33)
L2023768-02A	Plastic 60ml unpreserved	A	7	7	3.9	Y	Absent		CL-300(28)
L2023768-02B	Bacteria Cup Na2S2O3 preserved	A	NA		3.9	Y	Absent		ENTRO-MF(.33)
L2023768-02C	Bacteria Cup Na2S2O3 preserved	A	NA		3.9	Y	Absent		ENTRO-MF(.33)
L2023768-03A	Plastic 60ml unpreserved	A	7	7	3.9	Y	Absent		CL-300(28)
L2023768-03B	Bacteria Cup Na2S2O3 preserved	A	NA		3.9	Y	Absent		ENTRO-MF(.33)
L2023768-03C	Bacteria Cup Na2S2O3 preserved	A	NA		3.9	Y	Absent		ENTRO-MF(.33)
L2023768-04A	Plastic 60ml unpreserved	A	7	7	3.9	Y	Absent		CL-300(28)
L2023768-04B	Bacteria Cup Na2S2O3 preserved	A	NA		3.9	Y	Absent		ENTRO-MF(.33)
L2023768-04C	Bacteria Cup Na2S2O3 preserved	A	NA		3.9	Y	Absent		ENTRO-MF(.33)

Project Name: SWAMPSCOTT
Project Number: Not Specified

Lab Number: L2023768
Report Date: 06/16/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report



Project Name: SWAMPSCOTT
Project Number: Not Specified

Lab Number: L2023768
Report Date: 06/16/20

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

Terms

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

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

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

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

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less

Report Format: Data Usability Report



Project Name: SWAMPSCOTT

Lab Number: L2023768

Project Number: Not Specified

Report Date: 06/16/20

Data Qualifiers

than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name: SWAMPSCOTT
Project Number: Not Specified

Lab Number: L2023768
Report Date: 06/16/20

REFERENCES

- 23 Method 1600: Membrane Filter Test Method for Enterococci in Water, EPA-821-R-97-004a, May 1997.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

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

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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



ANALYTICAL REPORT

Lab Number:	L2030177
Client:	Kleinfelder One Beacon Street Suite 8100 Boston, MA 02108
ATTN:	Doris Jenkins
Phone:	(617) 497-7800
Project Name:	1B-PC
Project Number:	Not Specified
Report Date:	08/10/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2030177-01	KLF-4	WATER	SWAMPSCOTT, MA	07/16/20 10:45	07/16/20
L2030177-02	KLF-3	WATER	SWAMPSCOTT, MA	07/16/20 11:25	07/16/20
L2030177-03	KLF-6	WATER	SWAMPSCOTT, MA	07/16/20 12:10	07/16/20
L2030177-04	KLF-5	WATER	SWAMPSCOTT, MA	07/16/20 12:50	07/16/20
L2030177-05	KLF-7	WATER	SWAMPSCOTT, MA	07/16/20 13:25	07/16/20

Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

Case Narrative

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

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

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

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

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

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

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

Authorized Signature:

 Caitlin Walukevich

Title: Technical Director/Representative

Date: 08/10/20

INORGANICS & MISCELLANEOUS

Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2030177-01
Client ID: KLF-4
Sample Location: SWAMPSCOTT, MA

Date Collected: 07/16/20 10:45
Date Received: 07/16/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
ENTEROCOCCUS	210		col/100ml	10	--	10	-	07/16/20 17:15	23,1600	CW
Anions by Ion Chromatography - Westborough Lab										
Chloride	314.		mg/l	5.00	--	10	-	07/23/20 23:16	44,300.0	AT



Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2030177-02
Client ID: KLF-3
Sample Location: SWAMPSCOTT, MA

Date Collected: 07/16/20 11:25
Date Received: 07/16/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
ENTEROCOCCUS	1500		col/100ml	10	--	10	-	07/16/20 17:15	23,1600	CW
Anions by Ion Chromatography - Westborough Lab										
Chloride	16.8		mg/l	5.00	--	10	-	07/23/20 23:29	44,300.0	AT



Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2030177-03
Client ID: KLF-6
Sample Location: SWAMPSCOTT, MA

Date Collected: 07/16/20 12:10
Date Received: 07/16/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
ENTEROCOCCUS	90000		col/100ml	100	--	100	-	07/16/20 17:15	23,1600	CW
Anions by Ion Chromatography - Westborough Lab										
Chloride	220.		mg/l	5.00	--	10	-	07/23/20 23:41	44,300.0	AT



Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2030177-04
Client ID: KLF-5
Sample Location: SWAMPSCOTT, MA

Date Collected: 07/16/20 12:50
Date Received: 07/16/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
ENTEROCOCCUS	32000		col/100ml	100	--	100	-	07/16/20 17:15	23,1600	CW
Anions by Ion Chromatography - Westborough Lab										
Chloride	188.		mg/l	5.00	--	10	-	07/23/20 23:53	44,300.0	AT



Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2030177-05
Client ID: KLF-7
Sample Location: SWAMPSCOTT, MA

Date Collected: 07/16/20 13:25
Date Received: 07/16/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
ENTEROCOCCUS	960		col/100ml	10	--	10	-	07/16/20 17:15	23,1600	CW
Anions by Ion Chromatography - Westborough Lab										
Chloride	1710		mg/l	25.0	--	50	-	08/05/20 15:17	44,300.0	JT



Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab for sample(s): 01-05 Batch: WG1393028-1										
ENTEROCOCCUS	ND		col/100ml	1.0	--	1	-	07/16/20 17:15	23,1600	CW
Anions by Ion Chromatography - Westborough Lab for sample(s): 05 Batch: WG1395249-1										
Chloride	ND		mg/l	0.500	--	1	-	08/05/20 08:02	44,300.0	JT
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-04 Batch: WG1395626-1										
Chloride	ND		mg/l	0.500	--	1	-	07/23/20 20:14	44,300.0	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 05 Batch: WG1395249-2								
Chloride	106		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04 Batch: WG1395626-2								
Chloride	103		-		90-110	-		

Matrix Spike Analysis Batch Quality Control

Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 05 QC Batch ID: WG1395249-3 WG1395249-4 QC Sample: L2030880-01 Client ID: MS Sample												
Chloride	24.9	4	28.2	84	Q	28.2	84	Q	90-110	0		18
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1395626-3 QC Sample: L2030177-01 Client ID: KLF-4												
Chloride	314	100	403	90		-	-		90-110	-		18

Lab Duplicate Analysis

Batch Quality Control

Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1395626-4 QC Sample: L2030177-01 Client ID: KLF-4						
Chloride	314	318	mg/l	1		18

Project Name: 1B-PC**Lab Number:** L2030177**Project Number:** Not Specified**Report Date:** 08/10/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2030177-01A	Plastic 60ml unpreserved	A	7	7	2.2	Y	Absent		CL-300(28)
L2030177-01B	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)
L2030177-01C	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)
L2030177-02A	Plastic 60ml unpreserved	A	7	7	2.2	Y	Absent		CL-300(28)
L2030177-02B	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)
L2030177-02C	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)
L2030177-03A	Plastic 60ml unpreserved	A	7	7	2.2	Y	Absent		CL-300(28)
L2030177-03B	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)
L2030177-03C	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)
L2030177-04A	Plastic 60ml unpreserved	A	7	7	2.2	Y	Absent		CL-300(28)
L2030177-04B	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)
L2030177-04C	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)
L2030177-05A	Plastic 60ml unpreserved	A	7	7	2.2	Y	Absent		CL-300(28)
L2030177-05B	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)
L2030177-05C	Bacteria Cup Na2S2O3 preserved	A	NA		2.2	Y	Absent		ENTRO-MF(.33)

Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report



Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

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

Terms

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

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

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

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

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. (DoD and NYSDEC Part 375 PFAS only.)
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: Data Usability Report



Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Project Name: 1B-PC
Project Number: Not Specified

Lab Number: L2030177
Report Date: 08/10/20

REFERENCES

- 23 Method 1600: Membrane Filter Test Method for Enterococci in Water, EPA-821-R-97-004a, May 1997.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

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

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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



CHAIN OF CUSTODY

PAGE _____ OF _____

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Project Information

Project Name: **IB-PC**

Project Location: **Swampscott, MA**

Project #:

Project Manager:

ALPHA Quote #:

Date Rec'd in Lab: **7/16/20**

Report Information - Data Deliverables

ADEX EMAIL

ALPHA Job #: **L2030177**

Billing Information

Same as Client info PO #:

Client Information

Client: **Kleinfelder**

Address: **1 Beacon St Suite 8100
Boston, MA**

Phone: **860-682-0307**

Email: **djenkins@kleinfelder.com**

Additional Project Information:

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due:

Regulatory Requirements & Project Information Requirements

Yes No MA MCP Analytical Methods Yes No CT RCP Analytical Methods

Yes No Matrix Spike Required on this SDG? (Required for MCP Inorganics)

Yes No GW1 Standards (Info Required for Metals & EPH with Targets)

Yes No NPDES RGP

Other State /Fed Program _____ Criteria _____

ANALYSIS		TOTAL # BOTTLES
VOC: <input type="checkbox"/> 8260 <input type="checkbox"/> 624 <input type="checkbox"/> 524.2	SVOC: <input type="checkbox"/> ABN <input type="checkbox"/> PAH	
METALS: <input type="checkbox"/> MCP 13 <input type="checkbox"/> MCP 14 <input type="checkbox"/> RCP 15	METALS: <input type="checkbox"/> RCRA5 <input type="checkbox"/> RCRA8 <input type="checkbox"/> PP13	
EPH: <input type="checkbox"/> Ranges & Targets <input type="checkbox"/> Ranges Only	VPH: <input type="checkbox"/> Ranges & Targets <input type="checkbox"/> Ranges Only	Sample Comments
<input type="checkbox"/> PCB <input type="checkbox"/> PEST	TPH: <input type="checkbox"/> Quant Only <input type="checkbox"/> Fingerprint	
Enterococcus		
OML Chloride		

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler Initials
		Date	Time		
30177-01	KLF-4	7/16	10:45		DJ
02	KLF-3	7/16	11:25		DJ
03	KLF-6	7/16	12:10		DJ
04	KLF-5	7/16	12:50		DJ
05	KLF-7	7/16	1:25		DJ

Container Type

P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative

A= None
B= HCl
C= HNO₃
D= H₂SO₄
E= NaOH
F= MeOH
G= NaHSO₄
H= Na₂S₂O₈
I= Ascorbic Acid
J= NH₄Cl
K= Zn Acetate
O= Other

Container Type

Preservative

Relinquished By:

D Jenkins
MSM

Date/Time

7/16 2:06
7/16/20 1618

Received By:

Mark White
Wen

Date/Time

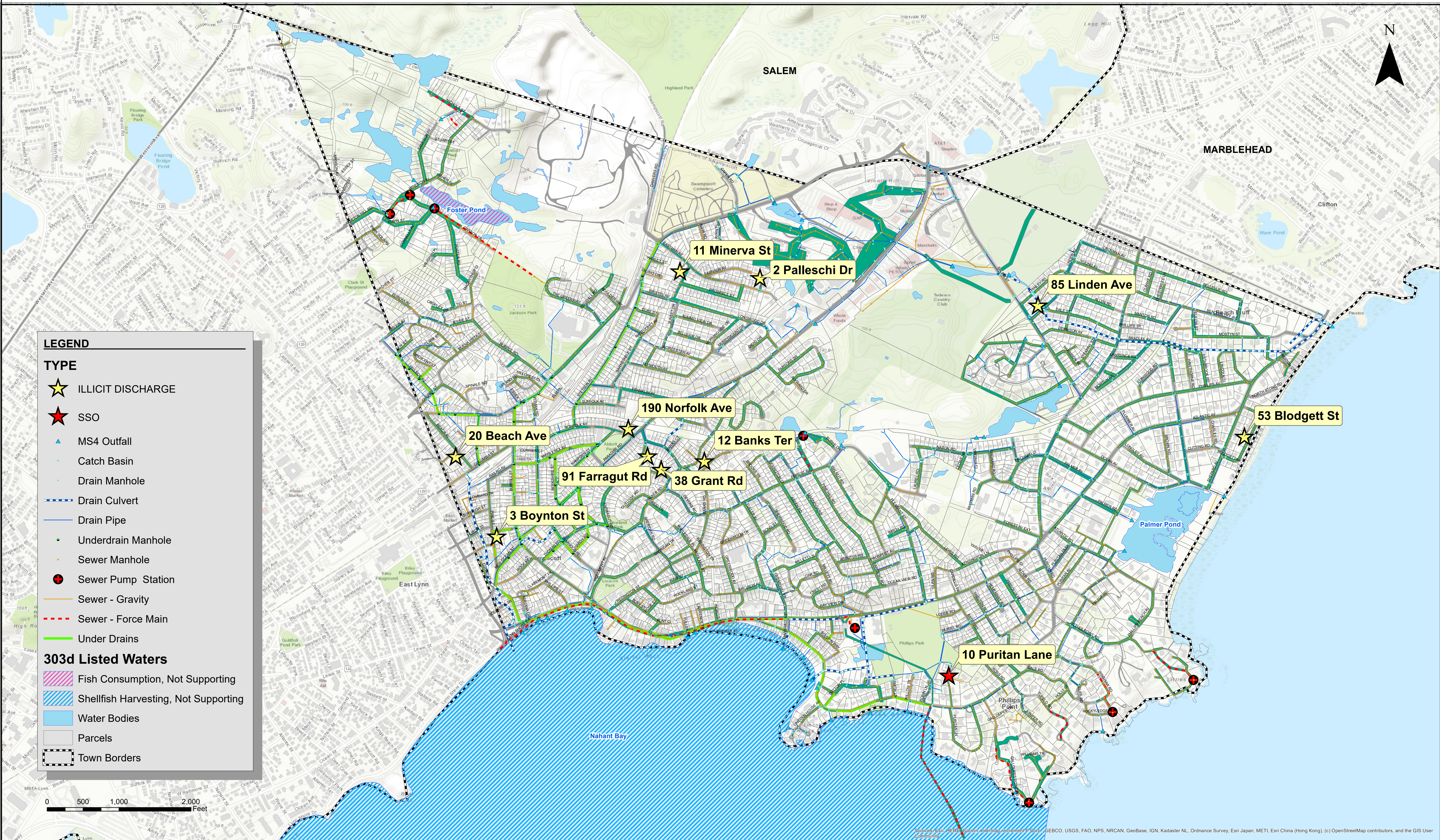
7/16/20 1408
7/16/20 1618

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

Appendix B

Illicit Discharge and SSO Overview Map



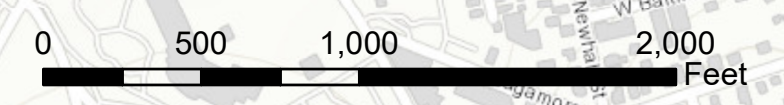
LEGEND

TYPE

- ★ ILLICIT DISCHARGE
- ★ SSO
- ▲ MS4 Outfall
- Catch Basin
- Drain Manhole
- Drain Culvert
- Drain Pipe
- Underdrain Manhole
- Sewer Manhole
- Sewer Pump Station
- Sewer - Gravity
- Sewer - Force Main
- Under Drains

303d Listed Waters

- ▨ Fish Consumption, Not Supporting
- ▨ Shellfish Harvesting, Not Supporting
- Water Bodies
- Parcels
- Town Borders



The information contained on this graphic representation has been compiled from a variety of sources and is subject to change without notice. The user of this information is advised to verify the accuracy, completeness, timeliness, and reliability of the information contained on this graphic representation in the context of the user's intended use of the information.



PROJECT NO.	20203446
DRAWN:	9/1/2020
DRAWN BY:	JVR
CHECKED BY:	DFS
FILE NAME:	Compliance Reporting

APPENDIX B	
ILLICIT DISCHARGE & SSO LOCATIONS	
REPORTING PERIOD: 2/1/20 to 7/31/20	
EPA Consent Decree Swampscott, Massachusetts	