CHAIN OF CUSTODY

PAGE ____ OF ____

Date Rec'd In Lab: 5/25/21

ALPHA Job #: L2127684

ALPHA ANALYTICAL

6 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: Town of Wilbraham
Address: 240 Spring Field St
Wilbraham MA 01095
Phone: 413-596-2800 x.208
Email: cgrochmal@wilbraham-ma.gov

Additional Project Information:

Project Information

Project Name:
Project Location:
Project #:
Project Manager:
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due:

Report Information - Data Deliverables

☐ ADEx ☐ EMAIL

Billing Information

☑ Same as Client info | PO #:

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

VOC: ☐ 8260 ☐ 624 ☐ 524.2
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint

SAMPLE INFO
Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

Sample Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials
27684-01	#133	5/25	11:30A		TY
02	#177	5/25	9:00A		TY
03	#9	5/25	9:20A		TY
04	#301	5/25	9:35A		TY
05	#23	5/25	9:56A		TY
06	#195	5/25	10:05		TY
07	#105	5/25	10:52		TY.
08	#96	5/25	10:35		TY
09	#43	5/25	11:16		TY

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	5/25/21	Benjamin Swick AAL	5/25 13:35
Benjamin Swick AAL 5/25 17:50	2235	[signature]	5/25/21 1750

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= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

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

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

From: "jthebodo" <jthebodo@alphalab.com>
To: "Dena Grochmal" <dgrochmal@wilbraham-ma.gov>
Sent: Monday, May 17, 2021 1:15:24 PM
Subject: Re: Stormwater Sampling

Dena,
Thank you for sending all that information. The account is set up and I am working on getting you a new PM to work with at Alpha as Mike Chang has moved on to another position within the company.

We will reach out to schedule your bottle order and courier service.

Can you please provide the following information:
Which parameters are you testing for? Same as the original request?
This was E.Coli via SM 9213B- $62.00
Surfactants via SM 5540- $67.00
Total Nitrogen package- $74.00
Ammonia Nitrogen- $29.00
Disposal- $3.20
How many samples do you plan to collect?

When do you need the bottleware by? Please provide Name/Address/Phone for the day of dropoff contact for our couriers.

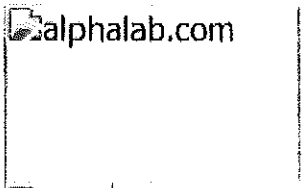
Thank You again for the opportunity.

Sincerely,
Jeremy

Jeremy Thebodo
Technical Sales Associate

Email: jthebodo@alphalab.com
Direct: 774-666-0360 | Main: 508-898-9220

www.alphalab.com | Give Us Feedback



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Mansfield & Westborough, MA | ME | NH | NJ | NY | OH | PA

ALPHA ANALYTICAL

ANALYTICAL REPORT

Lab Number:	L2127684
Client:	Town of Wilbraham 240 Springfield St. Wilbraham, MA 01095
ATTN:	Dena Grochmal
Phone:	(413) 596-2800
Project Name:	Not Specified
Project Number:	Not Specified
Report Date:	06/14/21

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: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2127684-01	#133	WATER	Not Specified	05/25/21 11:30	05/25/21
L2127684-02	#177	WATER	Not Specified	05/25/21 09:00	05/25/21
L2127684-03	#9	WATER	Not Specified	05/25/21 09:20	05/25/21
L2127684-04	#301	WATER	Not Specified	05/25/21 09:35	05/25/21
L2127684-05	#23	WATER	Not Specified	05/25/21 09:56	05/25/21
L2127684-06	#195	WATER	Not Specified	05/25/21 10:05	05/25/21
L2127684-07	#105	WATER	Not Specified	05/25/21 10:52	05/25/21
L2127684-08	#96	WATER	Not Specified	05/25/21 10:35	05/25/21
L2127684-09	#43	WATER	Not Specified	05/25/21 11:16	05/25/21

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

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: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

Case Narrative (continued)

Sample Receipt

The analyses performed were specified by the client.

Nitrogen, Ammonia

The WG1510047-4 MS recovery, performed on L2127684-09, is outside the acceptance criteria for nitrogen, ammonia (0%); however, the associated LCS recovery is within criteria. No further action was taken.

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: Jennifer L Clements

Title: Technical Director/Representative

Date: 06/14/21

INORGANICS
&
MISCELLANEOUS

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

SAMPLE RESULTS

Lab ID: L2127684-01
Client ID: #133
Sample Location: Not Specified

Date Collected: 05/25/21 11:30
Date Received: 05/25/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Ammonia	0.151		mg/l	0.075	--	1	06/10/21 00:29	06/10/21 22:56	121,4500NH3-BH	AT
Nitrogen, Nitrate/Nitrite	1.4		mg/l	0.10	--	1	-	05/30/21 07:18	44,353.2	MR
Total Nitrogen	2.3		mg/l	0.30	--	1	-	06/14/21 09:17	107,-	JO
Nitrogen, Total Kjeldahl	0.918		mg/l	0.300	--	1	06/09/21 06:51	06/11/21 17:53	121,4500NH3-H	JO
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:54	121,5540C	AW

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

SAMPLE RESULTS

Lab ID: L2127684-02
Client ID: #177
Sample Location: Not Specified

Date Collected: 05/25/21 09:00
Date Received: 05/25/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Ammonia	0.833		mg/l	0.075	--	1	06/10/21 00:29	06/10/21 22:57	121,4500NH3-BH	AT
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	--	1	-	05/30/21 07:21	44,353.2	MR
Total Nitrogen	0.72		mg/l	0.30	--	1	-	06/14/21 09:17	107,-	JO
Nitrogen, Total Kjeldahl	0.719		mg/l	0.300	--	1	06/09/21 06:51	06/11/21 17:40	121,4500NH3-H	JO
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:54	121,5540C	AW

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

SAMPLE RESULTS

Lab ID: L2127684-03
Client ID: #9
Sample Location: Not Specified

Date Collected: 05/25/21 09:20
Date Received: 05/25/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Ammonia	0.106		mg/l	0.075	--	1	06/10/21 00:29	06/10/21 22:58	121,4500NH3-BH	AT
Nitrogen, Nitrate/Nitrite	1.3		mg/l	0.10	--	1	-	05/30/21 07:23	44,353.2	MR
Total Nitrogen	2.0		mg/l	0.30	--	1	-	06/14/21 09:17	107,-	JO
Nitrogen, Total Kjeldahl	0.738		mg/l	0.300	--	1	06/09/21 06:51	06/11/21 17:41	121,4500NH3-H	JO
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:54	121,5540C	AW

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

SAMPLE RESULTS

Lab ID: L2127684-04
Client ID: #301
Sample Location: Not Specified

Date Collected: 05/25/21 09:35
Date Received: 05/25/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Ammonia	0.198		mg/l	0.075	--	1	06/10/21 00:29	06/10/21 22:59	121,4500NH3-BH	AT
Nitrogen, Nitrate/Nitrite	0.60		mg/l	0.10	--	1	-	05/30/21 07:24	44,353.2	MR
Total Nitrogen	0.60		mg/l	0.30	--	1	-	06/14/21 09:17	107,-	JO
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	06/09/21 06:51	06/11/21 17:42	121,4500NH3-H	JO
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:55	121,5540C	AW

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

SAMPLE RESULTS

Lab ID: L2127684-05
Client ID: #23
Sample Location: Not Specified

Date Collected: 05/25/21 09:56
Date Received: 05/25/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Ammonia	0.083		mg/l	0.075	--	1	06/10/21 00:29	06/10/21 23:00	121,4500NH3-BH	AT
Nitrogen, Nitrate/Nitrite	2.8		mg/l	0.10	--	1	-	05/30/21 07:25	44,353.2	MR
Total Nitrogen	2.8		mg/l	0.30	--	1	-	06/14/21 09:17	107,-	JO
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	06/09/21 06:51	06/11/21 17:42	121,4500NH3-H	JO
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:56	121,5540C	AW

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

SAMPLE RESULTS

Lab ID: L2127684-06
Client ID: #195
Sample Location: Not Specified

Date Collected: 05/25/21 10:05
Date Received: 05/25/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	06/10/21 18:00	06/11/21 13:53	121,4500NH3-BH	JO
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	--	1	-	05/30/21 07:30	44,353.2	MR
Total Nitrogen	0.33		mg/l	0.30	--	1	-	06/14/21 09:17	107,-	JO
Nitrogen, Total Kjeldahl	0.331		mg/l	0.300	--	1	06/09/21 06:51	06/11/21 17:48	121,4500NH3-H	JO
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:56	121,5540C	AW

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

SAMPLE RESULTS

Lab ID: L2127684-07
Client ID: #105
Sample Location: Not Specified

Date Collected: 05/25/21 10:52
Date Received: 05/25/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Ammonia	0.075		mg/l	0.075	--	1	06/10/21 00:29	06/10/21 23:01	121,4500NH3-BH	AT
Nitrogen, Nitrate/Nitrite	2.0		mg/l	0.10	--	1	-	05/30/21 07:32	44,353.2	MR
Total Nitrogen	2.3		mg/l	0.30	--	1	-	06/14/21 09:17	107,-	JO
Nitrogen, Total Kjeldahl	0.337		mg/l	0.300	--	1	06/09/21 06:51	06/11/21 17:49	121,4500NH3-H	JO
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:57	121,5540C	AW

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

SAMPLE RESULTS

Lab ID: L2127684-08
Client ID: #96
Sample Location: Not Specified

Date Collected: 05/25/21 10:35
Date Received: 05/25/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	06/10/21 00:29	06/10/21 23:02	121,4500NH3-BH	AT
Nitrogen, Nitrate/Nitrite	0.79		mg/l	0.10	--	1	-	05/30/21 07:33	44,353.2	MR
Total Nitrogen	1.2		mg/l	0.30	--	1	-	06/14/21 09:17	107,-	JO
Nitrogen, Total Kjeldahl	0.401		mg/l	0.300	--	1	06/09/21 06:51	06/11/21 17:50	121,4500NH3-H	JO
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:58	121,5540C	AW

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

SAMPLE RESULTS

Lab ID: L2127684-09
Client ID: #43
Sample Location: Not Specified

Date Collected: 05/25/21 11:16
Date Received: 05/25/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	06/10/21 00:29	06/10/21 23:03	121,4500NH3-BH	AT
Nitrogen, Nitrate/Nitrite	3.5		mg/l	0.10	--	1	-	05/30/21 07:34	44,353.2	MR
Total Nitrogen	3.9		mg/l	0.30	--	1	-	06/11/21 14:55	107,-	JO
Nitrogen, Total Kjeldahl	0.358		mg/l	0.300	--	1	06/10/21 05:36	06/11/21 13:05	121,4500NH3-H	JO
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:59	121,5540C	AW

Project Name:

Project Number: Not Specified

Lab Number: L2127684

Report Date: 06/14/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1503690-1										
Surfactants, MBAS	ND		mg/l	0.050	--	1	05/26/21 00:30	05/26/21 05:52	121,5540C	AW
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1505449-1										
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	--	1	-	05/30/21 06:48	44,353.2	MR
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG1509477-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	06/09/21 06:51	06/11/21 17:35	121,4500NH3-H	JO
General Chemistry - Westborough Lab for sample(s): 01-05,07-09 Batch: WG1510047-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	06/10/21 00:29	06/10/21 22:43	121,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 09 Batch: WG1510050-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	06/10/21 05:36	06/11/21 12:58	121,4500NH3-H	JO
General Chemistry - Westborough Lab for sample(s): 06 Batch: WG1510538-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	06/10/21 18:00	06/11/21 13:39	121,4500NH3-BH	JO

Lab Control Sample Analysis
Batch Quality Control

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1503690-2								
Surfactants, MBAS	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1505449-2								
Nitrogen, Nitrate/Nitrite	90		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG1509477-2								
Nitrogen, Total Kjeldahl	103		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05,07-09 Batch: WG1510047-2								
Nitrogen, Ammonia	88		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 09 Batch: WG1510050-2								
Nitrogen, Total Kjeldahl	108		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 06 Batch: WG1510538-2								
Nitrogen, Ammonia	89		-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1503690-4 QC Sample: L2127735-01 Client ID: MS Sample												
Surfactants, MBAS	ND	0.4	0.370	92		-	-		52-157	-		32
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1505449-4 QC Sample: L2127684-01 Client ID: #133												
Nitrogen, Nitrate/Nitrite	1.4	4	6.0	115		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1509477-4 QC Sample: L2127684-05 Client ID: #23												
Nitrogen, Total Kjeldahl	ND	8	6.86	86		-	-		77-111	-		24
General Chemistry - Westborough Lab Associated sample(s): 01-05,07-09 QC Batch ID: WG1510047-4 QC Sample: L2127684-09 Client ID: #43												
Nitrogen, Ammonia	ND	4	ND	0	Q	-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 09 QC Batch ID: WG1510050-4 QC Sample: L2128437-06 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	0.548	8	8.11	94		-	-		77-111	-		24
General Chemistry - Westborough Lab Associated sample(s): 06 QC Batch ID: WG1510538-4 QC Sample: L2128898-79 Client ID: MS Sample												
Nitrogen, Ammonia	0.102	4	3.75	91		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1503690-3 QC Sample: L2127735-01 Client ID: DUP Sample						
Surfactants, MBAS	ND	ND	mg/l	NC		32
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1505449-3 QC Sample: L2127684-01 Client ID: #133						
Nitrogen, Nitrate/Nitrite	1.4	1.4	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1509477-3 QC Sample: L2127684-05 Client ID: #23						
Nitrogen, Total Kjeldahl	ND	ND	mg/l	NC		24
General Chemistry - Westborough Lab Associated sample(s): 01-05,07-09 QC Batch ID: WG1510047-3 QC Sample: L2127684-09 Client ID: #43						
Nitrogen, Ammonia	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 09 QC Batch ID: WG1510050-3 QC Sample: L2128437-06 Client ID: DUP Sample						
Nitrogen, Total Kjeldahl	0.548	0.516	mg/l	6		24
General Chemistry - Westborough Lab Associated sample(s): 06 QC Batch ID: WG1510538-3 QC Sample: L2128898-79 Client ID: DUP Sample						
Nitrogen, Ammonia	0.102	ND	mg/l	NC		20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2127684-01A	Plastic 60ml unpreserved	A	7	7	5.4	Y	Absent		MBAS-5540(2)
L2127684-01B	Bacteria Cup Na2S2O3 preserved	A	NA		5.4	Y	Absent		ARCHIVE()
L2127684-01C	Bacteria Cup Na2S2O3 preserved	A	NA		5.4	Y	Absent		ARCHIVE()
L2127684-01D	Plastic 950ml H2SO4 preserved	A	<2	<2	5.4	Y	Absent		TKN-4500(28),NO3/NO2-353(28),TNITROGEN(28),NH3-4500(28)
L2127684-01E	Plastic 950ml unpreserved	A	7	7	5.4	Y	Absent		MBAS-5540(2)
L2127684-02A	Plastic 60ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)
L2127684-02B	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-02C	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-02D	Plastic 950ml H2SO4 preserved	B	<2	<2	4.6	Y	Absent		TKN-4500(28),NO3/NO2-353(28),TNITROGEN(28),NH3-4500(28)
L2127684-02E	Plastic 950ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)
L2127684-03A	Plastic 60ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)
L2127684-03B	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-03C	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-03D	Plastic 950ml H2SO4 preserved	B	<2	<2	4.6	Y	Absent		TKN-4500(28),NO3/NO2-353(28),TNITROGEN(28),NH3-4500(28)
L2127684-03E	Plastic 950ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)
L2127684-04A	Plastic 60ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)
L2127684-04B	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-04C	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-04D	Plastic 950ml H2SO4 preserved	B	<2	<2	4.6	Y	Absent		TKN-4500(28),NO3/NO2-353(28),TNITROGEN(28),NH3-4500(28)
L2127684-04E	Plastic 950ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)
L2127684-05A	Plastic 60ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)

*Values in parentheses indicate holding time in days

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2127684-05B	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-05C	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-05D	Plastic 950ml H2SO4 preserved	B	<2	<2	4.6	Y	Absent		TKN-4500(28),NO3/NO2-353(28),TNITROGEN(28),NH3-4500(28)
L2127684-05E	Plastic 950ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)
L2127684-06A	Plastic 60ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)
L2127684-06B	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-06C	Bacteria Cup Na2S2O3 preserved	B	NA		4.6	Y	Absent		ARCHIVE()
L2127684-06D	Plastic 950ml H2SO4 preserved	B	<2	<2	4.6	Y	Absent		TKN-4500(28),NO3/NO2-353(28),TNITROGEN(28),NH3-4500(28)
L2127684-06E	Plastic 950ml unpreserved	B	7	7	4.6	Y	Absent		MBAS-5540(2)
L2127684-07A	Plastic 60ml unpreserved	A	7	7	5.4	Y	Absent		MBAS-5540(2)
L2127684-07B	Bacteria Cup Na2S2O3 preserved	A	NA		5.4	Y	Absent		ARCHIVE()
L2127684-07C	Bacteria Cup Na2S2O3 preserved	A	NA		5.4	Y	Absent		ARCHIVE()
L2127684-07D	Plastic 950ml H2SO4 preserved	A	<2	<2	5.4	Y	Absent		TKN-4500(28),NO3/NO2-353(28),TNITROGEN(28),NH3-4500(28)
L2127684-07E	Plastic 950ml unpreserved	A	7	7	5.4	Y	Absent		MBAS-5540(2)
L2127684-08A	Plastic 60ml unpreserved	A	7	7	5.4	Y	Absent		MBAS-5540(2)
L2127684-08B	Bacteria Cup Na2S2O3 preserved	A	NA		5.4	Y	Absent		ARCHIVE()
L2127684-08C	Bacteria Cup Na2S2O3 preserved	A	NA		5.4	Y	Absent		ARCHIVE()
L2127684-08D	Plastic 950ml H2SO4 preserved	A	<2	<2	5.4	Y	Absent		TKN-4500(28),NO3/NO2-353(28),TNITROGEN(28),NH3-4500(28)
L2127684-08E	Plastic 950ml unpreserved	A	7	7	5.4	Y	Absent		MBAS-5540(2)
L2127684-09A	Plastic 60ml unpreserved	A	7	7	5.4	Y	Absent		MBAS-5540(2)
L2127684-09B	Bacteria Cup Na2S2O3 preserved	A	NA		5.4	Y	Absent		ARCHIVE()
L2127684-09C	Bacteria Cup Na2S2O3 preserved	A	NA		5.4	Y	Absent		ARCHIVE()
L2127684-09D	Plastic 950ml H2SO4 preserved	A	<2	<2	5.4	Y	Absent		TKN-4500(28),NO3/NO2-353(28),TNITROGEN(28),NH3-4500(28)
L2127684-09E	Plastic 950ml unpreserved	A	7	7	5.4	Y	Absent		MBAS-5540(2)

*Values in parentheses indicate holding time in days

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2127684
Report Date: 06/14/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	Not Specified	**Lab Number:**	L2127684
Project Number:	Not Specified	**Report Date:**	06/14/21

Footnotes

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

Terms

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

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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). 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.

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

Report Format: Data Usability Report

Project Name:	Not Specified	**Lab Number:**	L2127684
Project Number:	Not Specified	**Report Date:**	06/14/21

Data Qualifiers

the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: Data Usability Report

Project Name:	Not Specified	**Lab Number:**	L2127684
Project Number:	Not Specified	**Report Date:**	06/14/21

REFERENCES

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

107 Alpha Analytical - In-house calculation method.

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

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 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM4500Cl-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, SM9222D.**

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, EPA 537.1.

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

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

CHAIN OF CUSTODY

PAGE ____ OF ____

Date Rec'd In Lab: 5/25/21

ALPHA Job #: L2127684

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

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

Client Information

Client: Town of W. Ibrahim

Address: 240 Spring Field St
W. Ibrahim MA 01095

Phone: 413-596-2800 x208

Email: dyrachma@wilbrahim-ma.gov

Project Information

Project Name:

Project Location:

Project #:

Project Manager:

ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due:

Report Information - Data Deliverables

☐ ADEx ☐ EMAIL

Billing Information

☑ Same as Client info PO #:

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 ____

Additional Project Information:

ANALYSIS

VOC: ☐ 8260 ☐ 624 ☐ 524.2
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint

SAMPLE INFO
Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	Sample Comments
27684-01	#133	5/25	11:30A		TY	
02	#177	5/25	9:00A		TY	
03	#19	5/25	9:20A		TY	
04	#301	5/25	9:35A		TY	
05	#23	5/25	9:56A		TY	
06	#195	5/25	10:05		TY	
07	#105	5/25	10:52		TY	
08	#96	5/25	10:35		TY	
09	#43	5/25	11:16		TY	

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= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Container Type																					
Preservative																					

Relinquished By:	Date/Time	Received By:	Date/Time
Alma Rodriguez	5/25/21	Benjamin Swick AAL	5/25 13:35
Benjamin Swick AAL 5/25 17:50	2:37	Matt Low	5/25/21 1750

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

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

From: "jthebodo" <jthebodo@alphalab.com>
To: "Dena Grochmal" <dgrochmal@wilbraham-ma.gov>
Sent: Monday, May 17, 2021 1:15:24 PM
Subject: Re: Stormwater Sampling

Dena,
Thank you for sending all that information. The account is set up and I am working on getting you a new PM to work with at Alpha as Mike Chang has moved on to another position within the company.

We will reach out to schedule your bottle order and courier service.

Can you please provide the following information:
Which parameters are you testing for? Same as the original request?
This was E.Coli via SM 9213B- $62.00
Surfactants via SM 5540- $67.00
Total Nitrogen package- $74.00
Ammonia Nitrogen- $29.00
Disposal- $3.20
How many samples do you plan to collect?

When do you need the bottleware by? Please provide Name/Address/Phone for the day of dropoff contact for our couriers.

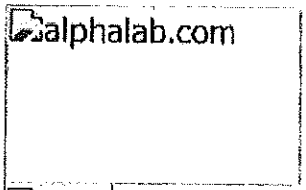
Thank You again for the opportunity.

Sincerely,
Jeremy

Jeremy Thebodo
Technical Sales Associate

Email: jthebodo@alphalab.com
Direct: 774-666-0360 | Main: 508-898-9220

www.alphalab.com | Give Us Feedback



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CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 6/28/21

ALPHA Job #: L2134870

ALPHA
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: Town of Wilbraham
Address: 240 Springfield St
Wilbraham, MA 01095
Phone: 413-596-2800
Email: dgrochmal@wilbraham-ma.gov

Additional Project Information:

e-coli Samples

Project Information

Project Name:
Project Location:
Project #:
Project Manager:
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due:

Report Information - Data Deliverables

☐ ADEx ☑ EMAIL

Billing Information

☑ Same as Client info PO #:

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 _____

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	Sample Comments
34870 01	~~#~~ #301	6/28	916		TY	e-coli
02	# 133	"	934		JL	e-coli
03	# 43	"	926	~~B~~	JL	e-coli
04	# 195	"	933		DG	e-coli
~~05~~ 6/28/21	# 96 No Flow	"				e-coli
05	# 105	"	915	1	DG	e-coli
06	# 23	"	933A		TY	e-coli

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA8 ☐ RCRA6 ☐ PP13; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint

SAMPLE INFO
Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

TOTAL # BOTTLES

Container Type																			
Preservative																			

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= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I = Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6/28/21 11:01	[signature]	6/28/21 1101
[signature] AM	6/28/21 1230	[signature] AM	6/28/21 12:30

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

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

ALPHA ANALYTICAL

ANALYTICAL REPORT

Lab Number:	L2134870
Client:	Town of Wilbraham 240 Springfield St. Wilbraham, MA 01095
ATTN:	Dena Grochmal
Phone:	(413) 596-2800
Project Name:	Not Specified
Project Number:	Not Specified
Report Date:	07/15/21

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: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2134870-01	#301	WATER	Not Specified	06/28/21 09:26	06/28/21
L2134870-02	#133	WATER	Not Specified	06/28/21 09:34	06/28/21
L2134870-03	#43	WATER	Not Specified	06/28/21 09:26	06/28/21
L2134870-04	#195	WATER	Not Specified	06/28/21 09:33	06/28/21
L2134870-05	#105	WATER	Not Specified	06/28/21 09:15	06/28/21
L2134870-06	#23	WATER	Not Specified	06/28/21 09:38	06/28/21

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

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: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

Case Narrative (continued)

Sample Receipt

L2134870-01: The collection date and time on the chain of custody was 28-JUN-21 09:16; however, the collection date/time on the container label was 28-JUN-21 09:26. At the client's request, the collection date/time is reported as 28-JUN-21 09:26.

L2134870-06: The collection date and time on the chain of custody was 28-JUN-21 09:33; however, the collection date/time on the container label was 28-JUN-21 09:38. At the client's request, the collection date/time is reported as 28-JUN-21 09:38.

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 Caitlin Walukevich

Title: Technical Director/Representative Date: 07/15/21

INORGANICS
&
MISCELLANEOUS

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

SAMPLE RESULTS

Lab ID: L2134870-01
Client ID: #301
Sample Location: Not Specified

Date Collected: 06/28/21 09:26
Date Received: 06/28/21
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										
E. Coli (MPN)	12.23		MPN/100ml	1	NA	1	-	06/28/21 15:38	121,9223B	SH

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

SAMPLE RESULTS

Lab ID: L2134870-02
Client ID: #133
Sample Location: Not Specified

Date Collected: 06/28/21 09:34
Date Received: 06/28/21
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										
E. Coli (MPN)	2.02		MPN/100ml	1	NA	1	-	06/28/21 15:38	121,9223B	SH

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

SAMPLE RESULTS

Lab ID: L2134870-03
Client ID: #43
Sample Location: Not Specified

Date Collected: 06/28/21 09:26
Date Received: 06/28/21
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										
E. Coli (MPN)	101.68		MPN/100ml	1	NA	1	-	06/28/21 15:38	121,9223B	SH

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

SAMPLE RESULTS

Lab ID: L2134870-04
Client ID: #195
Sample Location: Not Specified

Date Collected: 06/28/21 09:33
Date Received: 06/28/21
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										
E. Coli (MPN)	5.21		MPN/100ml	1	NA	1	-	06/28/21 15:38	121,9223B	SH

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

SAMPLE RESULTS

Lab ID: L2134870-05
Client ID: #105
Sample Location: Not Specified

Date Collected: 06/28/21 09:15
Date Received: 06/28/21
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										
E. Coli (MPN)	9.69		MPN/100ml	1	NA	1	-	06/28/21 15:38	121,9223B	SH

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

SAMPLE RESULTS

Lab ID: L2134870-06
Client ID: #23
Sample Location: Not Specified

Date Collected: 06/28/21 09:38
Date Received: 06/28/21
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										
E. Coli (MPN)	4.13		MPN/100ml	1	NA	1	-	06/28/21 15:38	121,9223B	SH

Project Name:

Project Number: Not Specified

Lab Number: L2134870

Report Date: 07/15/21

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): 01-06 Batch: WG1517877-1										
E. Coli (MPN)	<1		MPN/100ml	1	NA	1	-	06/28/21 15:38	121,9223B	SH

Project Name: Not Specified
Project Number: Not Specified

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(*)
L2134870-01A	Bacteria Cup Na2S2O3 preserved	A	NA		5.1	Y	Absent		E-COLI-QT(.33)
L2134870-02A	Bacteria Cup Na2S2O3 preserved	A	NA		5.1	Y	Absent		E-COLI-QT(.33)
L2134870-03A	Bacteria Cup Na2S2O3 preserved	A	NA		5.1	Y	Absent		E-COLI-QT(.33)
L2134870-04A	Bacteria Cup Na2S2O3 preserved	A	NA		5.1	Y	Absent		E-COLI-QT(.33)
L2134870-05A	Bacteria Cup Na2S2O3 preserved	A	NA		5.1	Y	Absent		E-COLI-QT(.33)
L2134870-06A	Bacteria Cup Na2S2O3 preserved	A	NA		5.1	Y	Absent		E-COLI-QT(.33)

*Values in parentheses indicate holding time in days

Project Name: Not Specified **Lab Number:** L2134870

Project Number: Not Specified **Report Date:** 07/15/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	Not Specified	**Lab Number:**	L2134870
Project Number:	Not Specified	**Report Date:**	07/15/21

Footnotes

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

Terms

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

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

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.
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

Report Format: Data Usability Report

Project Name:	Not Specified	**Lab Number:**	L2134870
Project Number:	Not Specified	**Report Date:**	07/15/21

Data Qualifiers

the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: Data Usability Report

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2134870
Report Date: 07/15/21

REFERENCES

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

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 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.
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, SM4500Cl-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, SM9222D.

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, Nl, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

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