

C&S Companies
141 Elm Street
Suite 100
Buffalo, NY 14203
p: (716) 847-1630
f: (716) 847-1454
www.cscos.com

September 12, 2017

Claire Quadri Environmental Engineer Niagara Frontier Transportation Authority 181 Ellicott Street Buffalo, NY 14203

Re: NFTA BNIA Runway Rehabilitation Project Manhole Monitoring

Dear Ms. Quadri:

The Niagara Frontier Transportation Authority (NFTA) requested C&S Engineers, Inc. (C&S) to provide construction observation and document activities associated with select manholes within the limits of the former Westinghouse Site, New York State Department of Environmental Conservation (NYSDEC) Site #9-15-066. The two manholes are part of a groundwater system that was previously filled as part of remedial actions at the Site and are within the construction limits of the Buffalo Niagara International Airport (BNIA) Runway 14-32 Rehabilitation Project (see Figure 1).

C&S was on-site on July 12, 2017 to observe the removal of accumulated groundwater in one manhole, MH-001-02. Union Concrete and Construction Corporation (Union Concrete) pumped approximately 75 gallons of groundwater via submersible pump into two 55-gallon drums. The groundwater was screened with a photoionization detector (PID). There were no PID detections and the groundwater was observed to be free of visible impacts.

C&S collected one composite waste characterization sample of the groundwater for subsequent disposal. The sample was analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), Target Analyte List (TAL) metals, polychlorinated biphenyls (PCBs), pH, and Flash Point (see Attachment 1). Environmental Service Group, Inc. (ESG) transported and disposed of the two 55-gallon drums as non-hazardous waste on July 27, 2017 at American Recyclers Company, located at 177 Wales Avenue Tonawanda, NY 14150 (see Attachment 2).

While at the Site, C&S also observed Manhole MH-001-10. The top portion of the manhole had been removed and the manhole had been filled with controlled low strength material (FAA Item P-153).

Niagara Frontier Transportation Authority September 12, 2017 Page 2

Sincerely yours,

**C&S ENGINEERS, INC.** 

Daniel E. Riker, P.G.

Department Manager – Environmental Services

Encl:

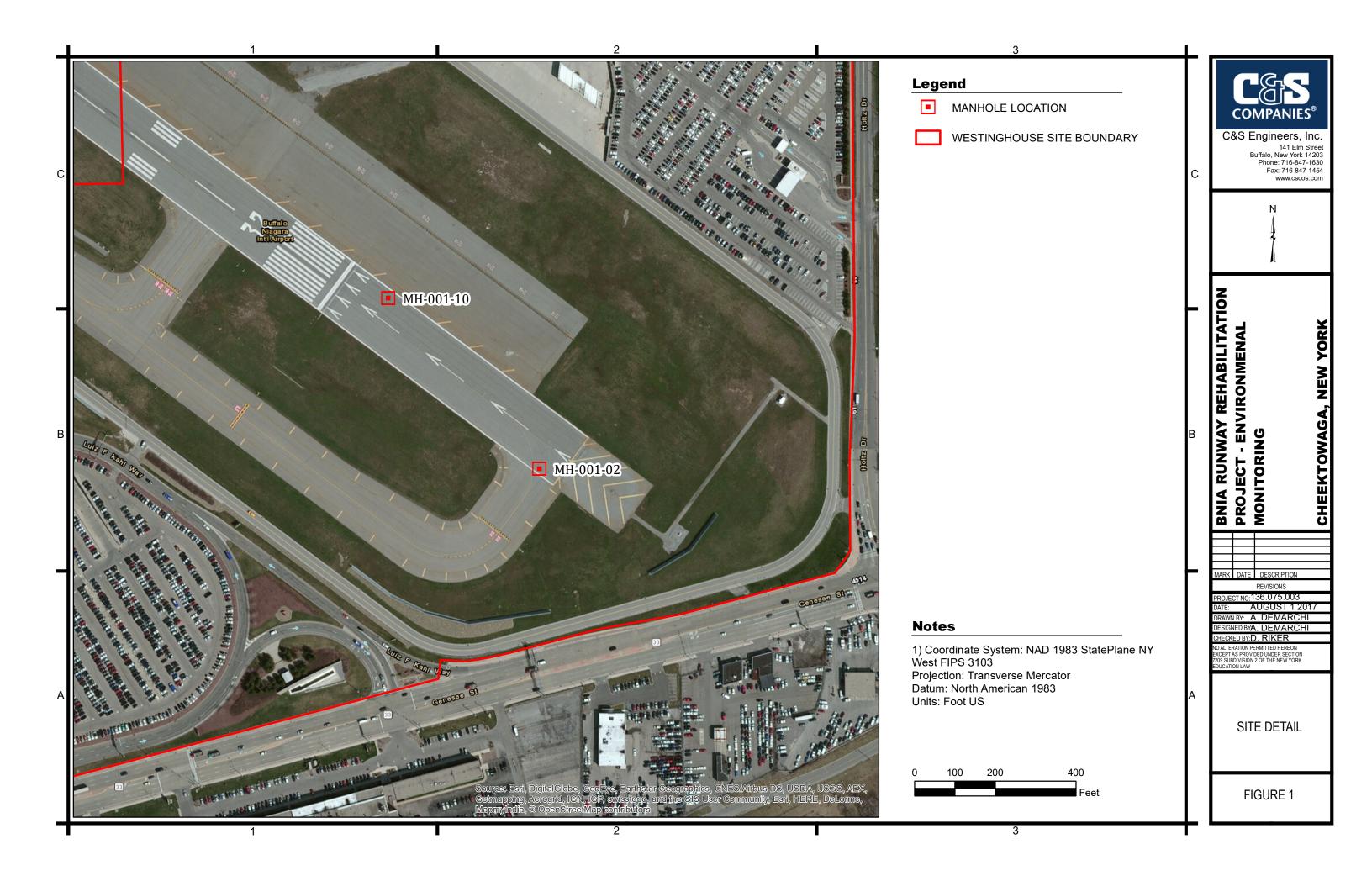
Figure 1 – Site Detail

Attachment 1 – Analytical Reports

Attachment 2 – Waste Manifest

## ATTACHMENT 1 ANALYTICAL REPORT

## ATTACHMENT 2 WASTE MANIFEST



## ATTACHMENT 1 ANALYTICAL REPORT



#### ANALYTICAL REPORT

Lab Number: L1723775

Client: C&S Companies

141 Elm Street, Suite 100

Buffalo, NY 14203

ATTN: Alayna DeMarchi Phone: (716) 955-3022

Project Name: NFTA BNIA RUNWAY

Project Number: 136.075.003 Report Date: 07/19/17

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), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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



Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003

Lab Number:

L1723775

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1723775-01	NFTA-W1	WATER	4200 GENESEE STREET	07/12/17 09:30	07/12/17
L1723775-02	TRIP BLANK	WATER	4200 GENESEE STREET	07/12/17 09:30	07/12/17



L1723775

Lab Number:

Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003 **Report Date:** 07/19/17

#### **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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### 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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.



Project Name: NFTA BNIA RUNWAY Lab Number: L1723775

**Project Number:** 136.075.003 **Report Date:** 07/19/17

#### **Case Narrative (continued)**

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

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.

Amita Naik

Authorized Signature:

Title: Technical Director/Representative Date: 07/19/17

Nails

## **ORGANICS**



### **VOLATILES**



07/12/17 09:30

Not Specified

07/12/17

**Project Name:** NFTA BNIA RUNWAY

**Project Number:** 136.075.003

**SAMPLE RESULTS** 

Lab Number: L1723775

Report Date: 07/19/17

Date Collected:

Date Received:

Field Prep:

Lab ID: L1723775-01

Client ID: NFTA-W1

Sample Location: 4200 GENESEE STREET

Matrix: Water Analytical Method: 1,8260C

Analytical Date: 07/17/17 16:55

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbo	orough Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1



L1723775

07/19/17

**Project Name:** NFTA BNIA RUNWAY

4200 GENESEE STREET

L1723775-01

NFTA-W1

**Project Number:** 136.075.003

Lab ID:

Client ID:

Sample Location:

**SAMPLE RESULTS** 

Lab Number:

Report Date:

Date Collected: 07/12/17 09:30

> Date Received: 07/12/17 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboro	ugh Lab					
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.1	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	103	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	99	70-130	
Dibromofluoromethane	100	70-130	



Project Name: NFTA BNIA RUNWAY

L1723775-02

**Project Number:** 136.075.003

**SAMPLE RESULTS** 

Lab Number: L1723775

**Report Date:** 07/19/17

Date Collected: 07/12/17 09:30

Client ID: TRIP BLANK Date Received: 07/12/17
Sample Location: 4200 GENESEE STREET Field Prep: Not Specified

Matrix: Water Analytical Method: 1,8260C

Analytical Date: 07/17/17 17:28

Analyst: PD

Lab ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboroug	h Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1



L1723775

Project Name: NFTA BNIA RUNWAY Lab Number:

**Project Number:** 136.075.003 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/12/17 09:30

Client ID: TRIP BLANK Date Received: 07/12/17
Sample Location: 4200 GENESEE STREET Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - West	borough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1	
p/m-Xylene	ND		ug/l	2.5	0.70	1	
o-Xylene	ND		ug/l	2.5	0.70	1	
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1	
Styrene	ND		ug/l	2.5	0.70	1	
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1	
Acetone	ND		ug/l	5.0	1.5	1	
Carbon disulfide	ND		ug/l	5.0	1.0	1	
2-Butanone	ND		ug/l	5.0	1.9	1	
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1	
2-Hexanone	ND		ug/l	5.0	1.0	1	
Bromochloromethane	ND		ug/l	2.5	0.70	1	
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1	
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1	
Isopropylbenzene	ND		ug/l	2.5	0.70	1	
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1	
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1	
Methyl Acetate	ND		ug/l	2.0	0.23	1	
Cyclohexane	ND		ug/l	10	0.27	1	
1,4-Dioxane	ND		ug/l	250	61.	1	
Freon-113	ND		ug/l	2.5	0.70	1	
Methyl cyclohexane	ND		ug/l	10	0.40	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	102	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	100	70-130	
Dibromofluoromethane	97	70-130	



Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003

Lab Number: L1723775

**Report Date:** 07/19/17

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/17/17 14:40

Analyst: PD

Methylene chloride         ND         ug/l         2.5         0.70           1,1-Dichloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethane         ND         ug/l         2.5         0.70           Chloroform         ND         ug/l         0.50         0.13           1,2-Dichloropropane         ND         ug/l         1.0         0.14           Dibromochloromethane         ND         ug/l         0.50         0.15           1,1,2-Trichloroethane         ND         ug/l         0.50         0.15           1,1,2-Trichloroethane         ND         ug/l         0.50         0.18           Chlorobenzene         ND         ug/l         0.50         0.18           Chlorofluoroethane         ND         ug/l         2.5         0.70           Trichlorofluoromethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.16           Bromofichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND <th>Parameter</th> <th>Result</th> <th>Qualifier Units</th> <th>RL</th> <th>MDL</th> <th></th>	Parameter	Result	Qualifier Units	RL	MDL	
1,1-Dichloroethane         ND         ug/l         2.5         0.70           Chloroform         ND         ug/l         2.5         0.70           Carbon tetrachloride         ND         ug/l         0.50         0.13           1,2-Dichloropropane         ND         ug/l         1.0         0.14           Dibromochloromethane         ND         ug/l         0.50         0.15           1,1,2-Trichloroethane         ND         ug/l         0.50         0.18           Chlorobenzene         ND         ug/l         0.50         0.18           Chlorobenzene         ND         ug/l         2.5         0.70           Trichlorofluoromethane         ND         ug/l         2.5         0.70           Trichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloropropene         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.16           Bromoform         ND         <	/olatile Organics by GC/MS -	Westborough Lab	for sample(s):	01-02 Batch:	WG1023505-5	
Chloroform         ND         ug/l         2.5         0.70           Carbon tetrachloride         ND         ug/l         0.50         0.13           1,2-Dichloropropane         ND         ug/l         1.0         0.14           Dibromochloromethane         ND         ug/l         0.50         0.15           1,1,2-Trichloroethane         ND         ug/l         0.50         0.18           Chlorobenzene         ND         ug/l         2.5         0.70           Trichlorofluoromethane         ND         ug/l         2.5         0.70           Trichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         0.50         0.17           Benzene         ND	Methylene chloride	ND	ug/l	2.5	0.70	
Carbon tetrachloride         ND         ug/l         0.50         0.13           1,2-Dichloropropane         ND         ug/l         1.0         0.14           Dibromochloromethane         ND         ug/l         0.50         0.15           1,1,2-Trichloroethane         ND         ug/l         0.50         0.18           Chlorobenzene         ND         ug/l         2.5         0.70           Trichlorofluoromethane         ND         ug/l         2.5         0.70           Trichlorofluoromethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.13           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         0.50         0.16           Toluene         ND	1,1-Dichloroethane	ND	ug/l	2.5	0.70	
1,2-Dichloropropane   ND	Chloroform	ND	ug/l	2.5	0.70	
Dibromochloromethane         ND         ug/l         0.50         0.15           1,1,2-Trichloroethane         ND         ug/l         1.5         0.50           Tetrachloroethane         ND         ug/l         0.50         0.18           Chlorobenzene         ND         ug/l         2.5         0.70           Trichlorofluoromethane         ND         ug/l         2.5         0.70           1,2-Dichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l	Carbon tetrachloride	ND	ug/l	0.50	0.13	
1,1,2-Trichloroethane         ND         ug/l         1.5         0.50           Tetrachloroethene         ND         ug/l         0.50         0.18           Chlorobenzene         ND         ug/l         2.5         0.70           Trichlorofluoromethane         ND         ug/l         2.5         0.70           1,2-Dichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         0.50         0.14           Benzene         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0	1,2-Dichloropropane	ND	ug/l	1.0	0.14	
Tetrachloroethene         ND         ug/l         0.50         0.18           Chlorobenzene         ND         ug/l         2.5         0.70           Trichlorofluoromethane         ND         ug/l         2.5         0.70           1,2-Dichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         0.50         0.19           bromodichloromethane         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         2.0         0.65           1,1,2,2-Tetrachloroethane         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5 </td <td>Dibromochloromethane</td> <td>ND</td> <td>ug/l</td> <td>0.50</td> <td>0.15</td> <td></td>	Dibromochloromethane	ND	ug/l	0.50	0.15	
Chlorobenzene         ND         ug/l         2.5         0.70           Trichlorofluoromethane         ND         ug/l         2.5         0.70           1,2-Dichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         2.5         0.70           Bromodichloromethane         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         2.0         0.65           1,1,2,2-Tetrachloroethane         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         2.5         0.70           Chloroethane         ND         ug/l         2.5	1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	
Trichlorofluoromethane         ND         ug/l         2.5         0.70           1,2-Dichloroethane         ND         ug/l         0.50         0.13           1,1,1-Trichloroethane         ND         ug/l         2.5         0.70           Bromodichloromethane         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         2.0         0.65           1,1,2,2-Tetrachloroethane         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         2.5         0.70           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         2.5	Tetrachloroethene	ND	ug/l	0.50	0.18	
1,2-Dichloroethane	Chlorobenzene	ND	ug/l	2.5	0.70	
1,1,1-Trichloroethane         ND         ug/l         2.5         0.70           Bromodichloromethane         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         2.0         0.65           1,1,2,2-Tetrachloroethane         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50	Trichlorofluoromethane	ND	ug/l	2.5	0.70	
Bromodichloromethane         ND         ug/l         0.50         0.19           trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         2.0         0.65           1,1,2,2-Tetrachloroethane         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         2.5         0.70           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         2.5	1,2-Dichloroethane	ND	ug/l	0.50	0.13	
trans-1,3-Dichloropropene         ND         ug/l         0.50         0.16           cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         2.0         0.65           1,1,2,2-Tetrachloroethane         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Bromomethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         1.0         0.07           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         2.5         0.70           trans-1,2-Dichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	
cis-1,3-Dichloropropene         ND         ug/l         0.50         0.14           Bromoform         ND         ug/l         2.0         0.65           1,1,2,2-Tetrachloroethane         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Bromomethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         2.5         0.70           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	Bromodichloromethane	ND	ug/l	0.50	0.19	
Bromoform         ND         ug/l         2.0         0.65           1,1,2,2-Tetrachloroethane         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Bromomethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         1.0         0.07           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	
1,1,2,2-Tetrachloroethane         ND         ug/l         0.50         0.17           Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Bromomethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         1.0         0.07           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	
Benzene         ND         ug/l         0.50         0.16           Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Bromomethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         1.0         0.07           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	Bromoform	ND	ug/l	2.0	0.65	
Toluene         ND         ug/l         2.5         0.70           Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Bromomethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         1.0         0.07           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	
Ethylbenzene         ND         ug/l         2.5         0.70           Chloromethane         ND         ug/l         2.5         0.70           Bromomethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         1.0         0.07           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	Benzene	ND	ug/l	0.50	0.16	
Chloromethane         ND         ug/l         2.5         0.70           Bromomethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         1.0         0.07           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	Toluene	ND	ug/l	2.5	0.70	
Bromomethane         ND         ug/l         2.5         0.70           Vinyl chloride         ND         ug/l         1.0         0.07           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	Ethylbenzene	ND	ug/l	2.5	0.70	
Vinyl chloride         ND         ug/l         1.0         0.07           Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	Chloromethane	ND	ug/l	2.5	0.70	
Chloroethane         ND         ug/l         2.5         0.70           1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	Bromomethane	ND	ug/l	2.5	0.70	
1,1-Dichloroethene         ND         ug/l         0.50         0.17           trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	Vinyl chloride	ND	ug/l	1.0	0.07	
trans-1,2-Dichloroethene         ND         ug/l         2.5         0.70           Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	Chloroethane	ND	ug/l	2.5	0.70	
Trichloroethene         ND         ug/l         0.50         0.18           1,2-Dichlorobenzene         ND         ug/l         2.5         0.70	1,1-Dichloroethene	ND	ug/l	0.50	0.17	
1,2-Dichlorobenzene ND ug/l 2.5 0.70	trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
	Trichloroethene	ND	ug/l	0.50	0.18	
1,3-Dichlorobenzene ND ug/l 2.5 0.70	1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	
	1,3-Dichlorobenzene	ND	ug/l	2.5	0.70	



Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003

**Lab Number:** L1723775

**Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/17/17 14:40

Analyst: PD

Parameter	Result	Qualifier	Units		RL	MDL
olatile Organics by GC/MS - W	estborough Lab	for sample	e(s):	01-02	Batch:	WG1023505-5
1,4-Dichlorobenzene	ND		ug/l		2.5	0.70
Methyl tert butyl ether	ND		ug/l		2.5	0.70
p/m-Xylene	ND		ug/l		2.5	0.70
o-Xylene	ND		ug/l		2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l		2.5	0.70
Styrene	ND		ug/l		2.5	0.70
Dichlorodifluoromethane	ND		ug/l		5.0	1.0
Acetone	ND		ug/l		5.0	1.5
Carbon disulfide	ND		ug/l		5.0	1.0
2-Butanone	ND		ug/l		5.0	1.9
4-Methyl-2-pentanone	ND		ug/l		5.0	1.0
2-Hexanone	ND		ug/l		5.0	1.0
Bromochloromethane	ND		ug/l		2.5	0.70
1,2-Dibromoethane	ND		ug/l		2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l		2.5	0.70
Isopropylbenzene	ND		ug/l		2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l		2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l		2.5	0.70
Methyl Acetate	ND		ug/l		2.0	0.23
Cyclohexane	ND		ug/l		10	0.27
1,4-Dioxane	ND		ug/l		250	61.
Freon-113	ND		ug/l		2.5	0.70
Methyl cyclohexane	ND		ug/l		10	0.40



L1723775

Lab Number:

Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/17/17 14:40

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - West	borough La	b for sampl	e(s): 01-02	Batch:	WG1023505-5

		Acceptance	
Surrogate	%Recovery	Qualifier Criteria	
1.2-Dichloroethane-d4	101	70-130	
,			
Toluene-d8	99	70-130	
4-Bromofluorobenzene	100	70-130	
Dibromofluoromethane	99	70-130	



**Project Name:** NFTA BNIA RUNWAY

**Project Number:** 136.075.003

Lab Number: L1723775

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westl	borough Lab Associated	sample(s):	01-02 Batch: '	WG1023505-3	WG1023505-4			
Methylene chloride	98		94		70-130	4		20
1,1-Dichloroethane	94		91		70-130	3		20
Chloroform	97		94		70-130	3		20
Carbon tetrachloride	94		92		63-132	2		20
1,2-Dichloropropane	96		95		70-130	1		20
Dibromochloromethane	93		90		63-130	3		20
1,1,2-Trichloroethane	97		94		70-130	3		20
Tetrachloroethene	97		94		70-130	3		20
Chlorobenzene	95		93		75-130	2		20
Trichlorofluoromethane	90		87		62-150	3		20
1,2-Dichloroethane	93		90		70-130	3		20
1,1,1-Trichloroethane	96		92		67-130	4		20
Bromodichloromethane	100		97		67-130	3		20
trans-1,3-Dichloropropene	91		88		70-130	3		20
cis-1,3-Dichloropropene	93		90		70-130	3		20
Bromoform	95		93		54-136	2		20
1,1,2,2-Tetrachloroethane	98		97		67-130	1		20
Benzene	96		93		70-130	3		20
Toluene	95		93		70-130	2		20
Ethylbenzene	99		96		70-130	3		20
Chloromethane	68		62	Q	64-130	9		20
Bromomethane	96		87		39-139	10		20
Vinyl chloride	86		82		55-140	5		20



**Project Name:** NFTA BNIA RUNWAY

**Project Number:** 136.075.003

Lab Number: L1723775

arameter	%Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limit	
platile Organics by GC/MS - Westborough	Lab Associated	sample(s):	01-02 Batch:	WG1023505-3	WG1023505-4			
Chloroethane	95		88		55-138	8	20	
1,1-Dichloroethene	94		91		61-145	3	20	
trans-1,2-Dichloroethene	95		91		70-130	4	20	
Trichloroethene	94		89		70-130	5	20	
1,2-Dichlorobenzene	97		94		70-130	3	20	
1,3-Dichlorobenzene	96		93		70-130	3	20	
1,4-Dichlorobenzene	96		92		70-130	4	20	
Methyl tert butyl ether	110		110		63-130	0	20	
p/m-Xylene	100		95		70-130	5	20	
o-Xylene	100		95		70-130	5	20	
cis-1,2-Dichloroethene	97		93		70-130	4	20	
Styrene	100		100		70-130	0	20	
Dichlorodifluoromethane	74		70		36-147	6	20	
Acetone	99		100		58-148	1	20	
Carbon disulfide	74		69		51-130	7	20	
2-Butanone	100		99		63-138	1	20	
4-Methyl-2-pentanone	95		94		59-130	1	20	
2-Hexanone	96		95		57-130	1	20	
Bromochloromethane	97		94		70-130	3	20	
1,2-Dibromoethane	100		100		70-130	0	20	
1,2-Dibromo-3-chloropropane	96		88		41-144	9	20	
Isopropylbenzene	98		98		70-130	0	20	
1,2,3-Trichlorobenzene	120		110		70-130	9	20	



Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003

Lab Number: L1723775

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough La	•		01-02 Batch:		- 111 -		
1,2,4-Trichlorobenzene	100		95	70-130	5		20
Methyl Acetate	93		92	70-130	1		20
Cyclohexane	89		85	70-130	5		20
1,4-Dioxane	112		110	56-162	2		20
Freon-113	93		89	70-130	4		20
Methyl cyclohexane	93		89	70-130	4		20

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97	96	70-130
Toluene-d8	99	100	70-130
4-Bromofluorobenzene	98	99	70-130
Dibromofluoromethane	103	101	70-130

### **PCBS**



Project Name: NFTA BNIA RUNWAY Lab Number: L1723775

**Project Number:** 136.075.003 **Report Date:** 07/19/17

**SAMPLE RESULTS** 

Lab ID: Date Collected: 07/12/17 09:30

Client ID: NFTA-W1 Date Received: 07/12/17

Sample Location: 4200 GENESEE STREET Field Prep: Not Specified Extraction Method:EPA 3510C

Matrix: Water Extraction Date: 07/15/17 12:27
Analytical Method: 1,8082A Cleanup Method: EPA 3665A
Analytical Date: 07/19/17 11:43 Cleanup Date: 07/15/17

Analytical Date: 07/19/17 11:43 Cleanup Date: 07/15/17
Analyst: JW Cleanup Method: EPA 3660B

Cleanup Date: 07/15/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by Go	C - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.020	1	Α
Aroclor 1221	ND		ug/l	0.083	0.032	1	Α
Aroclor 1232	ND		ug/l	0.083	0.027	1	Α
Aroclor 1242	ND		ug/l	0.083	0.030	1	Α
Aroclor 1248	ND		ug/l	0.083	0.023	1	Α
Aroclor 1254	ND		ug/l	0.083	0.035	1	Α
Aroclor 1260	ND		ug/l	0.083	0.020	1	Α
Aroclor 1262	ND		ug/l	0.083	0.017	1	Α
Aroclor 1268	ND		ug/l	0.083	0.027	1	Α
PCBs, Total	ND		ua/l	0.083	0.017	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	37		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	67		30-150	В
Decachlorobiphenyl	37		30-150	В



L1723775

Lab Number:

Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003 **Report Date:** 07/19/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 07/19/17 12:38

Analyst: JW

Extraction Method: EPA 3510C
Extraction Date: 07/15/17 12:27
Cleanup Method: EPA 3665A
Cleanup Date: 07/15/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/15/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC -	Westboroug	h Lab for s	sample(s):	01 Bato	h: WG1022915	5-1
Aroclor 1016	ND		ug/l	0.083	0.020	А
Aroclor 1221	ND		ug/l	0.083	0.032	Α
Aroclor 1232	ND		ug/l	0.083	0.027	Α
Aroclor 1242	ND		ug/l	0.083	0.030	А
Aroclor 1248	ND		ug/l	0.083	0.023	А
Aroclor 1254	ND		ug/l	0.083	0.035	А
Aroclor 1260	ND		ug/l	0.083	0.020	А
Aroclor 1262	ND		ug/l	0.083	0.017	А
Aroclor 1268	ND		ug/l	0.083	0.027	А
PCBs, Total	ND		ug/l	0.083	0.017	Α

		Acceptance	e
Surrogate	%Recovery Qualifie	r Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58	30-150	Α
Decachlorobiphenyl	66	30-150	Α
2,4,5,6-Tetrachloro-m-xylene	62	30-150	В
Decachlorobiphenyl	62	30-150	В



**Project Name:** NFTA BNIA RUNWAY

136.075.003

**Project Number:** 

Lab Number:

L1723775

		LCS		LCSD %Recovery					RPD		
<u>Parame</u>	ter	%Recovery	Qual	%Re	covery	Qual	Limits	RPD	Qual	Limits	Column
Polychlo	rinated Biphenyls by GC - Westborou	igh Lab Associ	iated sample(s):	01	Batch:	WG1022915-2	WG1022915-3	}			
Arock	or 1016	65			64		40-140	1		50	Α
Arock	or 1260	71			70		40-140	1		50	А

Surrogate	LCS %Recovery Qu	LCSD al %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	58	56	30-150 A
Decachlorobiphenyl	60	65	30-150 A
2,4,5,6-Tetrachloro-m-xylene	62	59	30-150 B
Decachlorobiphenyl	57	62	30-150 B



### **METALS**



07/12/17 09:30

**Project Name:** NFTA BNIA RUNWAY **Lab Number:** L1723775

**Project Number:** 136.075.003 **Report Date:** 07/19/17

**SAMPLE RESULTS** 

Lab ID: L1723775-01 Date Collected: Client ID: NFTA-W1 Date Received:

Client ID: NFTA-W1 Date Received: 07/12/17
Sample Location: 4200 GENESEE STREET Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mans	sfield Lab										
Aluminum, Total	2.13		mg/l	0.100	0.032	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Antimony, Total	ND		mg/l	0.050	0.007	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Arsenic, Total	0.004	J	mg/l	0.005	0.002	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Barium, Total	0.041		mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Beryllium, Total	ND		mg/l	0.005	0.001	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Cadmium, Total	ND		mg/l	0.005	0.001	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Calcium, Total	56.3		mg/l	0.100	0.035	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Chromium, Total	0.009	J	mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Cobalt, Total	0.004	J	mg/l	0.020	0.002	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Copper, Total	0.031		mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Iron, Total	9.31		mg/l	0.050	0.009	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Lead, Total	0.005	J	mg/l	0.010	0.003	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Magnesium, Total	4.03		mg/l	0.100	0.015	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Manganese, Total	0.165		mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Mercury, Total	ND		mg/l	0.00020	0.00006	1	07/13/17 15:14	07/13/17 20:16	EPA 7470A	1,7470A	EA
Nickel, Total	0.009	J	mg/l	0.025	0.002	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Potassium, Total	21.0		mg/l	2.50	0.237	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Selenium, Total	ND		mg/l	0.010	0.004	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Silver, Total	ND		mg/l	0.007	0.003	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Sodium, Total	5.02		mg/l	2.00	0.120	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Thallium, Total	ND		mg/l	0.020	0.003	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Vanadium, Total	0.009	J	mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB
Zinc, Total	0.342		mg/l	0.050	0.002	1	07/14/17 15:50	07/17/17 17:22	EPA 3005A	1,6010C	AB



Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003

Lab Number:

L1723775

**Report Date:** 07/19/17

# Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	
Total Metals - Mansfie	eld Lab for sample(s):	01 Batc	h: WG10	22309-	1				
Mercury, Total	ND	mg/l	0.00020	0.00006	5 1	07/13/17 15:14	07/13/17 20:09	1,7470A	EA

#### **Prep Information**

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansfield	Lab for sample(s):	01 Batch	n: WG10	022655-	1				
Aluminum, Total	ND	mg/l	0.100	0.032	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Antimony, Total	ND	mg/l	0.050	0.007	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Arsenic, Total	ND	mg/l	0.005	0.002	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Barium, Total	ND	mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Beryllium, Total	ND	mg/l	0.005	0.001	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Cadmium, Total	ND	mg/l	0.005	0.001	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Calcium, Total	ND	mg/l	0.100	0.035	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Chromium, Total	ND	mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Cobalt, Total	ND	mg/l	0.020	0.002	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Copper, Total	ND	mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Iron, Total	ND	mg/l	0.050	0.009	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Lead, Total	ND	mg/l	0.010	0.003	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Magnesium, Total	ND	mg/l	0.100	0.015	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Manganese, Total	ND	mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Nickel, Total	ND	mg/l	0.025	0.002	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Potassium, Total	ND	mg/l	2.50	0.237	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Selenium, Total	ND	mg/l	0.010	0.004	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Silver, Total	ND	mg/l	0.007	0.003	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Sodium, Total	ND	mg/l	2.00	0.120	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Thallium, Total	ND	mg/l	0.020	0.003	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Vanadium, Total	ND	mg/l	0.010	0.002	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS
Zinc, Total	ND	mg/l	0.050	0.002	1	07/14/17 15:50	07/17/17 16:51	1,6010C	PS



**Project Name:** NFTA BNIA RUNWAY **Lab Number:** L1723775

**Project Number:** 136.075.003 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

**Prep Information** 

Digestion Method: EPA 3005A



Project Name: NFTA BNIA RUNWAY

Lab Number:

L1723775

**Project Number:** 136.075.003

Report Date:

07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample	e(s): 01 Batch: \	WG102230	09-2					
Mercury, Total	118		-		80-120	-		



**Project Name:** NFTA BNIA RUNWAY

**Project Number:** 136.075.003

Lab Number: L1723775

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated samp	le(s): 01 Batch: WG1	022655-2			
Aluminum, Total	108	-	80-120		
Antimony, Total	88	-	80-120	-	
Arsenic, Total	107	-	80-120	-	
Barium, Total	99	-	80-120	-	
Beryllium, Total	103	-	80-120	-	
Cadmium, Total	101	-	80-120	-	
Calcium, Total	98	-	80-120	-	
Chromium, Total	96	-	80-120	-	
Cobalt, Total	93	-	80-120	-	
Copper, Total	94	-	80-120	-	
Iron, Total	104	-	80-120	-	
Lead, Total	101	-	80-120	-	
Magnesium, Total	106	-	80-120	-	
Manganese, Total	100	-	80-120	-	
Nickel, Total	97	-	80-120	-	
Potassium, Total	102	-	80-120	-	
Selenium, Total	102	-	80-120	-	
Silver, Total	96	-	80-120	-	
Sodium, Total	100	-	80-120	-	
Thallium, Total	100	-	80-120	-	
Vanadium, Total	100	-	80-120	-	

Project Name: NFTA BNIA RUNWAY

Lab Number:

L1723775

**Project Number:** 136.075.003

Report Date:

07/19/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated samp	ole(s): 01 Batch: WG1	022655-2			
Zinc, Total	100	-	80-120		



### Matrix Spike Analysis Batch Quality Control

Project Name: NFTA BNIA RUNWAY

**Project Number:** 

136.075.003

Lab Number:

L1723775

Report Date:

07/19/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab	Associated san	nple(s): 01	QC Batch	ID: WG102230	9-3 C	QC Sample	e: L1723775-01	Clien	t ID: NFTA	-W1		
Mercury, Total	ND	0.005	0.00496	99		-	-		75-125	-		20



### Matrix Spike Analysis Batch Quality Control

Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003

**Lab Number:** L1723775

arameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield La	b Associated sar	nple(s): 01	QC Batch	ID: WG1022655-3	QC Samp	ole: L1723632-24	Client ID: MS Sa	ımple	
Aluminum, Total	0.068J	2	2.32	116	-	-	75-125	-	20
Antimony, Total	0.017J	0.5	0.588	118	-	-	75-125	-	20
Arsenic, Total	0.005	0.12	0.147	118	-	-	75-125	-	20
Barium, Total	0.015	2	2.05	102	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.051	102	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.049	97	-	-	75-125	-	20
Calcium, Total	139.	10	146	70	Q -	-	75-125	-	20
Chromium, Total	ND	0.2	0.193	96	-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.439	88	-	-	75-125	-	20
Copper, Total	0.003J	0.25	0.262	105	-	-	75-125	-	20
Iron, Total	0.552	1	1.57	102	-	-	75-125	-	20
Lead, Total	ND	0.51	0.467	92	-	-	75-125	-	20
Magnesium, Total	359.	10	360	10	Q -	-	75-125	-	20
Manganese, Total	0.361	0.5	0.832	94	-	-	75-125	-	20
Nickel, Total	ND	0.5	0.448	90	-	-	75-125	-	20
Potassium, Total	132.	10	142	100	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.136	113	-	-	75-125	-	20
Silver, Total	ND	0.05	0.059	119	-	-	75-125	-	20
Sodium, Total	1420	10	1410	0	Q -	-	75-125	-	20
Thallium, Total	ND	0.12	0.099	82	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.527	105	-	-	75-125	-	20

### Matrix Spike Analysis Batch Quality Control

Project Name: NFTA BNIA RUNWAY

**Project Number:** 

136.075.003

Lab Number:

L1723775

Report Date:

07/19/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield La	b Associated sam	nple(s): 01	QC Batch	ID: WG1022655-3	QC Sample	: L1723632-24	Client ID: MS Sa	ample	
Zinc, Total	ND	0.5	0.489	98	-	-	75-125	-	20



Lab Duplicate Analysis
Batch Quality Control

Lab Number:

L1723775

Report Date:

07/19/17

Parameter	Native Sample	Duplicate Sample	Units	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01	QC Batch ID: WG1022309	9-4 QC Sample: L	L1723775-01	Client ID: NFTA-W1	
Mercury, Total	ND	0.00010J	mg/l	NC	20



**Project Name:** 

Project Number:

NFTA BNIA RUNWAY

136.075.003

# INORGANICS & MISCELLANEOUS



Serial\_No:07191718:27

Project Name: NFTA BNIA RUNWAY

**Project Number:** 136.075.003

Lab Number:

L1723775

Report Date:

07/19/17

# **SAMPLE RESULTS**

Lab ID: L1723775-01

Client ID: NFTA-W1

Sample Location: 4200 GENESEE STREET

Matrix: Water

Date Collected:

07/12/17 09:30

Date Received:

07/12/17

Field Prep:

Not Specified

Parameter	Result C	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst			
General Chemistry - Westborough Lab												
pH (H)	7.8	SU	-	NA	1	-	07/13/17 06:30	121,4500H+-B	JT			
Flash Point	>150	deg F	70	NA	1	-	07/13/17 13:55	1,1010A	BR			



# Lab Control Sample Analysis Batch Quality Control

Project Name: NFTA BNIA RUNWAY

**Project Number:** 

136.075.003

Lab Number:

L1723775

07/19/17

Report Date:

Parameter	LCS %Recovery Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Ass	sociated sample(s): 01 B	atch: WG1022088-1				
рН	100	-	99-101	-		5
General Chemistry - Westborough Lab Ass	sociated sample(s): 01 B	atch: WG1022321-1				
Flash Point	100	-	96-104	-		



L1723775

Lab Number:

Lab Duplicate Analysis
Batch Quality Control

Project Name: NFTA BNIA RUNWAY Batch Quality Control

**Project Number:** 136.075.003 **Report Date:** 07/19/17

Parameter	Native Sample	Duplicate Sam	ple Units	RPD	Qual RPD Limits
General Chemistry - Westborough Lab Associated sal	mple(s): 01 QC Batch ID:	WG1022088-2	QC Sample: L172	3775-01	Client ID: NFTA-W1
pH (H)	7.8	7.9	SU	1	5



Serial\_No:07191718:27

NFTA BNIA RUNWAY

Lab Number: L1723775

**Project Number:** 136.075.003 **Report Date:** 07/19/17

# Sample Receipt and Container Information

Were project specific reporting limits specified?

**Cooler Information** 

Project Name:

Cooler Custody Seal

A Absent

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рH	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1723775-01A	Vial HCl preserved	Α	NA		4.1	Υ	Absent		NYTCL-8260-R2(14)
L1723775-01B	Vial HCl preserved	Α	NA		4.1	Υ	Absent		NYTCL-8260-R2(14)
L1723775-01C	Vial HCl preserved	Α	NA		4.1	Υ	Absent		NYTCL-8260-R2(14)
L1723775-01D	Plastic 250ml HNO3 preserved	Α	<2	<2	4.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL- TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA- TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1723775-01E	Amber 500ml unpreserved	Α	7	7	4.1	Υ	Absent		FLASH()
L1723775-01F	Plastic 60ml unpreserved	Α	7	7	4.1	Υ	Absent		PH-4500(.01)
L1723775-01G	Amber 1000ml unpreserved	Α	7	7	4.1	Υ	Absent		NYTCL-8082-1200ML(7)
L1723775-01H	Amber 1000ml unpreserved	Α	7	7	4.1	Υ	Absent		NYTCL-8082-1200ML(7)
L1723775-02A	Vial HCl preserved	Α	NA		4.1	Υ	Absent		NYTCL-8260-R2(14)
L1723775-02B	Vial HCl preserved	Α	NA		4.1	Υ	Absent		NYTCL-8260-R2(14)



Project Name: NFTA BNIA RUNWAY Lab Number: L1723775

Project Number: 136.075.003 Report Date: 07/19/17

## **GLOSSARY**

### **Acronyms**

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).

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.

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.

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

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.

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**

- 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.

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.

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 Condensation Product".

- 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

Report Format: DU Report with 'J' Qualifiers



В

Project Name: NFTA BNIA RUNWAY Lab Number: L1723775

Project Number: 136.075.003 Report Date: 07/19/17

#### Data Qualifiers

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).

- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- 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 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.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Serial\_No:07191718:27

Project Name: NFTA BNIA RUNWAY Lab Number: L1723775

Project Number: 136.075.003 Report Date: 07/19/17

# REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Serial\_No:07191718:27

ID No.:17873 Revision 10

Published Date: 1/16/2017 11:00:05 AM

Page 1 of 1

# Certification Information

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

#### Westborough Facility

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

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

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

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

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

SM5310C: DW: Dissolved Organic Carbon

# Mansfield Facility

**SM 2540D: TSS** EPA 3005A NPW

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: 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

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, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, SM4500NO3-F, EPA 353.2: Nitrate-N, EPA 351.1, 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 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E.

# **Mansfield Facility:**

# **Drinking Water**

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. EPA 245.1 Hg.

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, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

Document Type: Form

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# ATTACHMENT 2 WASTE MANIFEST





Environmental Service Group, Inc (NY)

Project:

177 Wales Avenue

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١	Phone: 716.695.6720
	Fax: 716.695.0161

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	Cheektowaga, NY 1422	25					
Phone:	716-630-6141						
Fax:			Job Notes A	nd Notes To	Driver:		
Gen Contact:	Claire Quadri		1				
Gen EPAID:	NYD982538969		1				
Billing Contact:	Mike Hernandez A/P						
Billing Phone:	716-855-7308	Project:					

Quantity:		Common Name Description:	Approval Number:	Facility:	Manifest Documen Number
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& Care Date: 817-17

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