



**Environmental Quality Office
Sustainability, Environment & Safety
Engineering**

**Ford Motor Company
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April 29, 2020

Mr. Steve Walsh
New York State Department of Environmental Conservation
Section B, Remedial Bureau B
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7016

**RE: Former Ford Green Island Plant
Albany County, New York
NYSDEC Site No. 401007**

Dear Mr. Walsh:

Please find attached Arcadis' "Remedial Status Report – First Quarter 2020" pertaining to the subject facility, dated April 2020.

This report was prepared in accordance with the Remediation Work Plan appended to the Consent Order between Ford Motor Company and the NYSDEC dated July 16, 1999 and the Schedule of Compliance within the Modification of Order on Consent, dated September 20, 2005. The report summarizes OM&M activities, Vacuum Enhanced Recovery (VER) system performance, and proposed O&M activities for the following quarter.

If you have any questions regarding this report, please feel free to contact me at 313.282.6003 or abremmer@ford.com.

Sincerely,

A handwritten signature in black ink that reads "Anastasia Bremmer".

Anastasia Bremmer
Senior Environmental Engineer

Att Remedial Status Report

cc: Ms. Stephanie Selmer – NYSDOH
Mr. Joseph Legnard, Esq. - Village of Green Island
Mr. James Besha – Albany Engineering



**REMEDIAL STATUS REPORT - FIRST QUARTER
2020, FORMER FORD GREEN ISLAND PLANT
GREEN ISLAND, NEW YORK
NYSDEC SITE NO. 401007**

Apri 2020



REMEDIAL STATUS REPORT – FIRST QUARTER 2020

Former Ford Green Island Plant

Green Island, New York

NYSDEC Site No. 401007

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CONTENTS

Acronyms and Abbreviations.....	v
1 Introduction.....	1
2 Remedial System Operation and Maintenance	1
2.1 Summary of Remedial System Components	1
2.2 System Operation Summary	2
2.3 Non-Routine System O&M and Process Modifications	2
2.4 System Performance	2
2.4.1 Oil and Groundwater Recovery.....	2
2.4.2 Oil Thickness Measurements.....	3
2.4.3 Performance Monitoring Wells	3
2.5 Oil Recoverability.....	4
3 Monthly Treatment System Sampling Results	4
3.1 Influent and Mid-Filtration Samples Results	4
3.2 Effluent Sample Results	5
4 Groundwater Monitoring Results	5
4.1 Groundwater Elevation	5
4.2 Quarterly Groundwater Sampling Results.....	5
5 Scheduled Activities for the Next Quarter	6
5.1 Routine Activities	6

TABLES

- Table 1. Performance Monitoring Well Oil Thickness Measurements
- Table 2. Monitoring Well Groundwater Elevations
- Table 3. Groundwater Polychlorinated Biphenyl Analytical Results

FIGURES

- Figure 1. Site Location Map
- Figure 2. Remedial System Layout
- Figure 3. Groundwater Elevation Contour Map March 2020
- Figure 4. Groundwater PCB Analytical Results March 2020

APPENDICES

- A. Remedial System Monthly Sampling Logs
- B. Remedial System Laboratory Analytical Results
- C. Groundwater Laboratory Analytical Results

ACRONYMS AND ABBREVIATIONS

CO ₂	carbon dioxide
gpm	gallons per minute
lb	pound
LNAPL	light aqueous phase liquid
LRP	liquid ring pump
MTZ	mass transfer zone
MW	monitoring well
NSZD	natural source zone depletion
NYSDEC	New York State Department of Environmental Conservation
O&M	operation and maintenance
OWS	oil water separator
PCBs	polychlorinated biphenyls
PVC	polyvinyl chloride
RW	recovery well
SVOC	semi-volatile organic compound
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VER	vacuum enhanced recovery
VOC	volatile organic compound

1 INTRODUCTION

Arcadis is submitting this quarterly remedial status report, as required by Section I, “Schedule of Compliance” of the New York State Department of Environmental Conservation (NYSDEC) Modification of Order on Consent # R4-2123-98-12 (NYSDEC Site No. 401007) for the Remedial Program at the Former Ford Green Island Site located at 75 Tibbits Avenue, Green Island, New York (Figure 1). This quarterly status report covers the period from January 1 through March 31, 2020 and also includes the scheduled activities for the second quarter of 2020.

2 REMEDIAL SYSTEM OPERATION AND MAINTENANCE

The following sections summarize the major remedial system components and general process flow, overall system operation and performance.

2.1 Summary of Remedial System Components

The vacuum enhanced recovery (VER) technology utilized onsite includes a dual-pumping system (e.g., vacuum pump and submersible total fluids pumps). A liquid ring pump (LRP) is used to create an induced vacuum (i.e. pressure gradient towards well) and a second pump (e.g., total fluids) is utilized to further increase the hydraulic gradient towards the recovery well below the oil/water interface to establish a cone of depression (i.e., hydraulic gradient towards well) and capture the liquid phase component. In addition, oil can be manually removed from wells using a vacuum stinger.

There is a total of fourteen recovery wells. Of these, ten wells (RW-3, RW-6, RW-7, RW-8, RW-12, RW-15, RW-17, RW-19, RW-20 and RW-22) have dedicated pneumatic pumps and are linked to the LRP vacuum system. Four wells (RW-1, RW-2, RW-16, and RW-18) are linked to only the LRP vacuum system.

Recovered total fluids (oil and groundwater) are pumped directly to an oil water separator [OWS] for flow equalization, removal of non-emulsified oil, and removal of suspended solids. Recovered oil is decanted from the OWS, via gravity with an adjustable skimmer into the OWS integral oil storage chamber.

Groundwater and any residual emulsified (i.e., mechanically entrained) oil and sheen gravity flow into the OWS effluent chamber where it is pumped via batch discharge, using a centrifugal pump, through the treatment system.

The treatment system consists of the following process equipment, operated in series following the OWS; a single 75- micron particulate filtration vessel to remove organic and inorganic suspended solids, two 2,000 pound (lb) organoclay vessels to remove emulsified oil and sheens, two 1,000 lb granular activated carbon vessels to remove dissolved phase organics, and a single 0.5 micron particulate filter to remove fine suspended solids (e.g., inorganic material including silt or minerals, carbon fines, etc.) present post-carbon treatment in the effluent stream in order to remove any residual polychlorinated biphenyls (PCBs) from the groundwater stream prior to discharging to the Hudson River.

Extracted vapor from the vacuum recovery portion of the system is discharged above the building roofline directly to the atmosphere.

System operations consist of the cycled operation of fourteen recovery wells, in which operation of each recovery well ranged from several hours to several days per week. This cycled operation is intended to maximize oil recovery, while limiting the amount of groundwater recovered and treated by the system. The remedial system layout is provided in Figure 2.

2.2 System Operation Summary

The VER system was operated via pulsing/cycling each recovery well during the entire reporting period. The objective of pulsing operation is to sustain or increase oil recovery in the subsurface and decreasing the volume of groundwater recovered. However, it should be noted that during the reporting period, the VER system was operated 7 days per week, as needed, to prevent possible freezing of the recovery well above grade pipelines.

During each routine weekly O&M site visit system parameters were recorded, specifically the total volumes of oil and groundwater recovered. The VER system operation and treatment parameters were recorded on standardized O&M log forms. Any non-routine maintenance and/or process modifications implemented during the this quarter are discussed in more detail in Section 2.3.

A summary of the recovery well operations during the reporting period is provided below:

- Recovery wells RW-8, RW-15, RW-17 and RW-19 were pulsed/cycled (i.e., 6-24 hours per day, 5 to 7 days per week) during the reporting period. These wells are typically operated in a semi-continuous manner based on the field observations and measurements that indicated that these locations continue to have the highest oil yields, as compared to the other recovery well locations.
- Recovery wells RW-1, RW-2, RW-7, RW-16, RW-18, RW-20 and RW-22 were typically operated in a cyclic manner for several hours per day while the VER system was online. This cycled operation is intended to maximize the overall oil recovery, while limiting the amount of groundwater recovered by the VER system. The recovery wells were brought on or off-line by manually opening and/or closing control valves located on VER system manifold.
- The remaining recovery wells RW-3, RW-5, RW-6, and RW-12 are cycled on and off, as needed, if recoverable oil is present.

2.3 Non-Routine System O&M and Process Modifications

The system was temporarily taken offline for various operation and maintenance (O&M) activities (carbon vessel maintenance and organoclay vessel piping repairs). Waste (e.g., recovered oil, clay and carbon filter media, PPE, etc.) was transported offsite for disposal via incineration at Veolia's Port Author, Texas facility.

2.4 System Performance

2.4.1 Oil and Groundwater Recovery

As part of VER system monitoring activities, the volume of total fluids (oil and groundwater) collected at the site is measured and recorded. Based on the flow meter totalizer and oil storage tank gauge readings the total fluid volumes recovered during the quarter were as follows:

- Approximately 532,420 gallons of groundwater were recovered, treated, and discharged to the Hudson River during the first quarter of 2020. The average groundwater recovery rate this quarter was approximately 4.0 gallons per minute (gpm). As of March 31, 2020, the VER system has collected and treated a cumulative total of 14,301,894 gallons of groundwater.
- Approximately 18 gallons of oil was recovered during the first quarter of 2020. The cumulative total volume of oil recovered to date, as of March 31, 2020, is approximately 32,008 gallons.

The recovered oil is stored onsite in the OWS integral oil storage tank. When this tank reaches its working capacity of 70 percent full, the oil is then transferred onsite to a secure 1,000-gallon double walled steel aboveground bulk storage tank. Additionally, and as needed, United States Department of Transportation (USDOT) approved 55-gallon steel drums are used to containerize additional recovered oil.

2.4.2 Oil Thickness Measurements

Groundwater monitoring wells, system performance monitoring wells and active recovery wells are monitored quarterly for the presence of measurable quantities of oil. The groundwater monitoring well network (MW-13, MW-14, MW-27, and MW-31), which is located down-gradient of the oil plume, continued to exhibit no evidence of oil. Furthermore, performance monitoring wells MW-41, MW-42, and RW-11, located upgradient of the oil plume, and MW-33, MW-36, MW-37, MW-38, and RW-14, located at the downgradient edge of the oil plume, continued to exhibit no oil. Performance monitoring wells MW-25 and MW-34 have exhibited no detectable oil, since 2016 and 2015, respectively.

Oil thickness measurements in performance monitoring wells were recorded during the quarter and are provided in Table 1.

2.4.3 Performance Monitoring Wells

Measurable quantities of oil were observed in four (MW-32, MW-39, MW-40, and RW-9) of the 16 (MW-25, MW-32 through 42, RW-9, RW-10, RW-11, and RW-14) performance monitoring wells evaluated this quarter. The oil plume has decreasing thicknesses within the central area of the plume. The apparent static oil thickness measurements, when detected within the monitoring well network, ranged from 0.01 feet at RW-9 and 1.15 feet at MW-32. The following observations were noted pertaining to the wells that exhibit measurable quantities of oil.

- Historical oil thicknesses at MW-32 was highest in 2007 at 1.79 feet. Apparent oil thickness continues to decrease as oil thickness were measured this quarter ranging from 0.17 to 1.15 feet.
- Historical oil thicknesses at MW-39 was highest in 2006 at 5.29 feet. Apparent oil thicknesses measured this quarter ranged from 0.02 to 0.35 feet.
- Historical oil thicknesses at MW-40 was highest in 2007 at 5.89 feet. Apparent oil thicknesses measured this quarter ranged from 0.02 to 0.26 feet.
- Historical oil thicknesses at RW-9 was highest in 2008 at 1.44 feet. Apparent oil thicknesses measured this quarter ranged from 0.01 to 0.02 feet.

Overall, the oil thicknesses have reduced since 2010 and the footprint of the oil plume has reduced in the areas located at MW-32, MW-39, MW-40, and RW-9. Oil thicknesses will continue to be monitored and recorded.

2.5 Oil Recoverability

As noted above in Section 2.4.2 and 2.4.3, Arcadis continues to monitor and gauge system performance monitoring wells to evaluate the performance of the VER system. Based on the previous assessment of oil recoverability and transmissivity testing that was conducted 2016 through 2018, the VER system has successfully recovered the vast majority of recoverable oil. This is further evident by the declining oil recovery trend observed over the last several years. The oil transmissivity field data is being used as a quantitative indicator of recoverability in order to focus and optimize oil recovery efforts and establish realistic oil recovery endpoints. Arcadis will continue to operate the VER system in a pulsed/cycling frequency. The objective of this operational approach is to sustain or increase oil recovery in the subsurface and decreasing the volume of groundwater recovered.

3 MONTHLY TREATMENT SYSTEM SAMPLING RESULTS

As discussed in Section 2.1, recovered groundwater is treated on-site, prior to discharging to the Hudson River. In summary, groundwater is treated through a OWS and filtration system before entering two 2,000-pound (lb) organoclay vessels (Post Clay #1 and Post Clay #2) to remove emulsified oil and sheens and then through two 1,000 lb granular activated carbon vessels (Post Carbon #1 and Post Carbon #2) to remove dissolved phase organics, and a single 0.5-micron particulate filter (Effluent) to remove any suspended fine carbon particles.

Mid-point filtration (Post Clay #2, Post Carbon #1, and Post Carbon #2), and effluent (post-filtration) groundwater system samples were collected monthly. Monthly system sampling log forms are provided in Appendix A.

System effluent samples were analyzed for PCBs (United States Environmental Protection Agency [USEPA] Method 608), volatile organic compounds (VOCs) (USEPA Method 624), semi-organic volatile compounds (SVOCs) (USEPA Method 625), and pH (field measurement). Mid-point filtration samples were analyzed for PCBs via USEPA Method 608. The VOC and SVOC samples were submitted for analysis to Eurofins TestAmerica laboratory in North Canton, Ohio. The PCB samples were submitted for analysis to Eurofins TestAmerica laboratory in Buffalo, New York. Copies of the laboratory analytical reports have been included in Appendix B.

3.1 Influent and Mid-Filtration Samples Results

Mid-point filtration (e.g., post-organoclay and carbon) groundwater samples were collected and analyzed for PCBs to monitor mass loading rates, predict mass transfer zones (MTZ) through the organoclay and carbon vessels, and to track the treatment systems overall performance. Estimated and detectable concentrations of PCBs were detected in the Post Clay #2 and Post Carbon #1 samples collected during the first quarter monthly sampling events.

The table below summarizes the PCB concentration ranges in the system mid-point filtration samples collected during the quarter:

Date	Mid-Filtration		
	Total PCBs (µg/L)		
	Post Clay #2	Post Carbon #1	Post Carbon #2
1/30/2020	<0.057	<0.057	<0.057
2/20/2020	0.15	0.055 J	<0.060
3/19/2020	0.33	0.18	<0.060

Table Definitions:

"µg/L" – Micrograms per liter.

"J" – The reported value is an estimated concentration.

"<" – Analytes were analyzed for but not detected above the noted laboratory method detection limits (MDL).

3.2 Effluent Sample Results

The table below summarizes the post-filtration (i.e., system effluent) groundwater system samples collected during the quarter. There were no VOC or SVOC concentrations exceeding the NYSDEC Consent Order standards for Fuel Oil Surface Water Effluent. Furthermore, there were no detectable concentrations of PCBs above the laboratory method detection limit.

Date	Effluent			
	Analytes (µg/L)			
	VOCs	SVOCs	Total PCBs	pH
1/30/2020	<5	<9.5	<0.057	7.1
2/20/2020	<5	<9.6	<0.057	7.0
3/19/2020	<5	<9.5	<0.057	6.8

Table Definitions:

"µg/L" – Micrograms per liter.

"<" – Analytes were analyzed for but not detected above the noted laboratory method detection limits (MDL).

4 GROUNDWATER MONITORING RESULTS

The groundwater sampling program was conducted this quarter at the remaining quarterly groundwater monitoring wells at the site, which included MW-13, MW-14, MW-27, and MW-31. The following sections summarize the groundwater monitoring program for the site.

4.1 Groundwater Elevation

Water levels were collected from select monitoring wells at the site on March 5, 2020 during the quarterly groundwater sampling event. It should be noted that the VER system was online during the groundwater monitoring event. The depth to water measurements are provided in Table 2 and the potentiometric map is presented on Figure 3.

4.2 Quarterly Groundwater Sampling Results

Quarterly groundwater samples were collected on March 5, 2020 using 1.5-inch diameter polyethylene disposable bailers. Groundwater samples collected from monitoring wells MW-13, MW-14, MW-27, and

MW-31 were analyzed for total (unfiltered) and dissolved (lab filtered, 0.45 micron) PCBs. These samples were submitted to and analyzed by Eurofins TestAmerica laboratory in Buffalo, New York using USEPA Method 8082A. Copies of the laboratory analytical reports have been included in Appendix C.

As shown in Table 3, and presented on Figure 4, laboratory analytical results indicate that unfiltered and filtered groundwater samples collected from monitoring wells MW-13, MW-14, MW-27, and MW-31 did not contain any detectable concentrations of PCBs above the minimum laboratory reporting limits (0.090 µg/L).

5 SCHEDULED ACTIVITIES FOR THE NEXT QUARTER

The following sections summarize the routine and non-routine activities for the next quarter.

5.1 Routine Activities

The following system O&M and groundwater monitoring activities are planned for the next reporting period, or have been completed to date:

- Continue pulsing operation of the VER and treatment system;
- Perform routine weekly system maintenance as needed, including filter change-outs, adjusting biocide dosing rates, and general equipment cleaning (e.g., OWS, pumps, etc.);
- Cycling of each recovery well, adjust applied vacuum settings, and adjust vertical placement of oil recovery pumps, as needed, to maximize oil recovery rates;
- Continue supplemental oil recovery efforts by extracting oil periodically from the performance monitoring well network utilizing the vacuum stinger;
- Continue remote daily monitoring of the VER and treatment system components, via the programmable logic controller and remote access software;
- Collect monthly system performance influent and mid-filtration groundwater samples to track PCB mass loading rates to predict MTZ within the organoclay and carbon vessels;
- Monitor and record the volumes of oil recovered and groundwater collected and treated onsite;
- Continue recording oil thickness measurements in performance monitoring wells; and
- Conduct quarterly groundwater sampling and analysis of four monitoring wells (MW-13, MW-14, MW-27, and MW-31) for PCBs.

TABLES



Table 1. Performance Monitoring Well Oil Thickness Measurements
Former Ford Plant
Green Island, New York

Date	MW-25			MW-32*			MW-33			MW-34			MW-35*			MW-36		
	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)
1/15/2018		12.15		12.26	12.34	0.08		11.20			11.92		11.45	11.60	0.15		10.70	
1/19/2018		12.13		12.22	12.26	0.04		11.62			11.96		11.79	11.84	0.05		11.33	
2/21/2018		11.06		11.16	11.56	0.40		10.53			10.81			10.49			10.73	
4/9/2018		11.15		11.17	11.91	0.74		10.68			10.96			10.82			10.76	
4/20/2018		11.15		11.20	11.53	0.33		10.64			10.96			10.82			10.63	
5/2/2018		10.64		10.79	10.97	0.18		10.08			10.49			10.26			10.07	
5/30/2018		12.23		12.23	12.33	0.10		11.88			12.11		12.25	12.26	0.01		13.04	
7/10/2018		12.73		12.77	12.88	0.11		12.39			12.59		12.68	12.69	0.01		13.45	
7/17/2018		12.80		12.84	12.92	0.08		12.46			12.67			12.71			13.28	
8/9/2018		10.50		10.55	10.56	0.01		9.89			10.22		10.55	10.56	0.01		11.04	
8/27/2018		11.56		11.62	11.72	0.10		11.24			11.49		11.60	11.61	0.01		12.24	
10/19/2018		11.38		11.39	12.39	1.00		11.01			11.21		11.22	11.41	0.19		11.64	
10/30/2018		11.45		11.46	11.70	0.24		11.01			11.25		11.15	11.32	0.17		11.53	
11/5/2018		10.70		10.80	11.62	0.82		10.00			10.42		10.25	10.55	0.30		10.21	
11/19/2018		10.61		10.65	11.61	0.96		10.16			10.41		10.30	10.40	0.10		10.73	
12/6/2018		10.46		10.55	11.00	0.45		9.91			10.27		10.05	10.07	0.02		10.16	
1/4/2019		10.96		11.03	12.11	1.08		10.45			10.81			10.54			10.45	
1/7/2019		11.05		11.19	11.30	0.11		10.52			10.85			10.57			10.71	
1/14/2019		11.27		11.35	11.65	0.30		10.89			11.18			11.08			11.35	
1/17/2019		11.45		11.50	11.60	0.10		11.08			11.34			11.28			11.58	
4/1/2019		11.44		11.50	11.78	0.28		10.95			11.23		10.98	11.02	0.04		10.79	
4/4/2019		11.58		11.64	11.85	0.21		11.11			11.36		11.20	11.22	0.02		11.08	
4/8/2019		11.56		11.62	12.61	0.99		11.10			NM		11.20	11.35	0.15		11.15	
4/18/2019		10.55		10.75	11.60	0.85		9.71			10.30		9.98	10.15	0.17		9.40	
4/26/2019		10.58		10.72	10.91	0.19		9.89			NM		10.01	10.25	0.24		9.70	
5/6/2019		10.80		10.40	10.91	0.51		10.15			10.58		10.36	11.01	0.65		10.23	
5/13/2019		10.95		11.05	11.62	0.57		10.48			10.72		10.39	10.71	0.32		10.61	
5/23/2019		10.90		11.02	11.82	0.80		10.34			10.68		9.42	9.63	0.21		10.50	
6/13/2019		11.02		11.10	11.89	0.79		10.45			10.82		10.47	10.65	0.18		11.00	
6/20/2019		11.19		11.21	12.12	0.91		10.68			11.00		10.81	11.12	0.31		11.31	
6/24/2019		11.12		11.19	12.52	1.33		10.65			10.93		10.75	11.12	0.37		11.00	
7/1/2019		11.60		11.62	11.93	0.31		11.17			11.40		11.49	11.52	0.03		11.76	
7/11/2019		12.22		12.25	13.52	1.27		11.81			12.07		12.15	12.19	0.04		12.90	
7/15/2019		12.34		12.35	13.11	0.76		11.95			12.17		12.29	12.31	0.02		12.96	
7/25/2019		12.16		12.20	12.41	0.21		11.56			12.00		12.12	12.20	0.08		12.51	
8/1/2019		12.45		12.46	12.51	0.05		12.01			12.26		12.41	12.44	0.03		13.00	
8/12/2019		12.52		12.56	12.60	0.04		12.17			12.40		12.42	12.60	0.18		13.01	
9/9/2019		12.14		12.18	12.38	0.20		11.89			12.00		12.06	12.11	0.05		12.77	
9/19/2019		12.60		12.60	12.71	0.11		12.44			12.45		12.59	12.61	0.02		13.35	
10/10/2019		12.55		12.56	12.75	0.19		12.06			12.37		12.28	12.31	0.03		12.59	
10/24/2019		11.00		11.09	11.11	0.02		10.48			10.71		10.61	10.62	0.01		10.62	
11/18/2019		11.50		11.35	11.70	0.35		10.86			11.13		11.10	11.11	0.01		11.33	
1/9/2020		11.00		11.17	11.34	0.17		10.54			12.82			10.64			11.01	
2/17/2020		11.22		11.27	11.48	0.21		10.78			11.06			10.80			11.31	
3/5/2020		11.24		11.35	12.50	1.15		10.79			11.00			10.52			10.82	

Notes:

Blank - Obstruction in/over monitoring well or no product measured.

NR - Not Recorded

NM - Not Measured

* Denotes performance monitoring well where supplemental oil recovery program was implemented

1. Measurement taken post supplemental oil recovery event
2. Several well covers were frozen solid under a sheet of ice.
3. Several recovery wells were online during this monitoring event.

Table 1. Performance Monitoring Well Oil Thickness Measurements
Former Ford Plant
Green Island, New York

Date	MW-37			MW-38			MW-39*			MW-40*			MW-41		
	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)
1/15/2018		11.12			10.37		11.29	11.31	0.02	8.33	8.76	0.43		12.05	
1/19/2018		11.89			NM		11.80	12.02	0.22	9.21	9.53	0.32		12.08	
2/21/2018		10.27			10.49		10.22	10.76	0.54	7.41	7.75	0.34		10.93	
4/9/2018		11.04			10.43		10.88	11.89	1.01	8.39	8.57	0.18		11.00	
4/20/2018		10.97			10.22		11.00	11.13	0.13	8.40	8.47	0.07		11.01	
5/2/2018		10.10			9.61		10.50	10.55	0.05	7.66	7.85	0.19		10.52	
5/30/2018		13.03			11.85		12.92	12.94	0.02	10.51	10.53	0.02		12.16	
7/10/2018		13.35			12.33		13.14	13.43	0.29	10.79	10.88	0.09		12.70	
7/17/2018		13.20			12.30		13.04	13.19	0.15	10.60	10.61	0.01		12.79	
8/9/2018		11.41			9.51		11.41	11.87	0.46	9.09	9.23	0.14		10.52	
8/27/2018		12.31			11.23		12.14	12.52	0.38	9.83	9.85	0.02		11.40	
10/19/2018		11.71			11.48		11.64	11.94	0.30	9.19	9.24	0.05		11.49	
10/30/2018		11.24			10.83		11.40	11.43	0.03	8.8	8.95	0.15		11.33	
11/5/2018		10.02			9.55		10.45	10.80	0.35	7.90	8.52	0.62		10.55	
11/19/2018		10.05			9.92		10.81	11.05	0.24		8.20			10.51	
12/6/2018		9.46			9.60		10.43	10.67	0.24	7.71	7.80	0.09		10.35	
1/4/2019		10.52			10.06		10.85	11.21	0.36	8.37	8.40	0.03		10.85	
1/7/2019		10.47			10.11		10.95	11.20	0.25	8.32	8.45	0.13		10.91	
1/14/2019		11.46			10.65		11.55	11.65	0.10	9.00	9.02	0.02		11.20	
1/17/2019		11.70			10.95		11.68	11.70	0.02	9.15	9.20	0.05		11.55	
4/1/2019		10.98			10.65		11.00	11.12	0.12		8.19			11.26	
4/4/2019		11.35			10.86		11.30	11.41	0.11		8.68			11.44	
4/8/2019		11.38			10.85		11.30	11.52	0.22		8.66			11.44	
4/18/2019		9.80			9.30		10.03	10.25	0.22		7.26			10.38	
4/26/2019		9.59			9.60		10.19	10.31	0.12		7.28			10.38	
5/6/2019		10.30			9.87		10.42	10.54	0.12		7.90			10.60	
5/13/2019		10.42			10.08		10.54	10.63	0.09		7.90			10.75	
5/23/2019		10.04			10.07		10.70	11.12	0.42		8.04			10.70	
6/13/2019		10.21			10.05		11.15	11.62	0.47		8.48			10.55	
6/20/2019		10.89			10.40		11.42	11.81	0.39		8.94			11.00	
6/24/2019		10.95			10.42		11.04	11.98	0.94		8.50			10.94	
7/1/2019		12.05			10.98		11.98	12.16	0.18		9.45			11.40	
7/11/2019		13.08			11.74		12.79	12.81	0.02		10.32			12.11	
7/15/2019		12.95			11.40		12.80	12.91	0.11		10.35			12.25	
7/25/2019		12.62			11.21			12.80		10.30	10.34	0.04		12.07	
8/1/2019		13.11			11.56		13.00	13.10	0.10	10.60	10.63	0.03		12.34	
8/12/2019		13.05			12.11		12.91	13.02	0.11	10.46	10.72	0.26		12.46	
9/9/2019		12.74			11.72		12.55	12.58	0.03	10.11	10.72	0.61		12.05	
9/19/2019		13.31			12.22		13.15	13.41	0.26	10.80	11.19	0.39		12.54	
10/10/2019		12.33			11.80		12.65	12.70	0.05	10.00	10.68	0.68		12.44	
10/24/2019		10.52			10.22		10.80	10.83	0.03	8.11	8.23	0.12		10.80	
11/18/2019		11.58			10.68		11.39	11.41	0.02	8.91	9.01	0.10		11.19	
1/9/2020		10.86			10.31		11.00	11.35	0.35	8.49	8.75	0.26		10.85	
2/17/2020		11.02			10.61		11.48	11.75	0.27	8.95	8.99	0.04		11.08	
3/5/2020		10.90			10.58		10.82	10.84	0.02	7.11	7.13	0.02		11.01	

Notes:

Blank - Obstruction in/over monitoring well or no product measured.

NR - Not Recorded

NM - Not Measured

* Denotes performance monitoring well where supplemental oil recovery program was implemented

1. Measurement taken post supplemental oil recovery event
2. Several well covers were frozen solid under a sheet of ice.
3. Several recovery wells were online during this monitoring event.

Table 1. Performance Monitoring Well Oil Thickness Measurements
Former Ford Plant
Green Island, New York

Date	MW-42			RW-9			RW-10			RW-11			RW-14		
	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)	Depth to Oil (ft)	Depth to Oil/Water Interface (ft)	Apparent Oil Thickness (ft)
1/15/2018		11.91		8.41	8.49	0.08		11.41			11.41			14.03	
1/19/2018		12.12		9.20	9.50	0.30		11.85			11.80			14.26	
2/21/2018		10.84		7.32	7.51	0.19		10.40			9.77			13.56	
4/9/2018		11.14		8.30	8.31	0.01		10.88			10.84			13.41	
4/20/2018		11.14		8.22	8.23	0.01		10.80			10.82			13.17	
5/2/2018		10.59			7.41			10.12			9.87			12.56	
5/30/2018		12.61		10.37	10.38	0.01		12.77			11.94			14.64	
7/10/2018		13.00			11.57			13.02			12.28			15.24	
7/17/2018		13.08			9.97			13.10			10.84			15.35	
8/9/2018		10.85		9.08	9.09	0.01		11.13			10.15			12.32	
8/27/2018		11.95		10.04	10.05	0.01		12.18			11.50			14.05	
10/19/2018		11.42		9.32	9.33	0.01		11.50			11.51			13.80	
10/30/2018		11.48		8.68	8.72	0.04		11.46			11.11			13.74	
11/5/2018		10.61		7.65	8.20	0.55		10.18			9.91			12.50	
11/19/2018		10.77		8.1	8.20	0.10		10.14		10.15	10.20	0.05		12.85	
12/6/2018		10.49		7.54	7.55	0.01		10.29		10.15	10.20	0.05		12.56	
1/4/2019		10.97			8.06			10.59			10.52			13.03	
1/7/2019		11.05			8.21			10.66			NM			13.10	
1/14/2019		11.51		9.00	9.04	0.04		11.33			NM			13.50	
1/17/2019		11.65		9.20	9.21	0.01		11.60			NM			13.79	
4/1/2019		11.48			8.03			11.00			9.45			13.68	
4/4/2019		11.54			8.66			11.30			11.71			13.80	
4/8/2019		11.53			8.68			11.25			11.98			13.80	
4/18/2019		10.36			7.09			10.03			8.45			11.23	
4/26/2019		10.35			7.14			10.01			NM			12.57	
5/6/2019		10.67			7.63			10.31			7.93			12.85	
5/13/2019		10.81			7.81			10.16			9.42			13.08	
5/23/2019		10.82			7.93			10.58			10.22			13.00	
6/13/2019		11.08			8.54			10.93			9.05			12.94	
6/20/2019		11.52			8.90			11.36			9.10			13.29	
6/24/2019		11.12			8.40			11.09			9.03			13.35	
7/1/2019		11.80			9.40			11.89			9.65			13.86	
7/11/2019		12.55			10.41			12.70			10.40			14.60	
7/15/2019		12.64			10.48			12.81			11.50			14.77	
7/25/2019		12.51			10.09			12.52			9.64			13.91	
8/1/2019		12.75			10.42			12.66			9.13			14.85	
8/12/2019		12.83			10.55			12.79			11.52			15.14	
9/9/2019		12.45			10.44			12.55			11.40			14.50	
9/19/2019		12.96			NM			NM			NM			NM	
10/10/2019		12.65		12.00	12.01	0.01		12.10			11.16			14.51	
10/24/2019		10.92			8.33			10.77			9.78			13.51	
11/18/2019		11.45		8.90	8.91	0.01		11.35			11.05			13.55	
1/9/2020		11.08		8.60	8.61	0.01		10.98			10.66			13.20	
2/17/2020		11.40		9.00	9.01	0.01		11.38			10.59			13.32	
3/5/2020		11.06		8.14	8.16	0.02		10.81			10.22			13.55	

Notes:

Blank - Obstruction in/over monitoring well or no product measured.

NR - Not Recorded

NM - Not Measured

* Denotes performance monitoring well where supplemental oil recovery program was implemented

1. Measurement taken post supplemental oil recovery event
2. Several well covers were frozen solid under a sheet of ice.
3. Several recovery wells were online during this monitoring event.

Table 2. Monitoring Well Groundwater Elevations,
March 2020
Former Ford Plant
Green Island, New York.

Well No.	Surveyed Elevation (ft.) ¹	Depth to Water (ft.)	Groundwater Elevation (ft.)
MW-13	27.04	8.96	18.08
MW-14	25.89	8.20	17.69
MW-25	28.96	11.24	17.72
MW-27	26.36	8.75	17.61
MW-31	26.02	8.65	17.37
MW-32	28.92	12.50	16.42
MW-33	29.32	10.79	18.53
MW-34	28.95	11.00	17.95
MW-35	28.69	10.52	18.17
MW-36	28.92	10.82	18.10
MW-37	28.81	10.90	17.91
MW-38	28.46	10.58	17.88
MW-39	28.72	10.84	17.88
MW-40	26.08	7.13	18.95
MW-41	28.92	11.01	17.91
MW-42	29.04	11.06	17.98

Notes:

1. Survey elevation data updated in 2017.

NM - Not measured

Table 3. Groundwater Polychlorinated Biphenyl Analytical Results,
March 2020
Former Ford Plant
Green Island, New York.

Analyte	Sampling Date: 3/05/2020							
	Sample Location							
	MW-13	MW-13 (F)	MW-14	MW-14 (F)	MW-27	MW-27 (F)	MW-31	MW-31 (F)
Aroclor 1016	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090
Aroclor 1221	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090
Aroclor 1232	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090
Aroclor 1242	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090
Aroclor 1248	<0.090	<0.090	<0.086	<0.090	<0.090	<0.090	<0.090	<0.090
Aroclor 1254	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090
Aroclor 1260	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090

Notes:

All results reported in micrograms per liter (ug/L), equivalent to parts per billion (ppb).
The NYSDEC GA Groundwater Standard for PCBs is 0.09 µg/L.

Definitions:

F - Sample lab filtered.

< - Less than laboratory method detection limits.

J - Reported value is an estimated concentration.

R - PCB surrogate recoveries were outliers biased low and less than 10% for at least 1 out of 2 surrgates

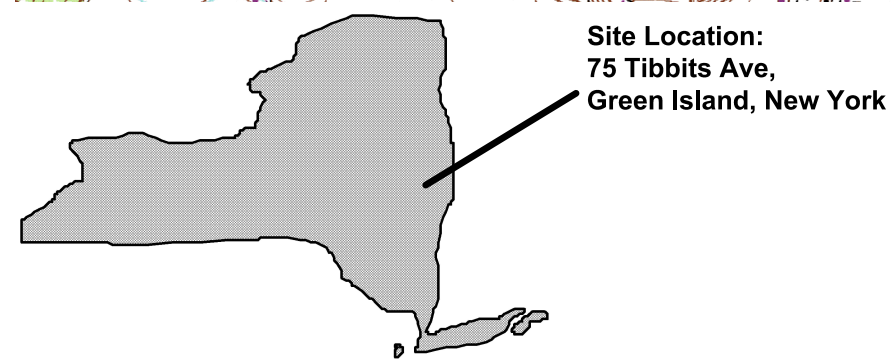
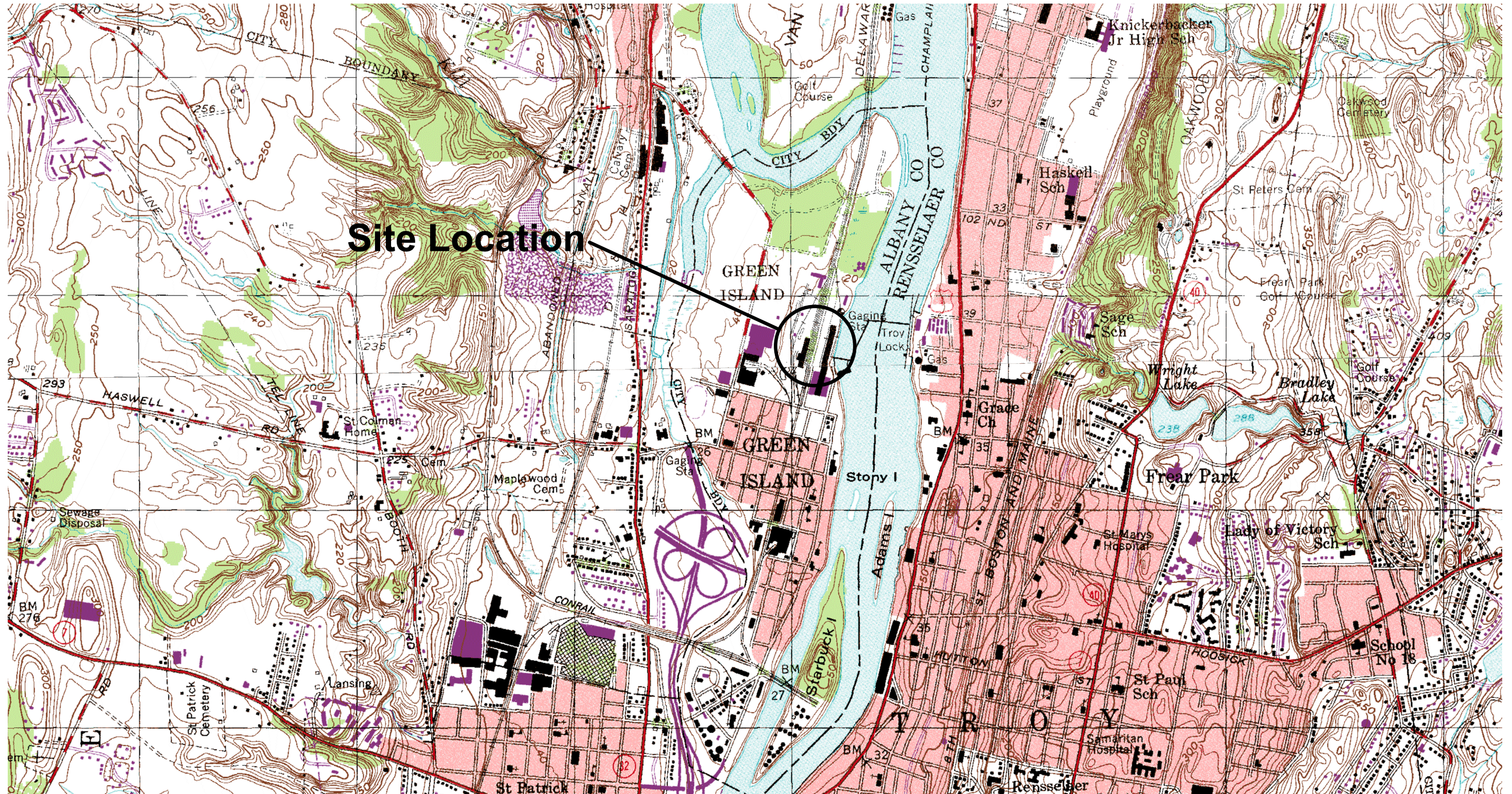
PCB results for these samples should be considered to be unusable.

NS - Not sampled

Bold - Indicates a detected value with no data qualifiers.

FIGURES





Site Location:
75 Tibbits Ave,
Green Island, New York



GENERAL NOTES:

1. North arrow as shown is referenced to Grid North.
2. Source: USGS, 1990

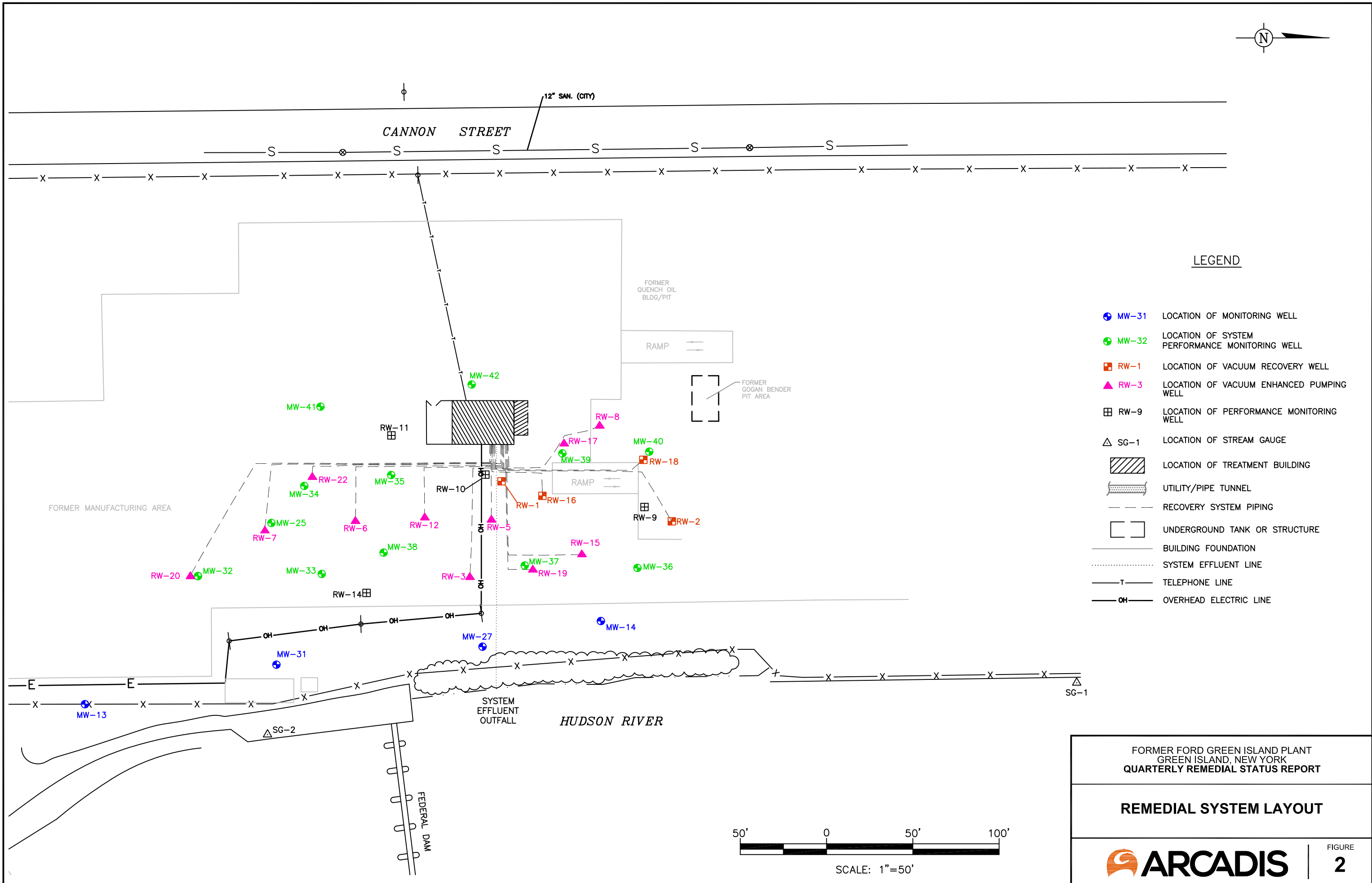


FORMER GREEN ISLAND PLANT
GREEN ISLAND, NEW YORK
QUARTERLY REMEDIAL STATUS REPORT

SITE LOCATION MAP



USER: TCARIGNAN FILENAME: G:\ACAD\PROJ\AY000290.0016\DRAWINGS\2018\FIGURE 1_NEW 2018.DWG SAVE DATE: 1/25/2018 1:54 PM PLOT DATE: 1/29/2018 11:00 AM



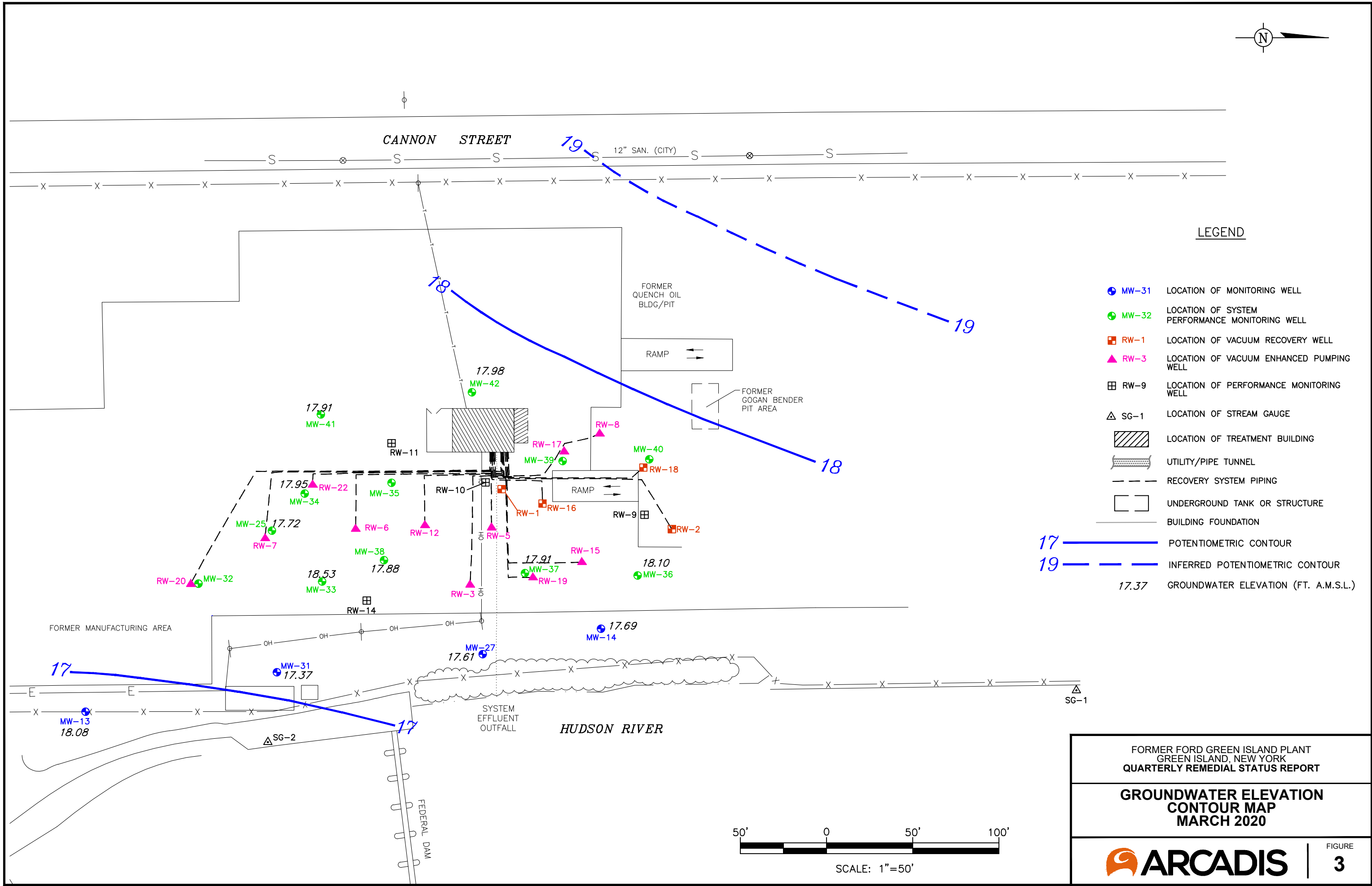
FORMER FORD GREEN ISLAND PLANT
GREEN ISLAND, NEW YORK
QUARTERLY REMEDIAL STATUS REPORT

REMEDIAL SYSTEM LAYOUT

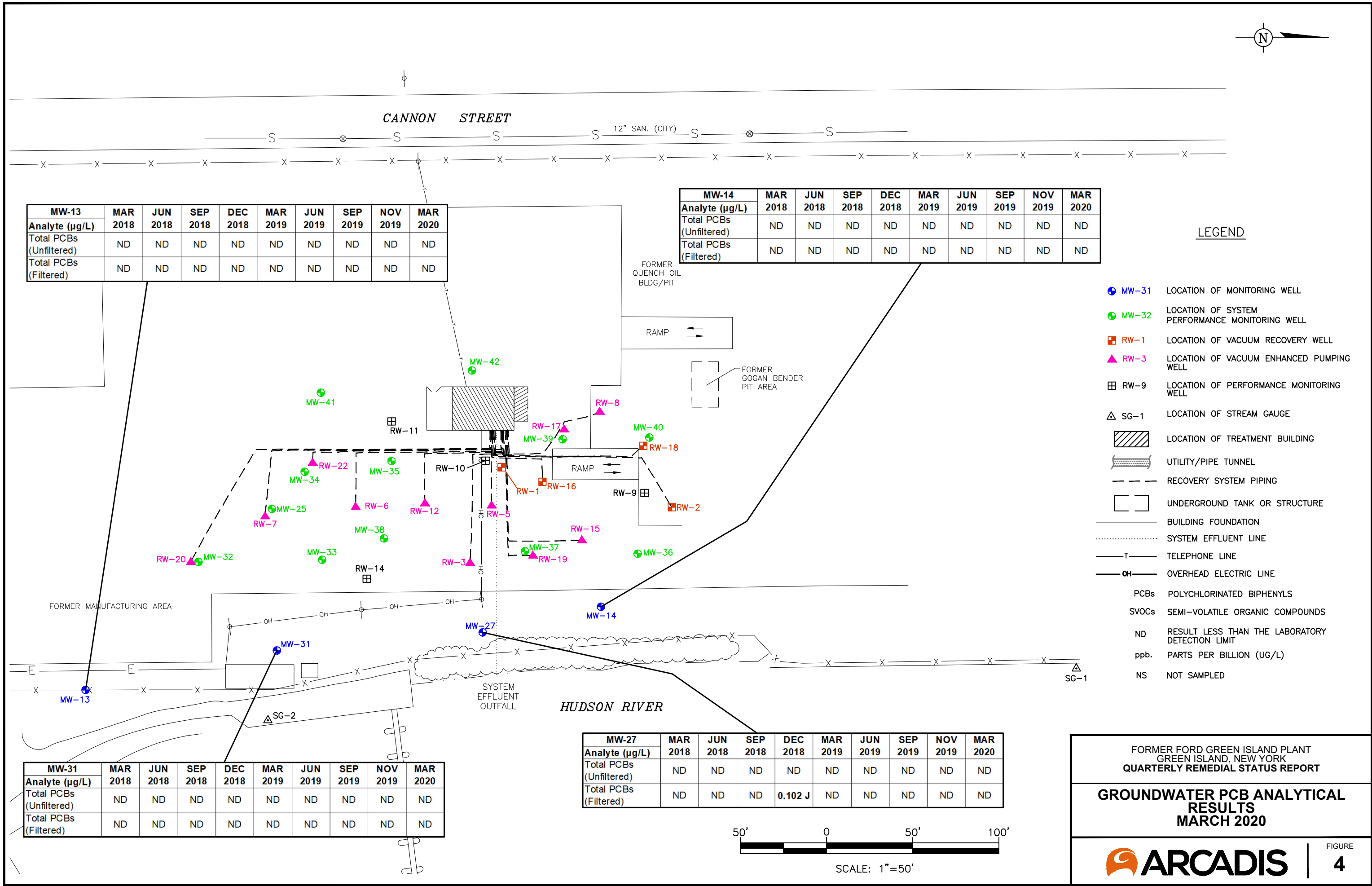
ARCADIS

FIGURE
2

USER: JMUILLINS FILENAME: G:\ACAD\PROJ\AY000290.0016\DRAWINGS\2020\Q1-2020 POTENTIOMETRIC.DWG SAVE DATE: 4/15/2020 1:48 PM PLOT DATE: 4/15/2020 1:49 PM



USER: JMUILLINS FILENAME: G:\ACAD\PROJ\AY000290.0016\DRAWINGS\2020\Q1-2020 HITBOX.DWG SAVE DATE: 4/15/2020 1:15 PM PLOT DATE: 4/15/2020 1:18 PM



APPENDIX A

Remedial System Monthly Sampling Logs



Monthly System Sampling Log
Former Ford Green Island Plant
Green Island, New York

Date: 1/30/2020
Time: 0820
Technician: NK

SYSTEM STATUS	Online (Y/N)	Notes:
Air Compressor/Pneumatic Pump	Y	
Liquid Ring Vacuum Pump	N	
Chemical Feed Online	Y	10 doses per minute
Alarms? (List)	N	

Sampling Start
Totalizer/HMI Cumulative: 13,893,168

Sampling End
Totalizer/HMI Cumulative: 13,893,401

RECOVERY WELL OPERATION

Well(s)	Online			Vacuum On (Y/N)	Visible Product (Y/N)	Approximate Size of Product	Notes
	On Arrival	Cycled Today	At Departure				
Vacuum Recovery Wells							
RW-1	N	Y	N	N	Y	Turbid	
RW-2	N	Y	N	N	N		
RW-16	N	Y	N	N	N		
RW-18	N	Y	N	N	N		
Vacuum Enhanced Pneumatic Pumping Wells							
RW-3	N	Y	N	N	N		
RW-5	N	Y	N	N	N		
RW-6	Y	Y	Y	N	Y	Small globs	
RW-7	N	Y	N	N	N		
RW-8	Y	Y	Y	N	Y	Small globs	
RW-12	N	Y	N	N	N		
RW-15	N	Y	N	N	N		
RW-17	N	Y	N	N	N		
RW-19	Y	Y	Y	N	Y	Small globs	
RW-20	Y	Y	Y	N	Y	Fine globs	
RW-22	N	Y	N	N	N		

MONTHLY SAMPLING	Sample Collected (Y/N)	Notes / Sample Observations
Post-OWS	N	
Post-10 Micron Filter	N	
Post-Clay #1	N	
Post-Clay #2	Y	Clear water, no sheen, no odor
Post-Carbon #1	Y	Clear water, no sheen, sulfur odor
Post-Carbon #2	Y	Clear water, no sheen, sulfur odor
Post-0.5 Micron Filter/Effluent	Y	Clear water, no sheen, strong sulfur odor
DUP-1	Y	Collected at Effluent

Post System Effluent pH 7.1
pH Meter , Model #: Exttech, Exstik PH100
Calibration Points: 4 and 7

pH limits 6.5 - 8.5

Date: 2/20/2020
Time: 0930
Technician: NK

Sampling Start	Sampling End
Totalizer/HMI Cumulative: 13,977,428	Totalizer/HMI Cumulative: 13,977,659

Well(s)	Online			Vacuum On (Y/N)	Visible Product (Y/N)	Approximate Size of Product	Notes
	On Arrival	Cycled Today	At Departure				
Vacuum Recovery Wells							
RW-1	N	N	N	N	N		
RW-2	N	N	N	N	N		
RW-16	N	N	N	N	N		
RW-18	N	N	N	N	N		
Vacuum Enhanced Pneumatic Pumping Wells							
RW-3	N	Y	N	N	N		
RW-5	N	Y	N	N	N		
RW-6	Y	Y	Y	N	Y	Fine globs	
RW-7	N	Y	N	N	N		
RW-8	Y	Y	Y	N	Y	Small globs	
RW-12	N	Y	N	N	N		
RW-15	N	Y	N	N	N		
RW-17	N	Y	N	N	N		
RW-19	Y	Y	Y	N	Y	Large globs	
RW-20	Y	Y	Y	N	N		
RW-22	N	Y	N	N	Y	Fine globs	

Post System Effluent pH 7.0 pH limits 6.5 - 8.5
pH Meter , Model #: Extech, Exstik PH100
Calibration Points: 4 and 7

Date: 3/19/2020
Time: 0900
Technician: J. Mullins

Sampling Start	Sampling End
Totalizer/HMI Cumulative: 14,224,905	Totalizer/HMI Cumulative: 14,225,153

Well(s)	Online			Vacuum On (Y/N)	Visible Product (Y/N)	Approximate Size of Product	Notes
	On Arrival	Cycled Today	At Departure				
Vacuum Recovery Wells							
RW-1	N	N	N	N	N		
RW-2	N	N	N	N	N		
RW-16	N	N	N	N	N		
RW-18	N	N	N	N	N		
Vacuum Enhanced Pneumatic Pumping Wells							
RW-3	N	Y	N	N	N		
RW-5	N	Y	N	N	N		
RW-6	N	Y	N	N	Y	Fine globs	
RW-7	N	Y	Y	N	Y	Fine globs	
RW-8	Y	Y	Y	N	N		
RW-12	N	Y	N	N	N		
RW-15	N	Y	Y	N	N		
RW-17	Y	Y	N	N	N		
RW-19	Y	Y	Y	N	Y	Fine globs	
RW-20	Y	Y	Y	N	N		
RW-22	N	Y	N	N	N		

Post System Effluent pH	<u>6.8</u>	<u>pH limits 6.5 - 8.5</u>
pH Meter , Model #:	<u>Extech, Exstik PH100</u>	
Calibration Points:	4 and 7	

APPENDIX B

Remedial System Laboratory Analytical Results



ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-125657-1

Client Project/Site: Ford Green Island NY - E200077

For:

ARCADIS U.S. Inc
855 Route 146
Suite 210
Clifton Park, New York 12065

Attn: Todd Carignan



Authorized for release by:
2/17/2020 12:07:39 PM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

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results through

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
Surrogate Summary	16
QC Sample Results	17
QC Association Summary	20
Lab Chronicle	21
Certification Summary	23
Chain of Custody	25
Receipt Checklists	29



Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Job ID: 240-125657-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S. Inc

Project: Ford Green Island NY - E200077

Report Number: 240-125657-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The EPA Method 608.3 PCB's analysis was performed at the Eurofins TestAmerica Buffalo laboratory.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 2/1/2020 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5° C and 2.9° C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples EFFLUENT (240-125657-1) and TRIP BLANK (240-125657-6) were analyzed for Volatile organic compounds (GC/MS) in accordance with EPA Method 624. The samples were analyzed on 02/03/2020 and 02/04/2020.

The matrix spike/matrix spike duplicate (MS/MSD) for samples EFFLUENT (240-125657-1) and TRIP BLANK (240-125657-6) was not reported, because the analyte list for these samples did not match the analyte list for the MS/MSD parent sample.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample EFFLUENT (240-125657-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA Method 625. The samples were prepared on 02/04/2020 and analyzed on 02/06/2020.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Job ID: 240-125657-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

no corrective action is required.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples EFFLUENT (240-125657-1), POST CARBON 2 (240-125657-2), POST CARBON 1 (240-125657-3), POST CLAY 2 (240-125657-4) and DUP-1 (240-125657-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 608.3. The samples were prepared on 02/06/2020 and analyzed on 02/09/2020.

DCB Decachlorobiphenyl failed the surrogate recovery criteria low for POST CLAY 2 (240-125657-4) and DUP-1 (240-125657-5). Refer to the QC report for details.

The Decachlorobiphenyl surrogate recovery for the following samples was outside acceptance limits (low biased) on the primary column: POST CLAY 2 (240-125657-4) and DUP-1 (240-125657-5). The recovery is within acceptance limits on the other column, indicating that the extraction process was in control.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 480-516420.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CAN
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL CAN
608.3	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
625	Liquid-Liquid Extraction	40CFR136A	TAL CAN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-125657-1	EFFLUENT	Water	01/30/20 14:55	02/01/20 09:30	
240-125657-2	POST CARBON 2	Water	01/30/20 15:00	02/01/20 09:30	
240-125657-3	POST CARBON 1	Water	01/30/20 15:05	02/01/20 09:30	
240-125657-4	POST CLAY 2	Water	01/30/20 15:10	02/01/20 09:30	
240-125657-5	DUP-1	Water	01/30/20 00:00	02/01/20 09:30	
240-125657-6	TRIP BLANK	Water	01/30/20 00:00	02/01/20 09:30	

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Client Sample ID: EFFLUENT

Lab Sample ID: 240-125657-1

☐ No Detections.

Client Sample ID: POST CARBON 2

Lab Sample ID: 240-125657-2

☐ No Detections.

Client Sample ID: POST CARBON 1

Lab Sample ID: 240-125657-3

☐ No Detections.

Client Sample ID: POST CLAY 2

Lab Sample ID: 240-125657-4

☐ No Detections.

Client Sample ID: DUP-1

Lab Sample ID: 240-125657-5

☐ No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-125657-6

☐ No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Client Sample ID: EFFLUENT

Lab Sample ID: 240-125657-1

Date Collected: 01/30/20 14:55

Matrix: Water

Date Received: 02/01/20 09:30

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.13	ug/L			02/03/20 23:42	1
Ethylbenzene	5.0	U	5.0	0.11	ug/L			02/03/20 23:42	1
Toluene	5.0	U	5.0	0.14	ug/L			02/03/20 23:42	1
m-Xylene & p-Xylene	2.5	U	2.5	0.080	ug/L			02/03/20 23:42	1
o-Xylene	2.5	U	2.5	0.090	ug/L			02/03/20 23:42	1
Naphthalene	5.0	U	5.0	0.32	ug/L			02/03/20 23:42	1
n-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/03/20 23:42	1
sec-Butylbenzene	5.0	U	5.0	0.13	ug/L			02/03/20 23:42	1
tert-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/03/20 23:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		47 - 134		02/03/20 23:42	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 130		02/03/20 23:42	1
Toluene-d8 (Surr)	94		69 - 122		02/03/20 23:42	1

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	9.5	U	9.5	0.16	ug/L		02/04/20 10:53	02/06/20 20:49	1
Benzo[a]pyrene	9.5	U	9.5	0.16	ug/L		02/04/20 10:53	02/06/20 20:49	1
Benzo[b]fluoranthene	9.5	U	9.5	0.15	ug/L		02/04/20 10:53	02/06/20 20:49	1
Benzo[g,h,i]perylene	9.5	U	9.5	0.17	ug/L		02/04/20 10:53	02/06/20 20:49	1
Acenaphthene	9.5	U	9.5	0.16	ug/L		02/04/20 10:53	02/06/20 20:49	1
Anthracene	9.5	U	9.5	0.13	ug/L		02/04/20 10:53	02/06/20 20:49	1
Benzo[k]fluoranthene	9.5	U	9.5	0.13	ug/L		02/04/20 10:53	02/06/20 20:49	1
Chrysene	9.5	U	9.5	0.18	ug/L		02/04/20 10:53	02/06/20 20:49	1
Dibenz(a,h)anthracene	9.5	U	9.5	0.14	ug/L		02/04/20 10:53	02/06/20 20:49	1
Fluorene	9.5	U	9.5	0.16	ug/L		02/04/20 10:53	02/06/20 20:49	1
Indeno[1,2,3-cd]pyrene	9.5	U	9.5	0.13	ug/L		02/04/20 10:53	02/06/20 20:49	1
Phenanthrene	9.5	U	9.5	0.16	ug/L		02/04/20 10:53	02/06/20 20:49	1
Pyrene	9.5	U	9.5	0.17	ug/L		02/04/20 10:53	02/06/20 20:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	39		10 - 120	02/04/20 10:53	02/06/20 20:49	1
2,4,6-Tribromophenol	74		33 - 120	02/04/20 10:53	02/06/20 20:49	1
Nitrobenzene-d5	73		33 - 120	02/04/20 10:53	02/06/20 20:49	1
Phenol-d5	23		10 - 120	02/04/20 10:53	02/06/20 20:49	1
Terphenyl-d14	69		36 - 122	02/04/20 10:53	02/06/20 20:49	1
2-Fluorobiphenyl (Surr)	78		39 - 120	02/04/20 10:53	02/06/20 20:49	1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 15:52	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 15:52	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 15:52	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 15:52	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 15:52	1
PCB-1254	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 15:52	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	40	p	36 - 121	02/06/20 07:45	02/09/20 15:52	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Client Sample ID: EFFLUENT

Date Collected: 01/30/20 14:55

Date Received: 02/01/20 09:30

Lab Sample ID: 240-125657-1

Matrix: Water

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tetrachloro-m-xylene</i>	75		42 - 135	02/06/20 07:45	02/09/20 15:52	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Client Sample ID: POST CARBON 2

Lab Sample ID: 240-125657-2

Date Collected: 01/30/20 15:00

Matrix: Water

Date Received: 02/01/20 09:30

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:05	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:05	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:05	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:05	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:05	1
PCB-1254	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 16:05	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	39		36 - 121	02/06/20 07:45	02/09/20 16:05	1
Tetrachloro-m-xylene	76		42 - 135	02/06/20 07:45	02/09/20 16:05	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Client Sample ID: POST CARBON 1

Lab Sample ID: 240-125657-3

Date Collected: 01/30/20 15:05

Matrix: Water

Date Received: 02/01/20 09:30

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:18	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:18	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:18	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:18	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:18	1
PCB-1254	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 16:18	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	40	p	36 - 121	02/06/20 07:45	02/09/20 16:18	1
Tetrachloro-m-xylene	68		42 - 135	02/06/20 07:45	02/09/20 16:18	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Client Sample ID: POST CLAY 2

Lab Sample ID: 240-125657-4

Date Collected: 01/30/20 15:10

Matrix: Water

Date Received: 02/01/20 09:30

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:30	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:30	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:30	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:30	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:30	1
PCB-1254	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 16:30	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	34	p X	36 - 121	02/06/20 07:45	02/09/20 16:30	1
Tetrachloro-m-xylene	66		42 - 135	02/06/20 07:45	02/09/20 16:30	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Client Sample ID: DUP-1

Date Collected: 01/30/20 00:00

Date Received: 02/01/20 09:30

Lab Sample ID: 240-125657-5

Matrix: Water

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:43	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:43	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:43	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:43	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/06/20 07:45	02/09/20 16:43	1
PCB-1254	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 16:43	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/06/20 07:45	02/09/20 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	35	p X	36 - 121	02/06/20 07:45	02/09/20 16:43	1
Tetrachloro-m-xylene	71		42 - 135	02/06/20 07:45	02/09/20 16:43	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-125657-6

Date Collected: 01/30/20 00:00

Matrix: Water

Date Received: 02/01/20 09:30

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.13	ug/L			02/04/20 00:04	1
Ethylbenzene	5.0	U	5.0	0.11	ug/L			02/04/20 00:04	1
Toluene	5.0	U	5.0	0.14	ug/L			02/04/20 00:04	1
m-Xylene & p-Xylene	2.5	U	2.5	0.080	ug/L			02/04/20 00:04	1
o-Xylene	2.5	U	2.5	0.090	ug/L			02/04/20 00:04	1
Naphthalene	5.0	U	5.0	0.32	ug/L			02/04/20 00:04	1
n-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/04/20 00:04	1
sec-Butylbenzene	5.0	U	5.0	0.13	ug/L			02/04/20 00:04	1
tert-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/04/20 00:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		47 - 134					02/04/20 00:04	1
1,2-Dichloroethane-d4 (Surr)	105		75 - 130					02/04/20 00:04	1
Toluene-d8 (Surr)	97		69 - 122					02/04/20 00:04	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (47-134)	DCA (75-130)	TOL (69-122)
240-125657-1	EFFLUENT	91	104	94
240-125657-6	TRIP BLANK	93	105	97
LCS 240-421290/5	Lab Control Sample	98	97	97
MB 240-421290/8	Method Blank	94	105	95

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP (10-120)	TBP (33-120)	NBZ (33-120)	PHL (10-120)	TPHL (36-122)	FBP (39-120)
240-125657-1	EFFLUENT	39	74	73	23	69	78
LCS 240-421433/17-A	Lab Control Sample	85	87	86	65	96	92
MB 240-421433/16-A	Method Blank	68	69	83	51	96	81

Surrogate Legend

2FP = 2-Fluorophenol

TBP = 2,4,6-Tribromophenol

NBZ = Nitrobenzene-d5

PHL = Phenol-d5

TPHL = Terphenyl-d14

FBP = 2-Fluorobiphenyl (Surr)

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1 (36-121)	TCX1 (42-135)
240-125657-1	EFFLUENT	40 p	75
240-125657-2	POST CARBON 2	39	76
240-125657-3	POST CARBON 1	40 p	68
240-125657-4	POST CLAY 2	34 p X	66
240-125657-5	DUP-1	35 p X	71
LCS 480-516420/2-A	Lab Control Sample	47	73
LCSD 480-516420/3-A	Lab Control Sample Dup	42 p	65
MB 480-516420/1-A	Method Blank	45	77

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-421290/8

Matrix: Water

Analysis Batch: 421290

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.13	ug/L			02/03/20 16:56	1
Ethylbenzene	5.0	U	5.0	0.11	ug/L			02/03/20 16:56	1
Toluene	5.0	U	5.0	0.14	ug/L			02/03/20 16:56	1
m-Xylene & p-Xylene	2.5	U	2.5	0.080	ug/L			02/03/20 16:56	1
o-Xylene	2.5	U	2.5	0.090	ug/L			02/03/20 16:56	1
Naphthalene	5.0	U	5.0	0.32	ug/L			02/03/20 16:56	1
n-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/03/20 16:56	1
sec-Butylbenzene	5.0	U	5.0	0.13	ug/L			02/03/20 16:56	1
tert-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/03/20 16:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		47 - 134		02/03/20 16:56	1
1,2-Dichloroethane-d4 (Surr)	105		75 - 130		02/03/20 16:56	1
Toluene-d8 (Surr)	95		69 - 122		02/03/20 16:56	1

Lab Sample ID: LCS 240-421290/5

Matrix: Water

Analysis Batch: 421290

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	21.4		ug/L		107	37 - 151
Ethylbenzene	20.0	20.5		ug/L		103	37 - 162
Toluene	20.0	20.2		ug/L		101	47 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		47 - 134
1,2-Dichloroethane-d4 (Surr)	97		75 - 130
Toluene-d8 (Surr)	97		69 - 122

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-421433/16-A

Matrix: Water

Analysis Batch: 421714

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 421433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	10	U	10	0.17	ug/L		02/04/20 10:53	02/06/20 09:10	1
Benzo[a]pyrene	10	U	10	0.17	ug/L		02/04/20 10:53	02/06/20 09:10	1
Benzo[b]fluoranthene	10	U	10	0.15	ug/L		02/04/20 10:53	02/06/20 09:10	1
Benzo[g,h,i]perylene	10	U	10	0.18	ug/L		02/04/20 10:53	02/06/20 09:10	1
Acenaphthene	10	U	10	0.17	ug/L		02/04/20 10:53	02/06/20 09:10	1
Anthracene	10	U	10	0.14	ug/L		02/04/20 10:53	02/06/20 09:10	1
Benzo[k]fluoranthene	10	U	10	0.14	ug/L		02/04/20 10:53	02/06/20 09:10	1
Chrysene	10	U	10	0.19	ug/L		02/04/20 10:53	02/06/20 09:10	1
Dibenz(a,h)anthracene	10	U	10	0.15	ug/L		02/04/20 10:53	02/06/20 09:10	1
Fluorene	10	U	10	0.17	ug/L		02/04/20 10:53	02/06/20 09:10	1
Indeno[1,2,3-cd]pyrene	10	U	10	0.14	ug/L		02/04/20 10:53	02/06/20 09:10	1
Phenanthrene	10	U	10	0.17	ug/L		02/04/20 10:53	02/06/20 09:10	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-421433/16-A

Matrix: Water

Analysis Batch: 421714

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 421433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	10	U	10	0.18	ug/L		02/04/20 10:53	02/06/20 09:10	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	68		10 - 120				02/04/20 10:53	02/06/20 09:10	1
2,4,6-Tribromophenol	69		33 - 120				02/04/20 10:53	02/06/20 09:10	1
Nitrobenzene-d5	83		33 - 120				02/04/20 10:53	02/06/20 09:10	1
Phenol-d5	51		10 - 120				02/04/20 10:53	02/06/20 09:10	1
Terphenyl-d14	96		36 - 122				02/04/20 10:53	02/06/20 09:10	1
2-Fluorobiphenyl (Surr)	81		39 - 120				02/04/20 10:53	02/06/20 09:10	1

Lab Sample ID: LCS 240-421433/17-A

Matrix: Water

Analysis Batch: 421714

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 421433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	20.0	18.0		ug/L		90	33 - 143
Benzo[a]pyrene	20.0	18.5		ug/L		92	17 - 163
Benzo[b]fluoranthene	20.0	17.9		ug/L		89	24 - 159
Benzo[g,h,i]perylene	20.0	17.6		ug/L		88	0 - 219
Acenaphthene	20.0	16.7		ug/L		84	47 - 145
Anthracene	20.0	18.1		ug/L		91	27 - 133
Benzo[k]fluoranthene	20.0	17.3		ug/L		86	11 - 162
Chrysene	20.0	17.6		ug/L		88	17 - 168
Dibenz(a,h)anthracene	20.0	17.4		ug/L		87	0 - 227
Fluorene	20.0	16.7		ug/L		83	59 - 121
Indeno[1,2,3-cd]pyrene	20.0	18.3		ug/L		92	0 - 171
Phenanthrene	20.0	17.3		ug/L		87	54 - 120
Pyrene	20.0	17.9		ug/L		90	52 - 115
Surrogate	%Recovery	LCS Qualifier	Limits				
2-Fluorophenol	85		10 - 120				
2,4,6-Tribromophenol	87		33 - 120				
Nitrobenzene-d5	86		33 - 120				
Phenol-d5	65		10 - 120				
Terphenyl-d14	96		36 - 122				
2-Fluorobiphenyl (Surr)	92		39 - 120				

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 480-516420/1-A

Matrix: Water

Analysis Batch: 516802

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 516420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.060	U	0.060	0.038	ug/L		02/06/20 07:45	02/09/20 15:14	1
PCB-1221	0.060	U	0.060	0.038	ug/L		02/06/20 07:45	02/09/20 15:14	1
PCB-1232	0.060	U	0.060	0.038	ug/L		02/06/20 07:45	02/09/20 15:14	1
PCB-1242	0.060	U	0.060	0.038	ug/L		02/06/20 07:45	02/09/20 15:14	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: MB 480-516420/1-A

Matrix: Water

Analysis Batch: 516802

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 516420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	0.060	U	0.060	0.038	ug/L		02/06/20 07:45	02/09/20 15:14	1
PCB-1254	0.060	U	0.060	0.031	ug/L		02/06/20 07:45	02/09/20 15:14	1
PCB-1260	0.060	U	0.060	0.031	ug/L		02/06/20 07:45	02/09/20 15:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	45		36 - 121	02/06/20 07:45	02/09/20 15:14	1
Tetrachloro-m-xylene	77		42 - 135	02/06/20 07:45	02/09/20 15:14	1

Lab Sample ID: LCS 480-516420/2-A

Matrix: Water

Analysis Batch: 516802

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	1.00	1.17		ug/L		117	69 - 123
PCB-1260	1.00	0.893		ug/L		89	69 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	47		36 - 121
Tetrachloro-m-xylene	73		42 - 135

Lab Sample ID: LCSD 480-516420/3-A

Matrix: Water

Analysis Batch: 516802

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 516420

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	1.00	1.08		ug/L		108	69 - 123	8	30
PCB-1260	1.00	0.805		ug/L		81	69 - 120	10	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	42	p	36 - 121
Tetrachloro-m-xylene	65		42 - 135

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

GC/MS VOA

Analysis Batch: 421290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125657-1	EFFLUENT	Total/NA	Water	624	
240-125657-6	TRIP BLANK	Total/NA	Water	624	
MB 240-421290/8	Method Blank	Total/NA	Water	624	
LCS 240-421290/5	Lab Control Sample	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 421433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125657-1	EFFLUENT	Total/NA	Water	625	
MB 240-421433/16-A	Method Blank	Total/NA	Water	625	
LCS 240-421433/17-A	Lab Control Sample	Total/NA	Water	625	

Analysis Batch: 421714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125657-1	EFFLUENT	Total/NA	Water	625	421433
MB 240-421433/16-A	Method Blank	Total/NA	Water	625	421433
LCS 240-421433/17-A	Lab Control Sample	Total/NA	Water	625	421433

GC Semi VOA

Prep Batch: 516420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125657-1	EFFLUENT	Total/NA	Water	3510C	
240-125657-2	POST CARBON 2	Total/NA	Water	3510C	
240-125657-3	POST CARBON 1	Total/NA	Water	3510C	
240-125657-4	POST CLAY 2	Total/NA	Water	3510C	
240-125657-5	DUP-1	Total/NA	Water	3510C	
MB 480-516420/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-516420/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-516420/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 516802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-125657-1	EFFLUENT	Total/NA	Water	608.3	516420
240-125657-2	POST CARBON 2	Total/NA	Water	608.3	516420
240-125657-3	POST CARBON 1	Total/NA	Water	608.3	516420
240-125657-4	POST CLAY 2	Total/NA	Water	608.3	516420
240-125657-5	DUP-1	Total/NA	Water	608.3	516420
MB 480-516420/1-A	Method Blank	Total/NA	Water	608.3	516420
LCS 480-516420/2-A	Lab Control Sample	Total/NA	Water	608.3	516420
LCSD 480-516420/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	516420

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Client Sample ID: EFFLUENT

Lab Sample ID: 240-125657-1

Date Collected: 01/30/20 14:55

Matrix: Water

Date Received: 02/01/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	421290	02/03/20 23:42	TJL1	TAL CAN
Total/NA	Prep	625			421433	02/04/20 10:53	BMB	TAL CAN
Total/NA	Analysis	625		1	421714	02/06/20 20:49	JMG	TAL CAN
Total/NA	Prep	3510C			516420	02/06/20 07:45	SMP	TAL BUF
Total/NA	Analysis	608.3		1	516802	02/09/20 15:52	W1T	TAL BUF

Client Sample ID: POST CARBON 2

Lab Sample ID: 240-125657-2

Date Collected: 01/30/20 15:00

Matrix: Water

Date Received: 02/01/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			516420	02/06/20 07:45	SMP	TAL BUF
Total/NA	Analysis	608.3		1	516802	02/09/20 16:05	W1T	TAL BUF

Client Sample ID: POST CARBON 1

Lab Sample ID: 240-125657-3

Date Collected: 01/30/20 15:05

Matrix: Water

Date Received: 02/01/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			516420	02/06/20 07:45	SMP	TAL BUF
Total/NA	Analysis	608.3		1	516802	02/09/20 16:18	W1T	TAL BUF

Client Sample ID: POST CLAY 2

Lab Sample ID: 240-125657-4

Date Collected: 01/30/20 15:10

Matrix: Water

Date Received: 02/01/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			516420	02/06/20 07:45	SMP	TAL BUF
Total/NA	Analysis	608.3		1	516802	02/09/20 16:30	W1T	TAL BUF

Client Sample ID: DUP-1

Lab Sample ID: 240-125657-5

Date Collected: 01/30/20 00:00

Matrix: Water

Date Received: 02/01/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			516420	02/06/20 07:45	SMP	TAL BUF
Total/NA	Analysis	608.3		1	516802	02/09/20 16:43	W1T	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-125657-6

Date Collected: 01/30/20 00:00

Matrix: Water

Date Received: 02/01/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	421290	02/04/20 00:04	TJL1	TAL CAN

Eurofins TestAmerica, Canton

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

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Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-20 *
Connecticut	State	PH-0590	12-31-19 *
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20 *
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20 *
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20 *
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19 *
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

Laboratory: Eurofins TestAmerica, Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-20
California	State	2931	04-01-20 *
Connecticut	State	PH-0568	09-30-20
Florida	NELAP	E87672	06-30-20
Georgia	State	10026 (NY)	03-31-20 *
Georgia (DW)	State	956	03-31-20 *
Illinois	NELAP	200003	09-30-19 *
Iowa	State	374	02-28-21
Kentucky (DW)	State	90029	12-31-20 *
Kentucky (UST)	State	30	03-31-20 *
Kentucky (WW)	State	KY90029	12-31-20
Louisiana	NELAP	02031	06-30-20
Maine	State	NY00044	12-04-20
Maryland	State	294	03-31-20 *
Massachusetts	State	M-NY044	06-30-20
Michigan	State	9937	03-31-20 *
Minnesota	NELAP	1524384	12-31-20
New Hampshire	NELAP	2337	11-17-19 *
New Jersey	NELAP	NY455	06-30-20
New York	NELAP	10026	04-01-20 *
North Dakota	State	R-176	03-31-20 *
Oklahoma	State	9421	09-01-20
Oregon	NELAP	NY200003	06-10-20
Pennsylvania	NELAP	68-00281	07-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Canton

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-125657-1

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAO00328	12-30-20 *
Tennessee	State	02970	03-31-20 *
Texas	NELAP	T104704412-18-10	08-01-20
USDA	US Federal Programs	P330-18-00039	02-06-21
Virginia	NELAP	460185	09-14-20
Washington	State	C784	02-10-20 *
Wisconsin	State	998310390	08-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Canton

Client Information Client Contact: Jasmine Mullins Company: ARCADIS U.S., Inc. Address: 855 Route 146 Suite 210 City: Clifton Park State Zip: NY, 12065 Phone:		Lab PM: DelMontico, Michael E-Mail: michael.delmontico@testamericainc.com Phone: 616-244-4208 Carrier Tracking No(s): 240-68851-28278.1 Page: Page 1 of 1 Job #:																																																																
Due Date Requested: 8/11 TAT Requested (days): 5		Analysis Requested  240-125657 Chain of Custody																																																																
PO #: 30008650 00002 WO #: ENOVIS/Cadana #: E200077 Project #: 24007735 SSOW#:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:																																																																
Sample Identification Effluent Port Carbon 2 Port Carbon 1 Port Clay 2 Dup-1 Trip blank		Special Instructions/Note:																																																																
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix (Water, Solid, or Tissue)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>625 - (MOD) Custom Sublist</th> <th>624 - (MOD) Custom Sublist</th> <th>608.3 - PCB, PREC - Priority Pollutant PCBs</th> </tr> </thead> <tbody> <tr> <td>1/30/2020</td> <td>255</td> <td>G</td> <td>Water</td> <td></td> <td></td> <td>2</td> <td>3</td> <td>2</td> </tr> <tr> <td>1/30/2020</td> <td>300</td> <td>G</td> <td>Water</td> <td></td> <td></td> <td>0</td> <td>0</td> <td>2</td> </tr> <tr> <td>1/30/2020</td> <td>305</td> <td>G</td> <td>Water</td> <td></td> <td></td> <td>0</td> <td>0</td> <td>2</td> </tr> <tr> <td>1/30/2020</td> <td>310</td> <td>G</td> <td>Water</td> <td></td> <td></td> <td>0</td> <td>0</td> <td>2</td> </tr> <tr> <td>1/30/2020</td> <td>---</td> <td>G</td> <td>Water</td> <td></td> <td></td> <td>0</td> <td>0</td> <td>2</td> </tr> <tr> <td>1/30/2020</td> <td>---</td> <td>G</td> <td>Water</td> <td></td> <td></td> <td>0</td> <td>0</td> <td>2</td> </tr> </tbody> </table>		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, or Tissue)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625 - (MOD) Custom Sublist	624 - (MOD) Custom Sublist	608.3 - PCB, PREC - Priority Pollutant PCBs	1/30/2020	255	G	Water			2	3	2	1/30/2020	300	G	Water			0	0	2	1/30/2020	305	G	Water			0	0	2	1/30/2020	310	G	Water			0	0	2	1/30/2020	---	G	Water			0	0	2	1/30/2020	---	G	Water			0	0	2	Total Number of Containers:	
Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, or Tissue)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625 - (MOD) Custom Sublist	624 - (MOD) Custom Sublist	608.3 - PCB, PREC - Priority Pollutant PCBs																																																										
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1/30/2020	305	G	Water			0	0	2																																																										
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1/30/2020	---	G	Water			0	0	2																																																										
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ PCB ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months																																																																
Empty Kit Relinquished by:		Method of Shipment:																																																																
Relinquished by: <i>North-Haven</i> Relinquished by: <i>Tim Krall</i> Relinquished by:		Received by: <i>Tim Krall</i> Received by: <i>Tim Krall</i> Received by:																																																																
Date/Time: 1/30/2020 / 515 Date/Time: 1-31-2020 1700 Date/Time:		Date/Time: 1-30-2020 1715 Date/Time: 2-1-20 930 Date/Time:																																																																
Company: ARCADIS Company: ENOVIS Company:		Company: ENOVIS Company: ENOVIS Company:																																																																
Custody Seal No.:		Custody Seal No.:																																																																

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 125657

Client Arcadis Site Name _____ Cooler unpacked by: [Signature]
 Cooler Received on 2-1-20 Opened on 2-1-20
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 11A Foam Box _____ Client Cooler _____ Box _____ Other _____
 Packing material used: Bubble Wrap Foam Plastic Bag None _____ Other _____
 COOLANT: Wet Ice Blue Ice _____ Dry Ice _____ Water _____ None _____

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
 IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN #IR-11 (CF +0.9 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
 -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
 If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC995364
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials?  Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # NA Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: MS

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____
 VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 240-125657-1

Login Number: 125657

List Number: 2

Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo

List Creation: 02/04/20 03:16 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-126611-1

Client Project/Site: Ford Green Island NY - E200077

For:

ARCADIS U.S. Inc
855 Route 146
Suite 210
Clifton Park, New York 12065

Attn: Todd Carignan



Authorized for release by:
3/6/2020 9:25:02 AM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
Surrogate Summary	16
QC Sample Results	17
QC Association Summary	20
Lab Chronicle	21
Certification Summary	23
Chain of Custody	25
Receipt Checklists	29



Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Job ID: 240-126611-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S. Inc

Project: Ford Green Island NY - E200077

Report Number: 240-126611-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The 608.3 PCBs analysis was performed at the Eurofins TestAmerica, Buffalo laboratory.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 2/21/2020 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.2° C and 4.5° C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples EFFLUENT (240-126611-1) and TRIP BLANK (240-126611-6) were analyzed for Volatile organic compounds (GC/MS) in accordance with EPA Method 624. The samples were analyzed on 02/24/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample EFFLUENT (240-126611-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA Method 625. The sample was prepared on 02/26/2020 and analyzed on 02/28/2020.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Job ID: 240-126611-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

POLYCHLORINATED BIPHENYLS (PCBS)

Samples EFFLUENT (240-126611-1), POST CARBON 2 (240-126611-2), POST CARBON 1 (240-126611-3), POST CLAY 2 (240-126611-4) and DUP-1 (240-126611-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 608.3. The samples were prepared on 02/25/2020 and analyzed on 02/26/2020.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-518847.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CAN
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL CAN
608.3	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
625	Liquid-Liquid Extraction	40CFR136A	TAL CAN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-126611-1	EFFLUENT	Water	02/20/20 12:15	02/21/20 09:40	
240-126611-2	POST CARBON 2	Water	02/20/20 12:20	02/21/20 09:40	
240-126611-3	POST CARBON 1	Water	02/20/20 12:22	02/21/20 09:40	
240-126611-4	POST CLAY 2	Water	02/20/20 12:24	02/21/20 09:40	
240-126611-5	DUP-1	Water	02/20/20 00:00	02/21/20 09:40	
240-126611-6	TRIP BLANK	Water	02/20/20 00:00	02/21/20 09:40	

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Client Sample ID: EFFLUENT

Lab Sample ID: 240-126611-1

No Detections.

Client Sample ID: POST CARBON 2

Lab Sample ID: 240-126611-2

No Detections.

Client Sample ID: POST CARBON 1

Lab Sample ID: 240-126611-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	0.055	J	0.057	0.030	ug/L	1		608.3	Total/NA

Client Sample ID: POST CLAY 2

Lab Sample ID: 240-126611-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	0.15		0.057	0.030	ug/L	1		608.3	Total/NA

Client Sample ID: DUP-1

Lab Sample ID: 240-126611-5

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-126611-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Client Sample ID: EFFLUENT

Lab Sample ID: 240-126611-1

Date Collected: 02/20/20 12:15

Matrix: Water

Date Received: 02/21/20 09:40

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.13	ug/L			02/24/20 22:02	1
Ethylbenzene	5.0	U	5.0	0.11	ug/L			02/24/20 22:02	1
Toluene	5.0	U	5.0	0.14	ug/L			02/24/20 22:02	1
m-Xylene & p-Xylene	2.5	U	2.5	0.080	ug/L			02/24/20 22:02	1
o-Xylene	2.5	U	2.5	0.090	ug/L			02/24/20 22:02	1
Naphthalene	5.0	U	5.0	0.32	ug/L			02/24/20 22:02	1
n-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/24/20 22:02	1
sec-Butylbenzene	5.0	U	5.0	0.13	ug/L			02/24/20 22:02	1
tert-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/24/20 22:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		47 - 134					02/24/20 22:02	1
1,2-Dichloroethane-d4 (Surr)	93		75 - 130					02/24/20 22:02	1
Toluene-d8 (Surr)	86		69 - 122					02/24/20 22:02	1

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	9.6	U	9.6	0.16	ug/L		02/26/20 09:12	02/28/20 19:04	1
Benzo[a]pyrene	9.6	U	9.6	0.17	ug/L		02/26/20 09:12	02/28/20 19:04	1
Benzo[b]fluoranthene	9.6	U	9.6	0.15	ug/L		02/26/20 09:12	02/28/20 19:04	1
Benzo[g,h,i]perylene	9.6	U	9.6	0.17	ug/L		02/26/20 09:12	02/28/20 19:04	1
Acenaphthene	9.6	U	9.6	0.17	ug/L		02/26/20 09:12	02/28/20 19:04	1
Anthracene	9.6	U	9.6	0.13	ug/L		02/26/20 09:12	02/28/20 19:04	1
Benzo[k]fluoranthene	9.6	U	9.6	0.13	ug/L		02/26/20 09:12	02/28/20 19:04	1
Chrysene	9.6	U	9.6	0.18	ug/L		02/26/20 09:12	02/28/20 19:04	1
Dibenz(a,h)anthracene	9.6	U	9.6	0.15	ug/L		02/26/20 09:12	02/28/20 19:04	1
Fluorene	9.6	U	9.6	0.16	ug/L		02/26/20 09:12	02/28/20 19:04	1
Indeno[1,2,3-cd]pyrene	9.6	U	9.6	0.13	ug/L		02/26/20 09:12	02/28/20 19:04	1
Phenanthrene	9.6	U	9.6	0.16	ug/L		02/26/20 09:12	02/28/20 19:04	1
Pyrene	9.6	U	9.6	0.17	ug/L		02/26/20 09:12	02/28/20 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	46		10 - 120				02/26/20 09:12	02/28/20 19:04	1
2,4,6-Tribromophenol	95		33 - 120				02/26/20 09:12	02/28/20 19:04	1
Nitrobenzene-d5	68		33 - 120				02/26/20 09:12	02/28/20 19:04	1
Phenol-d5	26		10 - 120				02/26/20 09:12	02/28/20 19:04	1
Terphenyl-d14	72		36 - 122				02/26/20 09:12	02/28/20 19:04	1
2-Fluorobiphenyl (Surr)	78		39 - 120				02/26/20 09:12	02/28/20 19:04	1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 22:27	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 22:27	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 22:27	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 22:27	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 22:27	1
PCB-1254	0.057	U	0.057	0.030	ug/L		02/25/20 08:39	02/26/20 22:27	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/25/20 08:39	02/26/20 22:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	43		36 - 121				02/25/20 08:39	02/26/20 22:27	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Client Sample ID: EFFLUENT

Date Collected: 02/20/20 12:15

Date Received: 02/21/20 09:40

Lab Sample ID: 240-126611-1

Matrix: Water

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tetrachloro-m-xylene</i>	66		42 - 135	02/25/20 08:39	02/26/20 22:27	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Client Sample ID: POST CARBON 2

Lab Sample ID: 240-126611-2

Date Collected: 02/20/20 12:20

Matrix: Water

Date Received: 02/21/20 09:40

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:06	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:06	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:06	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:06	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:06	1
PCB-1254	0.057	U	0.057	0.030	ug/L		02/25/20 08:39	02/26/20 23:06	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/25/20 08:39	02/26/20 23:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	48		36 - 121	02/25/20 08:39	02/26/20 23:06	1
Tetrachloro-m-xylene	70		42 - 135	02/25/20 08:39	02/26/20 23:06	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Client Sample ID: POST CARBON 1

Lab Sample ID: 240-126611-3

Date Collected: 02/20/20 12:22

Matrix: Water

Date Received: 02/21/20 09:40

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:19	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:19	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:19	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:19	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:19	1
PCB-1254	0.055	J	0.057	0.030	ug/L		02/25/20 08:39	02/26/20 23:19	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/25/20 08:39	02/26/20 23:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	50		36 - 121	02/25/20 08:39	02/26/20 23:19	1
Tetrachloro-m-xylene	69		42 - 135	02/25/20 08:39	02/26/20 23:19	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Client Sample ID: POST CLAY 2

Lab Sample ID: 240-126611-4

Date Collected: 02/20/20 12:24

Matrix: Water

Date Received: 02/21/20 09:40

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:31	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:31	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:31	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:31	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:31	1
PCB-1254	0.15		0.057	0.030	ug/L		02/25/20 08:39	02/26/20 23:31	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/25/20 08:39	02/26/20 23:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	40		36 - 121	02/25/20 08:39	02/26/20 23:31	1
Tetrachloro-m-xylene	59		42 - 135	02/25/20 08:39	02/26/20 23:31	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Client Sample ID: DUP-1

Lab Sample ID: 240-126611-5

Date Collected: 02/20/20 00:00

Matrix: Water

Date Received: 02/21/20 09:40

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:45	1
PCB-1221	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:45	1
PCB-1232	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:45	1
PCB-1242	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:45	1
PCB-1248	0.057	U	0.057	0.036	ug/L		02/25/20 08:39	02/26/20 23:45	1
PCB-1254	0.057	U	0.057	0.030	ug/L		02/25/20 08:39	02/26/20 23:45	1
PCB-1260	0.057	U	0.057	0.030	ug/L		02/25/20 08:39	02/26/20 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	50		36 - 121	02/25/20 08:39	02/26/20 23:45	1
Tetrachloro-m-xylene	69		42 - 135	02/25/20 08:39	02/26/20 23:45	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-126611-6

Date Collected: 02/20/20 00:00

Matrix: Water

Date Received: 02/21/20 09:40

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.13	ug/L			02/24/20 22:24	1
Ethylbenzene	5.0	U	5.0	0.11	ug/L			02/24/20 22:24	1
Toluene	5.0	U	5.0	0.14	ug/L			02/24/20 22:24	1
m-Xylene & p-Xylene	2.5	U	2.5	0.080	ug/L			02/24/20 22:24	1
o-Xylene	2.5	U	2.5	0.090	ug/L			02/24/20 22:24	1
Naphthalene	5.0	U	5.0	0.32	ug/L			02/24/20 22:24	1
n-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/24/20 22:24	1
sec-Butylbenzene	5.0	U	5.0	0.13	ug/L			02/24/20 22:24	1
tert-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/24/20 22:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		47 - 134					02/24/20 22:24	1
1,2-Dichloroethane-d4 (Surr)	91		75 - 130					02/24/20 22:24	1
Toluene-d8 (Surr)	85		69 - 122					02/24/20 22:24	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (47-134)	DCA (75-130)	TOL (69-122)
240-126611-1	EFFLUENT	95	93	86
240-126611-6	TRIP BLANK	94	91	85
LCS 240-424012/5	Lab Control Sample	86	84	81
MB 240-424012/9	Method Blank	98	95	86

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (10-120)	TBP (33-120)	NBZ (33-120)	PHL (10-120)	TPHL (36-122)	FBP (39-120)
240-126611-1	EFFLUENT	46	95	68	26	72	78
LCS 240-424317/13-A	Lab Control Sample	40	97	74	22	82	81
MB 240-424317/12-A	Method Blank	39	80	65	22	98	76

Surrogate Legend

2FP = 2-Fluorophenol

TBP = 2,4,6-Tribromophenol

NBZ = Nitrobenzene-d5

PHL = Phenol-d5

TPHL = Terphenyl-d14

FBP = 2-Fluorobiphenyl (Surr)

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2 (36-121)	TCX2 (42-135)
240-126611-1	EFFLUENT	43	66
240-126611-2	POST CARBON 2	48	70
240-126611-3	POST CARBON 1	50	69
240-126611-4	POST CLAY 2	40	59
240-126611-5	DUP-1	50	69
LCS 480-518847/2-A	Lab Control Sample	55	77
LCSD 480-518847/3-A	Lab Control Sample Dup	57	77
MB 480-518847/1-A	Method Blank	53	78

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-424012/9

Matrix: Water

Analysis Batch: 424012

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.13	ug/L			02/24/20 17:33	1
Ethylbenzene	5.0	U	5.0	0.11	ug/L			02/24/20 17:33	1
Toluene	5.0	U	5.0	0.14	ug/L			02/24/20 17:33	1
m-Xylene & p-Xylene	2.5	U	2.5	0.080	ug/L			02/24/20 17:33	1
o-Xylene	2.5	U	2.5	0.090	ug/L			02/24/20 17:33	1
Naphthalene	5.0	U	5.0	0.32	ug/L			02/24/20 17:33	1
n-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/24/20 17:33	1
sec-Butylbenzene	5.0	U	5.0	0.13	ug/L			02/24/20 17:33	1
tert-Butylbenzene	5.0	U	5.0	0.14	ug/L			02/24/20 17:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		47 - 134		02/24/20 17:33	1
1,2-Dichloroethane-d4 (Surr)	95		75 - 130		02/24/20 17:33	1
Toluene-d8 (Surr)	86		69 - 122		02/24/20 17:33	1

Lab Sample ID: LCS 240-424012/5

Matrix: Water

Analysis Batch: 424012

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	18.5		ug/L		92	37 - 151
Ethylbenzene	20.0	19.3		ug/L		96	37 - 162
Toluene	20.0	17.5		ug/L		87	47 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		47 - 134
1,2-Dichloroethane-d4 (Surr)	84		75 - 130
Toluene-d8 (Surr)	81		69 - 122

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-424317/12-A

Matrix: Water

Analysis Batch: 424501

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	10	U	10	0.17	ug/L		02/26/20 09:12	02/27/20 11:34	1
Benzo[a]pyrene	10	U	10	0.17	ug/L		02/26/20 09:12	02/27/20 11:34	1
Benzo[b]fluoranthene	10	U	10	0.15	ug/L		02/26/20 09:12	02/27/20 11:34	1
Benzo[g,h,i]perylene	10	U	10	0.18	ug/L		02/26/20 09:12	02/27/20 11:34	1
Acenaphthene	10	U	10	0.17	ug/L		02/26/20 09:12	02/27/20 11:34	1
Anthracene	10	U	10	0.14	ug/L		02/26/20 09:12	02/27/20 11:34	1
Benzo[k]fluoranthene	10	U	10	0.14	ug/L		02/26/20 09:12	02/27/20 11:34	1
Chrysene	10	U	10	0.19	ug/L		02/26/20 09:12	02/27/20 11:34	1
Dibenz(a,h)anthracene	10	U	10	0.15	ug/L		02/26/20 09:12	02/27/20 11:34	1
Fluorene	10	U	10	0.17	ug/L		02/26/20 09:12	02/27/20 11:34	1
Indeno[1,2,3-cd]pyrene	10	U	10	0.14	ug/L		02/26/20 09:12	02/27/20 11:34	1
Phenanthrene	10	U	10	0.17	ug/L		02/26/20 09:12	02/27/20 11:34	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-424317/12-A

Matrix: Water

Analysis Batch: 424501

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	10	U	10	0.18	ug/L		02/26/20 09:12	02/27/20 11:34	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	39		10 - 120				02/26/20 09:12	02/27/20 11:34	1
2,4,6-Tribromophenol	80		33 - 120				02/26/20 09:12	02/27/20 11:34	1
Nitrobenzene-d5	65		33 - 120				02/26/20 09:12	02/27/20 11:34	1
Phenol-d5	22		10 - 120				02/26/20 09:12	02/27/20 11:34	1
Terphenyl-d14	98		36 - 122				02/26/20 09:12	02/27/20 11:34	1
2-Fluorobiphenyl (Surr)	76		39 - 120				02/26/20 09:12	02/27/20 11:34	1

Lab Sample ID: LCS 240-424317/13-A

Matrix: Water

Analysis Batch: 424501

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	20.0	16.1		ug/L		81	33 - 143
Benzo[a]pyrene	20.0	15.4		ug/L		77	17 - 163
Benzo[b]fluoranthene	20.0	15.8		ug/L		79	24 - 159
Benzo[g,h,i]perylene	20.0	15.5		ug/L		78	0 - 219
Acenaphthene	20.0	15.6		ug/L		78	47 - 145
Anthracene	20.0	17.2		ug/L		86	27 - 133
Benzo[k]fluoranthene	20.0	14.6		ug/L		73	11 - 162
Chrysene	20.0	15.6		ug/L		78	17 - 168
Dibenz(a,h)anthracene	20.0	15.0		ug/L		75	0 - 227
Fluorene	20.0	15.5		ug/L		78	59 - 121
Indeno[1,2,3-cd]pyrene	20.0	15.6		ug/L		78	0 - 171
Phenanthrene	20.0	16.4		ug/L		82	54 - 120
Pyrene	20.0	17.2		ug/L		86	52 - 115
Surrogate	%Recovery	LCS Qualifier	Limits				
2-Fluorophenol	40		10 - 120				
2,4,6-Tribromophenol	97		33 - 120				
Nitrobenzene-d5	74		33 - 120				
Phenol-d5	22		10 - 120				
Terphenyl-d14	82		36 - 122				
2-Fluorobiphenyl (Surr)	81		39 - 120				

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 480-518847/1-A

Matrix: Water

Analysis Batch: 519088

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 518847

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.060	U	0.060	0.038	ug/L		02/25/20 08:39	02/26/20 21:49	1
PCB-1221	0.060	U	0.060	0.038	ug/L		02/25/20 08:39	02/26/20 21:49	1
PCB-1232	0.060	U	0.060	0.038	ug/L		02/25/20 08:39	02/26/20 21:49	1
PCB-1242	0.060	U	0.060	0.038	ug/L		02/25/20 08:39	02/26/20 21:49	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: MB 480-518847/1-A

Matrix: Water

Analysis Batch: 519088

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 518847

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	0.060	U	0.060	0.038	ug/L		02/25/20 08:39	02/26/20 21:49	1
PCB-1254	0.060	U	0.060	0.031	ug/L		02/25/20 08:39	02/26/20 21:49	1
PCB-1260	0.060	U	0.060	0.031	ug/L		02/25/20 08:39	02/26/20 21:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	53		36 - 121	02/25/20 08:39	02/26/20 21:49	1
Tetrachloro-m-xylene	78		42 - 135	02/25/20 08:39	02/26/20 21:49	1

Lab Sample ID: LCS 480-518847/2-A

Matrix: Water

Analysis Batch: 519088

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 518847

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	1.00	1.10		ug/L		110	69 - 123
PCB-1260	1.00	1.00		ug/L		100	69 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	55		36 - 121
Tetrachloro-m-xylene	77		42 - 135

Lab Sample ID: LCSD 480-518847/3-A

Matrix: Water

Analysis Batch: 519088

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 518847

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	1.00	1.13		ug/L		113	69 - 123	3	30
PCB-1260	1.00	0.998		ug/L		100	69 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	57		36 - 121
Tetrachloro-m-xylene	77		42 - 135

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

GC/MS VOA

Analysis Batch: 424012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-126611-1	EFFLUENT	Total/NA	Water	624	
240-126611-6	TRIP BLANK	Total/NA	Water	624	
MB 240-424012/9	Method Blank	Total/NA	Water	624	
LCS 240-424012/5	Lab Control Sample	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 424317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-126611-1	EFFLUENT	Total/NA	Water	625	
MB 240-424317/12-A	Method Blank	Total/NA	Water	625	
LCS 240-424317/13-A	Lab Control Sample	Total/NA	Water	625	

Analysis Batch: 424501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-424317/12-A	Method Blank	Total/NA	Water	625	424317
LCS 240-424317/13-A	Lab Control Sample	Total/NA	Water	625	424317

Analysis Batch: 424682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-126611-1	EFFLUENT	Total/NA	Water	625	424317

GC Semi VOA

Prep Batch: 518847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-126611-1	EFFLUENT	Total/NA	Water	3510C	
240-126611-2	POST CARBON 2	Total/NA	Water	3510C	
240-126611-3	POST CARBON 1	Total/NA	Water	3510C	
240-126611-4	POST CLAY 2	Total/NA	Water	3510C	
240-126611-5	DUP-1	Total/NA	Water	3510C	
MB 480-518847/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-518847/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-518847/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 519088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-126611-1	EFFLUENT	Total/NA	Water	608.3	518847
240-126611-2	POST CARBON 2	Total/NA	Water	608.3	518847
240-126611-3	POST CARBON 1	Total/NA	Water	608.3	518847
240-126611-4	POST CLAY 2	Total/NA	Water	608.3	518847
240-126611-5	DUP-1	Total/NA	Water	608.3	518847
MB 480-518847/1-A	Method Blank	Total/NA	Water	608.3	518847
LCS 480-518847/2-A	Lab Control Sample	Total/NA	Water	608.3	518847
LCSD 480-518847/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	518847

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Client Sample ID: EFFLUENT

Lab Sample ID: 240-126611-1

Date Collected: 02/20/20 12:15

Matrix: Water

Date Received: 02/21/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	424012	02/24/20 22:02	TJL1	TAL CAN
Total/NA	Prep	625			424317	02/26/20 09:12	MDH	TAL CAN
Total/NA	Analysis	625		1	424682	02/28/20 19:04	MRU	TAL CAN
Total/NA	Prep	3510C			518847	02/25/20 08:39	JMP	TAL BUF
Total/NA	Analysis	608.3		1	519088	02/26/20 22:27	W1T	TAL BUF

Client Sample ID: POST CARBON 2

Lab Sample ID: 240-126611-2

Date Collected: 02/20/20 12:20

Matrix: Water

Date Received: 02/21/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			518847	02/25/20 08:39	JMP	TAL BUF
Total/NA	Analysis	608.3		1	519088	02/26/20 23:06	W1T	TAL BUF

Client Sample ID: POST CARBON 1

Lab Sample ID: 240-126611-3

Date Collected: 02/20/20 12:22

Matrix: Water

Date Received: 02/21/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			518847	02/25/20 08:39	JMP	TAL BUF
Total/NA	Analysis	608.3		1	519088	02/26/20 23:19	W1T	TAL BUF

Client Sample ID: POST CLAY 2

Lab Sample ID: 240-126611-4

Date Collected: 02/20/20 12:24

Matrix: Water

Date Received: 02/21/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			518847	02/25/20 08:39	JMP	TAL BUF
Total/NA	Analysis	608.3		1	519088	02/26/20 23:31	W1T	TAL BUF

Client Sample ID: DUP-1

Lab Sample ID: 240-126611-5

Date Collected: 02/20/20 00:00

Matrix: Water

Date Received: 02/21/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			518847	02/25/20 08:39	JMP	TAL BUF
Total/NA	Analysis	608.3		1	519088	02/26/20 23:45	W1T	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-126611-6

Date Collected: 02/20/20 00:00

Matrix: Water

Date Received: 02/21/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	424012	02/24/20 22:24	TJL1	TAL CAN

Eurofins TestAmerica, Canton

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

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Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-20 *
Connecticut	State	PH-0590	12-31-19 *
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20 *
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kentucky (VW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20 *
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19 *
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

Laboratory: Eurofins TestAmerica, Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-20
California	State	2931	04-01-20 *
Connecticut	State	PH-0568	09-30-20
Florida	NELAP	E87672	06-30-20
Georgia	State	10026 (NY)	03-31-20 *
Georgia (DW)	State	956	03-31-20 *
Illinois	NELAP	200003	09-30-19 *
Iowa	State	374	02-28-21
Kansas	NELAP	E-10187	01-31-20 *
Kentucky (DW)	State	90029	12-31-20 *
Kentucky (UST)	State	30	03-31-20 *
Kentucky (VW)	State	KY90029	12-31-20
Louisiana	NELAP	02031	06-30-20
Maine	State	NY00044	12-04-20
Maryland	State	294	03-31-20 *
Massachusetts	State	M-NY044	06-30-20
Michigan	State	9937	03-31-20 *
Minnesota	NELAP	1524384	12-31-20
New Hampshire	NELAP	2337	11-17-20
New Jersey	NELAP	NY455	06-30-20
New York	NELAP	10026	04-01-20 *
North Dakota	State	R-176	03-31-20 *
Oklahoma	State	9421	09-01-20
Oregon	NELAP	NY200003	06-10-20
Pennsylvania	NELAP	68-00281	07-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Canton

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Ford Green Island NY - E200077

Job ID: 240-126611-1

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAO00328	12-29-19 *
Rhode Island	State	LAO00328	12-30-20
Tennessee	State	02970	03-31-20 *
Texas	NELAP	T104704412-18-10	08-01-20
USDA	US Federal Programs	P330-18-00039	02-06-21
Virginia	NELAP	460185	09-14-19 *
Virginia	NELAP	460185	09-14-20
Washington	State	C784	02-11-21
Wisconsin	State	998310390	08-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Canton

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login #: 126611

Client Arcadis Site Name _____ Cooler unpacked by: Adam Curry
Cooler Received on 2-21-20 Opened on 2-21-20
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time

Storage Location

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN #IR-11 (CF +0.9 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1a Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
-Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC995364
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials?  Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # overed Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not
checked for pH by
Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: AG

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

[illegible]

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 240-126611-1

Login Number: 126611

List Number: 2

Creator: Sabuda, Brendan D

List Source: Eurofins TestAmerica, Buffalo

List Creation: 02/24/20 12:03 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-127961-1

Client Project/Site: Ford Green Island NY - E200077

For:

ARCADIS U.S., Inc.
855 Route 146
Suite 210
Clifton Park, New York 12065

Attn: Jasmine Mullins



Authorized for release by:
3/27/2020 10:29:19 AM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
Surrogate Summary	16
QC Sample Results	17
QC Association Summary	20
Lab Chronicle	21
Certification Summary	23
Chain of Custody	25
Receipt Checklists	29



Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Job ID: 240-127961-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford Green Island NY - E200077

Report Number: 240-127961-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The EPA Method 608.3 PCB analysis was performed at the Eurofins TestAmerica Buffalo laboratory.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 3/20/2020 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.6° C and 4.2° C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples EFFLUENT (240-127961-1) and TRIP BLANK (240-127961-6) were analyzed for Volatile organic compounds (GC/MS) in accordance with EPA Method 624. The samples were analyzed on 03/23/2020.

The matrix spike/matrix spike duplicate (MS/MSD) for samples EFFLUENT (240-127961-1) and TRIP BLANK (240-127961-6) was not reported, because the analyte list for these samples did not match the analyte list for the MS/MSD parent sample.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample EFFLUENT (240-127961-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA Method 625. The samples were prepared on 03/23/2020 and analyzed on 03/25/2020.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Job ID: 240-127961-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

no corrective action is required.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-427814.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples EFFLUENT (240-127961-1), POST CARBON 2 (240-127961-2), POST CARBON 1 (240-127961-3), POST CLAY 2 (240-127961-4) and DUP-1 (240-127961-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 608.3. The samples were prepared on 03/24/2020 and analyzed on 03/25/2020.

DCB Decachlorobiphenyl failed the surrogate recovery criteria low for MB 480-522760/1-A. DCB Decachlorobiphenyl failed the surrogate recovery criteria low for LCS 480-522760/2-A. DCB Decachlorobiphenyl failed the surrogate recovery criteria low for 480-167651-A-6-A MS. Refer to the QC report for details.

Sample POST CLAY 2 (240-127961-4)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following samples are associated with method blank (MB 480-522760/1) and laboratory control sample (LCS 480-522760/2) that had recoveries for the surrogate Decachlorobiphenyl that were below acceptance limits: EFFLUENT (240-127961-1), POST CARBON 2 (240-127961-2), POST CARBON 1 (240-127961-3), POST CLAY 2 (240-127961-4) and DUP-1 (240-127961-5). The secondary surrogate Tetrachloro-m-xylene was within limits. Therefore, the data has been reported.

The following sample was diluted due to the nature of the sample matrix: POST CLAY 2 (240-127961-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CAN
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL CAN
608.3	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
625	Liquid-Liquid Extraction	40CFR136A	TAL CAN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-127961-1	EFFLUENT	Water	03/19/20 09:15	03/20/20 14:43	
240-127961-2	POST CARBON 2	Water	03/19/20 09:25	03/20/20 14:43	
240-127961-3	POST CARBON 1	Water	03/19/20 09:35	03/20/20 14:43	
240-127961-4	POST CLAY 2	Water	03/19/20 09:45	03/20/20 14:43	
240-127961-5	DUP-1	Water	03/19/20 00:00	03/20/20 14:43	
240-127961-6	TRIP BLANK	Water	03/19/20 00:00	03/20/20 14:43	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Client Sample ID: EFFLUENT

Lab Sample ID: 240-127961-1

No Detections.

Client Sample ID: POST CARBON 2

Lab Sample ID: 240-127961-2

No Detections.

Client Sample ID: POST CARBON 1

Lab Sample ID: 240-127961-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	0.18		0.057	0.030	ug/L	1		608.3	Total/NA

Client Sample ID: POST CLAY 2

Lab Sample ID: 240-127961-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	0.33		0.11	0.059	ug/L	2		608.3	Total/NA

Client Sample ID: DUP-1

Lab Sample ID: 240-127961-5

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-127961-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Client Sample ID: EFFLUENT

Lab Sample ID: 240-127961-1

Date Collected: 03/19/20 09:15

Matrix: Water

Date Received: 03/20/20 14:43

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.13	ug/L			03/23/20 20:04	1
Ethylbenzene	5.0	U	5.0	0.11	ug/L			03/23/20 20:04	1
Toluene	5.0	U	5.0	0.14	ug/L			03/23/20 20:04	1
m-Xylene & p-Xylene	2.5	U	2.5	0.080	ug/L			03/23/20 20:04	1
o-Xylene	2.5	U	2.5	0.090	ug/L			03/23/20 20:04	1
Naphthalene	5.0	U	5.0	0.32	ug/L			03/23/20 20:04	1
n-Butylbenzene	5.0	U	5.0	0.14	ug/L			03/23/20 20:04	1
sec-Butylbenzene	5.0	U	5.0	0.13	ug/L			03/23/20 20:04	1
tert-Butylbenzene	5.0	U	5.0	0.14	ug/L			03/23/20 20:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		47 - 134		03/23/20 20:04	1
1,2-Dichloroethane-d4 (Surr)	116		75 - 130		03/23/20 20:04	1
Toluene-d8 (Surr)	98		69 - 122		03/23/20 20:04	1

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	9.5	U	9.5	0.16	ug/L		03/23/20 06:05	03/25/20 19:37	1
Benzo[a]pyrene	9.5	U	9.5	0.16	ug/L		03/23/20 06:05	03/25/20 19:37	1
Benzo[b]fluoranthene	9.5	U	9.5	0.15	ug/L		03/23/20 06:05	03/25/20 19:37	1
Benzo[g,h,i]perylene	9.5	U	9.5	0.17	ug/L		03/23/20 06:05	03/25/20 19:37	1
Acenaphthene	9.5	U	9.5	0.16	ug/L		03/23/20 06:05	03/25/20 19:37	1
Anthracene	9.5	U	9.5	0.13	ug/L		03/23/20 06:05	03/25/20 19:37	1
Benzo[k]fluoranthene	9.5	U	9.5	0.13	ug/L		03/23/20 06:05	03/25/20 19:37	1
Chrysene	9.5	U	9.5	0.18	ug/L		03/23/20 06:05	03/25/20 19:37	1
Dibenz(a,h)anthracene	9.5	U	9.5	0.14	ug/L		03/23/20 06:05	03/25/20 19:37	1
Fluorene	9.5	U	9.5	0.16	ug/L		03/23/20 06:05	03/25/20 19:37	1
Indeno[1,2,3-cd]pyrene	9.5	U	9.5	0.13	ug/L		03/23/20 06:05	03/25/20 19:37	1
Phenanthrene	9.5	U	9.5	0.16	ug/L		03/23/20 06:05	03/25/20 19:37	1
Pyrene	9.5	U	9.5	0.17	ug/L		03/23/20 06:05	03/25/20 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	38		10 - 120	03/23/20 06:05	03/25/20 19:37	1
2,4,6-Tribromophenol	105		33 - 120	03/23/20 06:05	03/25/20 19:37	1
Nitrobenzene-d5	79		33 - 120	03/23/20 06:05	03/25/20 19:37	1
Phenol-d5	21		10 - 120	03/23/20 06:05	03/25/20 19:37	1
Terphenyl-d14	87		36 - 122	03/23/20 06:05	03/25/20 19:37	1
2-Fluorobiphenyl (Surr)	70		39 - 120	03/23/20 06:05	03/25/20 19:37	1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:02	1
PCB-1221	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:02	1
PCB-1232	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:02	1
PCB-1242	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:02	1
PCB-1248	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:02	1
PCB-1254	0.057	U	0.057	0.030	ug/L		03/24/20 08:50	03/25/20 19:02	1
PCB-1260	0.057	U	0.057	0.030	ug/L		03/24/20 08:50	03/25/20 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	47		36 - 121	03/24/20 08:50	03/25/20 19:02	1

Eurofins TestAmerica, Canton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Client Sample ID: EFFLUENT

Date Collected: 03/19/20 09:15

Date Received: 03/20/20 14:43

Lab Sample ID: 240-127961-1

Matrix: Water

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tetrachloro-m-xylene</i>	<i>58</i>		<i>42 - 135</i>	<i>03/24/20 08:50</i>	<i>03/25/20 19:02</i>	<i>1</i>

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Client Sample ID: POST CARBON 2

Lab Sample ID: 240-127961-2

Date Collected: 03/19/20 09:25

Matrix: Water

Date Received: 03/20/20 14:43

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:15	1
PCB-1221	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:15	1
PCB-1232	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:15	1
PCB-1242	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:15	1
PCB-1248	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:15	1
PCB-1254	0.057	U	0.057	0.030	ug/L		03/24/20 08:50	03/25/20 19:15	1
PCB-1260	0.057	U	0.057	0.030	ug/L		03/24/20 08:50	03/25/20 19:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	51		36 - 121				03/24/20 08:50	03/25/20 19:15	1
Tetrachloro-m-xylene	68		42 - 135				03/24/20 08:50	03/25/20 19:15	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Client Sample ID: POST CARBON 1

Lab Sample ID: 240-127961-3

Date Collected: 03/19/20 09:35

Matrix: Water

Date Received: 03/20/20 14:43

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:28	1
PCB-1221	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:28	1
PCB-1232	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:28	1
PCB-1242	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:28	1
PCB-1248	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:28	1
PCB-1254	0.18		0.057	0.030	ug/L		03/24/20 08:50	03/25/20 19:28	1
PCB-1260	0.057	U	0.057	0.030	ug/L		03/24/20 08:50	03/25/20 19:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	48		36 - 121	03/24/20 08:50	03/25/20 19:28	1
Tetrachloro-m-xylene	65		42 - 135	03/24/20 08:50	03/25/20 19:28	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Client Sample ID: POST CLAY 2

Lab Sample ID: 240-127961-4

Date Collected: 03/19/20 09:45

Matrix: Water

Date Received: 03/20/20 14:43

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.11	U	0.11	0.072	ug/L		03/24/20 08:50	03/25/20 19:40	2
PCB-1221	0.11	U	0.11	0.072	ug/L		03/24/20 08:50	03/25/20 19:40	2
PCB-1232	0.11	U	0.11	0.072	ug/L		03/24/20 08:50	03/25/20 19:40	2
PCB-1242	0.11	U	0.11	0.072	ug/L		03/24/20 08:50	03/25/20 19:40	2
PCB-1248	0.11	U	0.11	0.072	ug/L		03/24/20 08:50	03/25/20 19:40	2
PCB-1254	0.33		0.11	0.059	ug/L		03/24/20 08:50	03/25/20 19:40	2
PCB-1260	0.11	U	0.11	0.059	ug/L		03/24/20 08:50	03/25/20 19:40	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	43		36 - 121	03/24/20 08:50	03/25/20 19:40	2
Tetrachloro-m-xylene	58		42 - 135	03/24/20 08:50	03/25/20 19:40	2

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Client Sample ID: DUP-1

Date Collected: 03/19/20 00:00

Date Received: 03/20/20 14:43

Lab Sample ID: 240-127961-5

Matrix: Water

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:53	1
PCB-1221	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:53	1
PCB-1232	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:53	1
PCB-1242	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:53	1
PCB-1248	0.057	U	0.057	0.036	ug/L		03/24/20 08:50	03/25/20 19:53	1
PCB-1254	0.057	U	0.057	0.030	ug/L		03/24/20 08:50	03/25/20 19:53	1
PCB-1260	0.057	U	0.057	0.030	ug/L		03/24/20 08:50	03/25/20 19:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	60		36 - 121	03/24/20 08:50	03/25/20 19:53	1
Tetrachloro-m-xylene	68		42 - 135	03/24/20 08:50	03/25/20 19:53	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-127961-6

Date Collected: 03/19/20 00:00

Matrix: Water

Date Received: 03/20/20 14:43

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.13	ug/L			03/23/20 20:29	1
Ethylbenzene	5.0	U	5.0	0.11	ug/L			03/23/20 20:29	1
Toluene	5.0	U	5.0	0.14	ug/L			03/23/20 20:29	1
m-Xylene & p-Xylene	2.5	U	2.5	0.080	ug/L			03/23/20 20:29	1
o-Xylene	2.5	U	2.5	0.090	ug/L			03/23/20 20:29	1
Naphthalene	5.0	U	5.0	0.32	ug/L			03/23/20 20:29	1
n-Butylbenzene	5.0	U	5.0	0.14	ug/L			03/23/20 20:29	1
sec-Butylbenzene	5.0	U	5.0	0.13	ug/L			03/23/20 20:29	1
tert-Butylbenzene	5.0	U	5.0	0.14	ug/L			03/23/20 20:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		47 - 134					03/23/20 20:29	1
1,2-Dichloroethane-d4 (Surr)	117		75 - 130					03/23/20 20:29	1
Toluene-d8 (Surr)	101		69 - 122					03/23/20 20:29	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (47-134)	DCA (75-130)	TOL (69-122)
240-127961-1	EFFLUENT	101	116	98
240-127961-6	TRIP BLANK	99	117	101
LCS 240-427849/5	Lab Control Sample	102	103	99
MB 240-427849/8	Method Blank	98	113	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP (10-120)	TBP (33-120)	NBZ (33-120)	PHL (10-120)	TPHL (36-122)	FBP (39-120)
240-127961-1	EFFLUENT	38	105	79	21	87	70
LCS 240-427814/18-A	Lab Control Sample	40	93	82	26	92	74
MB 240-427814/17-A	Method Blank	41	77	76	23	90	67

Surrogate Legend

2FP = 2-Fluorophenol

TBP = 2,4,6-Tribromophenol

NBZ = Nitrobenzene-d5

PHL = Phenol-d5

TPHL = Terphenyl-d14

FBP = 2-Fluorobiphenyl (Surr)

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1 (36-121)	TCX1 (42-135)
240-127961-1	EFFLUENT	47	58
240-127961-2	POST CARBON 2	51	68
240-127961-3	POST CARBON 1	48	65
240-127961-4	POST CLAY 2	43	58
240-127961-5	DUP-1	60	68
480-167651-A-6-A MS	Matrix Spike	32 X	62
480-167651-B-6-A MSD	Matrix Spike Duplicate	39	63
LCS 480-522760/2-A	Lab Control Sample	35 X	58
MB 480-522760/1-A	Method Blank	35 X	68

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-427849/8

Matrix: Water

Analysis Batch: 427849

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.13	ug/L			03/23/20 12:18	1
Ethylbenzene	5.0	U	5.0	0.11	ug/L			03/23/20 12:18	1
Toluene	5.0	U	5.0	0.14	ug/L			03/23/20 12:18	1
m-Xylene & p-Xylene	2.5	U	2.5	0.080	ug/L			03/23/20 12:18	1
o-Xylene	2.5	U	2.5	0.090	ug/L			03/23/20 12:18	1
Naphthalene	5.0	U	5.0	0.32	ug/L			03/23/20 12:18	1
n-Butylbenzene	5.0	U	5.0	0.14	ug/L			03/23/20 12:18	1
sec-Butylbenzene	5.0	U	5.0	0.13	ug/L			03/23/20 12:18	1
tert-Butylbenzene	5.0	U	5.0	0.14	ug/L			03/23/20 12:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		47 - 134		03/23/20 12:18	1
1,2-Dichloroethane-d4 (Surr)	113		75 - 130		03/23/20 12:18	1
Toluene-d8 (Surr)	98		69 - 122		03/23/20 12:18	1

Lab Sample ID: LCS 240-427849/5

Matrix: Water

Analysis Batch: 427849

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	19.7		ug/L		99	37 - 151
Ethylbenzene	20.0	19.9		ug/L		99	37 - 162
Toluene	20.0	18.9		ug/L		95	47 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		47 - 134
1,2-Dichloroethane-d4 (Surr)	103		75 - 130
Toluene-d8 (Surr)	99		69 - 122

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-427814/17-A

Matrix: Water

Analysis Batch: 428244

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 427814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	10	U	10	0.17	ug/L		03/23/20 06:05	03/25/20 10:27	1
Benzo[a]pyrene	10	U	10	0.17	ug/L		03/23/20 06:05	03/25/20 10:27	1
Benzo[b]fluoranthene	10	U	10	0.15	ug/L		03/23/20 06:05	03/25/20 10:27	1
Benzo[g,h,i]perylene	10	U	10	0.18	ug/L		03/23/20 06:05	03/25/20 10:27	1
Acenaphthene	10	U	10	0.17	ug/L		03/23/20 06:05	03/25/20 10:27	1
Anthracene	10	U	10	0.14	ug/L		03/23/20 06:05	03/25/20 10:27	1
Benzo[k]fluoranthene	10	U	10	0.14	ug/L		03/23/20 06:05	03/25/20 10:27	1
Chrysene	10	U	10	0.19	ug/L		03/23/20 06:05	03/25/20 10:27	1
Dibenz(a,h)anthracene	10	U	10	0.15	ug/L		03/23/20 06:05	03/25/20 10:27	1
Fluorene	10	U	10	0.17	ug/L		03/23/20 06:05	03/25/20 10:27	1
Indeno[1,2,3-cd]pyrene	10	U	10	0.14	ug/L		03/23/20 06:05	03/25/20 10:27	1
Phenanthrene	10	U	10	0.17	ug/L		03/23/20 06:05	03/25/20 10:27	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-427814/17-A
Matrix: Water
Analysis Batch: 428244

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	10	U	10	0.18	ug/L		03/23/20 06:05	03/25/20 10:27	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	41		10 - 120				03/23/20 06:05	03/25/20 10:27	1
2,4,6-Tribromophenol	77		33 - 120				03/23/20 06:05	03/25/20 10:27	1
Nitrobenzene-d5	76		33 - 120				03/23/20 06:05	03/25/20 10:27	1
Phenol-d5	23		10 - 120				03/23/20 06:05	03/25/20 10:27	1
Terphenyl-d14	90		36 - 122				03/23/20 06:05	03/25/20 10:27	1
2-Fluorobiphenyl (Surr)	67		39 - 120				03/23/20 06:05	03/25/20 10:27	1

Lab Sample ID: LCS 240-427814/18-A
Matrix: Water
Analysis Batch: 428244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	20.0	15.1		ug/L		75	33 - 143
Benzo[a]pyrene	20.0	16.2		ug/L		81	17 - 163
Benzo[b]fluoranthene	20.0	15.7		ug/L		79	24 - 159
Benzo[g,h,i]perylene	20.0	16.0		ug/L		80	0 - 219
Acenaphthene	20.0	14.8		ug/L		74	47 - 145
Anthracene	20.0	16.8		ug/L		84	27 - 133
Benzo[k]fluoranthene	20.0	16.0		ug/L		80	11 - 162
Chrysene	20.0	15.0		ug/L		75	17 - 168
Dibenz(a,h)anthracene	20.0	17.6		ug/L		88	0 - 227
Fluorene	20.0	15.8		ug/L		79	59 - 121
Indeno[1,2,3-cd]pyrene	20.0	16.7		ug/L		84	0 - 171
Phenanthrene	20.0	15.6		ug/L		78	54 - 120
Pyrene	20.0	14.5		ug/L		72	52 - 115
Surrogate	%Recovery	LCS Qualifier	Limits				
2-Fluorophenol	40		10 - 120				
2,4,6-Tribromophenol	93		33 - 120				
Nitrobenzene-d5	82		33 - 120				
Phenol-d5	26		10 - 120				
Terphenyl-d14	92		36 - 122				
2-Fluorobiphenyl (Surr)	74		39 - 120				

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 480-522760/1-A
Matrix: Water
Analysis Batch: 522982

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.060	U	0.060	0.038	ug/L		03/24/20 08:50	03/25/20 16:16	1
PCB-1221	0.060	U	0.060	0.038	ug/L		03/24/20 08:50	03/25/20 16:16	1
PCB-1232	0.060	U	0.060	0.038	ug/L		03/24/20 08:50	03/25/20 16:16	1
PCB-1242	0.060	U	0.060	0.038	ug/L		03/24/20 08:50	03/25/20 16:16	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: MB 480-522760/1-A

Matrix: Water

Analysis Batch: 522982

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 522760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	0.060	U	0.060	0.038	ug/L		03/24/20 08:50	03/25/20 16:16	1
PCB-1254	0.060	U	0.060	0.031	ug/L		03/24/20 08:50	03/25/20 16:16	1
PCB-1260	0.060	U	0.060	0.031	ug/L		03/24/20 08:50	03/25/20 16:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	35	X	36 - 121	03/24/20 08:50	03/25/20 16:16	1
Tetrachloro-m-xylene	68		42 - 135	03/24/20 08:50	03/25/20 16:16	1

Lab Sample ID: LCS 480-522760/2-A

Matrix: Water

Analysis Batch: 522982

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 522760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	1.00	0.860		ug/L		86	69 - 123
PCB-1260	1.00	0.723		ug/L		72	69 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	35	X	36 - 121
Tetrachloro-m-xylene	58		42 - 135

Lab Sample ID: 480-167651-A-6-A MS

Matrix: Water

Analysis Batch: 522982

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 522760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
PCB-1016	0.057	U	0.990	0.965		ug/L		97	43 - 150
PCB-1260	0.057	U	0.990	0.505		ug/L		51	21 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	32	X	36 - 121
Tetrachloro-m-xylene	62		42 - 135

Lab Sample ID: 480-167651-B-6-A MSD

Matrix: Water

Analysis Batch: 522982

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 522760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	0.057	U	0.971	0.856		ug/L		88	43 - 150	12	30
PCB-1260	0.057	U	0.971	0.501		ug/L		52	21 - 150	1	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	39		36 - 121
Tetrachloro-m-xylene	63		42 - 135

Eurofins TestAmerica, Canton

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

GC/MS VOA

Analysis Batch: 427849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127961-1	EFFLUENT	Total/NA	Water	624	
240-127961-6	TRIP BLANK	Total/NA	Water	624	
MB 240-427849/8	Method Blank	Total/NA	Water	624	
LCS 240-427849/5	Lab Control Sample	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 427814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127961-1	EFFLUENT	Total/NA	Water	625	
MB 240-427814/17-A	Method Blank	Total/NA	Water	625	
LCS 240-427814/18-A	Lab Control Sample	Total/NA	Water	625	

Analysis Batch: 428244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127961-1	EFFLUENT	Total/NA	Water	625	427814
MB 240-427814/17-A	Method Blank	Total/NA	Water	625	427814
LCS 240-427814/18-A	Lab Control Sample	Total/NA	Water	625	427814

GC Semi VOA

Prep Batch: 522760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127961-1	EFFLUENT	Total/NA	Water	3510C	
240-127961-2	POST CARBON 2	Total/NA	Water	3510C	
240-127961-3	POST CARBON 1	Total/NA	Water	3510C	
240-127961-4	POST CLAY 2	Total/NA	Water	3510C	
240-127961-5	DUP-1	Total/NA	Water	3510C	
MB 480-522760/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-522760/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-167651-A-6-A MS	Matrix Spike	Total/NA	Water	3510C	
480-167651-B-6-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 522982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127961-1	EFFLUENT	Total/NA	Water	608.3	522760
240-127961-2	POST CARBON 2	Total/NA	Water	608.3	522760
240-127961-3	POST CARBON 1	Total/NA	Water	608.3	522760
240-127961-4	POST CLAY 2	Total/NA	Water	608.3	522760
240-127961-5	DUP-1	Total/NA	Water	608.3	522760
MB 480-522760/1-A	Method Blank	Total/NA	Water	608.3	522760
LCS 480-522760/2-A	Lab Control Sample	Total/NA	Water	608.3	522760
480-167651-A-6-A MS	Matrix Spike	Total/NA	Water	608.3	522760
480-167651-B-6-A MSD	Matrix Spike Duplicate	Total/NA	Water	608.3	522760

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Client Sample ID: EFFLUENT

Lab Sample ID: 240-127961-1

Date Collected: 03/19/20 09:15

Matrix: Water

Date Received: 03/20/20 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	427849	03/23/20 20:04	HMB	TAL CAN
Total/NA	Prep	625			427814	03/23/20 06:05	MDH	TAL CAN
Total/NA	Analysis	625		1	428244	03/25/20 19:37	JMG	TAL CAN
Total/NA	Prep	3510C			522760	03/24/20 08:50	JMP	TAL BUF
Total/NA	Analysis	608.3		1	522982	03/25/20 19:02	W1T	TAL BUF

Client Sample ID: POST CARBON 2

Lab Sample ID: 240-127961-2

Date Collected: 03/19/20 09:25

Matrix: Water

Date Received: 03/20/20 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			522760	03/24/20 08:50	JMP	TAL BUF
Total/NA	Analysis	608.3		1	522982	03/25/20 19:15	W1T	TAL BUF

Client Sample ID: POST CARBON 1

Lab Sample ID: 240-127961-3

Date Collected: 03/19/20 09:35

Matrix: Water

Date Received: 03/20/20 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			522760	03/24/20 08:50	JMP	TAL BUF
Total/NA	Analysis	608.3		1	522982	03/25/20 19:28	W1T	TAL BUF

Client Sample ID: POST CLAY 2

Lab Sample ID: 240-127961-4

Date Collected: 03/19/20 09:45

Matrix: Water

Date Received: 03/20/20 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			522760	03/24/20 08:50	JMP	TAL BUF
Total/NA	Analysis	608.3		2	522982	03/25/20 19:40	W1T	TAL BUF

Client Sample ID: DUP-1

Lab Sample ID: 240-127961-5

Date Collected: 03/19/20 00:00

Matrix: Water

Date Received: 03/20/20 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			522760	03/24/20 08:50	JMP	TAL BUF
Total/NA	Analysis	608.3		1	522982	03/25/20 19:53	W1T	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-127961-6

Date Collected: 03/19/20 00:00

Matrix: Water

Date Received: 03/20/20 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	427849	03/23/20 20:29	HMB	TAL CAN

Eurofins TestAmerica, Canton

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127961-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20 *
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19 *
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

Laboratory: Eurofins TestAmerica, Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-20
California	State	2931	04-01-20
Connecticut	State	PH-0568	09-30-20
Florida	NELAP	E87672	06-30-20
Georgia	State	10026 (NY)	03-31-20
Georgia (DW)	State	956	03-31-20
Illinois	NELAP	200003	09-30-20
Iowa	State	374	02-28-21
Kansas	NELAP	E-10187	01-31-20 *
Kentucky (DW)	State	90029	12-31-20
Kentucky (UST)	State	30	03-31-20
Kentucky (WW)	State	KY90029	12-31-20
Louisiana	NELAP	02031	06-30-20
Maine	State	NY00044	12-04-20
Maryland	State	294	03-31-20
Massachusetts	State	M-NY044	06-30-20
Michigan	State	9937	03-31-20
Minnesota	NELAP	1524384	12-31-20
New Hampshire	NELAP	2337	11-18-20
New Jersey	NELAP	NY455	06-30-20
New York	NELAP	10026	04-01-20
North Dakota	State	R-176	03-31-20
Oklahoma	State	9421	09-01-20
Oregon	NELAP	NY200003	06-10-20
Pennsylvania	NELAP	68-00281	07-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Canton

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 240-127961-1

Project/Site: Ford Green Island NY - E200077

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAO00328	12-30-20
Tennessee	State	02970	03-31-20
Texas	NELAP	T104704412-18-10	08-01-20
USDA	US Federal Programs	P330-18-00039	02-06-21
Virginia	NELAP	460185	09-14-20
Washington	State	C784	02-11-21
Wisconsin	State	998310390	08-31-20

Eurofins TestAmerica, Canton
 4101 Shuffel Street NW
 North Canton, OH 44720
 Phone: 330-497-9396 Fax: 330-497-0772

Albany
#224

Chain of Custody Record



Environment Testing
 TestAmerica

3-5/4.2
 2.9/3.6

Client Information Client Contact: Jasmine Mullins Company: ARCADIS U.S., Inc. Address: 855 Route 146 Suite 210 City: Clifton Park State, Zip: NY, 12065 Phone: 646-248-4208 Email: Jasmine.Mullins@arcadis.com Project Name: Ford Green Island NY - E200077 Site: FORD GREEN ISLAND		Sampler: J. Mullins / K. Stilson Lab PM: DelMonico, Michael E-Mail: michael.delmonico@testamerica.com Due Date Requested: STANDARD TAT Requested (days): STANDARD PO #: 30041191 - Task 02 WO #: E200077 Project #: 24007735 SSOW#:		Carner Tracking Note(s): COC No: 240-68661-25536.1 Page: Page 1 of 1 Job #:	
Analysis Requested Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 R - Na2S2O3 S - P Dodecahydrate T - xylene U - CAA V - H 4-5 W - her (specify)					
240-127961 Chain of Custody					
Sample Identification EFFLUENT POST CARBON 2 POST CARBON 1 POST CLAY 2 DUP-1 TRIP BLANK KY		Sample Date 3/19/2020 3/19/2020 3/19/2020 3/19/2020 3/19/2020 3/19/2020	Sample Type (C=comp, G=grab) G G G G G G	Matrix (W=water, S=solid, O=soil, A=air) Water Water Water Water Water Water	Preservation Code: N A N N N N N
Perform MS/MSD (Yes or No) 625 - (MOD) Custom Subst 624 - (MOD) Custom Subst 608 - PCB, PREC - Priority Pollutant PCBs		Field Filtered Sample (Yes or No) N N N N N N		Special Instructions/Note: Total Number 7 2 2 2 2 3	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by:					
Relinquished by: K. Mullins Date/Time: 3/19/2020 1500 Relinquished by: K. Mullins Date/Time: 3/19/2020 1700 Relinquished by:		Relinquished by: K. Mullins Date/Time: 3/19/2020 1500 Relinquished by: K. Mullins Date/Time: 3/19/2020 1700 Relinquished by:		Relinquished by: K. Mullins Date/Time: 3/19/2020 1500 Relinquished by: K. Mullins Date/Time: 3/19/2020 1700 Relinquished by:	
Custody Seals Intact: ☒ Yes ☐ No		Custody Seal No.:			

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 127961

Client Acadix Site Name _____ Cooler unpacked by: Adam Bennett
Cooler Received on 3-20-20 Opened on 3-20-20
FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 1A Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN #IR-11 (CF +0.9 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1ea Yes No
- Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
- Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
- Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC995364
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials?  Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0417701E Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not
checked for pH by
Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: _____

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Age Group	Percentage
1	10%
2	15%
3	20%
4	25%
5	30%
6	35%
7	40%
8	45%
9	50%
10	55%
11	60%
12	65%
13	70%
14	75%
15	80%

[illegible]

WJ-NC-099 Cooler Receipt Form Page 2 - Multiple Coolers

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 240-127961-1

Login Number: 127961

List Number: 2

Creator: Yeager, Brian A

List Source: Eurofins TestAmerica, Buffalo

List Creation: 03/23/20 12:44 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0 ice ir gun #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

APPENDIX C

Groundwater Laboratory Analytical Results



ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-127232-1

Client Project/Site: Ford Green Island NY - E200077

For:

ARCADIS U.S., Inc.
855 Route 146
Suite 210
Clifton Park, New York 12065

Attn: Jasmine Mullins



Authorized for release by:
3/13/2020 2:53:15 PM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	18
QC Sample Results	19
QC Association Summary	20
Lab Chronicle	21
Certification Summary	23
Chain of Custody	25
Receipt Checklists	30



Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Job ID: 240-127232-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford Green Island NY - E200077

Report Number: 240-127232-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Buffalo attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 3/6/2020 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.9° C and 5.4° C.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples MW-13 (240-127232-2), MW14 (240-127232-4), MW-27 (240-127232-6), MW-31 (240-127232-8) and DUP-1 (240-127232-10) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 03/11/2020 and analyzed on 03/12/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples MW-13 (240-127232-1), MW14 (240-127232-3), MW-27 (240-127232-5), MW-31 (240-127232-7) and DUP-1 (240-127232-9) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 03/11/2020 and analyzed on 03/12/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) (GC)	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
Filtration	Sample Filtration	None	TAL BUF

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-127232-1	MW-13	Water	03/05/20 08:45	03/06/20 09:30	
240-127232-2	MW-13	Water	03/05/20 08:45	03/06/20 09:30	
240-127232-3	MW14	Water	03/05/20 11:25	03/06/20 09:30	
240-127232-4	MW14	Water	03/05/20 11:25	03/06/20 09:30	
240-127232-5	MW-27	Water	03/05/20 10:25	03/06/20 09:30	
240-127232-6	MW-27	Water	03/05/20 10:25	03/06/20 09:30	
240-127232-7	MW-31	Water	03/05/20 09:25	03/06/20 09:30	
240-127232-8	MW-31	Water	03/05/20 09:25	03/06/20 09:30	
240-127232-9	DUP-1	Water	03/05/20 00:00	03/06/20 09:30	
240-127232-10	DUP-1	Water	03/05/20 00:00	03/06/20 09:30	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW-13

Lab Sample ID: 240-127232-1

☐ No Detections.

Client Sample ID: MW-13

Lab Sample ID: 240-127232-2

☐ No Detections.

Client Sample ID: MW14

Lab Sample ID: 240-127232-3

☐ No Detections.

Client Sample ID: MW14

Lab Sample ID: 240-127232-4

☐ No Detections.

Client Sample ID: MW-27

Lab Sample ID: 240-127232-5

☐ No Detections.

Client Sample ID: MW-27

Lab Sample ID: 240-127232-6

☐ No Detections.

Client Sample ID: MW-31

Lab Sample ID: 240-127232-7

☐ No Detections.

Client Sample ID: MW-31

Lab Sample ID: 240-127232-8

☐ No Detections.

Client Sample ID: DUP-1

Lab Sample ID: 240-127232-9

☐ No Detections.

Client Sample ID: DUP-1

Lab Sample ID: 240-127232-10

☐ No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW-13

Date Collected: 03/05/20 08:45

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-1

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:43	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:43	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:43	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:43	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:43	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 18:43	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 18:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	39		25 - 120				03/11/20 14:21	03/12/20 18:43	1
Tetrachloro-m-xylene	81		25 - 139				03/11/20 14:21	03/12/20 18:43	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW-13

Date Collected: 03/05/20 08:45

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-2

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:56	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:56	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:56	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:56	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 18:56	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 18:56	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	39		25 - 120				03/11/20 14:21	03/12/20 18:56	1
Tetrachloro-m-xylene	82		25 - 139				03/11/20 14:21	03/12/20 18:56	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW14

Date Collected: 03/05/20 11:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-3

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:09	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:09	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:09	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:09	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:09	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 19:09	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	39		25 - 120				03/11/20 14:21	03/12/20 19:09	1
Tetrachloro-m-xylene	83		25 - 139				03/11/20 14:21	03/12/20 19:09	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW14

Date Collected: 03/05/20 11:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-4

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:22	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:22	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:22	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:22	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:22	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 19:22	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	36		25 - 120				03/11/20 14:21	03/12/20 19:22	1
Tetrachloro-m-xylene	83		25 - 139				03/11/20 14:21	03/12/20 19:22	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW-27

Date Collected: 03/05/20 10:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-5

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:35	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:35	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:35	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:35	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:35	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 19:35	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 19:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	31		25 - 120				03/11/20 14:21	03/12/20 19:35	1
Tetrachloro-m-xylene	88		25 - 139				03/11/20 14:21	03/12/20 19:35	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW-27

Date Collected: 03/05/20 10:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-6

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:47	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:47	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:47	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:47	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 19:47	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 19:47	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 19:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	36		25 - 120				03/11/20 14:21	03/12/20 19:47	1
Tetrachloro-m-xylene	91		25 - 139				03/11/20 14:21	03/12/20 19:47	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW-31

Date Collected: 03/05/20 09:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-7

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:00	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:00	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:00	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:00	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:00	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 20:00	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 20:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	43		25 - 120				03/11/20 14:21	03/12/20 20:00	1
Tetrachloro-m-xylene	89		25 - 139				03/11/20 14:21	03/12/20 20:00	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW-31

Date Collected: 03/05/20 09:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-8

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:13	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:13	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:13	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:13	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:13	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 20:13	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 20:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	63		25 - 120				03/11/20 14:21	03/12/20 20:13	1
Tetrachloro-m-xylene	86		25 - 139				03/11/20 14:21	03/12/20 20:13	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: DUP-1

Lab Sample ID: 240-127232-9

Date Collected: 03/05/20 00:00

Matrix: Water

Date Received: 03/06/20 09:30

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:26	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:26	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:26	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:26	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:26	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 20:26	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 20:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	45		25 - 120	03/11/20 14:21	03/12/20 20:26	1
Tetrachloro-m-xylene	88		25 - 139	03/11/20 14:21	03/12/20 20:26	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: DUP-1

Lab Sample ID: 240-127232-10

Date Collected: 03/05/20 00:00

Matrix: Water

Date Received: 03/06/20 09:30

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:38	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:38	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:38	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:38	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 20:38	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 20:38	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	57		25 - 120	03/11/20 14:21	03/12/20 20:38	1
Tetrachloro-m-xylene	87		25 - 139	03/11/20 14:21	03/12/20 20:38	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP2 (25-120)	TCX2 (25-139)
240-127232-1	MW-13	39	81
240-127232-3	MW14	39	83
240-127232-5	MW-27	31	88
240-127232-7	MW-31	43	89
240-127232-9	DUP-1	45	88
LCS 480-521001/2-A	Lab Control Sample	47	84
LCSD 480-521001/3-A	Lab Control Sample Dup	46	88
MB 480-521001/1-A	Method Blank	44	87

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Dissolved

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP2 (25-120)	TCX2 (25-139)
240-127232-2	MW-13	39	82
240-127232-4	MW14	36	83
240-127232-6	MW-27	36	91
240-127232-8	MW-31	63	86
240-127232-10	DUP-1	57	87

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 480-521001/1-A

Matrix: Water

Analysis Batch: 521177

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 521001

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 17:39	1
Aroclor-1221	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 17:39	1
Aroclor-1232	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 17:39	1
Aroclor-1242	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 17:39	1
Aroclor-1248	0.090	U	0.090	0.038	ug/L		03/11/20 14:21	03/12/20 17:39	1
Aroclor-1254	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 17:39	1
Aroclor-1260	0.090	U	0.090	0.031	ug/L		03/11/20 14:21	03/12/20 17:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	44		25 - 120	03/11/20 14:21	03/12/20 17:39	1
Tetrachloro-m-xylene	87		25 - 139	03/11/20 14:21	03/12/20 17:39	1

Lab Sample ID: LCS 480-521001/2-A

Matrix: Water

Analysis Batch: 521177

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 521001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aroclor-1016	1.00	1.13		ug/L		113	64 - 129
Aroclor-1260	1.00	1.01		ug/L		101	55 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	47		25 - 120
Tetrachloro-m-xylene	84		25 - 139

Lab Sample ID: LCSD 480-521001/3-A

Matrix: Water

Analysis Batch: 521177

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 521001

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Aroclor-1016	1.00	1.11		ug/L		111	64 - 129	2	50
Aroclor-1260	1.00	0.992		ug/L		99	55 - 120	2	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	46		25 - 120
Tetrachloro-m-xylene	88		25 - 139

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

GC Semi VOA

Filtration Batch: 520911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127232-2	MW-13	Dissolved	Water	Filtration	
240-127232-4	MW14	Dissolved	Water	Filtration	
240-127232-6	MW-27	Dissolved	Water	Filtration	
240-127232-8	MW-31	Dissolved	Water	Filtration	
240-127232-10	DUP-1	Dissolved	Water	Filtration	

Prep Batch: 521001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127232-1	MW-13	Total/NA	Water	3510C	
240-127232-2	MW-13	Dissolved	Water	3510C	520911
240-127232-3	MW14	Total/NA	Water	3510C	
240-127232-4	MW14	Dissolved	Water	3510C	520911
240-127232-5	MW-27	Total/NA	Water	3510C	
240-127232-6	MW-27	Dissolved	Water	3510C	520911
240-127232-7	MW-31	Total/NA	Water	3510C	
240-127232-8	MW-31	Dissolved	Water	3510C	520911
240-127232-9	DUP-1	Total/NA	Water	3510C	
240-127232-10	DUP-1	Dissolved	Water	3510C	520911
MB 480-521001/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-521001/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-521001/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 521177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-127232-1	MW-13	Total/NA	Water	8082A	521001
240-127232-2	MW-13	Dissolved	Water	8082A	521001
240-127232-3	MW14	Total/NA	Water	8082A	521001
240-127232-4	MW14	Dissolved	Water	8082A	521001
240-127232-5	MW-27	Total/NA	Water	8082A	521001
240-127232-6	MW-27	Dissolved	Water	8082A	521001
240-127232-7	MW-31	Total/NA	Water	8082A	521001
240-127232-8	MW-31	Dissolved	Water	8082A	521001
240-127232-9	DUP-1	Total/NA	Water	8082A	521001
240-127232-10	DUP-1	Dissolved	Water	8082A	521001
MB 480-521001/1-A	Method Blank	Total/NA	Water	8082A	521001
LCS 480-521001/2-A	Lab Control Sample	Total/NA	Water	8082A	521001
LCSD 480-521001/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	521001

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW-13

Date Collected: 03/05/20 08:45

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Total/NA	Analysis	8082A		1	521177	03/12/20 18:43	W1T	TAL BUF

Client Sample ID: MW-13

Date Collected: 03/05/20 08:45

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			520911	03/11/20 08:25	LMS	TAL BUF
Dissolved	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Dissolved	Analysis	8082A		1	521177	03/12/20 18:56	W1T	TAL BUF

Client Sample ID: MW14

Date Collected: 03/05/20 11:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Total/NA	Analysis	8082A		1	521177	03/12/20 19:09	W1T	TAL BUF

Client Sample ID: MW14

Date Collected: 03/05/20 11:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			520911	03/11/20 08:25	LMS	TAL BUF
Dissolved	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Dissolved	Analysis	8082A		1	521177	03/12/20 19:22	W1T	TAL BUF

Client Sample ID: MW-27

Date Collected: 03/05/20 10:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Total/NA	Analysis	8082A		1	521177	03/12/20 19:35	W1T	TAL BUF

Client Sample ID: MW-27

Date Collected: 03/05/20 10:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			520911	03/11/20 08:25	LMS	TAL BUF
Dissolved	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Dissolved	Analysis	8082A		1	521177	03/12/20 19:47	W1T	TAL BUF

Eurofins TestAmerica, Canton

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Client Sample ID: MW-31

Date Collected: 03/05/20 09:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Total/NA	Analysis	8082A		1	521177	03/12/20 20:00	W1T	TAL BUF

Client Sample ID: MW-31

Date Collected: 03/05/20 09:25

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			520911	03/11/20 08:25	LMS	TAL BUF
Dissolved	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Dissolved	Analysis	8082A		1	521177	03/12/20 20:13	W1T	TAL BUF

Client Sample ID: DUP-1

Date Collected: 03/05/20 00:00

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Total/NA	Analysis	8082A		1	521177	03/12/20 20:26	W1T	TAL BUF

Client Sample ID: DUP-1

Date Collected: 03/05/20 00:00

Date Received: 03/06/20 09:30

Lab Sample ID: 240-127232-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			520911	03/11/20 08:25	LMS	TAL BUF
Dissolved	Prep	3510C			521001	03/11/20 14:21	ATG	TAL BUF
Dissolved	Analysis	8082A		1	521177	03/12/20 20:38	W1T	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Green Island NY - E200077

Job ID: 240-127232-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-19 *
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20 *
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kentucky (VW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19 *
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

Laboratory: Eurofins TestAmerica, Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-20
California	State	2931	04-01-20
Connecticut	State	PH-0568	09-30-20
Florida	NELAP	E87672	06-30-20
Georgia	State	10026 (NY)	03-31-20
Georgia (DW)	State	956	03-31-20
Illinois	NELAP	200003	09-30-20
Iowa	State	374	02-28-21
Kansas	NELAP	E-10187	01-31-20 *
Kentucky (DW)	State	90029	12-31-20
Kentucky (UST)	State	30	03-31-20
Kentucky (VW)	State	KY90029	12-31-20
Louisiana	NELAP	02031	06-30-20
Maine	State	NY00044	12-04-20
Maryland	State	294	03-31-20
Massachusetts	State	M-NY044	06-30-20
Michigan	State	9937	03-31-20
Minnesota	NELAP	1524384	12-31-20
New Hampshire	NELAP	2337	03-12-20
New Jersey	NELAP	NY455	06-30-20
New York	NELAP	10026	04-01-20
North Dakota	State	R-176	03-31-20
Oklahoma	State	9421	09-01-20
Oregon	NELAP	NY200003	06-10-20
Pennsylvania	NELAP	68-00281	07-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Canton

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 240-127232-1

Project/Site: Ford Green Island NY - E200077

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAO00328	12-30-20
Tennessee	State	02970	03-31-20
Texas	NELAP	T104704412-18-10	08-01-20
USDA	US Federal Programs	P330-18-00039	02-06-21
Virginia	NELAP	460185	09-14-20
Washington	State	C784	02-11-21
Wisconsin	State	998310390	08-31-20

4.7/5.4 B-2/3-9

Albany #224

Client Information		Sampler: <i>Matthew K. Miller</i>		Lab PM: DelMonico, Michael		Carrier Tracking No(s):		COC No: 240-68660-25536.1	
Client Contact: Jasmine Mullins		Phone: 646-248-4208		E-Mail: michael.delmonico@testamericainc.com				Page: Page 1 of 1	
Company: ARCADIS U.S., Inc.								Job #:	
Address: 855 Route 146 Suite 210		Due Date Requested: 5/1/20		Analysis Requested				Preservation Codes:	
City: Clifton Park		TAT Requested (days): 5/1/20						A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
State Zip: NY, 12065		PO #: 30008650.00002						M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Phone:		WO #: ENOVIS/Cadena # E200077							
Email: Jasmine.Mullins@arcadis.com		Project #: 24007735							
Project Name: Ford Green Island NY - E200077		SSOW#:							
Site:									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=overlaid, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625 (MOB) Custom Subst.	624 (LT-TMOD) Custom Subst.	608 J PCB, PREC - Priority Pollutant PCBs	PCBs, F.I. hand	PCBs, Unk. hand	Total Number of containers	Special Instructions/Note:
MW-13	3/5/2020	845	G	Water									
MW-14	3/5/2020	1125	G	Water									
MW-27	3/5/2020	1025	G	Water									
MW-31	3/5/2020	925	G	Water									
DUP-1	3/5/2020	—	G	Water									
TAK													
3-5-													

Barcode: 240-127232 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/OC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>Matthew K. Miller</i>		Date/Time: 3/5/2020/1225		Company: ARCADIS		Received by: <i>Matthew K. Miller</i>	
Relinquished by: <i>JM Kwo Inger</i>		Date/Time: 3-5-2020 1700		Company: Eurofins TA		Received by: <i>JM Kwo Inger</i>	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

Eurofins TestAmerica Canton Sample Receipt Form/Narrative				Login # : <u>127232</u>	
Canton Facility					
Client <u>Arcadis</u>		Site Name _____		Cooler unpacked by: <u>DSD</u>	
Cooler Received on <u>03/06/20</u>		Opened on <u>03/06/20</u>			
FedEx: 1 st Grd <u>Exp</u>		UPS FAS Clipper		Client Drop Off TestAmerica Courier Other _____	
Receipt After-hours: Drop-off Date/Time			Storage Location		
TestAmerica Cooler # <u>TAK</u>		Foam Box		Client Cooler Box Other _____	
Packing material used: <u>Bubble Wrap</u>		Foam Plastic Bag		None Other _____	
COOLANT: <u>Wet Ice</u>		Blue Ice Dry Ice Water		None	
1. Cooler temperature upon receipt		☒ See Multiple Cooler Form			
IR GUN# IR-10 (CF +0.7 °C)		Observed Cooler Temp. _____ °C		Corrected Cooler Temp. _____ °C	
IR GUN #IR-11 (CF +0.9 °C)		Observed Cooler Temp. _____ °C		Corrected Cooler Temp. _____ °C	
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1 each</u>		Yes No			
-Were the seals on the outside of the cooler(s) signed & dated?		Yes No NA			
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?		Yes No			
-Were tamper/custody seals intact and uncompromised?		Yes No NA			
3. Shippers' packing slip attached to the cooler(s)?		Yes No			
4. Did custody papers accompany the sample(s)?		Yes No			
5. Were the custody papers relinquished & signed in the appropriate place?		Yes No			
6. Was/were the person(s) who collected the samples clearly identified on the COC?		Yes No			
7. Did all bottles arrive in good condition (Unbroken)?		Yes No			
8. Could all bottle labels be reconciled with the COC?		Yes No			
9. Were correct bottle(s) used for the test(s) indicated?		Yes No			
10. Sufficient quantity received to perform indicated analyses?		Yes No			
11. Are these work share samples?		Yes No			
If yes, Questions 12-16 have been checked at the originating laboratory.					
12. Were all preserved sample(s) at the correct pH upon receipt?		Yes No NA		pH Strip Lot# <u>HC995364</u>	
13. Were VOAs on the COC?		Yes No			
14. Were air bubbles >6 mm in any VOA vials? Larger than this.		Yes No NA			
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____		Yes No			
16. Was a LL Hg or Me Hg trip blank present?		Yes No			
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____					
Concerning _____					

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES		Samples processed by: <u>AG</u>	
18. SAMPLE CONDITION			
Sample(s) _____ were received after the recommended holding time had expired.			
Sample(s) _____ were received in a broken container.			
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)			
19. SAMPLE PRESERVATION			
Sample(s) _____ were further preserved in the laboratory.			
Time preserved: _____ Preservative(s) added/Lot number(s): _____			
VOA Sample Preservation - Date/Time VOAs Frozen: _____			

[illegible]

W1-NC-099 Cooler Receipt Form Page 2 - Multiple Coolers

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 240-127232-1

Login Number: 127232

List Number: 2

Creator: Yeager, Brian A

List Source: Eurofins TestAmerica, Buffalo

List Creation: 03/10/20 12:17 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2 2.0 ice ir gun #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Arcadis of New York, Inc.

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Suite 210

Clifton Park, New York 12065

Tel 518 250 7300

Fax 518 371 2757

www.arcadis.com

Three decorative orange lines are present in the bottom right quadrant of the page. One line is horizontal, extending from the left edge. Two other lines are diagonal, intersecting the horizontal line and each other.