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Subject:  
July 2018 Groundwater Sampling  
Former Cleanerama Site (#401056)  
Colonie, New York

Date:  
September 8, 2018

Contact:  
Andy Vitolins

Dear Mr. Walsh:

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At the request of the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation, Arcadis CE, Inc. (Arcadis) conducted a round of groundwater sampling at the Former Cleanerama Site (#401056) at 253 Osborne Road, Colonie, Albany County, New York (the Site; **Figure 1**). The purpose of the sampling was to update groundwater conditions following a remedial pilot study that was completed in 2016-2017, and to assess whether the emerging contaminants 1,4-dioxane and perfluoroalkyl substances (PFAS) were present in the groundwater at the site. This letter report summarizes the sampling activities and presents the analytical results for the groundwater samples.

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Our ref:  
00266436.0000

## BACKGROUND

The Site is an approximately 0.9-acre property located east of the intersection of Osborne Road and Albany-Shaker Road in Colonie, Albany County, New York. The Site contained a strip mall that was built in approximately 1955 and an office building that was built in 1962. The one-story strip mall of commercial properties included the Former Cleanerama dry cleaner, which operated at the Site from approximately 1960 to 1995. In 2003, the Site changed ownership and is currently owned by Walgreens. In August 2010, the strip mall was demolished, and the Site has remained vacant and undeveloped as of the time of this report. Commercial properties adjacent to the Site (e.g., restaurants, jeweler, floral shop, pharmacy) are currently operating. A map of the Site is provided as **Figure 2**.

A remedial pilot study was conducted in 2016-2017 to compare the effectiveness of EHC<sup>®</sup>-Liquid (EHC-L), a proprietary in-situ chemical reduction (ISCR) reagent, with emulsified vegetable oil (EVO) which is used to biologically enhance reductive dechlorination, for the treatment of chlorinated volatile organic compounds (CVOCs) in the site groundwater. The results of the pilot study were reported to the NYSDEC in a Pre-Design Investigation Report, dated November 2017.

## JULY 2018 GROUNDWATER SAMPLING

### Sample Collection

Groundwater sampling activities were performed from July 10 to 13, 2018. Prior to sampling, the depth to water was measured in the site monitoring and injection wells. Groundwater samples were collected from the injection wells IW-1 and IW-2 and monitoring wells MW-1, MW-2, MW-5, MW-6, MW-8, MW-9R, OS-1, OS-4, OS-9, OS-10, and OS-12 using low-flow sampling methods. Field parameters (pH, specific conductivity, oxidation reduction potential [ORP], dissolved oxygen [DO], temperature, and turbidity) were collected during sampling to verify well purging effectiveness. All groundwater samples were analyzed for VOCs by USEPA Method 8260C, TAL Metals by USEPA Method 6010C/7470A, as well as for the following parameters: nitrate, total iron, total manganese, sulfate, alkalinity, chloride, total organic carbon (TOC), and the dissolved gases ethane/ethene/methane. At the request of NYSDEC, groundwater samples from monitoring wells MW-8 and OS-1 were also analyzed for PFAS by USEPA Method 537 Modified, and 1,4-dioxane by USEPA Method 8260 SIM. All samples were analyzed by TestAmerica Laboratories in Buffalo, New York.

### Sample Results

Groundwater sampling results are presented in **Tables 1 through 4**. CVOC detections are also presented in **Figure 3**. Laboratory analytical reports are included in **Attachment 1**.

As shown in Table 1 and Figure 3, VOC detections in the July 2018 samples were similar to those present in the previous samples collected from the site. The results for metals (Table 2) and geochemical parameters (Table 3) were also similar. As shown in Table 4, low concentrations of PFAS were detected in the groundwater samples collected from monitoring wells MW-8 and OS-1; however, these detections did not exceed the current USEPA Health Advisory Limit (HAL) for PFAS of 70 nanograms per liter (ng/l). Table 4 also shows that 1,4-dioxane was detected in monitoring well MW-8 at a concentration of 0.58B micrograms per liter (ug/l).

## CONCLUSIONS

The results of the July 2018 groundwater sampling indicate that CVOC concentrations at the site have not changed significantly since the end of the pilot study in June 2017.

Mr. Steve Walsh  
NYSDEC  
September 7, 2018

Please contact me at [andy.vitolins@arcadis.com](mailto:andy.vitolins@arcadis.com) or at 518.250.7359 if you have any questions or comments concerning this report.

Sincerely,

Arcadis CE, Inc.



Andrew R. Vitolins  
Associate Vice President

Copies:  
Janet Brown - NYSDEC

Enclosures:

**Tables**

- 1 Summary of VOC Concentrations in Groundwater Samples
- 2 Summary of Metals Concentrations in Groundwater Samples
- 3 Summary of Groundwater Geochemical Results
- 4 Summary of PFAS and 1,4-Dioxane Concentrations in Groundwater Samples

**Figures**

- 1 Site Location
- 2 Site Map
- 3 Summary of CVOC Concentrations in Groundwater Samples

**Attachments**

- 1 Analytical Laboratory Reporting Forms

Table 1  
Summary of Groundwater VOC Results  
Former Cleanerama Site  
Site Number 401056

| Sample ID                                     | NYSDEC<br>GA<br>Standard<br>ug/L | IW-1<br>9/20/2016<br>ug/L | IW-1<br>1/30/2017<br>ug/L | IW-1<br>3/22/2017<br>ug/L | IW-1<br>6/9/2017<br>ug/L | IW-1<br>7/12/2018<br>ug/L | DUP-1 <sup>1</sup><br>9/20/2016<br>ug/L | DUP-1 <sup>1</sup><br>1/25/2017<br>ug/L | DUP-1 <sup>1</sup><br>3/22/2017<br>ug/L | DUP-1 <sup>1</sup><br>6/9/2017<br>ug/L | DUP-1 <sup>1</sup><br>7/12/2018<br>ug/L | IW-2<br>9/22/2016<br>ug/L | IW-2<br>1/25/2017<br>ug/L | IW-2<br>3/23/2017<br>ug/L | IW-2<br>6/7/2017<br>ug/L | IW-2<br>7/11/2018<br>ug/L | MW-1<br>9/21/2016<br>ug/L | MW-1<br>1/26/2017<br>ug/L | MW-1<br>3/22/2017<br>ug/L | MW-1<br>6/8/2017<br>ug/L | MW-1<br>7/12/2018<br>ug/L |
|-----------------------------------------------|----------------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|
| 1,1,1-TRICHLOROETHANE                         | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,1,2,2-TETRACHLOROETHANE                     | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE         |                                  | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,1,2-TRICHLOROETHANE                         | 1                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,1-DICHLOROETHANE                            | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,1-DICHLOROETHENE                            | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,2,4-TRICHLOROBENZENE                        | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,2-DIBROMO-3-CHLOROPROPANE                   | 0.04                             | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,2-DIBROMOETHANE                             | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,2-DICHLOROBENZENE                           | 3                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,2-DICHLOROETHANE                            | 0.6                              | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,2-DICHLOROPROPANE                           | 1                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,3-DICHLOROBENZENE                           | 3                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 1,4-DICHLOROBENZENE                           | 3                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| 2-HEXANONE                                    | 50                               | 20 U                      | 5.0 U                     | 20 U                      | 20 U                     | 10 U                      | 20 U                                    | 5.0 U                                   | 20 U                                    | 20 U                                   | 10 U                                    | 5.0 U                     | 5.0 U                     | 5.0 U                     | 3.1 J                    | 7.4 J                     | 5.0 U                     | 20 U                      | 20 U                      | 20 U                     | 20 U                      |
| ACETONE                                       | 50                               | 40 U                      | 7.9 J                     | 21 J                      | 19 J                     | 20 U                      | 40 U                                    | 10 U                                    | 40 U                                    | 40 U                                   | 20 U                                    | 10 U                      | 5.7 J                     | 10 U                      | 66                       | 780                       | 3.6 J                     | 40 U                      | 40 U                      | 40 U                     | 40 U                      |
| BENZENE                                       | 1                                | 4.0 U                     | 1.0 U                     | 1.7 J                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| BROMODICHLROMETHANE                           | 50                               | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| BROMOFORM                                     | 50                               | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| BROMOMETHANE                                  | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| CARBON DISULFIDE                              |                                  | 4.0 U                     | 2.6                       | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| CARBON TETRACHLORIDE                          | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| CHLOROBENZENE                                 | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| CHLOROETHANE                                  | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.5                                     | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| CHLOROFORM                                    | 7                                | 4.0 U                     | 0.62 J                    | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 9.1                                     | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 8.5                       | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| CHLOROMETHANE                                 |                                  | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| CIS-1,2-DICHLOROETHYLENE                      | 5                                | 4.0 U                     | 1.2                       | 110                       | 130                      | 38                        | 4.0 U                                   | 1.6                                     | 130                                     | 91                                     | 40                                      | 1.6                       | 1.8                       | 1.0 U                     | 4.9                      | 22                        | 1.5                       | 3.2 J                     | 4.6                       | 4.7                      | 4.2                       |
| CIS-1,3-DICHLOROPROPENE                       | 0.4                              | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| CYCLOHEXANE                                   |                                  | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| DIBROMOCHLROMETHANE                           | 50                               | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| DICHLORODIFLUOROMETHANE                       | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| ETHYLBENZENE                                  | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| ISOPROPYLBENZENE (CUMENE)                     | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| METHYL ACETATE                                |                                  | 10 U                      | 2.5 U                     | 10 U                      | 10 U                     | 2.0 U                     | 10 U                                    | 2.5 U                                   | 10 U                                    | 10 U                                   | 2.0 U                                   | 2.5 U                     | 2.5 U                     | 2.5 U                     | 2.5 U                    | 2.0 U                     | 2.5 U                     | 10 U                      | 10 U                      | 10 U                     | 10 U                      |
| METHYL ETHYL KETONE (2-BUTANONE)              | 50                               | 40 U                      | 12                        | 40 U                      | 40 U                     | 20 U                      | 40 U                                    | 25                                      | 40 U                                    | 40 U                                   | 20 U                                    | 10 U                      | 18                        | 16                        | 28                       | 140                       | 5.3 J                     | 40 U                      | 40 U                      | 40 U                     | 40 U                      |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) |                                  | 20 U                      | 5.0 U                     | 20 U                      | 20 U                     | 2.0 U                     | 20 U                                    | 5.0 U                                   | 20 U                                    | 20 U                                   | 2.0 U                                   | 5.0 U                     | 5.0 U                     | 5.0 U                     | 5.0 U                    | 2.0 U                     | 5.0 U                     | 20 U                      | 20 U                      | 20 U                     | 20 U                      |
| METHYLCYCLOHEXANE                             |                                  | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| METHYLENE CHLORIDE                            | 5                                | 4.0 U                     | 0.81 JB                   | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 0.46 J                                  | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 3.4                       | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| STYRENE                                       | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| TERT-BUTYL METHYL ETHER                       | 10                               | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| TETRACHLOROETHYLENE                           | 5                                | 140                       | 46                        | 38                        | 1.4 J                    | 74                        | 150                                     | 15                                      | 13                                      | 88                                     | 79                                      | 25                        | 23                        | 6.5                       | 4.4                      | 6.5                       | 11                        | 80                        | 180                       | 140                      | 140                       |
| TOLUENE                                       | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| TRANS-1,2-DICHLOROETHENE                      | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| TRANS-1,3-DICHLOROPROPENE                     | 0.4                              | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| TRICHLOROETHYLENE                             | 5                                | 5.9                       | 4.1                       | 9.3                       | 4.0 U                    | 27                        | 5.7                                     | 0.55 J                                  | 3 J                                     | 6.4                                    | 30                                      | 0.88 J                    | 0.63 J                    | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.4                       | 6.9                       | 15                        | 13                       | 11                        |
| TRICHLOROFLUROMETHANE                         | 5                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| VINYL CHLORIDE                                | 2                                | 4.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                    | 2.0 U                     | 4.0 U                                   | 1.0 U                                   | 4.0 U                                   | 4.0 U                                  | 2.0 U                                   | 1.0 U                     | 1.0 U                     | 1.0 U                     | 1.0 U                    | 2.0 U                     | 1.0 U                     | 4.0 U                     | 4.0 U                     | 4.0 U                    | 4.0 U                     |
| XYLENES, TOTAL                                |                                  | 8.0 U                     | 2.0 U                     | 8.0 U                     | 8.0 U                    | 2.0 U                     | 8.0 U                                   | 2.0 U                                   | 8.0 U                                   | 8.0 U                                  | 2.0 U                                   | 2.0 U                     | 2.0 U                     | 2.0 U                     | 2.0 U                    | 2.0 U                     | 2.0 U                     | 8.0 U                     | 8.0 U                     | 8.0 U                    | 8.0 U                     |

Notes  
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 - Concentration exceeds NYSDEC Class GA Standard.  
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J - Compound detected below the reporting limit or reported concentration is estimated.  
B - Compound was found in both the laboratory blank and the sample.  
µg/L - Micrograms per Liter  
<sup>1</sup>- This is a duplicate sample from IW-1.





**Table 1**  
**Summary of Groundwater VOC Results**  
**Former Cleanorama Site**  
**Site Number 401056**

| Sample ID                             | NYSDEC<br>GA | OS-1      | OS-1      | OS-1      | OS-1     | OS-1      | OS-4      | OS-4      | OS-4      | OS-4     | OS-4      | OS-9      | OS-9      | OS-9      | OS-9     | OS-9      | OS-10     | OS-10     | OS-10     | OS-10    | OS-10     | OS-12     | OS-12     | OS-12     | OS-12    | OS-12     |
|---------------------------------------|--------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|
| Sampling Date                         | Standard     | 9/22/2016 | 1/25/2017 | 3/23/2017 | 6/7/2017 | 7/10/2018 | 9/22/2016 | 1/25/2017 | 3/21/2017 | 6/7/2017 | 7/10/2018 | 9/21/2016 | 1/26/2017 | 3/21/2017 | 6/8/2017 | 7/10/2018 | 9/21/2016 | 1/26/2017 | 3/21/2017 | 6/7/2017 | 7/12/2018 | 9/21/2016 | 1/30/2017 | 3/24/2017 | 6/8/2017 | 7/13/2018 |
| Units                                 | ug/L         | ug/L      | ug/L      | ug/L      | ug/L     | ug/L      | ug/L      | ug/L      | ug/L      | ug/L     | ug/L      | ug/L      | ug/L      | ug/L      | ug/L     | ug/L      | ug/L      | ug/L      | ug/L      | ug/L     | ug/L      | ug/L      | ug/L      | ug/L      | ug/L     | ug/L      |
| 1,1,1-TRICHLOROETHANE                 | 5            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,1,2,2-TETRACHLOROETHANE             | 5            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE |              | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,1,2-TRICHLOROETHANE                 | 1            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,1-DICHLOROETHANE                    | 5            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,1-DICHLOROETHENE                    | 5            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,2,4-TRICHLOROBENZENE                | 5            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,2-DIBROMO-3-CHLOROPROPANE           | 0.04         | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,2-DIBROMOETHANE                     | 5            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,2-DICHLOROBENZENE                   | 3            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,2-DICHLOROETHANE                    | 0.6          | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,2-DICHLOROPROPANE                   | 1            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,3-DICHLOROBENZENE                   | 3            | 4.0 U     | 4.0 U     | 4.0 U     | 4.0 U    | 4.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 2.0 U     | 1.0 U     | 1.0 U     | 1.0 U     | 1.0 U    | 1.0 U     |
| 1,4-DICHLOROBENZENE                   | 3            | 4.0 U</   |           |           |          |           |           |           |           |          |           |           |           |           |          |           |           |           |           |          |           |           |           |           |          |           |

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µg/L - Micrograms per Liter

<sup>1</sup>-This is a duplicate sample from IW-1.

Table 2  
Summary of Groundwater Metals Results  
Former Cleanerama Site  
Site Number 401056

| Sample ID       | NYSDEC<br>GA<br>Standard<br>mg/L | IW-1<br>9/20/2016<br>mg/L | IW-1<br>1/30/2017<br>mg/L | IW-1<br>3/22/2017<br>mg/L | IW-1<br>6/9/2017<br>mg/L | IW-1<br>7/12/2018<br>mg/L | DUP-1 <sup>1</sup><br>9/20/2016<br>mg/L | DUP-1 <sup>1</sup><br>1/25/2017<br>mg/L | DUP-1 <sup>1</sup><br>3/22/2017<br>mg/L | DUP-1 <sup>1</sup><br>6/9/2017<br>mg/L | DUP-1 <sup>1</sup><br>7/12/2018<br>mg/L |
|-----------------|----------------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|
| ALUMINUM        |                                  | 0.6                       | 0.16 J                    | 0.096 J                   | 0.95                     | 0.08 J                    | 1.0                                     | 0.61                                    | 3.3                                     | 0.099 J                                | 0.073 J                                 |
| ANTIMONY        | 0.003                            | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                                  | 0.02 U                                  | 0.02 U                                  | 0.02 U                                 | 0.02 U                                  |
| ARSENIC         | 0.025                            | 0.0059 J                  | 0.006 J                   | 0.014 J                   | 0.012 J                  | 0.015 U                   | 0.015 U                                 | 0.015 U                                 | 0.031                                   | 0.0081 J                               | 0.015 U                                 |
| BARIUM          | 1                                | 0.16                      | 0.084                     | 0.12                      | 0.15                     | 0.15                      | 0.16                                    | 0.2                                     | 0.19                                    | 0.17                                   | 0.14                                    |
| BERYLLIUM       | 0.003                            | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   | 0.002 U                                 | 0.002 U                                 | 0.00034 J                               | 0.002 U                                | 0.002 U                                 |
| CADMIUM         | 0.005                            | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   | 0.002 U                                 | 0.002 U                                 | 0.002 U                                 | 0.002 U                                | 0.002 U                                 |
| CALCIUM         |                                  | 127                       | 108                       | 122                       | 135 B                    | 184                       | 119                                     | 82.6                                    | 125                                     | 132 B                                  | 172                                     |
| CHROMIUM, TOTAL | 0.05                             | 0.11                      | 0.023                     | 0.026                     | 0.6                      | 0.03                      | 0.12                                    | 0.016                                   | 0.0049                                  | 0.004 U                                | 0.028                                   |
| COBALT          |                                  | 0.0042                    | 0.0065                    | 0.0026 J                  | 0.0039 J                 | 0.00091 J                 | 0.0047                                  | 0.038                                   | 0.0075                                  | 0.0018 J                               | 0.00099 J                               |
| COPPER          | 0.2                              | 0.0021 J                  | 0.0044 J                  | 0.0044 J                  | 0.0059 J                 | 0.01 U                    | 0.0024 J                                | 0.015                                   | 0.011                                   | 0.01 U                                 | 0.01 U                                  |
| IRON            | 0.3                              | 1.5                       | 28.4                      | 26.3                      | 41.7                     | 13.9                      | 1.8                                     | 21.9                                    | 17.6                                    | 18.9                                   | 12.9                                    |
| LEAD            | 0.025                            | 0.01 U                    | 0.0048 J                  | 0.0087 J                  | 0.0043 J                 | 0.01 U                    | 0.0033 J                                | 0.0079 J                                | 0.014                                   | 0.0032 J                               | 0.01 U                                  |
| MAGNESIUM       | 35                               | 19.1                      | 19.6                      | 21.9                      | 18.3                     | 26.7                      | 18.7                                    | 20.6                                    | 23                                      | 19.1                                   | 25.1                                    |
| MANGANESE       | 0.3                              | 0.22                      | 4.2                       | 6.2                       | 3.7                      | 0.28                      | 0.24                                    | 22.2                                    | 5.1                                     | 1.8                                    | 0.26                                    |
| MERCURY         | 0.0007                           | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.00002 U                 | 0.0002 U                                | 0.0002 U                                | 0.0002 U                                | 0.0002 U                               | 0.0002 U                                |
| NICKEL          | 0.1                              | 0.26                      | 0.057                     | 0.0068 J                  | 0.046                    | 0.0041 J                  | 0.29                                    | 0.18                                    | 0.011                                   | 0.0055 J                               | 0.0033 J                                |
| POTASSIUM       |                                  | 4.7                       | 7.3                       | 6.1 B                     | 5                        | 5.3                       | 5.1                                     | 5.6 B                                   | 5 B                                     | 3.5                                    | 5                                       |
| SELENIUM        | 0.01                             | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   | 0.025 U                                 | 0.025 U                                 | 0.025 U                                 | 0.025 U                                | 0.025 U                                 |
| SILVER          | 0.05                             | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   | 0.006 U                                 | 0.006 U                                 | 0.006 U                                 | 0.006 U                                | 0.006 U                                 |
| SODIUM          | 20                               | 392                       | 321                       | 302                       | 252                      | 276                       | 387                                     | 146                                     | 301                                     | 357                                    | 258                                     |
| THALLIUM        | 0.0005                           | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                                  | 0.02 U                                  | 0.02 U                                  | 0.02 U                                 | 0.02 U                                  |
| VANADIUM        |                                  | 0.005 U                   | 0.005 U                   | 0.005 U                   | 0.0038 J                 | 0.005 U                   | 0.0026 J                                | 0.0017 J                                | 0.0062                                  | 0.005 U                                | 0.005 U                                 |
| ZINC            | 2                                | 0.004 BJ                  | 0.0073 J                  | 0.0048 J                  | 0.012 B                  | 0.0024 J                  | 0.0033 J                                | 0.012 B                                 | 0.016                                   | 0.0027 JB                              | 0.01 U                                  |

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<sup>1</sup>-This is a duplicate sample from IW-1.

Table 2  
Summary of Groundwater Metals Results  
Former Cleanerama Site  
Site Number 401056

| Sample ID       | NYSDEC<br>GA<br>Standard<br>mg/L | IW-2<br>9/22/2016<br>mg/L | IW-2<br>1/25/2017<br>mg/L | IW-2<br>3/23/2017<br>mg/L | IW-2<br>6/7/2017<br>mg/L | IW-2<br>7/11/2018<br>mg/L | MW-1<br>9/21/2016<br>mg/L | MW-1<br>1/26/2017<br>mg/L | MW-1<br>3/22/2017<br>mg/L | MW-1<br>6/8/2017<br>mg/L | MW-1<br>7/12/2018<br>mg/L |
|-----------------|----------------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|
| ALUMINUM        |                                  | 3.1                       | 1.4                       | 0.83                      | 0.099 J                  | 0.23                      | 112                       | 0.28                      | 0.093 J                   | 0.2                      | 0.2                       |
| ANTIMONY        | 0.003                            | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| ARSENIC         | 0.025                            | 0.015 U                   | 0.0058 J                  | 0.015 U                   | 0.013 J                  | 0.036                     | 0.068                     | 0.015 U                   | 0.015 U                   | 0.015 U                  | 0.015 U                   |
| BARIUM          | 1                                | 0.18                      | 0.21                      | 0.64                      | 1.2                      | 1.4                       | 0.99                      | 0.14                      | 0.13                      | 0.13                     | 0.14                      |
| BERYLLIUM       | 0.003                            | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   | 0.0055                    | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CADMIUM         | 0.005                            | 0.00091 J                 | 0.002 U                   | 0.00073 J                 | 0.001 J                  | 0.002 U                   | 0.62                      | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CALCIUM         |                                  | 123 B                     | 80.1                      | 186                       | 218                      | 207                       | 275                       | 129                       | 146                       | 148                      | 155                       |
| CHROMIUM, TOTAL | 0.05                             | 0.041                     | 0.026                     | 0.062                     | 0.011                    | 0.0075                    | 0.17                      | 0.0015 J                  | 0.004 U                   | 0.004 U                  | 0.004 U                   |
| COBALT          |                                  | 0.0081                    | 0.04                      | 0.023                     | 0.036                    | 0.17                      | 0.13                      | 0.0016 J                  | 0.001 J                   | 0.004 U                  | 0.004 U                   |
| COPPER          | 0.2                              | 0.02                      | 0.014                     | 0.0081 J                  | 0.0056 J                 | 0.0082 J                  | 0.32                      | 0.01 U                    | 0.0031 J                  | 0.002 J                  | 0.010 U                   |
| IRON            | 0.3                              | 5.6                       | 27.7                      | 65                        | 80.6 B                   | 26.7                      | 192                       | 0.34                      | 0.12                      | 0.23                     | 0.23                      |
| LEAD            | 0.025                            | 0.0049 J                  | 0.0085 J                  | 0.0082 J                  | 0.0079 J                 | 0.0057 J                  | 0.57                      | 0.0043 J                  | 0.0041 J                  | 0.01 U                   | 0.01 U                    |
| MAGNESIUM       | 35                               | 22.4                      | 20.8                      | 36.3                      | 46.2                     | 42.8                      | 86.9                      | 22.1                      | 25                        | 25.6                     | 26.7                      |
| MANGANESE       | 0.3                              | 4.0                       | 21.5                      | 28.9                      | 41.2                     | 16.6                      | 9.4                       | 3.3                       | 1.1                       | 0.92                     | 1.9                       |
| MERCURY         | 0.0007                           | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.0002 U                  | 0.0012                    | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.0002 U                  |
| NICKEL          | 0.1                              | 0.15                      | 0.25                      | 0.072                     | 0.029                    | 0.7                       | 0.26                      | 0.004 JB                  | 0.0016 J                  | 0.0028 J                 | 0.0036 J                  |
| POTASSIUM       |                                  | 5.6                       | 5.7 B                     | 8.9                       | 8.6                      | 5.2                       | 18.7                      | 4.7 B                     | 4.7 B                     | 4.3                      | 4.5                       |
| SELENIUM        | 0.01                             | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   |
| SILVER          | 0.05                             | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   |
| SODIUM          | 20                               | 133                       | 146                       | 170                       | 176                      | 141                       | 437                       | 154                       | 194                       | 189                      | 171                       |
| THALLIUM        | 0.0005                           | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| VANADIUM        |                                  | 0.0056                    | 0.0025 J                  | 0.0016 J                  | 0.005 U                  | 0.0021 J                  | 0.2                       | 0.005 U                   | 0.005 U                   | 0.005 U                  | 0.005 U                   |
| ZINC            | 2                                | 0.029 B                   | 0.016 B                   | 0.011 B                   | 0.0046 JB                | 0.0092 JB                 | 1.6                       | 0.011                     | 0.0051 J                  | 0.0053 JB                | 0.0065 JB                 |

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Former Cleanerama Site  
Site Number 401056

| Sample ID       | NYSDEC<br>GA<br>Standard<br>mg/L | MW-2<br>9/21/2016<br>mg/L | MW-2<br>1/26/2017<br>mg/L | MW-2<br>3/21/2017<br>mg/L | MW-2<br>6/7/2017<br>mg/L | MW-2<br>7/11/2018<br>mg/L | MW-5<br>9/20/2016<br>mg/L | MW-5<br>1/30/2017<br>mg/L | MW-5<br>3/22/2017<br>mg/L | MW-5<br>6/8/2017<br>mg/L | MW-5<br>7/12/2018<br>mg/L |
|-----------------|----------------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|
| ALUMINUM        |                                  | 0.58                      | 0.06 J                    | 0.2 U                     | 0.077 J                  | 0.2 U                     | 0.13 J                    | 0.15 J                    | 0.16 J                    | 0.27                     | 0.11 J                    |
| ANTIMONY        | 0.003                            | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| ARSENIC         | 0.025                            | 0.015 U                   | 0.015 U                   | 0.015 U                   | 0.015 U                  | 0.015 U                   | 0.015 U                   | 0.015 U                   | 0.015 U                   | 0.015 U                  | 0.015 U                   |
| BARIUM          | 1                                | 0.14                      | 0.14                      | 0.15                      | 0.15                     | 0.15                      | 0.1                       | 0.099                     | 0.1                       | 0.093                    | 0.097                     |
| BERYLLIUM       | 0.003                            | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CADMIUM         | 0.005                            | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CALCIUM         |                                  | 118                       | 122                       | 129                       | 135                      | 146                       | 273                       | 240                       | 237                       | 247                      | 265                       |
| CHROMIUM, TOTAL | 0.05                             | 0.0012                    | 0.004 U                   | 0.004 U                   | 0.004 U                  | 0.004 U                   | 0.004 U                   | 0.004 U                   | 0.004 U                   | 0.004 U                  | 0.004 U                   |
| COBALT          |                                  | 0.0017                    | 0.0027 J                  | 0.0029 J                  | 0.002 J                  | 0.0017 J                  | 0.0031 J                  | 0.0027 J                  | 0.0024 J                  | 0.0024 J                 | 0.0023 J                  |
| COPPER          | 0.2                              | 0.0041                    | 0.0017 J                  | 0.0027 BJ                 | 0.0025 J                 | 0.0018 J                  | 0.01 U                    | 0.01 U                    | 0.0044 J                  | 0.0017 J                 | 0.01 U                    |
| IRON            | 0.3                              | 0.96                      | 0.1                       | 0.14                      | 0.12 B                   | 0.021 J                   | 0.21                      | 0.24                      | 0.31                      | 0.42                     | 0.24                      |
| LEAD            | 0.025                            | 0.01 U                    | 0.01 U                    | 0.01 U                    | 0.01 U                   | 0.01 U                    | 0.01 U                    | 0.0034 J                  | 0.0049 J                  | 0.01 U                   | 0.01 U                    |
| MAGNESIUM       | 35                               | 21.6                      | 21.6                      | 23.1                      | 24.9                     | 26                        | 72.7                      | 64.4                      | 64.6                      | 68.4                     | 72.5                      |
| MANGANESE       | 0.3                              | 0.63                      | 0.63                      | 1.1                       | 1.2                      | 2.3                       | 1                         | 0.95                      | 0.96                      | 0.85                     | 0.85                      |
| MERCURY         | 0.0007                           | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.0002 U                  |
| NICKEL          | 0.1                              | 0.003                     | 0.003                     | 0.0032 J                  | 0.0043 J                 | 0.0035 J                  | 0.0042 J                  | 0.0029 J                  | 0.0038 J                  | 0.0052 J                 | 0.0042 J                  |
| POTASSIUM       |                                  | 3.9                       | 3.9                       | 3.5                       | 3.6                      | 3.4                       | 5.7                       | 5.9                       | 6.3 B                     | 5.7                      | 6.3                       |
| SELENIUM        | 0.01                             | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   |
| SILVER          | 0.05                             | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   |
| SODIUM          | 20                               | 131                       | 131                       | 136                       | 155                      | 145                       | 345                       | 362                       | 394                       | 369                      | 385                       |
| THALLIUM        | 0.0005                           | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| VANADIUM        |                                  | 0.005 U                   | 0.005 U                   | 0.005 U                   | 0.005 U                  | 0.005 U                   | 0.005 U                   | 0.005 U                   | 0.005 U                   | 0.005 U                  | 0.005 U                   |
| ZINC            | 2                                | 0.0087                    | 0.0087                    | 0.011 B                   | 0.0081 JB                | 0.0057 JB                 | 0.0045 BJ                 | 0.0048 J                  | 0.0025 J                  | 0.004 JB                 | 0.0029 J                  |

#### Notes

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<sup>1</sup>-This is a duplicate sample from IW-1.

Table 2  
Summary of Groundwater Metals Results  
Former Cleanerama Site  
Site Number 401056

| Sample ID       | NYSDEC<br>GA<br>Standard<br>mg/L | MW-6<br>9/21/2016<br>mg/L | MW-6<br>1/30/2017<br>mg/L | MW-6<br>3/23/2017<br>mg/L | MW-6<br>6/8/2017<br>mg/L | MW-6<br>7/13/2018<br>mg/L | MW-8<br>9/20/2016<br>mg/L | MW-8<br>1/30/2017<br>mg/L | MW-8<br>3/22/2017<br>mg/L | MW-8<br>6/9/2017<br>mg/L | MW-8<br>7/12/2018<br>mg/L |
|-----------------|----------------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|
| ALUMINUM        |                                  | 0.37                      | 0.14 J                    | 0.56                      | 0.31                     | 0.089 J                   | 1.6                       | 1.1                       | 2.4                       | 0.13 J                   | 0.077 J                   |
| ANTIMONY        | 0.003                            | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| ARSENIC         | 0.025                            | 0.015 U                   | 0.015 U                   | 0.015 U                   | 0.015 U                  | 0.015 U                   | 0.015 U                   | 0.018                     | 0.033                     | 0.011 J                  | 0.015 U                   |
| BARIUM          | 1                                | 0.16                      | 0.14                      | 0.14                      | 0.14                     | 0.17                      | 0.14                      | 0.14                      | 0.17                      | 0.17                     | 0.18                      |
| BERYLLIUM       | 0.003                            | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CADMIUM         | 0.005                            | 0.002 U                   | 0.002 U                   | 0.00058 J                 | 0.002 U                  | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CALCIUM         |                                  | 245                       | 238                       | 230                       | 211                      | 217                       | 130                       | 138                       | 124                       | 136 B                    | 151                       |
| CHROMIUM, TOTAL | 0.05                             | 0.0012 J                  | 0.004 U                   | 0.0011 J                  | 0.004 U                  | 0.004 U                   | 0.0026 J                  | 0.0025 J                  | 0.0038 J                  | 0.004 U                  | 0.004 U                   |
| COBALT          |                                  | 0.0054                    | 0.0017 J                  | 0.0055                    | 0.0016 J                 | 0.00087 J                 | 0.00081 J                 | 0.005                     | 0.0074                    | 0.0016 J                 | 0.00068 J                 |
| COPPER          | 0.2                              | 0.01 U                    | 0.01 U                    | 0.0028 J                  | 0.0019 J                 | 0.01 U                    | 0.0025 J                  | 0.0031 J                  | 0.007 J                   | 0.01 U                   | 0.01 U                    |
| IRON            | 0.3                              | 0.67                      | 0.27                      | 1.1                       | 0.56                     | 0.18                      | 2.1                       | 24.4                      | 15                        | 19.4                     | 5.1                       |
| LEAD            | 0.025                            | 0.01 U                    | 0.0036 J                  | 0.0039 J                  | 0.01 U                   | 0.01 U                    | 0.01 U                    | 0.0049 J                  | 0.011                     | 0.01 U                   | 0.01 U                    |
| MAGNESIUM       | 35                               | 64.6                      | 60.8                      | 59.9                      | 53.2                     | 54.7                      | 23.6                      | 27.1                      | 22.2                      | 19.6                     | 21.1                      |
| MANGANESE       | 0.3                              | 0.24                      | 0.097                     | 0.23                      | 0.11                     | 0.08                      | 0.15                      | 7.8                       | 4.8                       | 1.8                      | 0.29                      |
| MERCURY         | 0.0007                           | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.0002 U                  |
| NICKEL          | 0.1                              | 0.0049 J                  | 0.0036 J                  | 0.0042 J                  | 0.0039 J                 | 0.0023 J                  | 0.0041 J                  | 0.0034 J                  | 0.0088 J                  | 0.0053 J                 | 0.0023 J                  |
| POTASSIUM       |                                  | 4.5                       | 3.9                       | 4.2                       | 4                        | 4.4                       | 4.1                       | 4.2                       | 4.7 B                     | 3.5                      | 6.2                       |
| SELENIUM        | 0.01                             | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   |
| SILVER          | 0.05                             | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   |
| SODIUM          | 20                               | 376                       | 354                       | 341                       | 413                      | 444                       | 334                       | 312                       | 301                       | 359                      | 307                       |
| THALLIUM        | 0.0005                           | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| VANADIUM        |                                  | 0.005 U                   | 0.005 U                   | 0.005 U                   | 0.005 U                  | 0.005 U                   | 0.0026 J                  | 0.0015 J                  | 0.005                     | 0.005 U                  | 0.005 U                   |
| ZINC            | 2                                | 0.014                     | 0.0067 J                  | 0.013 B                   | 0.0054 JB                | 0.0036 J                  | 0.0094 BJ                 | 0.0073 J                  | 0.012                     | 0.0026 JB                | 0.0024 JB                 |

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<sup>1</sup>-This is a duplicate sample from IW-1.

Table 2  
Summary of Groundwater Metals Results  
Former Cleanerama Site  
Site Number 401056

| Sample ID       | NYSDEC<br>GA<br>Standard<br>mg/L | MW-9R<br>9/22/2016<br>mg/L | MW-9R<br>1/30/2017<br>mg/L | MW-9R<br>3/23/2017<br>mg/L | MW-9R<br>6/8/2017<br>mg/L | MW-9R<br>7/13/2018<br>mg/L | OS-1<br>9/22/2016<br>mg/L | OS-1<br>1/25/2017<br>mg/L | OS-1<br>3/23/2017<br>mg/L | OS-1<br>6/7/2017<br>mg/L | OS-1<br>7/10/2018<br>mg/L |
|-----------------|----------------------------------|----------------------------|----------------------------|----------------------------|---------------------------|----------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|
| ALUMINUM        |                                  | 2.9                        | 5.5                        | 2.9                        | 3.2                       | 0.83                       | 0.2 U                     | 0.2 U                     | 0.2 U                     | 0.2 U                    | 0.2 U                     |
| ANTIMONY        | 0.003                            | 0.02 U                     | 0.02 U                     | 0.02 U                     | 0.02 U                    | 0.02 U                     | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| ARSENIC         | 0.025                            | 0.006 J                    | 0.0058 J                   | 0.015 U                    | 0.015 U                   | 0.015 U                    | 0.015 U                   | 0.015 U                   | 0.015 U                   | 0.015 U                  | 0.011 J                   |
| BARIUM          | 1                                | 0.26                       | 0.27                       | 0.26                       | 0.26                      | 0.24                       | 0.099                     | 0.19                      | 0.21                      | 0.23                     | 0.083                     |
| BERYLLIUM       | 0.003                            | 0.002 U                    | 0.00042 J                  | 0.002 U                    | 0.0004 J                  | 0.002 U                    | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CADMIUM         | 0.005                            | 0.002 U                    | 0.002 U                    | 0.00066 J                  | 0.002 U                   | 0.002 U                    | 0.00063 J                 | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CALCIUM         |                                  | 232 B                      | 221                        | 243                        | 193                       | 216                        | 121 B                     | 136                       | 118                       | 114                      | 110 B                     |
| CHROMIUM, TOTAL | 0.05                             | 0.01                       | 0.013                      | 0.0082                     | 0.0077                    | 0.0031 J                   | 0.004 U                   | 0.0014 J                  | 0.004 U                   | 0.004 U                  | 0.004 U                   |
| COBALT          |                                  | 0.0047                     | 0.011                      | 0.0051                     | 0.0069                    | 0.0017 J                   | 0.00069 J                 | 0.013                     | 0.0032 J                  | 0.0026 J                 | 0.004 U                   |
| COPPER          | 0.2                              | 0.0093 J                   | 0.017                      | 0.0094 J                   | 0.011                     | 0.01 U                     | 0.01 U                    | 0.0016 J                  | 0.0043 J                  | 0.01 U                   | 0.01 U                    |
| IRON            | 0.3                              | 7.4                        | 15                         | 11.4                       | 7.4                       | 2.1                        | 0.057                     | 0.28                      | 0.71                      | 3.5 B                    | 5.8                       |
| LEAD            | 0.025                            | 0.006 J                    | 0.013                      | 0.0095 J                   | 0.0059 J                  | 0.01 U                     | 0.01 U                    | 0.0038 J                  | 0.0047 J                  | 0.01 U                   | 0.01 U                    |
| MAGNESIUM       | 35                               | 59.7                       | 57.8                       | 64.3                       | 48.7                      | 51.7                       | 21.4                      | 23.6                      | 20.3                      | 20.3                     | 18.9                      |
| MANGANESE       | 0.3                              | 0.52                       | 1                          | 0.64                       | 0.061                     | 0.21                       | 1.1                       | 12.9                      | 6.4                       | 7.4                      | 0.6                       |
| MERCURY         | 0.0007                           | 0.0002 U                   | 0.0002 U                   | 0.0002 U                   | 0.0002 U                  | 0.0002 U                   | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.0002 U                  |
| NICKEL          | 0.1                              | 0.0078 J                   | 0.017                      | 0.0085 J                   | 0.012 J                   | 0.0036 J                   | 0.0028 J                  | 0.027                     | 0.0056 J                  | 0.0039 J                 | 0.01 U                    |
| POTASSIUM       |                                  | 4.9                        | 6.3                        | 6.6                        | 5.4                       | 5.1                        | 3.8                       | 4.2 B                     | 4                         | 3.5                      | 2.9                       |
| SELENIUM        | 0.01                             | 0.025 U                    | 0.025 U                    | 0.025 U                    | 0.025 U                   | 0.025 U                    | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   |
| SILVER          | 0.05                             | 0.006 U                    | 0.006 U                    | 0.006 U                    | 0.006 U                   | 0.006 U                    | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   |
| SODIUM          | 20                               | 428                        | 349                        | 399                        | 689                       | 502                        | 98.8                      | 112                       | 104                       | 98.8                     | 90.6                      |
| THALLIUM        | 0.0005                           | 0.02 U                     | 0.02 U                     | 0.02 U                     | 0.02 U                    | 0.02 U                     | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| VANADIUM        |                                  | 0.0063                     | 0.012                      | 0.0064                     | 0.0063                    | 0.0018 J                   | 0.005 U                   | 0.005 U                   | 0.005 U                   | 0.005 U                  | 0.005 U                   |
| ZINC            | 2                                | 0.019 B                    | 0.036                      | 0.019 B                    | 0.02 B                    | 0.0033 J                   | 0.0058 BJ                 | 0.0051 BJ                 | 0.0036 BJ                 | 0.01 U                   | 0.01 U                    |

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<sup>1</sup>-This is a duplicate sample from IW-1.

Table 2  
Summary of Groundwater Metals Results  
Former Cleanerama Site  
Site Number 401056

| Sample ID       | NYSDEC<br>GA<br>Standard<br>mg/L | OS-4<br>9/22/2016<br>mg/L | OS-4<br>1/25/2017<br>mg/L | OS-4<br>3/21/2017<br>mg/L | OS-4<br>6/7/2017<br>mg/L | OS-4<br>7/10/2018<br>mg/L | OS-9<br>9/21/2016<br>mg/L | OS-9<br>1/26/2017<br>mg/L | OS-9<br>3/21/2017<br>mg/L | OS-9<br>6/8/2017<br>mg/L | OS-9<br>7/10/2018<br>mg/L |
|-----------------|----------------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|
| ALUMINUM        |                                  | 0.24                      | 0.2 U                     | 0.2 U                     | 0.2 U                    | 0.2 U                     | 0.11 J                    | 0.2 U                     | 0.2 U                     | 0.2 U                    | 0.2 U                     |
| ANTIMONY        | 0.003                            | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| ARSENIC         | 0.025                            | 0.015 U                   | 0.015 U                   | 0.015 U                   | 0.015 U                  | 0.015 U                   | 0.015 U                   | 0.015 U                   | 0.015 U                   | 0.015 U                  | 0.015 U                   |
| BARIUM          | 1                                | 0.16                      | 0.12                      | 0.097                     | 0.084                    | 0.13                      | 0.098                     | 0.093                     | 0.1                       | 0.087                    | 0.11                      |
| BERYLLIUM       | 0.003                            | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CADMIUM         | 0.005                            | 0.00093 J                 | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   | 0.00094 J                 | 0.002 U                   | 0.002 U                   | 0.002 U                  | 0.002 U                   |
| CALCIUM         |                                  | 136 B                     | 147                       | 142                       | 128                      | 162 B                     | 110                       | 116                       | 123                       | 109                      | 131 B                     |
| CHROMIUM, TOTAL | 0.05                             | 0.004 U                   | 0.004 U                   | 0.004 U                   | 0.004 U                  | 0.004 U                   | 0.004 U                   | 0.004 U                   | 0.004 U                   | 0.004 U                  | 0.004 U                   |
| COBALT          |                                  | 0.0074                    | 0.004 U                   | 0.004 U                   | 0.004 U                  | 0.004 U                   | 0.0033 J                  | 0.0012 J                  | 0.0018 J                  | 0.0012 J                 | 0.00069 J                 |
| COPPER          | 0.2                              | 0.0024 J                  | 0.01 U                    | 0.01 U                    | 0.01 U                   | 0.01 U                    | 0.0033 J                  | 0.01 U                    | 0.0016 BJ                 | 0.0026 J                 | 0.01 U                    |
| IRON            | 0.3                              | 8.6                       | 0.66                      | 0.16                      | 0.099 B                  | 0.84                      | 0.21                      | 0.063                     | 0.048 J                   | 0.023 J                  | 0.025 J                   |
| LEAD            | 0.025                            | 0.01 U                    | 0.01 U                    | 0.01 U                    | 0.01 U                   | 0.01 U                    | 0.01 U                    | 0.01 U                    | 0.0037 J                  | 0.01 U                   | 0.01 U                    |
| MAGNESIUM       | 35                               | 16.6                      | 19.5                      | 19.3                      | 17.7                     | 21.9                      | 20.1                      | 20.5                      | 22.2                      | 20.4                     | 23.7                      |
| MANGANESE       | 0.3                              | 5.6                       | 1.4                       | 0.69                      | 0.041                    | 1.6                       | 1.5                       | 0.28                      | 0.6                       | 0.27                     | 0.34                      |
| MERCURY         | 0.0007                           | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                  | 0.0002 U                 | 0.0002 U                  |
| NICKEL          | 0.1                              | 0.006 J                   | 0.01 U                    | 0.002 J                   | 0.0015 J                 | 0.0016 J                  | 0.0039 J                  | 0.01 U                    | 0.0029 J                  | 0.0029 J                 | 0.0021 J                  |
| POTASSIUM       |                                  | 3.2                       | 3 B                       | 2.7                       | 2.7                      | 3.4                       | 3.4                       | 4 B                       | 3.6                       | 2.9                      | 3.2                       |
| SELENIUM        | 0.01                             | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                   | 0.025 U                  | 0.025 U                   |
| SILVER          | 0.05                             | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                   | 0.006 U                  | 0.006 U                   |
| SODIUM          | 20                               | 180                       | 176                       | 191                       | 164                      | 199                       | 136                       | 143                       | 148                       | 133                      | 148                       |
| THALLIUM        | 0.0005                           | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                    | 0.02 U                   | 0.02 U                    |
| VANADIUM        |                                  | 0.005 U                   | 0.005 U                   | 0.005 U                   | 0.005 U                  | 0.005 U                   | 0.005 U                   | 0.005 U                   | 0.005 U                   | 0.005 U                  | 0.005 U                   |
| ZINC            | 2                                | 0.032 B                   | 0.0083 JB                 | 0.0044 BJ                 | 0.0027 BJ                | 0.01 U                    | 0.011                     | 0.011                     | 0.0083 BJ                 | 0.0072 BJ                | 0.0037 J                  |

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Table 2  
Summary of Groundwater Metals Results  
Former Cleanerama Site  
Site Number 401056

| Sample ID       | NYSDEC<br>GA<br>Standard<br>mg/L | OS-10<br>9/21/2016<br>mg/L | OS-10<br>1/26/2017<br>mg/L | OS-10<br>3/21/2017<br>mg/L | OS-10<br>6/7/2017<br>mg/L | OS-10<br>7/12/2018<br>mg/L | OS-12<br>9/21/2016<br>mg/L | OS-12<br>1/30/2017<br>mg/L | OS-12<br>3/24/2017<br>mg/L | OS-12<br>6/8/2017<br>mg/L | OS-12<br>7/13/2018<br>mg/L |
|-----------------|----------------------------------|----------------------------|----------------------------|----------------------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|----------------------------|
| ALUMINUM        |                                  | 9.0                        | 3.3                        | 0.25                       | 1.2                       | 2.7                        | 58                         | 20.5                       | 14.3                       | 30.1                      | 3.4                        |
| ANTIMONY        | 0.003                            | 0.02 U                     | 0.02 U                     | 0.02 U                     | 0.02 U                    | 0.02 U                     | 0.02 U                     | 0.02 U                     | 0.02 U                     | 0.02 U                    | 0.02 U                     |
| ARSENIC         | 0.025                            | 0.016                      | 0.015 U                    | 0.015 U                    | 0.015 U                   | 0.006 J                    | 0.037                      | 0.012 J                    | 0.0075 J                   | 0.018                     | 0.015 U                    |
| BARIUM          | 1                                | 0.092                      | 0.04                       | 0.19                       | 0.014                     | 0.032                      | 0.65                       | 0.37                       | 0.28                       | 0.44                      | 0.16                       |
| BERYLLIUM       | 0.003                            | 0.00035 J                  | 0.002 U                    | 0.002 U                    | 0.002 U                   | 0.002 U                    | 0.003                      | 0.0015 J                   | 0.00075 J                  | 0.0015 J                  | 0.002 U                    |
| CADMIUM         | 0.005                            | 0.004                      | 0.0006 J                   | 0.002 U                    | 0.002 U                   | 0.002 U                    | 0.23                       | 0.077                      | 0.0087                     | 0.018                     | 0.0031                     |
| CALCIUM         |                                  | 51.7                       | 28.9                       | 67.4                       | 20.4                      | 31.5                       | 257                        | 299                        | 270                        | 245                       | 206                        |
| CHROMIUM, TOTAL | 0.05                             | 0.019                      | 0.0078                     | 0.004 U                    | 0.0017 J                  | 0.0054                     | 0.087                      | 0.037                      | 0.026                      | 0.046                     | 0.014                      |
| COBALT          |                                  | 0.0041                     | 0.001 J                    | 0.00065 J                  | 0.00076 J                 | 0.0011 J                   | 0.075                      | 0.028                      | 0.016                      | 0.04                      | 0.0038 J                   |
| COPPER          | 0.2                              | 0.061                      | 0.015                      | 0.0043 BJ                  | 0.0024 J                  | 0.018                      | 0.15                       | 0.035                      | 0.022 B                    | 0.077                     | 0.0079 J                   |
| IRON            | 0.3                              | 14.2                       | 3                          | 0.91                       | 1.6 B                     | 4.9                        | 106                        | 40.1                       | 23.3                       | 55.1                      | 5.4                        |
| LEAD            | 0.025                            | 0.024                      | 0.01                       | 0.01 U                     | 0.01 U                    | 0.0081 J                   | 0.21                       | 0.091                      | 0.025                      | 0.052                     | 0.0068 J                   |
| MAGNESIUM       | 35                               | 12.9                       | 4.2                        | 16.7                       | 2.7                       | 4.4                        | 69.7                       | 80.4                       | 74                         | 63.4                      | 52.9                       |
| MANGANESE       | 0.3                              | 0.6                        | 0.086                      | 0.3                        | 0.16                      | 0.28                       | 5.2                        | 1.8                        | 1.4                        | 3.4                       | 0.55                       |
| MERCURY         | 0.0007                           | 0.0002 U                   | 0.0002 U                   | 0.0002 U                   | 0.0002 U                  | 0.0002 U                   | 0.00044                    | 0.0002 U                   | 0.0002 U                   | 0.0002 U                  | 0.0002 U                   |
| NICKEL          | 0.1                              | 0.012                      | 0.0031 JB                  | 0.0036 J                   | 0.002 J                   | 0.0041 J                   | 0.14                       | 0.05                       | 0.029                      | 0.078                     | 0.015                      |
| POTASSIUM       |                                  | 4.4                        | 2.6                        | 8.7                        | 0.93                      | 2                          | 13.8                       | 9.4                        | 9.4                        | 11.2                      | 5.8                        |
| SELENIUM        | 0.01                             | 0.025 U                    | 0.025 U                    | 0.025 U                    | 0.025 U                   | 0.025 U                    | 0.025 U                    | 0.025 U                    | 0.025 U                    | 0.025 U                   | 0.025 U                    |
| SILVER          | 0.05                             | 0.006 U                    | 0.006 U                    | 0.006 U                    | 0.006 U                   | 0.006 U                    | 0.006 U                    | 0.006 U                    | 0.006 U                    | 0.006 U                   | 0.006 U                    |
| SODIUM          | 20                               | 188                        | 1570                       | 7790                       | 13.3                      | 71.2                       | 451                        | 351                        | 366                        | 473                       | 411                        |
| THALLIUM        | 0.0005                           | 0.02 U                     | 0.02 U                     | 0.02 U                     | 0.02 U                    | 0.02 U                     | 0.02 U                     | 0.02 U                     | 0.02 U                     | 0.02 U                    | 0.02 U                     |
| VANADIUM        |                                  | 0.026                      | 0.0086                     | 0.005 U                    | 0.002 J                   | 0.0078                     | 0.1                        | 0.043                      | 0.025                      | 0.052                     | 0.0077                     |
| ZINC            | 2                                | 0.35                       | 0.12                       | 0.045 B                    | 0.011 B                   | 0.08                       | 0.67                       | 0.26                       | 0.081                      | 0.22 B                    | 0.05                       |

**Notes**

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Environmental Conservation Groundwater Standard.

- Concentration exceeds NYSDEC Class GA Standard.

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<sup>1</sup>-This is a duplicate sample from IW-1.

**Table 3**  
**Summary of Groundwater Geochemical Results**  
**Former Cleanerama Site**  
**Site Number 401056**

| Sample ID                    | IW-1      | IW-1      | IW-1      | IW-1     | IW-1      | DUP-1 <sup>1</sup> | DUP-1 <sup>1</sup> | DUP-1 <sup>1</sup> | DUP-1 <sup>1</sup> | DUP-1 <sup>1</sup> | IW-2      | IW-2      | IW-2      | IW-2     | IW-2      |
|------------------------------|-----------|-----------|-----------|----------|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|-----------|-----------|-----------|----------|-----------|
| Sampling Date                | 9/20/2016 | 1/30/2017 | 3/22/2017 | 6/9/2017 | 7/12/2018 | 9/20/2016          | 1/25/2017          | 3/22/2017          | 6/9/2017           | 7/12/2018          | 9/22/2016 | 1/25/2017 | 3/23/2017 | 6/7/2017 | 7/11/2018 |
| Units                        | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      | mg/L               | mg/L               | mg/L               | mg/L               | mg/L               | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      |
| ALKALINITY, TOTAL (AS CaCO3) | 223       | 235       | 275       | 327      | 207       | 223                | 281                | 308                | 243                | 207                | 333 B     | 294       | 534       | 733      | 542       |
| CHLORIDE (AS CL)             | 676       | 617       | 586       | 542      | 1030      | 685                | 191                | 554                | 751                | 638                | 227       | 190       | 7.5 U     | 289      | 308       |
| ETHANE                       | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.33 U    | 0.0075 U           | 0.0075 U           | 0.0075 U           | 0.0075 U           | 0.33 U             | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.33 U    |
| ETHENE                       | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.0070 U | 0.31 U    | 0.0070 U           | 0.0070 U           | 0.0070 U           | 0.0070 U           | 0.31 U             | 0.0070 U  | 0.0070 U  | 2.1 J     | 0.0070 U | 0.31 U    |
| METHANE                      | 0.0040 U  | 0.0035 J  | 0.0040 U  | 5.4      | 4.0       | 0.0040 U           | 0.0040 U           | 0.390              | 1.0                | 3.5                | 0.0021 J  | 0.0040 U  | 243       | 0.140    | 4.7       |
| NITROGEN, NITRATE (AS N)     | 1.1       | 1.0 U     | 0.25 U    | 16.7 H   | 0.5 U     | 0.98               | 1.0 U              | 0.25 U             | 0.5 U              | 0.5 U              | 0.12      | 1.0 U     | 0.25 U    | 0.5 U    | 0.25 U    |
| SULFATE (AS SO4)             | 59.6 B    | 40 U      | 20 U      | 20 U     | 89.5      | 58.8 B             | 23.3               | 20 U               | 10.8 J             | 34.9               | 59.5      | 25.3      | 10 U      | 20 U     | 10 U      |
| TOTAL ORGANIC CARBON         | 0.75 J    | 72.6      | 42.6      | 17.4     | 1 B       | 0.81 J             | 147                | 12                 | 5.4 B              | 1.1 B              | 1.4       | 228       | 333 B     | 389      | 159 B     |

**Notes**

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H - Sample was prepped or analyzed beyond the specific holding time.

F1 - MS and/or MSD recovery is outside acceptable limits.

mg/L - Milligrams per Liter

<sup>1</sup>-This is a duplicate sample from IW-1.

Table 3  
Summary of Groundwater Geochemical Results  
Former Cleanerama Site  
Site Number 401056

| Sample ID                    | MW-1      | MW-1      | MW-1      | MW-1     | MW-1      | MW-2      | MW-2      | MW-2      | MW-2     | MW-2      | MW-5      | MW-5      | MW-5      | MW-5     | MW-5      |
|------------------------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|
| Sampling Date                | 9/21/2016 | 1/26/2017 | 3/22/2017 | 6/8/2017 | 7/12/2018 | 9/21/2016 | 1/26/2017 | 3/21/2017 | 6/7/2017 | 7/11/2018 | 9/20/2016 | 1/30/2017 | 3/22/2017 | 6/8/2017 | 7/12/2018 |
| Units                        | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      |
| ALKALINITY, TOTAL (AS CaCO3) | 294       | 336       | 321       | 321      | 326       | 325       | 326       | 295       | 308      | 364       | 277       | 295       | 293       | 287      | 275       |
| CHLORIDE (AS CL)             | 259       | 304       | 366       | 387      | 360       | 264       | 254       | 273       | 284      | 274       | 980       | 953       | 1020      | 955      | 641       |
| ETHANE                       | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.0075 U  | 0.0075 U  | 0.0075 U  | 7.5 U     | 0.0075 U | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.0075 U  |
| ETHENE                       | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.0070 U | 0.0070 U  | 0.0070 U  | 0.0070 U  | 7 U       | 0.0070 U | 0.007 U   | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.0070 U | 0.0070 U  |
| METHANE                      | 0.0040 U  | 0.0040 U  | 1.3 J     | 0.004 U  | 0.0040 U  | 0.0078    | 0.0040 U  | 0.0043    | 0.0047   | 2.6       | 0.0040 U  | 0.0040 U  | 0.0040 U  | 0.0040 U | 0.0040 U  |
| NITROGEN, NITRATE (AS N)     | 0.1 U     | 0.13      | 0.25 U    | 0.25 U   | 0.25 U    | 0.12      | 0.054     | 0.25 U    | 0.25 U   | 0.25 U    | 0.1 U     | 1.0 U     | 1.0 U     | 0.4 J    | 0.5 U     |
| SULFATE (AS SO4)             | 60.8 B    | 55.9      | 53.8      | 59.5     | 51.7      | 55 B      | 53.8      | 53.1      | 45.7     | 28        | 105 B     | 79.5      | 105       | 113      | 35.4      |
| TOTAL ORGANIC CARBON         | 1.9 B     | 1.3       | 1.1       | 1.7 B    | 0.67 JB   | 1.1       | 1.2       | 1         | 1.4      | 1.1 B     | 1.0 U     | 0.46 J    | 1.0 U     | 0.75 JB  | 1.0 U     |

**Notes**

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F1 - MS and/or MSD recovery is outside acceptable limits.

mg/L - Milligrams per Liter

<sup>1</sup>-This is a duplicate sample from IW-1.

**Table 3**  
**Summary of Groundwater Geochemical Results**  
**Former Cleanerama Site**  
**Site Number 401056**

| Sample ID                    | MW-6      | MW-6      | MW-6      | MW-6     | MW-6      | MW-8      | MW-8      | MW-8      | MW-8     | MW-8      | MW-9R     | MW-9R     | MW-9R     | MW-9R    | MW-9R     |
|------------------------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|
| Sampling Date                | 9/21/2016 | 1/30/2017 | 3/23/2017 | 6/8/2017 | 7/13/2018 | 9/20/2016 | 1/30/2017 | 3/22/2017 | 6/9/2017 | 7/12/2018 | 9/22/2016 | 1/30/2017 | 3/23/2017 | 6/8/2017 | 7/13/2018 |
| Units                        | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      |
| ALKALINITY, TOTAL (AS CaCO3) | 259 B     | 287       | 277       | 278      | 293       | 216       | 273       | 307       | 237      | 220       | 287 B     | 292       | 289       | 287      | 296       |
| CHLORIDE (AS CL)             | 1050      | 961       | 922       | 984      | 1000      | 646       | 681       | 556       | 744      | 638       | 2.3       | 924 F1    | 1040      | 1280     | 1080      |
| ETHANE                       | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.38 U    | 0.0075 U | 0.0075 U  | 1.01      | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.0075 U  |
| ETHENE                       | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.0070 U | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.35 U    | 0.0070 U | 0.0070 U  | 0.771     | 0.0070 U  | 0.0070 U  | 0.0070 U | 0.0070 U  |
| METHANE                      | 0.0040 U  | 0.098     | 3.6 J     | 0.0040 U | 0.0040 U  | 0.060     | 0.94      | 300       | 0.7      | 3.8       | 0.0040 U  | 0.0040 U  | 0.0040 U  | 0.004 U  | 0.004 U   |
| NITROGEN, NITRATE (AS N)     | 1.1       | 0.81 J    | 1 U       | 1.5      | 2 H       | 1.3       | 1.0 U     | 0.5 U     | 0.5 U    | 1.1       | 7.0 U     | 2.4 F1    | 2         | 2.5      | 3.2 H     |
| SULFATE (AS SO4)             | 86.1 B    | 65.2      | 81        | 89.5     | 57.9      | 52.5 B    | 40 U      | 20 U      | 10.5 J   | 31.1      | 4.0 U     | 61.1 F1   | 80.4      | 85.4     | 52        |
| TOTAL ORGANIC CARBON         | 1.0 U     | 1.0 U     | 0.48 J    | 0.87 JB  | 1.0 U     | 0.83 J    | 20.2      | 13.2      | 5.1 B    | 0.85 JB   | 1.0 U     | 0.7 J     | 1.0 U     | 1.1 B    | 1.0 U     |

**Notes**

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mg/L - Milligrams per Liter

<sup>1</sup>-This is a duplicate sample from IW-1.

**Table 3**  
**Summary of Groundwater Geochemical Results**  
**Former Cleanerama Site**  
**Site Number 401056**

| Sample ID                    | OS-1      | OS-1      | OS-1      | OS-1     | OS-1      | OS-4      | OS-4      | OS-4      | OS-4     | OS-4      | OS-9      | OS-9      | OS-9      | OS-9     | OS-9      |
|------------------------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|
| Sampling Date                | 9/22/2016 | 1/25/2017 | 3/23/2017 | 6/7/2017 | 7/10/2018 | 9/22/2016 | 1/25/2017 | 3/21/2017 | 6/7/2017 | 7/10/2018 | 9/21/2016 | 1/26/2017 | 3/21/2017 | 6/8/2017 | 7/10/2018 |
| Units                        | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      |
| ALKALINITY, TOTAL (AS CaCO3) | 283 B     | 306       | 300       | 314      | 279       | 295 B     | 299       | 293       | 303      | 297       | 297       | 307       | 309       | 274      | 297       |
| CHLORIDE (AS CL)             | 200       | 252       | 207       | 178      | 157       | 325       | 364       | 387       | 239      | 394       | 248       | 279       | 274       | 305      | 293       |
| ETHANE                       | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.0075 U  |
| ETHENE                       | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.0070 U | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.0070 U | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.0070 U  | 0.0070 U | 0.0070 U  |
| METHANE                      | 0.0046    | 0.0054    | 0.0040 U  | 0.0053   | 0.041     | 0.021     | 0.0190    | 0.029     | 0.004 U  | 0.029     | 0.0040 U  | 0.0040 U  | 0.0040 U  | 0.018    | 0.052     |
| NITROGEN, NITRATE (AS N)     | 7.0 U     | 1.0 U     | 0.25 U    | 0.25 U   | 0.25 U    | 0.11      | 1.0 U     | 0.25 U    | 0.28     | 0.25 U    | 0.35      | 0.26      | 0.25 U    | 0.25 U   | 0.14 J    |
| SULFATE (AS SO4)             | 61        | 47.8      | 45.3      | 43.4     | 52.9      | 55.8      | 37.1      | 56.4      | 57.1     | 62.1      | 53.7 B    | 52.2      | 54.9      | 70.7     | 47.2      |
| TOTAL ORGANIC CARBON         | 1.5       | 2.6       | 4.3       | 6.4      | 1.2 B     | 2.0       | 2.3       | 1.7       | 1.6 B    | 2.3 B     | 0.86 BJ   | 1.1       | 1         | 2.4      | 0.84 JB   |

**Notes**

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F1 - MS and/or MSD recovery is outside acceptable limits.

mg/L - Milligrams per Liter

<sup>1</sup>-This is a duplicate sample from IW-1.

**Table 3**  
**Summary of Groundwater Geochemical Results**  
**Former Cleanerama Site**  
**Site Number 401056**

| Sample ID                    | OS-10     | OS-10     | OS-10     | OS-10    | OS-10     | OS-12     | OS-12     | OS-12     | OS-12    | OS-12     |
|------------------------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|
| Sampling Date                | 9/21/2016 | 1/26/2017 | 3/21/2017 | 6/7/2017 | 7/12/2018 | 9/21/2016 | 1/30/2017 | 3/24/2017 | 6/8/2017 | 7/13/2018 |
| Units                        | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      | mg/L      | mg/L      | mg/L      | mg/L     | mg/L      |
| ALKALINITY, TOTAL (AS CaCO3) | 297       | 54.6      | 191       | 58.2     | 116       | 301       | 294       | 289       | 310      | 319       |
| CHLORIDE (AS CL)             | 194       | 2930      | 11800     | 19.9     | 63.6      | 1060      | 1030      | 1050      | 1020     | 936       |
| ETHANE                       | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U  | 0.0075 U | 0.0075 U  |
| ETHENE                       | 0.0070 U  | 0.0070 U  | 0.007 U   | 0.007 U  | 0.007 U   | 0.0070 U  | 0.0070 U  | 95.3      | 0.007 U  | 0.007 U   |
| METHANE                      | 0.32      | 0.0040 U  | 14        | 0.004 U  | 150       | 0.64      | 0.33      | 0.004 U   | 0.023    | 0.004 U   |
| NITROGEN, NITRATE (AS N)     | 7.0 U     | 2.1       | 5 U       | 0.049 J  | 0.05 U    | 0.9       | 0.68 J    | 0.25 U    | 0.93     | 0.94 H    |
| SULFATE (AS SO4)             | 28.9 B    | 18.7      | 200 U     | 4.1      | 14.1      | 75.9 B    | 79.6      | 85        | 87.9     | 73.8      |
| TOTAL ORGANIC CARBON         | 7.1 B     | 1.8       | 3         | 2        | 7.1 B     | 2.6 B     | 0.94 J    | 1.4       | 4 B      | 0.6 JB    |

**Notes**

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mg/L - Milligrams per Liter

<sup>1</sup>-This is a duplicate sample from IW-1.

**Table 4**  
**Summary of Groundwater PFAS and 1,4-Dioxane Results**  
**Former Cleanerama Site**  
**Site Number 401056**

| Sample ID<br>Sampling Date<br>Units                          | DUP-1 <sup>1</sup><br>7/13/2018<br>ng/L | MW-8<br>7/13/2018<br>ng/L | OS-1<br>7/10/2018<br>ng/L |
|--------------------------------------------------------------|-----------------------------------------|---------------------------|---------------------------|
| <b>Method: 537 (modified) - Fluorinated Alkyl Substances</b> |                                         |                           |                           |
| Perfluorobutanoic acid (PFBA)                                | 3.8                                     | 3.8                       | 3.5                       |
| Perfluoropentanoic acid (PFPeA)                              | 4.5                                     | 4.6                       | 5.8                       |
| Perfluorohexanoic acid (PFHxA)                               | 3.8                                     | 4.3                       | 4.5                       |
| Perfluoroheptanoic acid (PFHpA)                              | 3.0                                     | 3.3                       | 6.1                       |
| Perfluorooctanoic acid (PFOA)                                | 16                                      | 17                        | 8.8                       |
| Perfluorononanoic acid (PFNA)                                | 2.1 U                                   | 2.1 U                     | 1.7 U                     |
| Perfluorodecanoic acid (PFDA)                                | 2.1 U                                   | 2.1 U                     | 1.7 U                     |
| Perfluoroundecanoic acid (PFUnA)                             | 2.1 U                                   | 2.1 U                     | 1.7 U                     |
| Perfluorododecanoic acid (PFDoA)                             | 2.1 U                                   | 2.1 U                     | 1.7 U                     |
| Perfluorotridecanoic Acid (PFTriA)                           | 2.1 U                                   | 2.1 U                     | 1.7 U                     |
| Perfluorotetradecanoic acid (PFTeA)                          | 2.1 U                                   | 2.1 U                     | 0.3 J                     |
| Perfluorobutanesulfonic acid (PFBS)                          | 2.0                                     | 1.8 J                     | 0.9 J                     |
| Perfluorohexanesulfonic acid (PFHxS)                         | 3.3                                     | 3.4 B                     | 1.6 JB                    |
| Perfluoroheptanesulfonic Acid (PFHpS)                        | 0.84                                    | 0.86 J                    | 1.7 U                     |
| Perfluorooctanesulfonic acid (PFOS)                          | 7.2                                     | 7.4                       | 2.5                       |
| Perfluorodecanesulfonic acid (PFDS)                          | 2.1 U                                   | 2.1 U                     | 1.7 U                     |
| Perfluorooctane Sulfonamide (FOSA)                           | 2.1 U                                   | 2.1 U                     | 1.7 U                     |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)   | 21 U                                    | 21 U                      | 17 U                      |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)    | 21 U                                    | 21 U                      | 17 U                      |
| 6:2 FTS                                                      | 21 U                                    | 21 U                      | 17 U                      |
| 8:2 FTS                                                      | 21 U                                    | 21 U                      | 17 U                      |
| <b>TOTAL</b>                                                 | 44.4                                    | 46.5                      | 33.7                      |
| <b>Method: 8270D SIM ID - Semivolatile Organic Compounds</b> |                                         |                           |                           |
| 1,4-Dioxane (µg/L)                                           | 0.98 B                                  | 0.58 B                    | 0.2 U                     |

**Notes**

NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard.

U - Compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or reported concentration is estimated.

B - Analyte detected in the method blank and sample.

<sup>1</sup>-This is a duplicate sample from MW-8

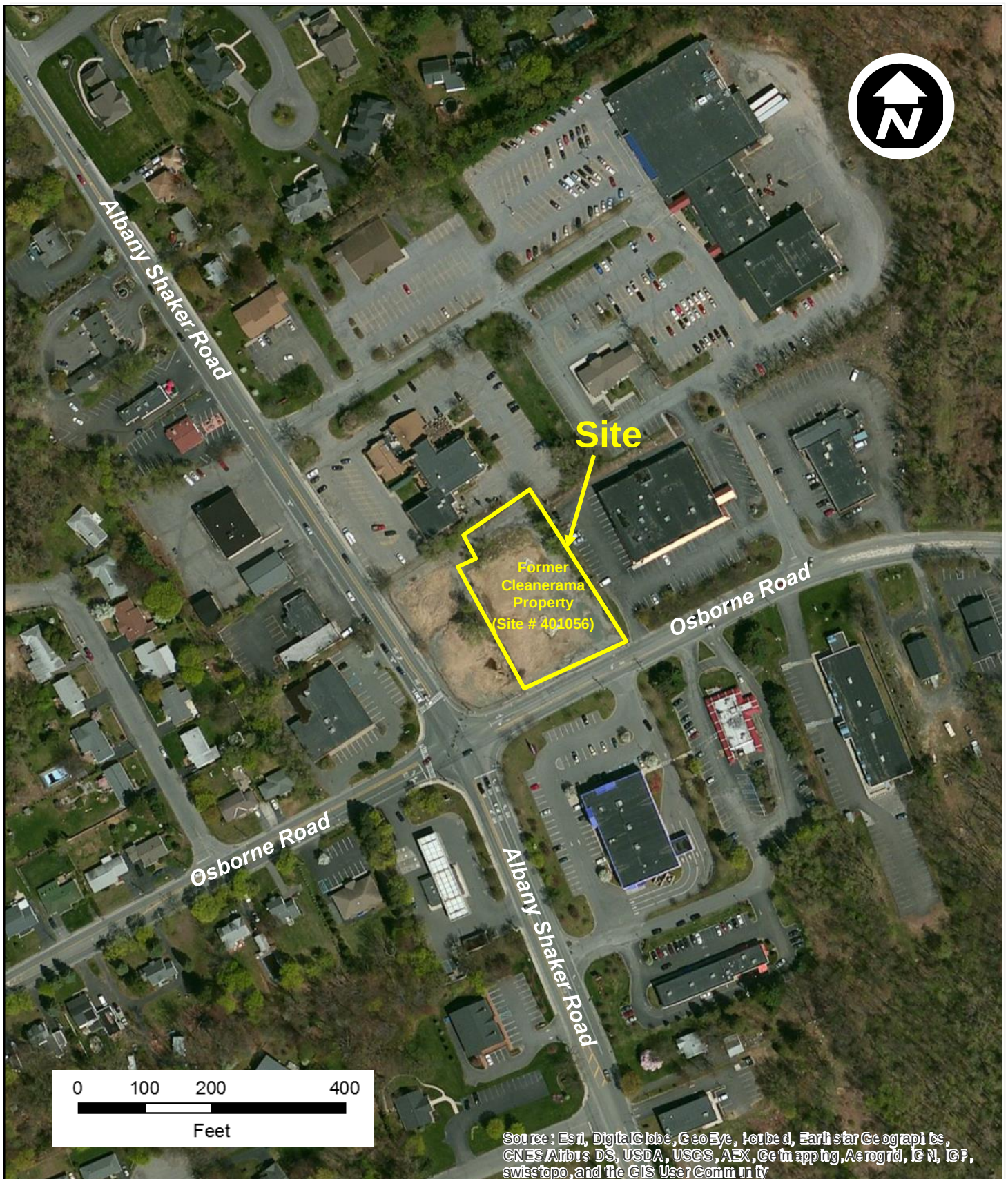
ng/L - Nanograms per Liter

µg/L - Micrograms per Liter



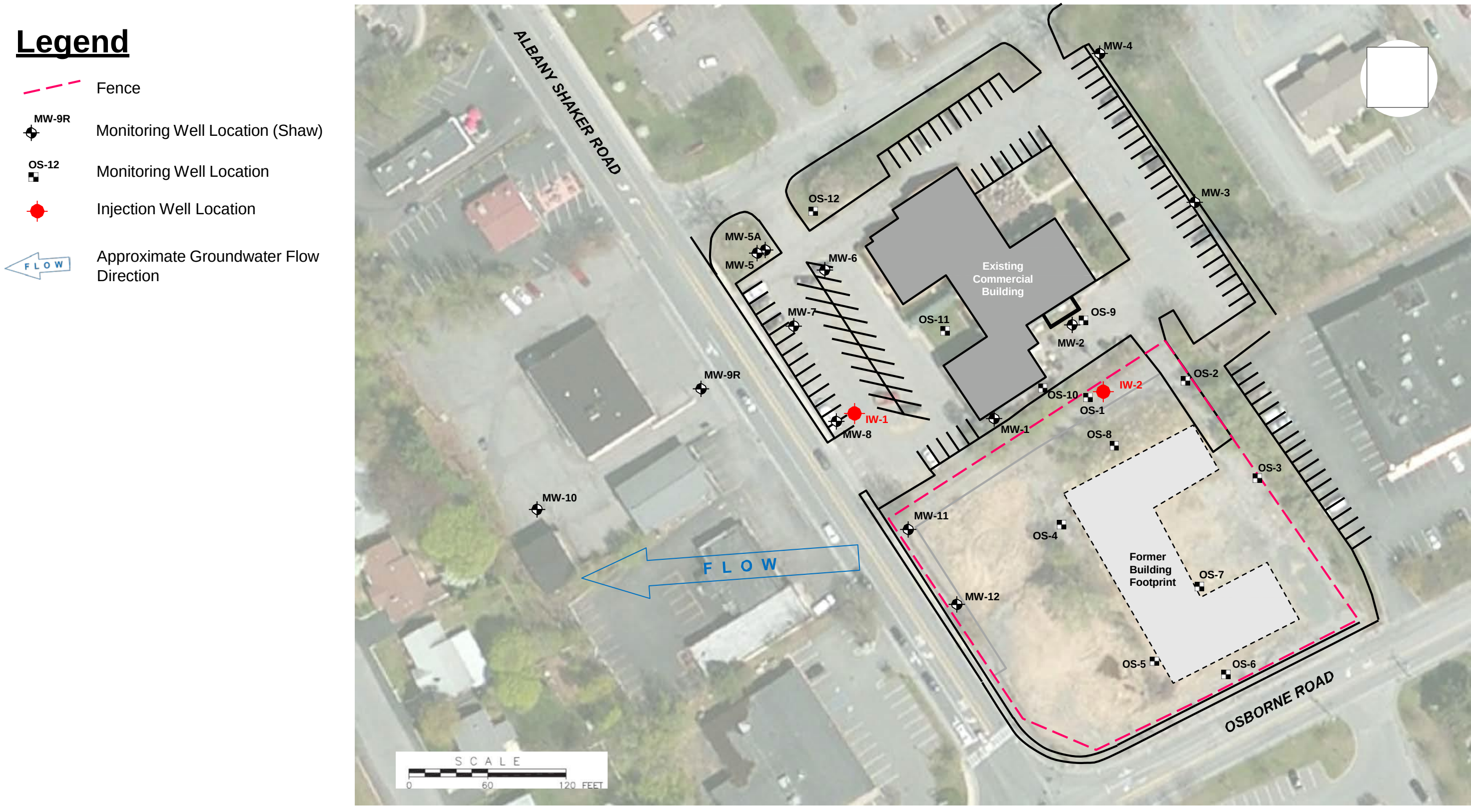
**Figure 1**  
**Site and Vicinity**

Former Cleanerama Site (Site # 401056)  
Loudonville, Albany County, New York





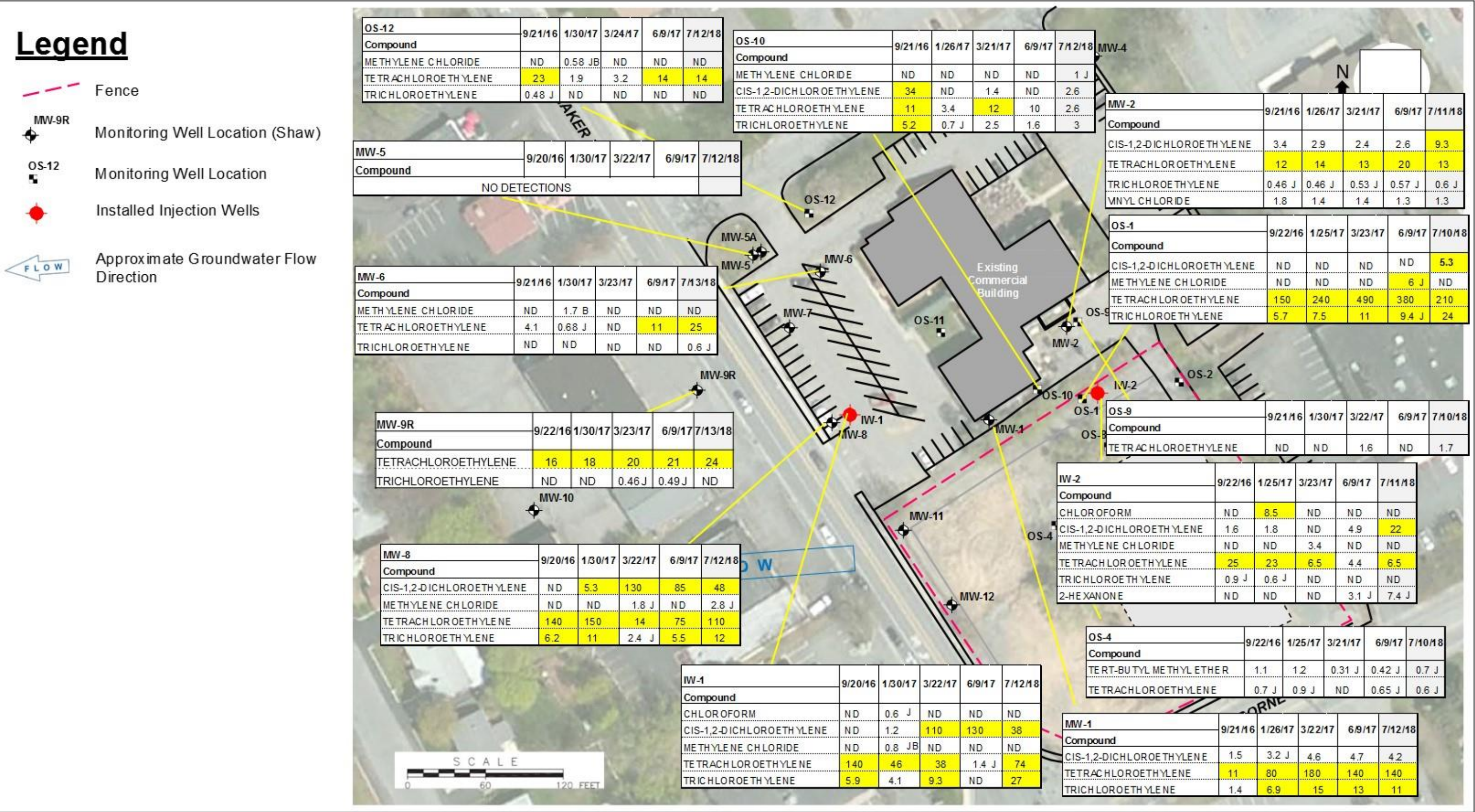
**Figure 2**  
**Site Plan and Injection Well Locations**  
Former Cleanerama Site (Site # 401056)  
Loudonville, Albany County, New York





**Figure 3**  
**Summary of CVOC Detections in Groundwater Samples**

Former Cleanerama (Site # 401056) Remedial Design  
Loudonville, Albany County, New York





## **Attachment 1 – Analytical Laboratory Reporting Forms**

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-138607-1

Client Project/Site: NYSDEC - Former Cleanerama, Site#  
401056

For:

ARCADIS U.S. Inc

855 Route 146

Suite 210

Clifton Park, New York 12065

Attn: Andy Vitolins



Authorized for release by:

7/25/2018 7:56:14 PM

Rebecca Jones, Project Management Assistant I

[rebecca.jones@testamericainc.com](mailto:rebecca.jones@testamericainc.com)

Designee for

Melissa Deyo, Project Manager I

(716)504-9874

[melissa.deyo@testamericainc.com](mailto:melissa.deyo@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

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# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| *         | LCS or LCSD is outside acceptance limits.                                                                      |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### LCMS

| 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. |
| B         | Compound was found in the blank and sample.                                                                    |

### Metals

| 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. |
| B         | Compound was found in the blank and sample.                                                                    |

### General Chemistry

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| *         | LCS or LCSD is outside acceptance limits.                                                                      |
| ^         | ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits. |
| B         | Compound was found in the blank and sample.                                                                    |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Job ID: 480-138607-1

### Laboratory: TestAmerica Buffalo

#### Narrative

#### Job Narrative 480-138607-1

#### Receipt

The samples were received on 7/11/2018 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

#### GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: OS-1 (07102018) (480-138607-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-424052 recovered outside control limits for the following analytes: 2-Hexanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: OS-1 (07102018) (480-138607-1), OS-9 (07102018) (480-138607-3) and TRIP BLANK (480-138607-4).

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

#### GC/MS Semi VOA

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

#### HPLC/IC

Method(s) 300.0: The following samples were reported with elevated reporting limits for all analytes: OS-1 (07102018) (480-138607-1), OS-4 (07102018) (480-138607-2) and OS-9 (07102018) (480-138607-3). The sample was analyzed at a dilution based on screening results.

Method(s) 300.0: The following samples were reported with elevated reporting limits for all analytes: OS-1 (07102018) (480-138607-1), OS-4 (07102018) (480-138607-2) and OS-9 (07102018) (480-138607-3). The sample was analyzed at a dilution based on screening results.

Method(s) 300.0: The following samples were reported with elevated reporting limits for all analytes: OS-1 (07102018) (480-138607-1), OS-4 (07102018) (480-138607-2) and OS-9 (07102018) (480-138607-3). The sample was analyzed at a dilution based on screening results.

Method(s) 300.0: The laboratory control sample (LCS) and (CCV) for batch 423973 recovered outside control limits for Nitrate. The samples has been reanalyzed outside of holding time. Both sets of data are reported: OS-1 (07102018) (480-138607-1), OS-4 (07102018) (480-138607-2) and OS-9 (07102018) (480-138607-3).

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

#### GC VOA

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

#### Metals

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

#### LCMS

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

#### General Chemistry

Method(s) SM 2320B: The following sample(s) was received with headspace in the sample container. This sample container was received with headspace. OS-9 (07102018) (480-138607-3).

No additional 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: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

---

### Job ID: 480-138607-1 (Continued)

---

#### Laboratory: TestAmerica Buffalo (Continued)

##### Organic Prep

Method(s) 3535: The following sample:OS-1 (07102018) (480-138607-1) in preparation batch 320-234027 was observed to be a yellow color prior to extraction.

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



# Detection Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Client Sample ID: OS-1 (07102018)

## Lab Sample ID: 480-138607-1

| Analyte                              | Result | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method         | Prep Type |
|--------------------------------------|--------|-----------|--------|---------|------|---------|---|----------------|-----------|
| cis-1,2-Dichloroethene               | 5.3    |           | 4.0    | 3.2     | ug/L | 4       |   | 8260C          | Total/NA  |
| Tetrachloroethene                    | 210    |           | 4.0    | 1.4     | ug/L | 4       |   | 8260C          | Total/NA  |
| Trichloroethene                      | 24     |           | 4.0    | 1.8     | ug/L | 4       |   | 8260C          | Total/NA  |
| Methane                              | 41     |           | 4.0    | 1.0     | ug/L | 1       |   | RSK-175        | Total/NA  |
| Perfluorobutanoic acid (PFBA)        | 3.5    |           | 1.7    | 0.29    | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluoropentanoic acid (PFPeA)      | 5.8    |           | 1.7    | 0.41    | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorohexanoic acid (PFHxA)       | 4.5    |           | 1.7    | 0.48    | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluoroheptanoic acid (PFHpA)      | 6.1    |           | 1.7    | 0.21    | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorooctanoic acid (PFOA)        | 8.8    |           | 1.7    | 0.71    | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorotetradecanoic acid (PFTeA)  | 0.30   | J         | 1.7    | 0.24    | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorobutanesulfonic acid (PFBS)  | 0.90   | J         | 1.7    | 0.17    | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorohexanesulfonic acid (PFHxS) | 1.6    | J B       | 1.7    | 0.14    | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorooctanesulfonic acid (PFOS)  | 2.5    |           | 1.7    | 0.45    | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Arsenic                              | 0.011  | J         | 0.015  | 0.0056  | mg/L | 1       |   | 6010C          | Total/NA  |
| Barium                               | 0.083  |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C          | Total/NA  |
| Calcium                              | 110    | B         | 0.50   | 0.10    | mg/L | 1       |   | 6010C          | Total/NA  |
| Iron                                 | 5.8    |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C          | Total/NA  |
| Magnesium                            | 18.9   |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C          | Total/NA  |
| Manganese                            | 0.60   |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C          | Total/NA  |
| Potassium                            | 2.9    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C          | Total/NA  |
| Sodium                               | 90.6   |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C          | Total/NA  |
| Chloride                             | 157    |           | 2.5    | 1.4     | mg/L | 5       |   | 300.0          | Total/NA  |
| Sulfate                              | 52.9   |           | 10.0   | 1.7     | mg/L | 5       |   | 300.0          | Total/NA  |
| Total Organic Carbon                 | 1.2    | B         | 1.0    | 0.43    | mg/L | 1       |   | 9060A          | Total/NA  |
| Alkalinity, Total                    | 279    |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B       | Total/NA  |

## Client Sample ID: OS-4 (07102018)

## Lab Sample ID: 480-138607-2

| Analyte                 | Result | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method   | Prep Type |
|-------------------------|--------|-----------|--------|---------|------|---------|---|----------|-----------|
| Methyl tert-butyl ether | 0.63   | J         | 1.0    | 0.16    | ug/L | 1       |   | 8260C    | Total/NA  |
| Tetrachloroethene       | 0.61   | J         | 1.0    | 0.36    | ug/L | 1       |   | 8260C    | Total/NA  |
| Methane                 | 29     |           | 4.0    | 1.0     | ug/L | 1       |   | RSK-175  | Total/NA  |
| Barium                  | 0.13   |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Total/NA  |
| Calcium                 | 162    | B         | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Iron                    | 0.84   |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Total/NA  |
| Magnesium               | 21.9   |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Total/NA  |
| Manganese               | 1.6    |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Total/NA  |
| Nickel                  | 0.0016 | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Total/NA  |
| Potassium               | 3.4    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Sodium                  | 199    |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Total/NA  |
| Chloride                | 394    |           | 2.5    | 1.4     | mg/L | 5       |   | 300.0    | Total/NA  |
| Sulfate                 | 62.1   |           | 10.0   | 1.7     | mg/L | 5       |   | 300.0    | Total/NA  |
| Total Organic Carbon    | 2.3    | B         | 1.0    | 0.43    | mg/L | 1       |   | 9060A    | Total/NA  |
| Alkalinity, Total       | 297    |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B | Total/NA  |

## Client Sample ID: OS-9 (07102018)

## Lab Sample ID: 480-138607-3

| Analyte           | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method  | Prep Type |
|-------------------|--------|-----------|-----|------|------|---------|---|---------|-----------|
| Tetrachloroethene | 1.7    |           | 1.0 | 0.36 | ug/L | 1       |   | 8260C   | Total/NA  |
| Methane           | 52     |           | 4.0 | 1.0  | ug/L | 1       |   | RSK-175 | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

### Client Sample ID: OS-9 (07102018) (Continued)

### Lab Sample ID: 480-138607-3

| Analyte              | Result  | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method   | Prep Type |
|----------------------|---------|-----------|--------|---------|------|---------|---|----------|-----------|
| Barium               | 0.11    |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Total/NA  |
| Calcium              | 131     | B         | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Cobalt               | 0.00069 | J         | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C    | Total/NA  |
| Iron                 | 0.025   | J         | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Total/NA  |
| Magnesium            | 23.7    |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Total/NA  |
| Manganese            | 0.34    |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Total/NA  |
| Nickel               | 0.0021  | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Total/NA  |
| Potassium            | 3.2     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Sodium               | 148     |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Total/NA  |
| Zinc                 | 0.0037  | J         | 0.010  | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Chloride             | 293     |           | 2.5    | 1.4     | mg/L | 5       |   | 300.0    | Total/NA  |
| Sulfate              | 47.2    |           | 10.0   | 1.7     | mg/L | 5       |   | 300.0    | Total/NA  |
| Total Organic Carbon | 0.84    | J B       | 1.0    | 0.43    | mg/L | 1       |   | 9060A    | Total/NA  |
| Alkalinity, Total    | 297     |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B | Total/NA  |
| Nitrate - RA         | 0.14    | J         | 0.25   | 0.13    | mg/L | 5       |   | 300.0    | Total/NA  |

### Client Sample ID: TRIP BLANK

### Lab Sample ID: 480-138607-4

| Analyte | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| Acetone | 5.0    | J         | 10  | 3.0  | ug/L | 1       |   | 8260C  | Total/NA  |
| Toluene | 0.57   | J         | 1.0 | 0.51 | ug/L | 1       |   | 8260C  | Total/NA  |

### Client Sample ID: FIELD BLANK (07102018)

### Lab Sample ID: 480-138607-5

| Analyte                              | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method         | Prep Type |
|--------------------------------------|--------|-----------|-----|------|------|---------|---|----------------|-----------|
| Perfluorohexanesulfonic acid (PFHxS) | 0.22   | J B       | 1.6 | 0.14 | ng/L | 1       |   | 537 (modified) | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-1 (07102018)**

**Lab Sample ID: 480-138607-1**

**Date Collected: 07/10/18 11:45**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 4.0 | 3.3  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 4.0 | 0.84 | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,1,2-Trichloroethane                 | ND     |           | 4.0 | 0.92 | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 4.0 | 1.2  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,1-Dichloroethane                    | ND     |           | 4.0 | 1.5  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,1-Dichloroethene                    | ND     |           | 4.0 | 1.2  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,2,4-Trichlorobenzene                | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,2-Dibromoethane                     | ND     |           | 4.0 | 2.9  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,2-Dichlorobenzene                   | ND     |           | 4.0 | 3.2  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,2-Dichloroethane                    | ND     |           | 4.0 | 0.84 | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,2-Dichloropropane                   | ND     |           | 4.0 | 2.9  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,3-Dichlorobenzene                   | ND     |           | 4.0 | 3.1  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 1,4-Dichlorobenzene                   | ND     |           | 4.0 | 3.4  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 2-Hexanone                            | ND     | *         | 20  | 5.0  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 2-Butanone (MEK)                      | ND     |           | 40  | 5.3  | ug/L |   |          | 07/12/18 01:13 | 4       |
| 4-Methyl-2-pentanone (MIBK)           | ND     |           | 20  | 8.4  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Acetone                               | ND     |           | 40  | 12   | ug/L |   |          | 07/12/18 01:13 | 4       |
| Benzene                               | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Bromodichloromethane                  | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Bromoform                             | ND     |           | 4.0 | 1.0  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Bromomethane                          | ND     |           | 4.0 | 2.8  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Carbon disulfide                      | ND     |           | 4.0 | 0.76 | ug/L |   |          | 07/12/18 01:13 | 4       |
| Carbon tetrachloride                  | ND     |           | 4.0 | 1.1  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Chlorobenzene                         | ND     |           | 4.0 | 3.0  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Dibromochloromethane                  | ND     |           | 4.0 | 1.3  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Chloroethane                          | ND     |           | 4.0 | 1.3  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Chloroform                            | ND     |           | 4.0 | 1.4  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Chloromethane                         | ND     |           | 4.0 | 1.4  | ug/L |   |          | 07/12/18 01:13 | 4       |
| cis-1,2-Dichloroethene                | 5.3    |           | 4.0 | 3.2  | ug/L |   |          | 07/12/18 01:13 | 4       |
| cis-1,3-Dichloropropene               | ND     |           | 4.0 | 1.4  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Cyclohexane                           | ND     |           | 4.0 | 0.72 | ug/L |   |          | 07/12/18 01:13 | 4       |
| Dichlorodifluoromethane               | ND     |           | 4.0 | 2.7  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Ethylbenzene                          | ND     |           | 4.0 | 3.0  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Isopropylbenzene                      | ND     |           | 4.0 | 3.2  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Methyl acetate                        | ND     |           | 10  | 5.2  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Methyl tert-butyl ether               | ND     |           | 4.0 | 0.64 | ug/L |   |          | 07/12/18 01:13 | 4       |
| Methylcyclohexane                     | ND     |           | 4.0 | 0.64 | ug/L |   |          | 07/12/18 01:13 | 4       |
| Methylene Chloride                    | ND     |           | 4.0 | 1.8  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Styrene                               | ND     |           | 4.0 | 2.9  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Tetrachloroethene                     | 210    |           | 4.0 | 1.4  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Toluene                               | ND     |           | 4.0 | 2.0  | ug/L |   |          | 07/12/18 01:13 | 4       |
| trans-1,2-Dichloroethene              | ND     |           | 4.0 | 3.6  | ug/L |   |          | 07/12/18 01:13 | 4       |
| trans-1,3-Dichloropropene             | ND     |           | 4.0 | 1.5  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Trichloroethene                       | 24     |           | 4.0 | 1.8  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Trichlorofluoromethane                | ND     |           | 4.0 | 3.5  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Vinyl chloride                        | ND     |           | 4.0 | 3.6  | ug/L |   |          | 07/12/18 01:13 | 4       |
| Xylenes, Total                        | ND     |           | 8.0 | 2.6  | ug/L |   |          | 07/12/18 01:13 | 4       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-1 (07102018)**

**Lab Sample ID: 480-138607-1**

**Date Collected: 07/10/18 11:45**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 97        |           | 77 - 120 |          | 07/12/18 01:13 | 4       |
| Toluene-d8 (Surr)            | 99        |           | 80 - 120 |          | 07/12/18 01:13 | 4       |
| 4-Bromofluorobenzene (Surr)  | 100       |           | 73 - 120 |          | 07/12/18 01:13 | 4       |
| Dibromofluoromethane (Surr)  | 97        |           | 75 - 123 |          | 07/12/18 01:13 | 4       |

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte          | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | ND        |           | 0.20     | 0.10 | ug/L |   | 07/11/18 14:31 | 07/14/18 08:18 | 1       |
| Isotope Dilution | %Recovery | Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 30        |           | 15 - 110 |      |      |   | 07/11/18 14:31 | 07/14/18 08:18 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 7.5 | 1.5 | ug/L |   |          | 07/12/18 13:16 | 1       |
| Ethene  | ND     |           | 7.0 | 1.5 | ug/L |   |          | 07/12/18 13:16 | 1       |
| Methane | 41     |           | 4.0 | 1.0 | ug/L |   |          | 07/12/18 13:16 | 1       |

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte                                                    | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------------------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)                              | 3.5       |           | 1.7      | 0.29 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluoropentanoic acid (PFPeA)                            | 5.8       |           | 1.7      | 0.41 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorohexanoic acid (PFHxA)                             | 4.5       |           | 1.7      | 0.48 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluoroheptanoic acid (PFHpA)                            | 6.1       |           | 1.7      | 0.21 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorooctanoic acid (PFOA)                              | 8.8       |           | 1.7      | 0.71 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorononanoic acid (PFNA)                              | ND        |           | 1.7      | 0.23 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorodecanoic acid (PFDA)                              | ND        |           | 1.7      | 0.26 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluoroundecanoic acid (PFUnA)                           | ND        |           | 1.7      | 0.92 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorododecanoic acid (PFDoA)                           | ND        |           | 1.7      | 0.46 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorotridecanoic Acid (PFTriA)                         | ND        |           | 1.7      | 1.1  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorotetradecanoic acid (PFTeA)                        | 0.30      | J         | 1.7      | 0.24 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorobutanesulfonic acid (PFBS)                        | 0.90      | J         | 1.7      | 0.17 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)                       | 1.6       | J B       | 1.7      | 0.14 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | ND        |           | 1.7      | 0.16 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                        | 2.5       |           | 1.7      | 0.45 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorodecanesulfonic acid (PFDS)                        | ND        |           | 1.7      | 0.27 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Perfluorooctane Sulfonamide (FOSA)                         | ND        |           | 1.7      | 0.29 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | ND        |           | 17       | 2.6  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | ND        |           | 17       | 1.6  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 6:2 FTS                                                    | ND        |           | 17       | 1.7  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 8:2 FTS                                                    | ND        |           | 17       | 1.7  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| Isotope Dilution                                           | %Recovery | Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 13C4 PFBA                                                  | 74        |           | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C5 PFPeA                                                 | 93        |           | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C2 PFHxA                                                 | 97        |           | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C4-PFHpA                                                 | 101       |           | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:33 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-1 (07102018)**

**Lab Sample ID: 480-138607-1**

**Date Collected: 07/10/18 11:45**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| 13C4 PFOA        | 102       |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C5 PFNA        | 100       |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C2 PFDA        | 97        |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C2 PFUnA       | 97        |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C2 PFDoA       | 95        |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C2-PFTeDA      | 88        |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C3-PFBS        | 92        |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 18O2 PFHxS       | 103       |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C4 PFOS        | 94        |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| 13C8 FOSA        | 92        |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| d3-NMeFOSAA      | 95        |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| d5-NEtFOSAA      | 97        |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| M2-6:2FTS        | 117       |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |
| M2-8:2FTS        | 103       |           | 25 - 150 | 07/14/18 07:35 | 07/20/18 03:33 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte   | Result | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | ND     |           | 0.20   | 0.060   | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Antimony  | ND     |           | 0.020  | 0.0068  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Arsenic   | 0.011  | J         | 0.015  | 0.0056  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Barium    | 0.083  |           | 0.0020 | 0.00070 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Beryllium | ND     |           | 0.0020 | 0.00030 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Cadmium   | ND     |           | 0.0020 | 0.00050 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Calcium   | 110    | B         | 0.50   | 0.10    | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Chromium  | ND     |           | 0.0040 | 0.0010  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Cobalt    | ND     |           | 0.0040 | 0.00063 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Copper    | ND     |           | 0.010  | 0.0016  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Iron      | 5.8    |           | 0.050  | 0.019   | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Lead      | ND     |           | 0.010  | 0.0030  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Magnesium | 18.9   |           | 0.20   | 0.043   | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Manganese | 0.60   |           | 0.0030 | 0.00040 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Nickel    | ND     |           | 0.010  | 0.0013  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Potassium | 2.9    |           | 0.50   | 0.10    | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Selenium  | ND     |           | 0.025  | 0.0087  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Silver    | ND     |           | 0.0060 | 0.0017  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Sodium    | 90.6   |           | 1.0    | 0.32    | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Thallium  | ND     |           | 0.020  | 0.010   | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Vanadium  | ND     |           | 0.0050 | 0.0015  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |
| Zinc      | ND     |           | 0.010  | 0.0015  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:40 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/19/18 12:15 | 07/19/18 16:03 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 157    |           | 2.5  | 1.4  | mg/L |   |          | 07/11/18 13:32 | 5       |
| Nitrate              | ND     | ^ *       | 0.25 | 0.13 | mg/L |   |          | 07/11/18 13:32 | 5       |
| Sulfate              | 52.9   |           | 10.0 | 1.7  | mg/L |   |          | 07/11/18 13:32 | 5       |
| Total Organic Carbon | 1.2    | B         | 1.0  | 0.43 | mg/L |   |          | 07/19/18 13:45 | 1       |

TestAmerica Buffalo



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-1 (07102018)**

**Lab Sample ID: 480-138607-1**

**Date Collected: 07/10/18 11:45**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## General Chemistry (Continued)

| Analyte           | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Alkalinity, Total | 279    |           | 5.0 | 0.79 | mg/L |   |          | 07/11/18 13:48 | 1       |

## General Chemistry - RA

| Analyte | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Nitrate | ND     |           | 0.25 | 0.13 | mg/L |   |          | 07/11/18 15:52 | 5       |

**Client Sample ID: OS-4 (07102018)**

**Lab Sample ID: 480-138607-2**

**Date Collected: 07/10/18 14:15**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 1.0 | 0.82 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,1,2-Trichloroethane                 | ND     |           | 1.0 | 0.23 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 1.0 | 0.31 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,1-Dichloroethane                    | ND     |           | 1.0 | 0.38 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,1-Dichloroethene                    | ND     |           | 1.0 | 0.29 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,2,4-Trichlorobenzene                | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,2-Dibromoethane                     | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,2-Dichlorobenzene                   | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,2-Dichloroethane                    | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,2-Dichloropropane                   | ND     |           | 1.0 | 0.72 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,3-Dichlorobenzene                   | ND     |           | 1.0 | 0.78 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 1,4-Dichlorobenzene                   | ND     |           | 1.0 | 0.84 | ug/L |   |          | 07/11/18 18:38 | 1       |
| 2-Hexanone                            | ND     |           | 5.0 | 1.2  | ug/L |   |          | 07/11/18 18:38 | 1       |
| 2-Butanone (MEK)                      | ND     |           | 10  | 1.3  | ug/L |   |          | 07/11/18 18:38 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND     |           | 5.0 | 2.1  | ug/L |   |          | 07/11/18 18:38 | 1       |
| Acetone                               | ND     |           | 10  | 3.0  | ug/L |   |          | 07/11/18 18:38 | 1       |
| Benzene                               | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Bromodichloromethane                  | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Bromoform                             | ND     |           | 1.0 | 0.26 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Bromomethane                          | ND     |           | 1.0 | 0.69 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Carbon disulfide                      | ND     |           | 1.0 | 0.19 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Carbon tetrachloride                  | ND     |           | 1.0 | 0.27 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Chlorobenzene                         | ND     |           | 1.0 | 0.75 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Dibromochloromethane                  | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Chloroethane                          | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Chloroform                            | ND     |           | 1.0 | 0.34 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Chloromethane                         | ND     |           | 1.0 | 0.35 | ug/L |   |          | 07/11/18 18:38 | 1       |
| cis-1,2-Dichloroethene                | ND     |           | 1.0 | 0.81 | ug/L |   |          | 07/11/18 18:38 | 1       |
| cis-1,3-Dichloropropene               | ND     |           | 1.0 | 0.36 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Cyclohexane                           | ND     |           | 1.0 | 0.18 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Dichlorodifluoromethane               | ND     |           | 1.0 | 0.68 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Ethylbenzene                          | ND     |           | 1.0 | 0.74 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Isopropylbenzene                      | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Methyl acetate                        | ND     |           | 2.5 | 1.3  | ug/L |   |          | 07/11/18 18:38 | 1       |
| Methyl tert-butyl ether               | 0.63   | J         | 1.0 | 0.16 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Methylcyclohexane                     | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/11/18 18:38 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-4 (07102018)**

**Lab Sample ID: 480-138607-2**

**Date Collected: 07/10/18 14:15**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                   | Result      | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|-------------|-----------|-----|------|------|---|----------|----------------|---------|
| Methylene Chloride        | ND          |           | 1.0 | 0.44 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Styrene                   | ND          |           | 1.0 | 0.73 | ug/L |   |          | 07/11/18 18:38 | 1       |
| <b>Tetrachloroethene</b>  | <b>0.61</b> | <b>J</b>  | 1.0 | 0.36 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Toluene                   | ND          |           | 1.0 | 0.51 | ug/L |   |          | 07/11/18 18:38 | 1       |
| trans-1,2-Dichloroethene  | ND          |           | 1.0 | 0.90 | ug/L |   |          | 07/11/18 18:38 | 1       |
| trans-1,3-Dichloropropene | ND          |           | 1.0 | 0.37 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Trichloroethene           | ND          |           | 1.0 | 0.46 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Trichlorofluoromethane    | ND          |           | 1.0 | 0.88 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Vinyl chloride            | ND          |           | 1.0 | 0.90 | ug/L |   |          | 07/11/18 18:38 | 1       |
| Xylenes, Total            | ND          |           | 2.0 | 0.66 | ug/L |   |          | 07/11/18 18:38 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 95        |           | 77 - 120 |          | 07/11/18 18:38 | 1       |
| Toluene-d8 (Surr)            | 98        |           | 80 - 120 |          | 07/11/18 18:38 | 1       |
| 4-Bromofluorobenzene (Surr)  | 101       |           | 73 - 120 |          | 07/11/18 18:38 | 1       |
| Dibromofluoromethane (Surr)  | 99        |           | 75 - 123 |          | 07/11/18 18:38 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte        | Result    | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane         | ND        |           | 7.5 | 1.5 | ug/L |   |          | 07/12/18 13:33 | 1       |
| Ethene         | ND        |           | 7.0 | 1.5 | ug/L |   |          | 07/12/18 13:33 | 1       |
| <b>Methane</b> | <b>29</b> |           | 4.0 | 1.0 | ug/L |   |          | 07/12/18 13:33 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte          | Result        | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|---------------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum         | ND            |           | 0.20   | 0.060   | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Antimony         | ND            |           | 0.020  | 0.0068  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Arsenic          | ND            |           | 0.015  | 0.0056  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| <b>Barium</b>    | <b>0.13</b>   |           | 0.0020 | 0.00070 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Beryllium        | ND            |           | 0.0020 | 0.00030 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Cadmium          | ND            |           | 0.0020 | 0.00050 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| <b>Calcium</b>   | <b>162</b>    | <b>B</b>  | 0.50   | 0.10    | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Chromium         | ND            |           | 0.0040 | 0.0010  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Cobalt           | ND            |           | 0.0040 | 0.00063 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Copper           | ND            |           | 0.010  | 0.0016  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| <b>Iron</b>      | <b>0.84</b>   |           | 0.050  | 0.019   | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Lead             | ND            |           | 0.010  | 0.0030  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| <b>Magnesium</b> | <b>21.9</b>   |           | 0.20   | 0.043   | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| <b>Manganese</b> | <b>1.6</b>    |           | 0.0030 | 0.00040 | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| <b>Nickel</b>    | <b>0.0016</b> | <b>J</b>  | 0.010  | 0.0013  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| <b>Potassium</b> | <b>3.4</b>    |           | 0.50   | 0.10    | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Selenium         | ND            |           | 0.025  | 0.0087  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Silver           | ND            |           | 0.0060 | 0.0017  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| <b>Sodium</b>    | <b>199</b>    |           | 1.0    | 0.32    | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Thallium         | ND            |           | 0.020  | 0.010   | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Vanadium         | ND            |           | 0.0050 | 0.0015  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |
| Zinc             | ND            |           | 0.010  | 0.0015  | mg/L |   | 07/12/18 09:27 | 07/13/18 00:56 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-4 (07102018)**

**Lab Sample ID: 480-138607-2**

**Date Collected: 07/10/18 14:15**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/19/18 12:15 | 07/19/18 15:15 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 394    |           | 2.5  | 1.4  | mg/L |   |          | 07/11/18 13:41 | 5       |
| Nitrate              | ND     | ^ *       | 0.25 | 0.13 | mg/L |   |          | 07/11/18 13:41 | 5       |
| Sulfate              | 62.1   |           | 10.0 | 1.7  | mg/L |   |          | 07/11/18 13:41 | 5       |
| Total Organic Carbon | 2.3    | B         | 1.0  | 0.43 | mg/L |   |          | 07/19/18 14:13 | 1       |
| Alkalinity, Total    | 297    |           | 5.0  | 0.79 | mg/L |   |          | 07/11/18 13:53 | 1       |

## General Chemistry - RA

| Analyte | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Nitrate | ND     |           | 0.25 | 0.13 | mg/L |   |          | 07/11/18 16:04 | 5       |

**Client Sample ID: OS-9 (07102018)**

**Lab Sample ID: 480-138607-3**

**Date Collected: 07/10/18 15:30**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 1.0 | 0.82 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,1,2-Trichloroethane                 | ND     |           | 1.0 | 0.23 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 1.0 | 0.31 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,1-Dichloroethane                    | ND     |           | 1.0 | 0.38 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,1-Dichloroethene                    | ND     |           | 1.0 | 0.29 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,2,4-Trichlorobenzene                | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,2-Dibromoethane                     | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,2-Dichlorobenzene                   | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,2-Dichloroethane                    | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,2-Dichloropropane                   | ND     |           | 1.0 | 0.72 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,3-Dichlorobenzene                   | ND     |           | 1.0 | 0.78 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 1,4-Dichlorobenzene                   | ND     |           | 1.0 | 0.84 | ug/L |   |          | 07/12/18 01:42 | 1       |
| 2-Hexanone                            | ND     | *         | 5.0 | 1.2  | ug/L |   |          | 07/12/18 01:42 | 1       |
| 2-Butanone (MEK)                      | ND     |           | 10  | 1.3  | ug/L |   |          | 07/12/18 01:42 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND     |           | 5.0 | 2.1  | ug/L |   |          | 07/12/18 01:42 | 1       |
| Acetone                               | ND     |           | 10  | 3.0  | ug/L |   |          | 07/12/18 01:42 | 1       |
| Benzene                               | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Bromodichloromethane                  | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Bromoform                             | ND     |           | 1.0 | 0.26 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Bromomethane                          | ND     |           | 1.0 | 0.69 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Carbon disulfide                      | ND     |           | 1.0 | 0.19 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Carbon tetrachloride                  | ND     |           | 1.0 | 0.27 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Chlorobenzene                         | ND     |           | 1.0 | 0.75 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Dibromochloromethane                  | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Chloroethane                          | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Chloroform                            | ND     |           | 1.0 | 0.34 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Chloromethane                         | ND     |           | 1.0 | 0.35 | ug/L |   |          | 07/12/18 01:42 | 1       |
| cis-1,2-Dichloroethene                | ND     |           | 1.0 | 0.81 | ug/L |   |          | 07/12/18 01:42 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-9 (07102018)**

**Lab Sample ID: 480-138607-3**

**Date Collected: 07/10/18 15:30**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                   | Result     | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|------------|-----------|-----|------|------|---|----------|----------------|---------|
| cis-1,3-Dichloropropene   | ND         |           | 1.0 | 0.36 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Cyclohexane               | ND         |           | 1.0 | 0.18 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Dichlorodifluoromethane   | ND         |           | 1.0 | 0.68 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Ethylbenzene              | ND         |           | 1.0 | 0.74 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Isopropylbenzene          | ND         |           | 1.0 | 0.79 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Methyl acetate            | ND         |           | 2.5 | 1.3  | ug/L |   |          | 07/12/18 01:42 | 1       |
| Methyl tert-butyl ether   | ND         |           | 1.0 | 0.16 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Methylcyclohexane         | ND         |           | 1.0 | 0.16 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Methylene Chloride        | ND         |           | 1.0 | 0.44 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Styrene                   | ND         |           | 1.0 | 0.73 | ug/L |   |          | 07/12/18 01:42 | 1       |
| <b>Tetrachloroethene</b>  | <b>1.7</b> |           | 1.0 | 0.36 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Toluene                   | ND         |           | 1.0 | 0.51 | ug/L |   |          | 07/12/18 01:42 | 1       |
| trans-1,2-Dichloroethene  | ND         |           | 1.0 | 0.90 | ug/L |   |          | 07/12/18 01:42 | 1       |
| trans-1,3-Dichloropropene | ND         |           | 1.0 | 0.37 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Trichloroethene           | ND         |           | 1.0 | 0.46 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Trichlorofluoromethane    | ND         |           | 1.0 | 0.88 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Vinyl chloride            | ND         |           | 1.0 | 0.90 | ug/L |   |          | 07/12/18 01:42 | 1       |
| Xylenes, Total            | ND         |           | 2.0 | 0.66 | ug/L |   |          | 07/12/18 01:42 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 89        |           | 77 - 120 |          | 07/12/18 01:42 | 1       |
| Toluene-d8 (Surr)            | 92        |           | 80 - 120 |          | 07/12/18 01:42 | 1       |
| 4-Bromofluorobenzene (Surr)  | 95        |           | 73 - 120 |          | 07/12/18 01:42 | 1       |
| Dibromofluoromethane (Surr)  | 90        |           | 75 - 123 |          | 07/12/18 01:42 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte        | Result    | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane         | ND        |           | 7.5 | 1.5 | ug/L |   |          | 07/12/18 13:51 | 1       |
| Ethene         | ND        |           | 7.0 | 1.5 | ug/L |   |          | 07/12/18 13:51 | 1       |
| <b>Methane</b> | <b>52</b> |           | 4.0 | 1.0 | ug/L |   |          | 07/12/18 13:51 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte          | Result         | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|----------------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum         | ND             |           | 0.20   | 0.060   | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Antimony         | ND             |           | 0.020  | 0.0068  | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Arsenic          | ND             |           | 0.015  | 0.0056  | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| <b>Barium</b>    | <b>0.11</b>    |           | 0.0020 | 0.00070 | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Beryllium        | ND             |           | 0.0020 | 0.00030 | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Cadmium          | ND             |           | 0.0020 | 0.00050 | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| <b>Calcium</b>   | <b>131</b>     | <b>B</b>  | 0.50   | 0.10    | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Chromium         | ND             |           | 0.0040 | 0.0010  | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| <b>Cobalt</b>    | <b>0.00069</b> | <b>J</b>  | 0.0040 | 0.00063 | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Copper           | ND             |           | 0.010  | 0.0016  | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| <b>Iron</b>      | <b>0.025</b>   | <b>J</b>  | 0.050  | 0.019   | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Lead             | ND             |           | 0.010  | 0.0030  | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| <b>Magnesium</b> | <b>23.7</b>    |           | 0.20   | 0.043   | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| <b>Manganese</b> | <b>0.34</b>    |           | 0.0030 | 0.00040 | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| <b>Nickel</b>    | <b>0.0021</b>  | <b>J</b>  | 0.010  | 0.0013  | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| <b>Potassium</b> | <b>3.2</b>     |           | 0.50   | 0.10    | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Selenium         | ND             |           | 0.025  | 0.0087  | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-9 (07102018)**

**Lab Sample ID: 480-138607-3**

**Date Collected: 07/10/18 15:30**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 6010C - Metals (ICP) (Continued)

| Analyte  | Result | Qualifier | RL     | MDL    | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Silver   | ND     |           | 0.0060 | 0.0017 | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Sodium   | 148    |           | 1.0    | 0.32   | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Thallium | ND     |           | 0.020  | 0.010  | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Vanadium | ND     |           | 0.0050 | 0.0015 | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |
| Zinc     | 0.0037 | J         | 0.010  | 0.0015 | mg/L |   | 07/12/18 09:27 | 07/13/18 01:00 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/19/18 12:15 | 07/19/18 16:08 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 293    |           | 2.5  | 1.4  | mg/L |   |          | 07/11/18 13:49 | 5       |
| Nitrate              | ND     | ^ *       | 0.25 | 0.13 | mg/L |   |          | 07/11/18 13:49 | 5       |
| Sulfate              | 47.2   |           | 10.0 | 1.7  | mg/L |   |          | 07/11/18 13:49 | 5       |
| Total Organic Carbon | 0.84   | J B       | 1.0  | 0.43 | mg/L |   |          | 07/19/18 17:01 | 1       |
| Alkalinity, Total    | 297    |           | 5.0  | 0.79 | mg/L |   |          | 07/11/18 14:10 | 1       |

## General Chemistry - RA

| Analyte | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Nitrate | 0.14   | J         | 0.25 | 0.13 | mg/L |   |          | 07/11/18 16:17 | 5       |

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138607-4**

**Date Collected: 07/10/18 00:00**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 1.0 | 0.82 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,1,2-Trichloroethane                 | ND     |           | 1.0 | 0.23 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 1.0 | 0.31 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,1-Dichloroethane                    | ND     |           | 1.0 | 0.38 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,1-Dichloroethene                    | ND     |           | 1.0 | 0.29 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,2,4-Trichlorobenzene                | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,2-Dibromoethane                     | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,2-Dichlorobenzene                   | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,2-Dichloroethane                    | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,2-Dichloropropane                   | ND     |           | 1.0 | 0.72 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,3-Dichlorobenzene                   | ND     |           | 1.0 | 0.78 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 1,4-Dichlorobenzene                   | ND     |           | 1.0 | 0.84 | ug/L |   |          | 07/12/18 02:11 | 1       |
| 2-Hexanone                            | ND     | *         | 5.0 | 1.2  | ug/L |   |          | 07/12/18 02:11 | 1       |
| 2-Butanone (MEK)                      | ND     |           | 10  | 1.3  | ug/L |   |          | 07/12/18 02:11 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND     |           | 5.0 | 2.1  | ug/L |   |          | 07/12/18 02:11 | 1       |
| Acetone                               | 5.0    | J         | 10  | 3.0  | ug/L |   |          | 07/12/18 02:11 | 1       |
| Benzene                               | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Bromodichloromethane                  | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Bromoform                             | ND     |           | 1.0 | 0.26 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Bromomethane                          | ND     |           | 1.0 | 0.69 | ug/L |   |          | 07/12/18 02:11 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138607-4**

**Date Collected: 07/10/18 00:00**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                   | Result        | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|---------------|-----------|-----|------|------|---|----------|----------------|---------|
| Carbon disulfide          | ND            |           | 1.0 | 0.19 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Carbon tetrachloride      | ND            |           | 1.0 | 0.27 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Chlorobenzene             | ND            |           | 1.0 | 0.75 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Dibromochloromethane      | ND            |           | 1.0 | 0.32 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Chloroethane              | ND            |           | 1.0 | 0.32 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Chloroform                | ND            |           | 1.0 | 0.34 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Chloromethane             | ND            |           | 1.0 | 0.35 | ug/L |   |          | 07/12/18 02:11 | 1       |
| cis-1,2-Dichloroethene    | ND            |           | 1.0 | 0.81 | ug/L |   |          | 07/12/18 02:11 | 1       |
| cis-1,3-Dichloropropene   | ND            |           | 1.0 | 0.36 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Cyclohexane               | ND            |           | 1.0 | 0.18 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Dichlorodifluoromethane   | ND            |           | 1.0 | 0.68 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Ethylbenzene              | ND            |           | 1.0 | 0.74 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Isopropylbenzene          | ND            |           | 1.0 | 0.79 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Methyl acetate            | ND            |           | 2.5 | 1.3  | ug/L |   |          | 07/12/18 02:11 | 1       |
| Methyl tert-butyl ether   | ND            |           | 1.0 | 0.16 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Methylcyclohexane         | ND            |           | 1.0 | 0.16 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Methylene Chloride        | ND            |           | 1.0 | 0.44 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Styrene                   | ND            |           | 1.0 | 0.73 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Tetrachloroethene         | ND            |           | 1.0 | 0.36 | ug/L |   |          | 07/12/18 02:11 | 1       |
| <b>Toluene</b>            | <b>0.57 J</b> |           | 1.0 | 0.51 | ug/L |   |          | 07/12/18 02:11 | 1       |
| trans-1,2-Dichloroethene  | ND            |           | 1.0 | 0.90 | ug/L |   |          | 07/12/18 02:11 | 1       |
| trans-1,3-Dichloropropene | ND            |           | 1.0 | 0.37 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Trichloroethene           | ND            |           | 1.0 | 0.46 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Trichlorofluoromethane    | ND            |           | 1.0 | 0.88 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Vinyl chloride            | ND            |           | 1.0 | 0.90 | ug/L |   |          | 07/12/18 02:11 | 1       |
| Xylenes, Total            | ND            |           | 2.0 | 0.66 | ug/L |   |          | 07/12/18 02:11 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 97        |           | 77 - 120 |          | 07/12/18 02:11 | 1       |
| Toluene-d8 (Surr)            | 100       |           | 80 - 120 |          | 07/12/18 02:11 | 1       |
| 4-Bromofluorobenzene (Surr)  | 101       |           | 73 - 120 |          | 07/12/18 02:11 | 1       |
| Dibromofluoromethane (Surr)  | 97        |           | 75 - 123 |          | 07/12/18 02:11 | 1       |

**Client Sample ID: FIELD BLANK (07102018)**

**Lab Sample ID: 480-138607-5**

**Date Collected: 07/10/18 16:00**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte                             | Result | Qualifier | RL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------------------------------|--------|-----------|-----|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)       | ND     |           | 1.6 | 0.28 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluoropentanoic acid (PFPeA)     | ND     |           | 1.6 | 0.39 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorohexanoic acid (PFHxA)      | ND     |           | 1.6 | 0.46 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluoroheptanoic acid (PFHpA)     | ND     |           | 1.6 | 0.20 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorooctanoic acid (PFOA)       | ND     |           | 1.6 | 0.68 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorononanoic acid (PFNA)       | ND     |           | 1.6 | 0.22 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorodecanoic acid (PFDA)       | ND     |           | 1.6 | 0.25 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluoroundecanoic acid (PFUnA)    | ND     |           | 1.6 | 0.88 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorododecanoic acid (PFDoA)    | ND     |           | 1.6 | 0.44 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorotridecanoic Acid (PFTriA)  | ND     |           | 1.6 | 1.0  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorotetradecanoic acid (PFTeA) | ND     |           | 1.6 | 0.23 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |

TestAmerica Buffalo



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: FIELD BLANK (07102018)**

**Lab Sample ID: 480-138607-5**

**Date Collected: 07/10/18 16:00**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

| Analyte                                                    | Result      | Qualifier  | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------------------------------|-------------|------------|----------|------|------|---|----------------|----------------|---------|
| Perfluorobutanesulfonic acid (PFBS)                        | ND          |            | 1.6      | 0.16 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| <b>Perfluorohexanesulfonic acid (PFHxS)</b>                | <b>0.22</b> | <b>J B</b> | 1.6      | 0.14 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | ND          |            | 1.6      | 0.15 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                        | ND          |            | 1.6      | 0.43 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorodecanesulfonic acid (PFDS)                        | ND          |            | 1.6      | 0.26 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Perfluorooctane Sulfonamide (FOSA)                         | ND          |            | 1.6      | 0.28 | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | ND          |            | 16       | 2.5  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | ND          |            | 16       | 1.5  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 6:2 FTS                                                    | ND          |            | 16       | 1.6  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 8:2 FTS                                                    | ND          |            | 16       | 1.6  | ng/L |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| Isotope Dilution                                           | %Recovery   | Qualifier  | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 13C4 PFBA                                                  | 100         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C5 PFPeA                                                 | 100         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C2 PFHxA                                                 | 100         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C4-PFHpA                                                 | 105         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C4 PFOA                                                  | 102         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C5 PFNA                                                  | 108         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C2 PFDA                                                  | 111         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C2 PFUnA                                                 | 106         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C2 PFDoA                                                 | 98          |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C2-PFTeDA                                                | 94          |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C3-PFBS                                                  | 95          |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 18O2 PFHxS                                                 | 105         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C4 PFOS                                                  | 97          |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| 13C8 FOSA                                                  | 93          |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| d3-NMeFOSAA                                                | 100         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| d5-NEtFOSAA                                                | 106         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| M2-6:2FTS                                                  | 110         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |
| M2-8:2FTS                                                  | 111         |            | 25 - 150 |      |      |   | 07/14/18 07:35 | 07/20/18 03:41 | 1       |

## Surrogate Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                  |
|------------------|--------------------|------------------------------------------------|-----------------|-----------------|------------------|
|                  |                    | DCA<br>(77-120)                                | TOL<br>(80-120) | BFB<br>(73-120) | DBFM<br>(75-123) |
| 480-138607-1     | OS-1 (07102018)    | 97                                             | 99              | 100             | 97               |
| 480-138607-2     | OS-4 (07102018)    | 95                                             | 98              | 101             | 99               |
| 480-138607-3     | OS-9 (07102018)    | 89                                             | 92              | 95              | 90               |
| 480-138607-4     | TRIP BLANK         | 97                                             | 100             | 101             | 97               |
| LCS 480-423871/6 | Lab Control Sample | 100                                            | 99              | 103             | 104              |
| LCS 480-424052/5 | Lab Control Sample | 86                                             | 99              | 100             | 90               |
| MB 480-423871/8  | Method Blank       | 97                                             | 102             | 101             | 99               |
| MB 480-424052/7  | Method Blank       | 92                                             | 99              | 100             | 92               |

#### Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

# Isotope Dilution Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID       | Client Sample ID       | DXE<br>(15-110) |
|---------------------|------------------------|-----------------|
| 480-138607-1        | OS-1 (07102018)        | 30              |
| LCS 480-424010/2-A  | Lab Control Sample     | 33              |
| LCSD 480-424010/3-A | Lab Control Sample Dup | 32              |
| MB 480-424010/1-A   | Method Blank           | 36              |

#### Surrogate Legend

DXE = 1,4-Dioxane-d8

## Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID       | PFBA<br>(25-150) | PFPeA<br>(25-150) | PFHxA<br>(25-150) | PFHpA<br>(25-150) | PFOA<br>(25-150) | PFNA<br>(25-150) | PFDA<br>(25-150) | PFUnA<br>(25-150) |
|--------------------|------------------------|------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|-------------------|
| 480-138607-1       | OS-1 (07102018)        | 74               | 93                | 97                | 101               | 102              | 100              | 97               | 97                |
| 480-138607-5       | FIELD BLANK (07102018) | 100              | 100               | 100               | 105               | 102              | 108              | 111              | 106               |
| LCS 320-234027/2-A | Lab Control Sample     | 104              | 100               | 101               | 106               | 106              | 104              | 107              | 105               |
| MB 320-234027/1-A  | Method Blank           | 105              | 101               | 103               | 101               | 103              | 103              | 105              | 101               |

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID       | PFDaA<br>(25-150) | PFTDA<br>(25-150) | 3C3-PFBs<br>(25-150) | PFHxS<br>(25-150) | PFOS<br>(25-150) | PFOSA<br>(25-150) | d-NMeFOSAA<br>(25-150) | d-NMeFOSAA<br>(25-150) |
|--------------------|------------------------|-------------------|-------------------|----------------------|-------------------|------------------|-------------------|------------------------|------------------------|
| 480-138607-1       | OS-1 (07102018)        | 95                | 88                | 92                   | 103               | 94               | 92                | 95                     | 97                     |
| 480-138607-5       | FIELD BLANK (07102018) | 98                | 94                | 95                   | 105               | 97               | 93                | 100                    | 106                    |
| LCS 320-234027/2-A | Lab Control Sample     | 100               | 95                | 97                   | 100               | 101              | 97                | 105                    | 108                    |
| MB 320-234027/1-A  | Method Blank           | 98                | 99                | 94                   | 100               | 97               | 96                | 102                    | 109                    |

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID       | M262FTS<br>(25-150) | M282FTS<br>(25-150) |
|--------------------|------------------------|---------------------|---------------------|
| 480-138607-1       | OS-1 (07102018)        | 117                 | 103                 |
| 480-138607-5       | FIELD BLANK (07102018) | 110                 | 111                 |
| LCS 320-234027/2-A | Lab Control Sample     | 115                 | 114                 |
| MB 320-234027/1-A  | Method Blank           | 103                 | 111                 |

#### Surrogate Legend

PFBA = 13C4 PFBA  
PFPeA = 13C5 PFPeA  
PFHxA = 13C2 PFHxA  
PFHpA = 13C4-PFHpA  
PFOA = 13C4 PFOA  
PFNA = 13C5 PFNA  
PFDA = 13C2 PFDA  
PFUnA = 13C2 PFUnA  
PFDaA = 13C2 PFDaA  
PFTDA = 13C2-PFTeDA  
13C3-PFBs = 13C3-PFBs  
PFHxS = 18O2 PFHxS  
PFOS = 13C4 PFOS  
PFOSA = 13C8 FOSA  
d3-NMeFOSAA = d3-NMeFOSAA

TestAmerica Buffalo

# Isotope Dilution Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

d5-NEtFOSAA = d5-NEtFOSAA  
M262FTS = M2-6:2FTS  
M282FTS = M2-8:2FTS

1

2

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# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-423871/8

Matrix: Water

Analysis Batch: 423871

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                               | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND        |              | 1.0 | 0.82 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,1,2-Trichloroethane                 | ND        |              | 1.0 | 0.23 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND        |              | 1.0 | 0.31 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,1-Dichloroethane                    | ND        |              | 1.0 | 0.38 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,1-Dichloroethene                    | ND        |              | 1.0 | 0.29 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,2,4-Trichlorobenzene                | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,2-Dibromoethane                     | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,2-Dichlorobenzene                   | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,2-Dichloroethane                    | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,2-Dichloropropane                   | ND        |              | 1.0 | 0.72 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,3-Dichlorobenzene                   | ND        |              | 1.0 | 0.78 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 1,4-Dichlorobenzene                   | ND        |              | 1.0 | 0.84 | ug/L |   |          | 07/11/18 11:15 | 1       |
| 2-Hexanone                            | ND        |              | 5.0 | 1.2  | ug/L |   |          | 07/11/18 11:15 | 1       |
| 2-Butanone (MEK)                      | ND        |              | 10  | 1.3  | ug/L |   |          | 07/11/18 11:15 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND        |              | 5.0 | 2.1  | ug/L |   |          | 07/11/18 11:15 | 1       |
| Acetone                               | ND        |              | 10  | 3.0  | ug/L |   |          | 07/11/18 11:15 | 1       |
| Benzene                               | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Bromodichloromethane                  | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Bromoform                             | ND        |              | 1.0 | 0.26 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Bromomethane                          | ND        |              | 1.0 | 0.69 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Carbon disulfide                      | 0.191     | J            | 1.0 | 0.19 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Carbon tetrachloride                  | ND        |              | 1.0 | 0.27 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Chlorobenzene                         | ND        |              | 1.0 | 0.75 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Dibromochloromethane                  | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Chloroethane                          | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Chloroform                            | ND        |              | 1.0 | 0.34 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Chloromethane                         | ND        |              | 1.0 | 0.35 | ug/L |   |          | 07/11/18 11:15 | 1       |
| cis-1,2-Dichloroethene                | ND        |              | 1.0 | 0.81 | ug/L |   |          | 07/11/18 11:15 | 1       |
| cis-1,3-Dichloropropene               | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Cyclohexane                           | ND        |              | 1.0 | 0.18 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Dichlorodifluoromethane               | ND        |              | 1.0 | 0.68 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Ethylbenzene                          | ND        |              | 1.0 | 0.74 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Isopropylbenzene                      | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Methyl acetate                        | ND        |              | 2.5 | 1.3  | ug/L |   |          | 07/11/18 11:15 | 1       |
| Methyl tert-butyl ether               | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Methylcyclohexane                     | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Methylene Chloride                    | ND        |              | 1.0 | 0.44 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Styrene                               | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Tetrachloroethene                     | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Toluene                               | ND        |              | 1.0 | 0.51 | ug/L |   |          | 07/11/18 11:15 | 1       |
| trans-1,2-Dichloroethene              | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/11/18 11:15 | 1       |
| trans-1,3-Dichloropropene             | ND        |              | 1.0 | 0.37 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Trichloroethene                       | ND        |              | 1.0 | 0.46 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Trichlorofluoromethane                | ND        |              | 1.0 | 0.88 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Vinyl chloride                        | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/11/18 11:15 | 1       |
| Xylenes, Total                        | ND        |              | 2.0 | 0.66 | ug/L |   |          | 07/11/18 11:15 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 97           |              | 77 - 120 |          | 07/11/18 11:15 | 1       |
| Toluene-d8 (Surr)            | 102          |              | 80 - 120 |          | 07/11/18 11:15 | 1       |
| 4-Bromofluorobenzene (Surr)  | 101          |              | 73 - 120 |          | 07/11/18 11:15 | 1       |
| Dibromofluoromethane (Surr)  | 99           |              | 75 - 123 |          | 07/11/18 11:15 | 1       |

Lab Sample ID: LCS 480-423871/6

Matrix: Water

Analysis Batch: 423871

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

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1-Trichloroethane                 | 25.0        | 27.7       |               | ug/L |   | 111  | 73 - 126     |
| 1,1,2,2-Tetrachloroethane             | 25.0        | 27.0       |               | ug/L |   | 108  | 76 - 120     |
| 1,1,2-Trichloroethane                 | 25.0        | 25.7       |               | ug/L |   | 103  | 76 - 122     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0        | 28.7       |               | ug/L |   | 115  | 61 - 148     |
| 1,1-Dichloroethane                    | 25.0        | 26.2       |               | ug/L |   | 105  | 77 - 120     |
| 1,1-Dichloroethene                    | 25.0        | 26.0       |               | ug/L |   | 104  | 66 - 127     |
| 1,2,4-Trichlorobenzene                | 25.0        | 26.7       |               | ug/L |   | 107  | 79 - 122     |
| 1,2-Dibromo-3-Chloropropane           | 25.0        | 25.4       |               | ug/L |   | 102  | 56 - 134     |
| 1,2-Dibromoethane                     | 25.0        | 26.1       |               | ug/L |   | 104  | 77 - 120     |
| 1,2-Dichlorobenzene                   | 25.0        | 26.6       |               | ug/L |   | 106  | 80 - 124     |
| 1,2-Dichloroethane                    | 25.0        | 24.9       |               | ug/L |   | 99   | 75 - 120     |
| 1,2-Dichloropropane                   | 25.0        | 25.4       |               | ug/L |   | 102  | 76 - 120     |
| 1,3-Dichlorobenzene                   | 25.0        | 26.1       |               | ug/L |   | 104  | 77 - 120     |
| 1,4-Dichlorobenzene                   | 25.0        | 26.1       |               | ug/L |   | 104  | 80 - 120     |
| 2-Hexanone                            | 125         | 134        |               | ug/L |   | 107  | 65 - 127     |
| 2-Butanone (MEK)                      | 125         | 127        |               | ug/L |   | 102  | 57 - 140     |
| 4-Methyl-2-pentanone (MIBK)           | 125         | 139        |               | ug/L |   | 111  | 71 - 125     |
| Acetone                               | 125         | 114        |               | ug/L |   | 91   | 56 - 142     |
| Benzene                               | 25.0        | 25.1       |               | ug/L |   | 100  | 71 - 124     |
| Bromodichloromethane                  | 25.0        | 26.4       |               | ug/L |   | 105  | 80 - 122     |
| Bromoform                             | 25.0        | 27.6       |               | ug/L |   | 110  | 61 - 132     |
| Bromomethane                          | 25.0        | 24.9       |               | ug/L |   | 99   | 55 - 144     |
| Carbon disulfide                      | 25.0        | 26.5       |               | ug/L |   | 106  | 59 - 134     |
| Carbon tetrachloride                  | 25.0        | 28.1       |               | ug/L |   | 112  | 72 - 134     |
| Chlorobenzene                         | 25.0        | 25.9       |               | ug/L |   | 103  | 80 - 120     |
| Dibromochloromethane                  | 25.0        | 26.4       |               | ug/L |   | 106  | 75 - 125     |
| Chloroethane                          | 25.0        | 25.6       |               | ug/L |   | 102  | 69 - 136     |
| Chloroform                            | 25.0        | 25.9       |               | ug/L |   | 104  | 73 - 127     |
| Chloromethane                         | 25.0        | 24.1       |               | ug/L |   | 96   | 68 - 124     |
| cis-1,2-Dichloroethene                | 25.0        | 25.5       |               | ug/L |   | 102  | 74 - 124     |
| cis-1,3-Dichloropropene               | 25.0        | 25.3       |               | ug/L |   | 101  | 74 - 124     |
| Cyclohexane                           | 25.0        | 29.1       |               | ug/L |   | 116  | 59 - 135     |
| Dichlorodifluoromethane               | 25.0        | 26.6       |               | ug/L |   | 106  | 59 - 135     |
| Ethylbenzene                          | 25.0        | 26.4       |               | ug/L |   | 106  | 77 - 123     |
| Isopropylbenzene                      | 25.0        | 27.9       |               | ug/L |   | 112  | 77 - 122     |
| Methyl acetate                        | 50.0        | 52.4       |               | ug/L |   | 105  | 74 - 133     |
| Methyl tert-butyl ether               | 25.0        | 26.7       |               | ug/L |   | 107  | 77 - 120     |
| Methylcyclohexane                     | 25.0        | 29.2       |               | ug/L |   | 117  | 68 - 134     |
| Methylene Chloride                    | 25.0        | 25.9       |               | ug/L |   | 104  | 75 - 124     |
| Styrene                               | 25.0        | 26.7       |               | ug/L |   | 107  | 80 - 120     |
| Tetrachloroethene                     | 25.0        | 26.3       |               | ug/L |   | 105  | 74 - 122     |
| Toluene                               | 25.0        | 26.1       |               | ug/L |   | 104  | 80 - 122     |
| trans-1,2-Dichloroethene              | 25.0        | 26.4       |               | ug/L |   | 105  | 73 - 127     |

TestAmerica Buffalo



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-423871/6

Matrix: Water

Analysis Batch: 423871

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Trichloroethene        | 25.0        | 26.1       |               | ug/L |   | 104  | 74 - 123     |
| Trichlorofluoromethane | 25.0        | 26.9       |               | ug/L |   | 108  | 62 - 150     |
| Vinyl chloride         | 25.0        | 24.9       |               | ug/L |   | 100  | 65 - 133     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 100           |               | 77 - 120 |
| Toluene-d8 (Surr)            | 99            |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr)  | 103           |               | 73 - 120 |
| Dibromofluoromethane (Surr)  | 104           |               | 75 - 123 |

Lab Sample ID: MB 480-424052/7

Matrix: Water

Analysis Batch: 424052

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                               | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND        |              | 1.0 | 0.82 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,1,2-Trichloroethane                 | ND        |              | 1.0 | 0.23 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND        |              | 1.0 | 0.31 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,1-Dichloroethane                    | ND        |              | 1.0 | 0.38 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,1-Dichloroethene                    | ND        |              | 1.0 | 0.29 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,2,4-Trichlorobenzene                | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,2-Dibromoethane                     | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,2-Dichlorobenzene                   | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,2-Dichloroethane                    | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,2-Dichloropropane                   | ND        |              | 1.0 | 0.72 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,3-Dichlorobenzene                   | ND        |              | 1.0 | 0.78 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 1,4-Dichlorobenzene                   | ND        |              | 1.0 | 0.84 | ug/L |   |          | 07/12/18 00:05 | 1       |
| 2-Hexanone                            | ND        |              | 5.0 | 1.2  | ug/L |   |          | 07/12/18 00:05 | 1       |
| 2-Butanone (MEK)                      | ND        |              | 10  | 1.3  | ug/L |   |          | 07/12/18 00:05 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND        |              | 5.0 | 2.1  | ug/L |   |          | 07/12/18 00:05 | 1       |
| Acetone                               | ND        |              | 10  | 3.0  | ug/L |   |          | 07/12/18 00:05 | 1       |
| Benzene                               | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Bromodichloromethane                  | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Bromoform                             | ND        |              | 1.0 | 0.26 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Bromomethane                          | ND        |              | 1.0 | 0.69 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Carbon disulfide                      | 0.270 J   |              | 1.0 | 0.19 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Carbon tetrachloride                  | ND        |              | 1.0 | 0.27 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Chlorobenzene                         | ND        |              | 1.0 | 0.75 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Dibromochloromethane                  | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Chloroethane                          | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Chloroform                            | ND        |              | 1.0 | 0.34 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Chloromethane                         | ND        |              | 1.0 | 0.35 | ug/L |   |          | 07/12/18 00:05 | 1       |
| cis-1,2-Dichloroethene                | ND        |              | 1.0 | 0.81 | ug/L |   |          | 07/12/18 00:05 | 1       |
| cis-1,3-Dichloropropene               | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Cyclohexane                           | ND        |              | 1.0 | 0.18 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Dichlorodifluoromethane               | ND        |              | 1.0 | 0.68 | ug/L |   |          | 07/12/18 00:05 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-424052/7

Matrix: Water

Analysis Batch: 424052

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                   | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Ethylbenzene              | ND        |              | 1.0 | 0.74 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Isopropylbenzene          | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Methyl acetate            | ND        |              | 2.5 | 1.3  | ug/L |   |          | 07/12/18 00:05 | 1       |
| Methyl tert-butyl ether   | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Methylcyclohexane         | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Methylene Chloride        | ND        |              | 1.0 | 0.44 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Styrene                   | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Tetrachloroethene         | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Toluene                   | ND        |              | 1.0 | 0.51 | ug/L |   |          | 07/12/18 00:05 | 1       |
| trans-1,2-Dichloroethene  | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/12/18 00:05 | 1       |
| trans-1,3-Dichloropropene | ND        |              | 1.0 | 0.37 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Trichloroethene           | ND        |              | 1.0 | 0.46 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Trichlorofluoromethane    | ND        |              | 1.0 | 0.88 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Vinyl chloride            | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/12/18 00:05 | 1       |
| Xylenes, Total            | ND        |              | 2.0 | 0.66 | ug/L |   |          | 07/12/18 00:05 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 92           |              | 77 - 120 |          | 07/12/18 00:05 | 1       |
| Toluene-d8 (Surr)            | 99           |              | 80 - 120 |          | 07/12/18 00:05 | 1       |
| 4-Bromofluorobenzene (Surr)  | 100          |              | 73 - 120 |          | 07/12/18 00:05 | 1       |
| Dibromofluoromethane (Surr)  | 92           |              | 75 - 123 |          | 07/12/18 00:05 | 1       |

Lab Sample ID: LCS 480-424052/5

Matrix: Water

Analysis Batch: 424052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1-Trichloroethane                 | 25.0        | 22.7       |               | ug/L |   | 91   | 73 - 126     |
| 1,1,2,2-Tetrachloroethane             | 25.0        | 25.3       |               | ug/L |   | 101  | 76 - 120     |
| 1,1,2-Trichloroethane                 | 25.0        | 24.0       |               | ug/L |   | 96   | 76 - 122     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0        | 24.3       |               | ug/L |   | 97   | 61 - 148     |
| 1,1-Dichloroethane                    | 25.0        | 22.0       |               | ug/L |   | 88   | 77 - 120     |
| 1,1-Dichloroethene                    | 25.0        | 22.0       |               | ug/L |   | 88   | 66 - 127     |
| 1,2,4-Trichlorobenzene                | 25.0        | 24.5       |               | ug/L |   | 98   | 79 - 122     |
| 1,2-Dibromo-3-Chloropropane           | 25.0        | 23.2       |               | ug/L |   | 93   | 56 - 134     |
| 1,2-Dibromoethane                     | 25.0        | 24.4       |               | ug/L |   | 98   | 77 - 120     |
| 1,2-Dichlorobenzene                   | 25.0        | 24.7       |               | ug/L |   | 99   | 80 - 124     |
| 1,2-Dichloroethane                    | 25.0        | 20.5       |               | ug/L |   | 82   | 75 - 120     |
| 1,2-Dichloropropane                   | 25.0        | 21.6       |               | ug/L |   | 86   | 76 - 120     |
| 1,3-Dichlorobenzene                   | 25.0        | 24.2       |               | ug/L |   | 97   | 77 - 120     |
| 1,4-Dichlorobenzene                   | 25.0        | 24.2       |               | ug/L |   | 97   | 80 - 120     |
| 2-Hexanone                            | 125         | 185 *      |               | ug/L |   | 148  | 65 - 127     |
| 2-Butanone (MEK)                      | 125         | 138        |               | ug/L |   | 111  | 57 - 140     |
| 4-Methyl-2-pentanone (MIBK)           | 125         | 125        |               | ug/L |   | 100  | 71 - 125     |
| Acetone                               | 125         | 117        |               | ug/L |   | 94   | 56 - 142     |
| Benzene                               | 25.0        | 21.1       |               | ug/L |   | 84   | 71 - 124     |
| Bromodichloromethane                  | 25.0        | 22.0       |               | ug/L |   | 88   | 80 - 122     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-424052/5

Matrix: Water

Analysis Batch: 424052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------|-------------|------------|---------------|------|---|------|--------------|
| Bromoform                | 25.0        | 23.9       |               | ug/L |   | 96   | 61 - 132     |
| Bromomethane             | 25.0        | 19.6       |               | ug/L |   | 79   | 55 - 144     |
| Carbon disulfide         | 25.0        | 21.9       |               | ug/L |   | 87   | 59 - 134     |
| Carbon tetrachloride     | 25.0        | 23.3       |               | ug/L |   | 93   | 72 - 134     |
| Chlorobenzene            | 25.0        | 24.8       |               | ug/L |   | 99   | 80 - 120     |
| Dibromochloromethane     | 25.0        | 24.4       |               | ug/L |   | 98   | 75 - 125     |
| Chloroethane             | 25.0        | 20.8       |               | ug/L |   | 83   | 69 - 136     |
| Chloroform               | 25.0        | 21.0       |               | ug/L |   | 84   | 73 - 127     |
| Chloromethane            | 25.0        | 19.9       |               | ug/L |   | 80   | 68 - 124     |
| cis-1,2-Dichloroethene   | 25.0        | 20.8       |               | ug/L |   | 83   | 74 - 124     |
| cis-1,3-Dichloropropene  | 25.0        | 22.1       |               | ug/L |   | 88   | 74 - 124     |
| Cyclohexane              | 25.0        | 24.5       |               | ug/L |   | 98   | 59 - 135     |
| Dichlorodifluoromethane  | 25.0        | 22.5       |               | ug/L |   | 90   | 59 - 135     |
| Ethylbenzene             | 25.0        | 25.4       |               | ug/L |   | 101  | 77 - 123     |
| Isopropylbenzene         | 25.0        | 26.1       |               | ug/L |   | 104  | 77 - 122     |
| Methyl acetate           | 50.0        | 40.3       |               | ug/L |   | 81   | 74 - 133     |
| Methyl tert-butyl ether  | 25.0        | 20.9       |               | ug/L |   | 84   | 77 - 120     |
| Methylcyclohexane        | 25.0        | 25.2       |               | ug/L |   | 101  | 68 - 134     |
| Methylene Chloride       | 25.0        | 20.8       |               | ug/L |   | 83   | 75 - 124     |
| Styrene                  | 25.0        | 25.5       |               | ug/L |   | 102  | 80 - 120     |
| Tetrachloroethene        | 25.0        | 27.3       |               | ug/L |   | 109  | 74 - 122     |
| Toluene                  | 25.0        | 25.2       |               | ug/L |   | 101  | 80 - 122     |
| trans-1,2-Dichloroethene | 25.0        | 21.9       |               | ug/L |   | 87   | 73 - 127     |
| Trichloroethene          | 25.0        | 22.6       |               | ug/L |   | 90   | 74 - 123     |
| Trichlorofluoromethane   | 25.0        | 21.6       |               | ug/L |   | 86   | 62 - 150     |
| Vinyl chloride           | 25.0        | 20.6       |               | ug/L |   | 82   | 65 - 133     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 86            |               | 77 - 120 |
| Toluene-d8 (Surr)            | 99            |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr)  | 100           |               | 73 - 120 |
| Dibromofluoromethane (Surr)  | 90            |               | 75 - 123 |

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-424010/1-A

Matrix: Water

Analysis Batch: 424402

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424010

| Analyte          | MB Result    | MB Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|--------------|--------------|----------|------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | ND           |              | 0.20     | 0.10 | ug/L |   | 07/11/18 14:31 | 07/14/18 07:05 | 1       |
| Isotope Dilution | MB %Recovery | MB Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 36           |              | 15 - 110 |      |      |   | 07/11/18 14:31 | 07/14/18 07:05 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: LCS 480-424010/2-A

Matrix: Water

Analysis Batch: 424402

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424010

| Analyte          | Spike Added | LCS Result    | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------|-------------|---------------|---------------|------|---|------|--------------|
| 1,4-Dioxane      | 1.00        | 1.05          |               | ug/L |   | 105  | 40 - 140     |
| Isotope Dilution | %Recovery   | LCS Qualifier | Limits        |      |   |      |              |
| 1,4-Dioxane-d8   | 33          |               | 15 - 110      |      |   |      |              |

Lab Sample ID: LCSD 480-424010/3-A

Matrix: Water

Analysis Batch: 424402

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 424010

| Analyte          | Spike Added | LCSD Result    | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|------------------|-------------|----------------|----------------|------|---|------|--------------|-----|-------|
| 1,4-Dioxane      | 1.00        | 1.05           |                | ug/L |   | 105  | 40 - 140     | 0   | 20    |
| Isotope Dilution | %Recovery   | LCSD Qualifier | Limits         |      |   |      |              |     |       |
| 1,4-Dioxane-d8   | 32          |                | 15 - 110       |      |   |      |              |     |       |

## Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-424106/4

Matrix: Water

Analysis Batch: 424106

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND        |              | 7.5 | 1.5 | ug/L |   |          | 07/12/18 11:03 | 1       |
| Ethene  | ND        |              | 7.0 | 1.5 | ug/L |   |          | 07/12/18 11:03 | 1       |
| Methane | ND        |              | 4.0 | 1.0 | ug/L |   |          | 07/12/18 11:03 | 1       |

Lab Sample ID: LCS 480-424106/5

Matrix: Water

Analysis Batch: 424106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Ethane  | 14.6        | 15.4       |               | ug/L |   | 106  | 79 - 120     |
| Ethene  | 13.6        | 14.5       |               | ug/L |   | 107  | 85 - 120     |
| Methane | 7.77        | 8.05       |               | ug/L |   | 104  | 85 - 120     |

Lab Sample ID: LCSD 480-424106/6

Matrix: Water

Analysis Batch: 424106

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-------|
| Ethane  | 14.6        | 15.0        |                | ug/L |   | 103  | 79 - 120     | 3   | 50    |
| Ethene  | 13.6        | 14.1        |                | ug/L |   | 104  | 85 - 120     | 3   | 50    |
| Methane | 7.77        | 7.80        |                | ug/L |   | 100  | 85 - 120     | 3   | 50    |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-234027/1-A

Matrix: Water

Analysis Batch: 235049

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 234027

| Analyte                                                    | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------------------------------|-----------|--------------|-----|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)                              | ND        |              | 2.0 | 0.35 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluoropentanoic acid (PFPeA)                            | ND        |              | 2.0 | 0.49 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorohexanoic acid (PFHxA)                             | ND        |              | 2.0 | 0.58 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluoroheptanoic acid (PFHpA)                            | ND        |              | 2.0 | 0.25 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorooctanoic acid (PFOA)                              | ND        |              | 2.0 | 0.85 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorononanoic acid (PFNA)                              | ND        |              | 2.0 | 0.27 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorodecanoic acid (PFDA)                              | ND        |              | 2.0 | 0.31 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluoroundecanoic acid (PFUnA)                           | ND        |              | 2.0 | 1.1  | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorododecanoic acid (PFDoA)                           | ND        |              | 2.0 | 0.55 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorotridecanoic Acid (PFTriA)                         | ND        |              | 2.0 | 1.3  | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorotetradecanoic acid (PFTeA)                        | ND        |              | 2.0 | 0.29 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorobutanesulfonic acid (PFBS)                        | ND        |              | 2.0 | 0.20 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)                       | 0.302     | J            | 2.0 | 0.17 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | ND        |              | 2.0 | 0.19 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                        | ND        |              | 2.0 | 0.54 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorodecanesulfonic acid (PFDS)                        | ND        |              | 2.0 | 0.32 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| Perfluorooctane Sulfonamide (FOSA)                         | ND        |              | 2.0 | 0.35 | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | ND        |              | 20  | 3.1  | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | ND        |              | 20  | 1.9  | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 6:2 FTS                                                    | ND        |              | 20  | 2.0  | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 8:2 FTS                                                    | ND        |              | 20  | 2.0  | ng/L |   | 07/14/18 07:35 | 07/20/18 01:43 | 1       |

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|--------------|--------------|----------|----------------|----------------|---------|
| 13C4 PFBA        | 105          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C5 PFPeA       | 101          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C2 PFHxA       | 103          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C4-PFHpA       | 101          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C4 PFOA        | 103          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C5 PFNA        | 103          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C2 PFDA        | 105          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C2 PFUnA       | 101          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C2 PFDoA       | 98           |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C2-PFTeDA      | 99           |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C3-PFBS        | 94           |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 18O2 PFHxS       | 100          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C4 PFOS        | 97           |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| 13C8 FOSA        | 96           |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| d3-NMeFOSAA      | 102          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| d5-NEtFOSAA      | 109          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| M2-6:2FTS        | 103          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |
| M2-8:2FTS        | 111          |              | 25 - 150 | 07/14/18 07:35 | 07/20/18 01:43 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-234027/2-A

Matrix: Water

Analysis Batch: 235049

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 234027

| Analyte                                                    | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits   |
|------------------------------------------------------------|-------------|------------|---------------|------|---|------|----------|
| Perfluorobutanoic acid (PFBA)                              | 40.0        | 35.8       |               | ng/L |   | 90   | 70 - 130 |
| Perfluoropentanoic acid (PFPeA)                            | 40.0        | 35.7       |               | ng/L |   | 89   | 66 - 126 |
| Perfluorohexanoic acid (PFHxA)                             | 40.0        | 36.1       |               | ng/L |   | 90   | 66 - 126 |
| Perfluoroheptanoic acid (PFHpA)                            | 40.0        | 35.0       |               | ng/L |   | 87   | 66 - 126 |
| Perfluorooctanoic acid (PFOA)                              | 40.0        | 34.0       |               | ng/L |   | 85   | 64 - 124 |
| Perfluorononanoic acid (PFNA)                              | 40.0        | 35.9       |               | ng/L |   | 90   | 68 - 128 |
| Perfluorodecanoic acid (PFDA)                              | 40.0        | 35.9       |               | ng/L |   | 90   | 69 - 129 |
| Perfluoroundecanoic acid (PFUnA)                           | 40.0        | 37.6       |               | ng/L |   | 94   | 60 - 120 |
| Perfluorododecanoic acid (PFDoA)                           | 40.0        | 35.3       |               | ng/L |   | 88   | 71 - 131 |
| Perfluorotridecanoic Acid (PFTriA)                         | 40.0        | 34.4       |               | ng/L |   | 86   | 72 - 132 |
| Perfluorotetradecanoic acid (PFTeA)                        | 40.0        | 37.7       |               | ng/L |   | 94   | 68 - 128 |
| Perfluorobutanesulfonic acid (PFBS)                        | 35.4        | 33.4       |               | ng/L |   | 94   | 73 - 133 |
| Perfluorohexanesulfonic acid (PFHxS)                       | 36.4        | 33.7       |               | ng/L |   | 93   | 63 - 123 |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | 38.1        | 35.7       |               | ng/L |   | 94   | 68 - 128 |
| Perfluorooctanesulfonic acid (PFOS)                        | 37.1        | 31.4       |               | ng/L |   | 85   | 67 - 127 |
| Perfluorodecanesulfonic acid (PFDS)                        | 38.6        | 33.6       |               | ng/L |   | 87   | 68 - 128 |
| Perfluorooctane Sulfonamide (FOSA)                         | 40.0        | 37.6       |               | ng/L |   | 94   | 70 - 130 |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | 40.0        | 35.5       |               | ng/L |   | 89   | 67 - 127 |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | 40.0        | 36.4       |               | ng/L |   | 91   | 65 - 125 |
| 6:2 FTS                                                    | 37.9        | 34.5       |               | ng/L |   | 91   | 66 - 126 |
| 8:2 FTS                                                    | 38.3        | 35.9       |               | ng/L |   | 94   | 67 - 127 |

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits   |
|------------------|---------------|---------------|----------|
| 13C4 PFBA        | 104           |               | 25 - 150 |
| 13C5 PFPeA       | 100           |               | 25 - 150 |
| 13C2 PFHxA       | 101           |               | 25 - 150 |
| 13C4-PFHpA       | 106           |               | 25 - 150 |
| 13C4 PFOA        | 106           |               | 25 - 150 |
| 13C5 PFNA        | 104           |               | 25 - 150 |
| 13C2 PFDA        | 107           |               | 25 - 150 |
| 13C2 PFUnA       | 105           |               | 25 - 150 |
| 13C2 PFDoA       | 100           |               | 25 - 150 |
| 13C2-PFTeDA      | 95            |               | 25 - 150 |
| 13C3-PFBS        | 97            |               | 25 - 150 |
| 18O2 PFHxS       | 100           |               | 25 - 150 |
| 13C4 PFOS        | 101           |               | 25 - 150 |
| 13C8 FOSA        | 97            |               | 25 - 150 |

TestAmerica Buffalo



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-234027/2-A

Matrix: Water

Analysis Batch: 235049

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 234027

| Isotope Dilution | LCS<br>%Recovery | LCS<br>Qualifier | Limits   |
|------------------|------------------|------------------|----------|
| d3-NMeFOSAA      | 105              |                  | 25 - 150 |
| d5-NEtFOSAA      | 108              |                  | 25 - 150 |
| M2-6:2FTS        | 115              |                  | 25 - 150 |
| M2-8:2FTS        | 114              |                  | 25 - 150 |

## Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-423982/1-A

Matrix: Water

Analysis Batch: 424357

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423982

| Analyte   | MB<br>Result | MB<br>Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | 0.0903       | J               | 0.20   | 0.060   | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Antimony  | ND           |                 | 0.020  | 0.0068  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Arsenic   | ND           |                 | 0.015  | 0.0056  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Barium    | ND           |                 | 0.0020 | 0.00070 | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Beryllium | ND           |                 | 0.0020 | 0.00030 | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Cadmium   | ND           |                 | 0.0020 | 0.00050 | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Calcium   | 0.122        | J               | 0.50   | 0.10    | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Chromium  | ND           |                 | 0.0040 | 0.0010  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Cobalt    | ND           |                 | 0.0040 | 0.00063 | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Copper    | ND           |                 | 0.010  | 0.0016  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Iron      | ND           |                 | 0.050  | 0.019   | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Lead      | ND           |                 | 0.010  | 0.0030  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Magnesium | ND           |                 | 0.20   | 0.043   | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Manganese | ND           |                 | 0.0030 | 0.00040 | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Nickel    | ND           |                 | 0.010  | 0.0013  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Potassium | ND           |                 | 0.50   | 0.10    | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Selenium  | ND           |                 | 0.025  | 0.0087  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Silver    | ND           |                 | 0.0060 | 0.0017  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Sodium    | ND           |                 | 1.0    | 0.32    | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Thallium  | ND           |                 | 0.020  | 0.010   | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Vanadium  | ND           |                 | 0.0050 | 0.0015  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |
| Zinc      | ND           |                 | 0.010  | 0.0015  | mg/L |   | 07/12/18 09:27 | 07/12/18 23:00 | 1       |

Lab Sample ID: LCS 480-423982/2-A

Matrix: Water

Analysis Batch: 424357

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423982

| Analyte   | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|-----------|----------------|---------------|------------------|------|---|------|-----------------|
| Aluminum  | 10.0           | 9.81          |                  | mg/L |   | 98   | 80 - 120        |
| Antimony  | 0.200          | 0.204         |                  | mg/L |   | 102  | 80 - 120        |
| Arsenic   | 0.200          | 0.208         |                  | mg/L |   | 104  | 80 - 120        |
| Barium    | 0.200          | 0.209         |                  | mg/L |   | 104  | 80 - 120        |
| Beryllium | 0.200          | 0.208         |                  | mg/L |   | 104  | 80 - 120        |
| Cadmium   | 0.200          | 0.211         |                  | mg/L |   | 106  | 80 - 120        |
| Calcium   | 10.0           | 10.19         |                  | mg/L |   | 102  | 80 - 120        |
| Chromium  | 0.200          | 0.198         |                  | mg/L |   | 99   | 80 - 120        |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-423982/2-A

Matrix: Water

Analysis Batch: 424357

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423982

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| Cobalt    | 0.200       | 0.194      |               | mg/L |   | 97   | 80 - 120     |
| Copper    | 0.200       | 0.199      |               | mg/L |   | 100  | 80 - 120     |
| Iron      | 10.0        | 10.0       |               | mg/L |   | 100  | 80 - 120     |
| Lead      | 0.200       | 0.209      |               | mg/L |   | 104  | 80 - 120     |
| Magnesium | 10.0        | 10.17      |               | mg/L |   | 102  | 80 - 120     |
| Manganese | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Nickel    | 0.200       | 0.199      |               | mg/L |   | 100  | 80 - 120     |
| Potassium | 10.0        | 9.37       |               | mg/L |   | 94   | 80 - 120     |
| Selenium  | 0.200       | 0.206      |               | mg/L |   | 103  | 80 - 120     |
| Silver    | 0.0500      | 0.0547     |               | mg/L |   | 109  | 80 - 120     |
| Sodium    | 10.0        | 9.34       |               | mg/L |   | 93   | 80 - 120     |
| Thallium  | 0.200       | 0.206      |               | mg/L |   | 103  | 80 - 120     |
| Vanadium  | 0.200       | 0.207      |               | mg/L |   | 103  | 80 - 120     |
| Zinc      | 0.200       | 0.204      |               | mg/L |   | 102  | 80 - 120     |

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-425290/1-A

Matrix: Water

Analysis Batch: 425438

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425290

| Analyte | MB Result | MB Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND        |              | 0.00020 | 0.00012 | mg/L |   | 07/19/18 12:15 | 07/19/18 14:41 | 1       |

Lab Sample ID: LCS 480-425290/2-A

Matrix: Water

Analysis Batch: 425438

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425290

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Mercury | 0.00667     | 0.00645    |               | mg/L |   | 97   | 80 - 120     |

Lab Sample ID: MB 480-425291/1-A

Matrix: Water

Analysis Batch: 425438

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425291

| Analyte | MB Result | MB Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND        |              | 0.00020 | 0.00012 | mg/L |   | 07/19/18 12:15 | 07/19/18 15:34 | 1       |

Lab Sample ID: LCS 480-425291/2-A

Matrix: Water

Analysis Batch: 425438

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425291

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Mercury | 0.00667     | 0.00632    |               | mg/L |   | 95   | 80 - 120     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 480-425291/3-A

Matrix: Water

Analysis Batch: 425438

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 425291

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-------|
| Mercury | 0.00667     | 0.00627     |                | mg/L |   | 94   | 80 - 120     | 1   | 20    |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-423970/4

Matrix: Water

Analysis Batch: 423970

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte  | MB Result | MB Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|------|------|---|----------|----------------|---------|
| Chloride | ND        |              | 0.50 | 0.28 | mg/L |   |          | 07/11/18 13:08 | 1       |
| Sulfate  | ND        |              | 2.0  | 0.35 | mg/L |   |          | 07/11/18 13:08 | 1       |

Lab Sample ID: LCS 480-423970/3

Matrix: Water

Analysis Batch: 423970

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Chloride | 50.0        | 50.84      |               | mg/L |   | 102  | 90 - 110     |
| Sulfate  | 50.0        | 51.68      |               | mg/L |   | 103  | 90 - 110     |

Lab Sample ID: MB 480-423973/4

Matrix: Water

Analysis Batch: 423973

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| Nitrate | ND        | ^            | 0.050 | 0.025 | mg/L |   |          | 07/11/18 13:08 | 1       |

Lab Sample ID: LCS 480-423973/3

Matrix: Water

Analysis Batch: 423973

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Nitrate | 5.00        | 4.43       | ^ *           | mg/L |   | 89   | 90 - 110     |

Lab Sample ID: MB 480-424007/4

Matrix: Water

Analysis Batch: 424007

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| Nitrate | ND        |              | 0.050 | 0.025 | mg/L |   |          | 07/11/18 15:14 | 1       |

Lab Sample ID: LCS 480-424007/3

Matrix: Water

Analysis Batch: 424007

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Nitrate | 5.00        | 4.93       |               | mg/L |   | 99   | 90 - 110     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-138607-3 MS

Matrix: Water

Analysis Batch: 424007

Client Sample ID: OS-9 (07102018)

Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Nitrate | 0.14          | J                | 25.0        | 23.51     |              | mg/L |   | 93   | 80 - 120     |

Lab Sample ID: 480-138607-3 MSD

Matrix: Water

Analysis Batch: 424007

Client Sample ID: OS-9 (07102018)

Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Nitrate | 0.14          | J                | 25.0        | 24.75      |               | mg/L |   | 98   | 80 - 120     | 5   | 20        |

## Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-425593/27

Matrix: Water

Analysis Batch: 425593

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte              | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Total Organic Carbon | 0.449     | J            | 1.0 | 0.43 | mg/L |   |          | 07/19/18 10:01 | 1       |

Lab Sample ID: LCS 480-425593/28

Matrix: Water

Analysis Batch: 425593

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte              | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|-------------|------------|---------------|------|---|------|--------------|
| Total Organic Carbon | 60.0        | 59.04      |               | mg/L |   | 98   | 90 - 110     |

## Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-424022/30

Matrix: Water

Analysis Batch: 424022

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte           | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Alkalinity, Total | ND        |              | 5.0 | 0.79 | mg/L |   |          | 07/11/18 13:06 | 1       |

Lab Sample ID: LCS 480-424022/31

Matrix: Water

Analysis Batch: 424022

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte           | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-------------------|-------------|------------|---------------|------|---|------|--------------|
| Alkalinity, Total | 100         | 95.63      |               | mg/L |   | 96   | 90 - 110     |

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## GC/MS VOA

### Analysis Batch: 423871

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138607-2     | OS-4 (07102018)    | Total/NA  | Water  | 8260C  |            |
| MB 480-423871/8  | Method Blank       | Total/NA  | Water  | 8260C  |            |
| LCS 480-423871/6 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |

### Analysis Batch: 424052

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138607-1     | OS-1 (07102018)    | Total/NA  | Water  | 8260C  |            |
| 480-138607-3     | OS-9 (07102018)    | Total/NA  | Water  | 8260C  |            |
| 480-138607-4     | TRIP BLANK         | Total/NA  | Water  | 8260C  |            |
| MB 480-424052/7  | Method Blank       | Total/NA  | Water  | 8260C  |            |
| LCS 480-424052/5 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |

## GC/MS Semi VOA

### Prep Batch: 424010

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 480-138607-1        | OS-1 (07102018)        | Total/NA  | Water  | 3510C  |            |
| MB 480-424010/1-A   | Method Blank           | Total/NA  | Water  | 3510C  |            |
| LCS 480-424010/2-A  | Lab Control Sample     | Total/NA  | Water  | 3510C  |            |
| LCSD 480-424010/3-A | Lab Control Sample Dup | Total/NA  | Water  | 3510C  |            |

### Analysis Batch: 424402

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method       | Prep Batch |
|---------------------|------------------------|-----------|--------|--------------|------------|
| 480-138607-1        | OS-1 (07102018)        | Total/NA  | Water  | 8270D SIM ID | 424010     |
| MB 480-424010/1-A   | Method Blank           | Total/NA  | Water  | 8270D SIM ID | 424010     |
| LCS 480-424010/2-A  | Lab Control Sample     | Total/NA  | Water  | 8270D SIM ID | 424010     |
| LCSD 480-424010/3-A | Lab Control Sample Dup | Total/NA  | Water  | 8270D SIM ID | 424010     |

## GC VOA

### Analysis Batch: 424106

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method  | Prep Batch |
|-------------------|------------------------|-----------|--------|---------|------------|
| 480-138607-1      | OS-1 (07102018)        | Total/NA  | Water  | RSK-175 |            |
| 480-138607-2      | OS-4 (07102018)        | Total/NA  | Water  | RSK-175 |            |
| 480-138607-3      | OS-9 (07102018)        | Total/NA  | Water  | RSK-175 |            |
| MB 480-424106/4   | Method Blank           | Total/NA  | Water  | RSK-175 |            |
| LCS 480-424106/5  | Lab Control Sample     | Total/NA  | Water  | RSK-175 |            |
| LCSD 480-424106/6 | Lab Control Sample Dup | Total/NA  | Water  | RSK-175 |            |

## LCMS

### Prep Batch: 234027

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 480-138607-1       | OS-1 (07102018)        | Total/NA  | Water  | 3535   |            |
| 480-138607-5       | FIELD BLANK (07102018) | Total/NA  | Water  | 3535   |            |
| MB 320-234027/1-A  | Method Blank           | Total/NA  | Water  | 3535   |            |
| LCS 320-234027/2-A | Lab Control Sample     | Total/NA  | Water  | 3535   |            |

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## LCMS (Continued)

### Analysis Batch: 235049

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method         | Prep Batch |
|--------------------|------------------------|-----------|--------|----------------|------------|
| 480-138607-1       | OS-1 (07102018)        | Total/NA  | Water  | 537 (modified) | 234027     |
| 480-138607-5       | FIELD BLANK (07102018) | Total/NA  | Water  | 537 (modified) | 234027     |
| MB 320-234027/1-A  | Method Blank           | Total/NA  | Water  | 537 (modified) | 234027     |
| LCS 320-234027/2-A | Lab Control Sample     | Total/NA  | Water  | 537 (modified) | 234027     |

## Metals

### Prep Batch: 423982

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138607-1       | OS-1 (07102018)    | Total/NA  | Water  | 3005A  |            |
| 480-138607-2       | OS-4 (07102018)    | Total/NA  | Water  | 3005A  |            |
| 480-138607-3       | OS-9 (07102018)    | Total/NA  | Water  | 3005A  |            |
| MB 480-423982/1-A  | Method Blank       | Total/NA  | Water  | 3005A  |            |
| LCS 480-423982/2-A | Lab Control Sample | Total/NA  | Water  | 3005A  |            |

### Analysis Batch: 424357

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138607-1       | OS-1 (07102018)    | Total/NA  | Water  | 6010C  | 423982     |
| 480-138607-2       | OS-4 (07102018)    | Total/NA  | Water  | 6010C  | 423982     |
| 480-138607-3       | OS-9 (07102018)    | Total/NA  | Water  | 6010C  | 423982     |
| MB 480-423982/1-A  | Method Blank       | Total/NA  | Water  | 6010C  | 423982     |
| LCS 480-423982/2-A | Lab Control Sample | Total/NA  | Water  | 6010C  | 423982     |

### Prep Batch: 425290

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138607-2       | OS-4 (07102018)    | Total/NA  | Water  | 7470A  |            |
| MB 480-425290/1-A  | Method Blank       | Total/NA  | Water  | 7470A  |            |
| LCS 480-425290/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  |            |

### Prep Batch: 425291

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 480-138607-1        | OS-1 (07102018)        | Total/NA  | Water  | 7470A  |            |
| 480-138607-3        | OS-9 (07102018)        | Total/NA  | Water  | 7470A  |            |
| MB 480-425291/1-A   | Method Blank           | Total/NA  | Water  | 7470A  |            |
| LCS 480-425291/2-A  | Lab Control Sample     | Total/NA  | Water  | 7470A  |            |
| LCSD 480-425291/3-A | Lab Control Sample Dup | Total/NA  | Water  | 7470A  |            |

### Analysis Batch: 425438

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 480-138607-1        | OS-1 (07102018)        | Total/NA  | Water  | 7470A  | 425291     |
| 480-138607-2        | OS-4 (07102018)        | Total/NA  | Water  | 7470A  | 425290     |
| 480-138607-3        | OS-9 (07102018)        | Total/NA  | Water  | 7470A  | 425291     |
| MB 480-425290/1-A   | Method Blank           | Total/NA  | Water  | 7470A  | 425290     |
| MB 480-425291/1-A   | Method Blank           | Total/NA  | Water  | 7470A  | 425291     |
| LCS 480-425290/2-A  | Lab Control Sample     | Total/NA  | Water  | 7470A  | 425290     |
| LCS 480-425291/2-A  | Lab Control Sample     | Total/NA  | Water  | 7470A  | 425291     |
| LCSD 480-425291/3-A | Lab Control Sample Dup | Total/NA  | Water  | 7470A  | 425291     |

TestAmerica Buffalo



# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## General Chemistry

### Analysis Batch: 423970

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138607-1     | OS-1 (07102018)    | Total/NA  | Water  | 300.0  |            |
| 480-138607-2     | OS-4 (07102018)    | Total/NA  | Water  | 300.0  |            |
| 480-138607-3     | OS-9 (07102018)    | Total/NA  | Water  | 300.0  |            |
| MB 480-423970/4  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-423970/3 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 423973

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138607-1     | OS-1 (07102018)    | Total/NA  | Water  | 300.0  |            |
| 480-138607-2     | OS-4 (07102018)    | Total/NA  | Water  | 300.0  |            |
| 480-138607-3     | OS-9 (07102018)    | Total/NA  | Water  | 300.0  |            |
| MB 480-423973/4  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-423973/3 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 424007

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 480-138607-1 - RA | OS-1 (07102018)    | Total/NA  | Water  | 300.0  |            |
| 480-138607-2 - RA | OS-4 (07102018)    | Total/NA  | Water  | 300.0  |            |
| 480-138607-3 - RA | OS-9 (07102018)    | Total/NA  | Water  | 300.0  |            |
| MB 480-424007/4   | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-424007/3  | Lab Control Sample | Total/NA  | Water  | 300.0  |            |
| 480-138607-3 MS   | OS-9 (07102018)    | Total/NA  | Water  | 300.0  |            |
| 480-138607-3 MSD  | OS-9 (07102018)    | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 424022

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method   | Prep Batch |
|-------------------|--------------------|-----------|--------|----------|------------|
| 480-138607-1      | OS-1 (07102018)    | Total/NA  | Water  | SM 2320B |            |
| 480-138607-2      | OS-4 (07102018)    | Total/NA  | Water  | SM 2320B |            |
| 480-138607-3      | OS-9 (07102018)    | Total/NA  | Water  | SM 2320B |            |
| MB 480-424022/30  | Method Blank       | Total/NA  | Water  | SM 2320B |            |
| LCS 480-424022/31 | Lab Control Sample | Total/NA  | Water  | SM 2320B |            |

### Analysis Batch: 425593

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 480-138607-1      | OS-1 (07102018)    | Total/NA  | Water  | 9060A  |            |
| 480-138607-2      | OS-4 (07102018)    | Total/NA  | Water  | 9060A  |            |
| 480-138607-3      | OS-9 (07102018)    | Total/NA  | Water  | 9060A  |            |
| MB 480-425593/27  | Method Blank       | Total/NA  | Water  | 9060A  |            |
| LCS 480-425593/28 | Lab Control Sample | Total/NA  | Water  | 9060A  |            |

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-1 (07102018)**

**Date Collected: 07/10/18 11:45**

**Date Received: 07/11/18 02:00**

**Lab Sample ID: 480-138607-1**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C          |     | 4               | 424052       | 07/12/18 01:13       | AMM     | TAL BUF |
| Total/NA  | Prep       | 3510C          |     |                 | 424010       | 07/11/18 14:31       | MMV     | TAL BUF |
| Total/NA  | Analysis   | 8270D SIM ID   |     | 1               | 424402       | 07/14/18 08:18       | DMR     | TAL BUF |
| Total/NA  | Analysis   | RSK-175        |     | 1               | 424106       | 07/12/18 13:16       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3535           |     |                 | 234027       | 07/14/18 07:35       | SK      | TAL SAC |
| Total/NA  | Analysis   | 537 (modified) |     | 1               | 235049       | 07/20/18 03:33       | ABH     | TAL SAC |
| Total/NA  | Prep       | 3005A          |     |                 | 423982       | 07/12/18 09:27       | JAK     | TAL BUF |
| Total/NA  | Analysis   | 6010C          |     | 1               | 424357       | 07/13/18 00:40       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7470A          |     |                 | 425291       | 07/19/18 12:15       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A          |     | 1               | 425438       | 07/19/18 16:03       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0          | RA  | 5               | 424007       | 07/11/18 15:52       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0          |     | 5               | 423970       | 07/11/18 13:32       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0          |     | 5               | 423973       | 07/11/18 13:32       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A          |     | 1               | 425593       | 07/19/18 13:45       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B       |     | 1               | 424022       | 07/11/18 13:48       | JAH     | TAL BUF |

**Client Sample ID: OS-4 (07102018)**

**Date Collected: 07/10/18 14:15**

**Date Received: 07/11/18 02:00**

**Lab Sample ID: 480-138607-2**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 423871       | 07/11/18 18:38       | KMN     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 1               | 424106       | 07/12/18 13:33       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 423982       | 07/12/18 09:27       | JAK     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 424357       | 07/13/18 00:56       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425290       | 07/19/18 12:15       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 425438       | 07/19/18 15:15       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        | RA  | 5               | 424007       | 07/11/18 16:04       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 423970       | 07/11/18 13:41       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 423973       | 07/11/18 13:41       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425593       | 07/19/18 14:13       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 424022       | 07/11/18 13:53       | JAH     | TAL BUF |

**Client Sample ID: OS-9 (07102018)**

**Date Collected: 07/10/18 15:30**

**Date Received: 07/11/18 02:00**

**Lab Sample ID: 480-138607-3**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 424052       | 07/12/18 01:42       | AMM     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 1               | 424106       | 07/12/18 13:51       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 423982       | 07/12/18 09:27       | JAK     | TAL BUF |

TestAmerica Buffalo

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

**Client Sample ID: OS-9 (07102018)**

**Lab Sample ID: 480-138607-3**

**Date Collected: 07/10/18 15:30**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 6010C        |     | 1               | 424357       | 07/13/18 01:00       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425291       | 07/19/18 12:15       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 425438       | 07/19/18 16:08       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        | RA  | 5               | 424007       | 07/11/18 16:17       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 423970       | 07/11/18 13:49       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 423973       | 07/11/18 13:49       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425593       | 07/19/18 17:01       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 424022       | 07/11/18 14:10       | JAH     | TAL BUF |

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138607-4**

**Date Collected: 07/10/18 00:00**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 424052       | 07/12/18 02:11       | AMM     | TAL BUF |

**Client Sample ID: FIELD BLANK (07102018)**

**Lab Sample ID: 480-138607-5**

**Date Collected: 07/10/18 16:00**

**Matrix: Water**

**Date Received: 07/11/18 02:00**

| Prep Type | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3535           |     |                 | 234027       | 07/14/18 07:35       | SK      | TAL SAC |
| Total/NA  | Analysis   | 537 (modified) |     | 1               | 235049       | 07/20/18 03:41       | ABH     | TAL SAC |

## Laboratory References:

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

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

## Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| New York  | NELAP   | 2          | 10026                 | 03-31-19        |

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|---------|
| 300.0           |             | Water  | Nitrate |

## Laboratory: TestAmerica Sacramento

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

| Authority          | Program       | EPA Region | Identification Number | Expiration Date |
|--------------------|---------------|------------|-----------------------|-----------------|
| Alaska (UST)       | State Program | 10         | 17-020                | 01-20-21        |
| ANAB               | DoD ELAP      |            | L2468                 | 01-20-21        |
| Arizona            | State Program | 9          | AZ0708                | 08-11-18        |
| Arkansas DEQ       | State Program | 6          | 88-0691               | 06-17-19        |
| California         | State Program | 9          | 2897                  | 01-31-19        |
| Colorado           | State Program | 8          | CA00044               | 08-31-19        |
| Connecticut        | State Program | 1          | PH-0691               | 06-30-19        |
| Florida            | NELAP         | 4          | E87570                | 06-30-19        |
| Georgia            | State Program | 4          | N/A                   | 01-28-19        |
| Hawaii             | State Program | 9          | N/A                   | 01-29-19        |
| Illinois           | NELAP         | 5          | 200060                | 03-17-19        |
| Kansas             | NELAP         | 7          | E-10375               | 10-31-18        |
| Louisiana          | NELAP         | 6          | 30612                 | 06-30-19        |
| Maine              | State Program | 1          | CA0004                | 04-14-20        |
| Michigan           | State Program | 5          | 9947                  | 01-31-20        |
| Nevada             | State Program | 9          | CA00044               | 07-31-18 *      |
| New Hampshire      | NELAP         | 1          | 2997                  | 04-18-19        |
| New Jersey         | NELAP         | 2          | CA005                 | 06-30-19        |
| New York           | NELAP         | 2          | 11666                 | 03-31-19        |
| Oregon             | NELAP         | 10         | 4040                  | 01-29-19        |
| Pennsylvania       | NELAP         | 3          | 68-01272              | 03-31-19        |
| Texas              | NELAP         | 6          | T104704399            | 05-31-19        |
| US Fish & Wildlife | Federal       |            | LE148388-0            | 07-31-18 *      |
| USDA               | Federal       |            | P330-11-00436         | 01-17-21        |
| USEPA UCMR         | Federal       | 1          | CA00044               | 11-06-18        |
| Utah               | NELAP         | 8          | CA00044               | 02-28-19        |
| Vermont            | State Program | 1          | VT-4040               | 04-30-19        |
| Virginia           | NELAP         | 3          | 460278                | 03-14-19        |
| Washington         | State Program | 10         | C581                  | 05-05-19        |
| West Virginia (DW) | State Program | 3          | 9930C                 | 12-31-18        |
| Wyoming            | State Program | 8          | 8TMS-L                | 01-28-19        |

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

TestAmerica Buffalo

## Method Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

| Method         | Method Description                                            | Protocol | Laboratory |
|----------------|---------------------------------------------------------------|----------|------------|
| 8260C          | Volatile Organic Compounds by GC/MS                           | SW846    | TAL BUF    |
| 8270D SIM ID   | Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) | SW846    | TAL BUF    |
| RSK-175        | Dissolved Gases (GC)                                          | RSK      | TAL BUF    |
| 537 (modified) | Fluorinated Alkyl Substances                                  | EPA      | TAL SAC    |
| 6010C          | Metals (ICP)                                                  | SW846    | TAL BUF    |
| 7470A          | Mercury (CVAA)                                                | SW846    | TAL BUF    |
| 300.0          | Anions, Ion Chromatography                                    | MCAWW    | TAL BUF    |
| 9060A          | Organic Carbon, Total (TOC)                                   | SW846    | TAL BUF    |
| SM 2320B       | Alkalinity                                                    | SM       | TAL BUF    |
| 3005A          | Preparation, Total Metals                                     | SW846    | TAL BUF    |
| 3510C          | Liquid-Liquid Extraction (Separatory Funnel)                  | SW846    | TAL BUF    |
| 3535           | Solid-Phase Extraction (SPE)                                  | SW846    | TAL SAC    |
| 5030C          | Purge and Trap                                                | SW846    | TAL BUF    |
| 7470A          | Preparation, Mercury                                          | SW846    | TAL BUF    |

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

### Laboratory References:

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

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

## Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138607-1

| Lab Sample ID | Client Sample ID       | Matrix | Collected      | Received       |
|---------------|------------------------|--------|----------------|----------------|
| 480-138607-1  | OS-1 (07102018)        | Water  | 07/10/18 11:45 | 07/11/18 02:00 |
| 480-138607-2  | OS-4 (07102018)        | Water  | 07/10/18 14:15 | 07/11/18 02:00 |
| 480-138607-3  | OS-9 (07102018)        | Water  | 07/10/18 15:30 | 07/11/18 02:00 |
| 480-138607-4  | TRIP BLANK             | Water  | 07/10/18 00:00 | 07/11/18 02:00 |
| 480-138607-5  | FIELD BLANK (07102018) | Water  | 07/10/18 16:00 | 07/11/18 02:00 |



## Chain of Custody Record



|                    |                                         |
|--------------------|-----------------------------------------|
| Client Information |                                         |
| Client Contact:    | Josh Duquette                           |
| Company:           | ARCADIS U.S. Inc                        |
| Address:           | 855 Route 146 Suite 210                 |
| City:              | Clifton Park                            |
| State, Zip:        | NY, 12065                               |
| Phone:             |                                         |
| Email:             | Josh.Duquette@arcadis.com               |
| Project Name:      | NYSDC - Former Cleanerama, Site# 401056 |
| Site:              |                                         |

|          |                                 |
|----------|---------------------------------|
| Sampler: | J. Duquette                     |
| Lab PM:  | Deyo, Melissa L                 |
| Phone:   | 518 789 8487                    |
| E-Mail:  | melissa.deyo@testamericainc.com |

|               |                                         |
|---------------|-----------------------------------------|
| Company:      | ARCADIS U.S. Inc                        |
| Address:      | 855 Route 146 Suite 210                 |
| City:         | Clifton Park                            |
| State, Zip:   | NY, 12065                               |
| Phone:        |                                         |
| Email:        | Josh.Duquette@arcadis.com               |
| Project Name: | NYSDC - Former Cleanerama, Site# 401056 |
| Site:         |                                         |

## Analysis Requested

Due Date Requested:

TAT Requested (days):

Std.

PO #:

00266438.0000

WO #:

Project #:

48014618

SSOW#:

Due Date Requested:

TAT Requested (days):

Std.

PO #:

00266438.0000

WO #:

Project #:

48014618

SSOW#:

Due Date Requested:

TAT Requested (days):

Std.

PO #:

00266438.0000

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Std.

PO #:

00266438.0000

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Project #:

48014618

SSOW#:

Due Date Requested:

TAT Requested (days):

Std.

PO #:

00266438.0000

WO #:

Project #:

48014618

SSOW#:

Due Date Requested:

TAT Requested (days):

Std.

PO #:

00266438.0000

WO #:

Project #:

48014618

SSOW#:



## Chain of Custody Record

TestAmerica

## THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

THE LEADER IN ENVIRONMENTAL TESTING



480-138607 Field Sheet

Job: \_\_\_\_\_

Tracking # 4300 6537 0554 SO ☒ PO ☐ FO ☐ UPS ☐ Other ☐

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.  
File in the job folder with the COC.

Notes:

Therm. ID: **AK-2 / AK-3 / AK-5 / AK-6 / HACCP / Other**

Ice ☒ Wet ☒ Gel ☐ Other ☐

Cooler Custody Seal: 041208

Sample Custody Seal: \_\_\_\_\_

Cooler ID: 1 of 2

Temp: Observed 7-10

From: Temp Blank ☐ Sample ☒

NCM Filed: Yes ☐ No ☐

Yes   No   NA

Perchlorate has headspace? ☐ ☐ ☒

Alkalinity has no headspace? ☐ ☐ ☒

CoC is complete w/o discrepancies? ☒ ☐ ☐

Samples received within holding time? ☒ ☐ ☐

Sample preservatives verified? ☐ ☐ ☒

Cooler compromised/tampered with? ☐ ☒ ☐

Samples compromised/tampered with? ☐ ☒ ☐

Samples w/o discrepancies? ☒ ☐ ☐

Sample containers have legible labels? ☒ ☐ ☐

Containers are not broken or leaking? ☒ ☐ ☐

Sample date/times are provided. ☒ ☐ ☐

Appropriate containers are used? ☒ ☐ ☐

Sample bottles are completely filled? ☒ ☐ ☐

Zero headspace?\* ☐ ☐ ☒

Multiphasic samples are not present? ☒ ☐ ☐

Sample temp OK? ☒ ☐ ☐

Sample out of temp? ☐ ☒ ☐

Initials: DH Date: 7/12/14 Time 900

\*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")



TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING

041205

SIGNATURE  
DATE

7-11-18  
Kathy Stach

Custody Seal

TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING  
041205

ORIGIN ID: SCHA (518) 438-8140  
TIM KNOLLMEYER  
TESTAMERICA LAB INC  
25 KRAFT AVE

ALBANY, NY 12205  
UNITED STATES US

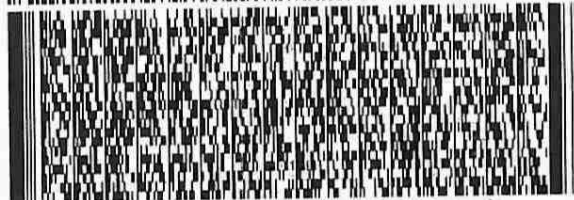
SHIP DATE: 11JUL18  
ACTWGT: 59.65 LB  
CAD: 0439821/CAFE3210  
DIMS: 26x15x14 IN

BILL THIRD PARTY

TO **SAMPLE RECEIVING**  
**TESTAMERICA - W. SACRAMENTO**  
**880 RIVERSIDE PKWY**

**WEST SACRAMENTO CA 95605**

(916) 373-5600  
REF: NY PFC



FedEx  
Express



J18111804200104

1 of 2

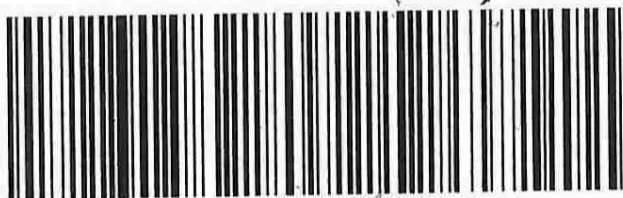
TRK#  
0201 4300 6537 0554  
## MASTER ##

**XH BLUA**

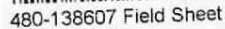
**THU - 12 JUL 10:30A**  
**PRIORITY OVERNIGHT**

**95605**  
**CA-US SMF**

Part # 156148-434 RIT2 04/13



THE LEADER IN ENVIRONMENTAL TESTING



Tracking # 4300 6537 0554 SO / PO / FO / UPS / Other \_\_\_\_\_

Notes: \_\_\_\_\_

Ice ☒ Wet ☒ Gel ☐ Other ☐

Cooler Custody Seal: 041205

Sample Custody Seal: \_\_\_\_\_

Cooler ID: 1 of 2

Temp: Observed 2-12

From: Temp Blank ☐ Sample ☒

NCM Filed: Yes ☐ No ☐

Yes   No   NA

Perchlorate has headspace? ☐ ☐ ☒

Alkalinity has no headspace? ☐ ☐ ☒

CoC is complete w/o discrepancies? ☒ ☐ ☐

Samples received within holding time? ☒ ☐ ☐

Sample preservatives verified? ☐ ☐ ☒

Cooler compromised/tampered with? ☐ ☒ ☐

Samples compromised/tampered with? ☐ ☒ ☐

Samples w/o discrepancies? ☒ ☐ ☐

Sample containers have legible labels? ☒ ☐ ☐

Containers are not broken or leaking? ☒ ☐ ☐

Sample date/times are provided. ☒ ☐ ☐

Appropriate containers are used? ☒ ☐ ☐

Sample bottles are completely filled? ☒ ☐ ☐

Zero headspace? ☐ ☐ ☒

Multiphasic samples are not present? ☒ ☐ ☐

Sample temp OK? ☒ ☐ ☐

Sample out of temp? ☐ ☒ ☐

Initials: DH Date: 7/12/14 Time 900

\*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING

041205

Custody Seal  
DATE 7-11-18  
SIGNAL URE

TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING  
041205

ORIGIN ID: SCHA (518) 438-8140  
TIM KNOLLMAYER  
TESTAMERICA LAB INC  
25 KRAFT AVE

ALBANY, NY 12205  
UNITED STATES US

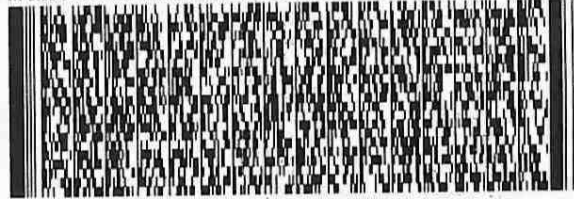
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BILL THIRD PARTY

TO **SAMPLE RECEIVING**  
**TESTAMERICA - W. SACRAMENTO**  
**880 RIVERSIDE PKWY**

**WEST SACRAMENTO CA 95605**

(916) 373-5600  
REF: NY PFC



FedEx  
Express



J1811180420010v

1 of 2

TRK# 4300 6537 0554  
0201

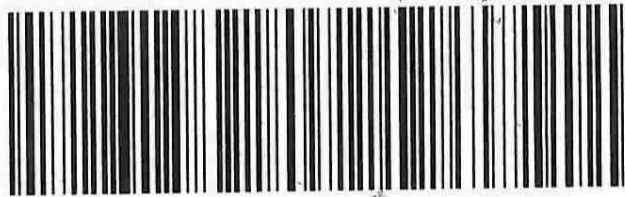
## MASTER ##

**XH BLUA**

**THU - 12 JUL 10:30A**  
**PRIORITY OVERNIGHT**

**95605**  
**CA - US SMF**

Part # 156148-434 RIT2 04/13



## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-138607-1

Login Number: 138607

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

| 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   |         |
| 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   | ARCADIS |
| Samples received within 48 hours of sampling.                                    | True   |         |
| Samples requiring field filtration have been filtered in the field.              | N/A    |         |
| Chlorine Residual checked.                                                       | N/A    |         |



## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-138607-1

**Login Number: 138607**

**List Source: TestAmerica Sacramento**

**List Number: 2**

**Creator: Her, David A**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | True   |         |
| The cooler's custody seal, if present, is intact.                                        | True   | 041205  |
| Sample custody seals, if present, are intact.                                            | N/A    |         |
| 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   | 2.1C    |
| 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 containers received 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.                                                            | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | N/A    |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-138698-1

Client Project/Site: NYSDEC - Former Cleanerama, Site#  
401056

For:

ARCADIS U.S. Inc

855 Route 146

Suite 210

Clifton Park, New York 12065

Attn: Andy Vitolins



Authorized for release by:

7/30/2018 5:05:12 PM

Rebecca Jones, Project Management Assistant I

[rebecca.jones@testamericainc.com](mailto:rebecca.jones@testamericainc.com)

Designee for

Melissa Deyo, Project Manager I

(716)504-9874

[melissa.deyo@testamericainc.com](mailto:melissa.deyo@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

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## Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

### Qualifiers

#### GC/MS 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. |
| *         | LCS or LCSD is outside acceptance limits.                                                                      |

#### Metals

| 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. |
| B         | Compound was found in the blank and sample.                                                                    |

#### General Chemistry

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| H         | Sample was prepped or analyzed beyond the specified holding time                                               |
| B         | Compound was found in the blank and sample.                                                                    |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### 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: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Job ID: 480-138698-1

### Laboratory: TestAmerica Buffalo

#### Narrative

#### Job Narrative 480-138698-1

#### Receipt

The samples were received on 7/12/2018 1:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

#### GC/MS VOA

Method(s) 8260C: Due to the coelution of n-butyl Acetate with 2-Hexanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 480-424088. The following sample was affected : MW-2(07112018) (480-138698-2).

Method(s) 8260C: The surrogate 1,2-Dichloroethane-d4 (Surr) was outside the 20%D limits on the continuing calibration verification (CCV) but was within laboratory limits. The following samples are impacted: MW-2(07112018) (480-138698-2).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: IW-2(07112018) (480-138698-1). 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.

#### HPLC/IC

Method(s) 300.0: The following samples were reported with elevated reporting limits for all analytes: IW-2(07112018) (480-138698-1) and MW-2(07112018) (480-138698-2). The sample was analyzed at a dilution based on screening results.

Method(s) 300.0: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: IW-2(07112018) (480-138698-1) and MW-2(07112018) (480-138698-2).

Method(s) 300.0: The following samples were reported with elevated reporting limits for all analytes: IW-2(07112018) (480-138698-1) and MW-2(07112018) (480-138698-2). The sample was analyzed at a dilution based on screening results.

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

#### GC VOA

Method(s) RSK-175: The following sample was diluted to bring the concentration of target analytes within the calibration range: IW-2(07112018) (480-138698-1). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2(07112018) (480-138698-2). 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.

#### Metals

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

#### General Chemistry

Method(s) SM 2320B: The following sample(s) was received with headspace in the sample container. This sample container was received with headspace. IW-2(07112018) (480-138698-1).

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

## Detection Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

**Client Sample ID: IW-2(07112018)**

**Lab Sample ID: 480-138698-1**

| Analyte                | Result | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method   | Prep Type |
|------------------------|--------|-----------|--------|---------|------|---------|---|----------|-----------|
| 2-Hexanone             | 7.4    | J         | 10     | 2.5     | ug/L | 2       |   | 8260C    | Total/NA  |
| 2-Butanone (MEK)       | 140    |           | 20     | 2.6     | ug/L | 2       |   | 8260C    | Total/NA  |
| Acetone                | 780    |           | 20     | 6.0     | ug/L | 2       |   | 8260C    | Total/NA  |
| cis-1,2-Dichloroethene | 22     |           | 2.0    | 1.6     | ug/L | 2       |   | 8260C    | Total/NA  |
| Tetrachloroethene      | 6.5    |           | 2.0    | 0.72    | ug/L | 2       |   | 8260C    | Total/NA  |
| Methane                | 4700   |           | 180    | 44      | ug/L | 44      |   | RSK-175  | Total/NA  |
| Aluminum               | 0.23   |           | 0.20   | 0.060   | mg/L | 1       |   | 6010C    | Total/NA  |
| Arsenic                | 0.036  |           | 0.015  | 0.0056  | mg/L | 1       |   | 6010C    | Total/NA  |
| Barium                 | 1.4    |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Total/NA  |
| Calcium                | 207    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Chromium               | 0.0075 |           | 0.0040 | 0.0010  | mg/L | 1       |   | 6010C    | Total/NA  |
| Cobalt                 | 0.17   |           | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C    | Total/NA  |
| Copper                 | 0.0082 | J         | 0.010  | 0.0016  | mg/L | 1       |   | 6010C    | Total/NA  |
| Iron                   | 26.7   |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Total/NA  |
| Lead                   | 0.0057 | J         | 0.010  | 0.0030  | mg/L | 1       |   | 6010C    | Total/NA  |
| Magnesium              | 42.8   |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Total/NA  |
| Manganese              | 16.6   |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Total/NA  |
| Nickel                 | 0.70   |           | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Total/NA  |
| Potassium              | 5.2    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Sodium                 | 141    |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Total/NA  |
| Vanadium               | 0.0021 | J         | 0.0050 | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Zinc                   | 0.0092 | J B       | 0.010  | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Chloride               | 308    |           | 2.5    | 1.4     | mg/L | 5       |   | 300.0    | Total/NA  |
| Total Organic Carbon   | 159    | B         | 2.0    | 0.87    | mg/L | 2       |   | 9060A    | Total/NA  |
| Alkalinity, Total      | 542    |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B | Total/NA  |

**Client Sample ID: MW-2(07112018)**

**Lab Sample ID: 480-138698-2**

| Analyte                | Result | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method   | Prep Type |
|------------------------|--------|-----------|--------|---------|------|---------|---|----------|-----------|
| cis-1,2-Dichloroethene | 9.3    |           | 1.0    | 0.81    | ug/L | 1       |   | 8260C    | Total/NA  |
| Tetrachloroethene      | 13     |           | 1.0    | 0.36    | ug/L | 1       |   | 8260C    | Total/NA  |
| Trichloroethene        | 0.57   | J         | 1.0    | 0.46    | ug/L | 1       |   | 8260C    | Total/NA  |
| Vinyl chloride         | 1.3    |           | 1.0    | 0.90    | ug/L | 1       |   | 8260C    | Total/NA  |
| Methane - DL           | 2600   |           | 180    | 44      | ug/L | 44      |   | RSK-175  | Total/NA  |
| Barium                 | 0.15   |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Total/NA  |
| Calcium                | 146    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Cobalt                 | 0.0017 | J         | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C    | Total/NA  |
| Copper                 | 0.0018 | J         | 0.010  | 0.0016  | mg/L | 1       |   | 6010C    | Total/NA  |
| Iron                   | 0.021  | J         | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Total/NA  |
| Magnesium              | 26.0   |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Total/NA  |
| Manganese              | 2.3    |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Total/NA  |
| Nickel                 | 0.0035 | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Total/NA  |
| Potassium              | 3.4    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Sodium                 | 145    |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Total/NA  |
| Zinc                   | 0.0057 | J B       | 0.010  | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Chloride               | 274    |           | 2.5    | 1.4     | mg/L | 5       |   | 300.0    | Total/NA  |
| Sulfate                | 28.0   |           | 10.0   | 1.7     | mg/L | 5       |   | 300.0    | Total/NA  |
| Total Organic Carbon   | 1.1    | B         | 1.0    | 0.43    | mg/L | 1       |   | 9060A    | Total/NA  |
| Alkalinity, Total      | 364    |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo



## Detection Summary

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-138698-1

Project/Site: NYSDEC - Former Cleanerama, Site# 401056

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138698-3**

| Analyte | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| Acetone | 8.5    | J         | 10  | 3.0  | ug/L | 1       |   | 8260C  | Total/NA  |
| Toluene | 0.63   | J         | 1.0 | 0.51 | ug/L | 1       |   | 8260C  | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

**Client Sample ID: IW-2(07112018)**

**Lab Sample ID: 480-138698-1**

**Date Collected: 07/11/18 10:20**

**Matrix: Water**

**Date Received: 07/12/18 01:15**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result     | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|------------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND         |           | 2.0 | 1.6  | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,1,2,2-Tetrachloroethane             | ND         |           | 2.0 | 0.42 | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,1,2-Trichloroethane                 | ND         |           | 2.0 | 0.46 | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND         |           | 2.0 | 0.62 | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,1-Dichloroethane                    | ND         |           | 2.0 | 0.76 | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,1-Dichloroethene                    | ND         |           | 2.0 | 0.58 | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,2,4-Trichlorobenzene                | ND         |           | 2.0 | 0.82 | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,2-Dibromo-3-Chloropropane           | ND         |           | 2.0 | 0.78 | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,2-Dibromoethane                     | ND         |           | 2.0 | 1.5  | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,2-Dichlorobenzene                   | ND         |           | 2.0 | 1.6  | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,2-Dichloroethane                    | ND         |           | 2.0 | 0.42 | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,2-Dichloropropane                   | ND         |           | 2.0 | 1.4  | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,3-Dichlorobenzene                   | ND         |           | 2.0 | 1.6  | ug/L |   |          | 07/12/18 20:16 | 2       |
| 1,4-Dichlorobenzene                   | ND         |           | 2.0 | 1.7  | ug/L |   |          | 07/12/18 20:16 | 2       |
| <b>2-Hexanone</b>                     | <b>7.4</b> | <b>J</b>  | 10  | 2.5  | ug/L |   |          | 07/12/18 20:16 | 2       |
| <b>2-Butanone (MEK)</b>               | <b>140</b> |           | 20  | 2.6  | ug/L |   |          | 07/12/18 20:16 | 2       |
| 4-Methyl-2-pentanone (MIBK)           | ND         |           | 10  | 4.2  | ug/L |   |          | 07/12/18 20:16 | 2       |
| <b>Acetone</b>                        | <b>780</b> |           | 20  | 6.0  | ug/L |   |          | 07/12/18 20:16 | 2       |
| Benzene                               | ND         |           | 2.0 | 0.82 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Bromodichloromethane                  | ND         |           | 2.0 | 0.78 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Bromoform                             | ND         |           | 2.0 | 0.52 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Bromomethane                          | ND         |           | 2.0 | 1.4  | ug/L |   |          | 07/12/18 20:16 | 2       |
| Carbon disulfide                      | ND         |           | 2.0 | 0.38 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Carbon tetrachloride                  | ND         |           | 2.0 | 0.54 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Chlorobenzene                         | ND         |           | 2.0 | 1.5  | ug/L |   |          | 07/12/18 20:16 | 2       |
| Dibromochloromethane                  | ND         |           | 2.0 | 0.64 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Chloroethane                          | ND         |           | 2.0 | 0.64 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Chloroform                            | ND         |           | 2.0 | 0.68 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Chloromethane                         | ND         |           | 2.0 | 0.70 | ug/L |   |          | 07/12/18 20:16 | 2       |
| <b>cis-1,2-Dichloroethene</b>         | <b>22</b>  |           | 2.0 | 1.6  | ug/L |   |          | 07/12/18 20:16 | 2       |
| cis-1,3-Dichloropropene               | ND         |           | 2.0 | 0.72 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Cyclohexane                           | ND         |           | 2.0 | 0.36 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Dichlorodifluoromethane               | ND         |           | 2.0 | 1.4  | ug/L |   |          | 07/12/18 20:16 | 2       |
| Ethylbenzene                          | ND         |           | 2.0 | 1.5  | ug/L |   |          | 07/12/18 20:16 | 2       |
| Isopropylbenzene                      | ND         |           | 2.0 | 1.6  | ug/L |   |          | 07/12/18 20:16 | 2       |
| Methyl acetate                        | ND         |           | 5.0 | 2.6  | ug/L |   |          | 07/12/18 20:16 | 2       |
| Methyl tert-butyl ether               | ND         |           | 2.0 | 0.32 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Methylcyclohexane                     | ND         |           | 2.0 | 0.32 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Methylene Chloride                    | ND         |           | 2.0 | 0.88 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Styrene                               | ND         |           | 2.0 | 1.5  | ug/L |   |          | 07/12/18 20:16 | 2       |
| <b>Tetrachloroethene</b>              | <b>6.5</b> |           | 2.0 | 0.72 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Toluene                               | ND         |           | 2.0 | 1.0  | ug/L |   |          | 07/12/18 20:16 | 2       |
| trans-1,2-Dichloroethene              | ND         |           | 2.0 | 1.8  | ug/L |   |          | 07/12/18 20:16 | 2       |
| trans-1,3-Dichloropropene             | ND         |           | 2.0 | 0.74 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Trichloroethene                       | ND         |           | 2.0 | 0.92 | ug/L |   |          | 07/12/18 20:16 | 2       |
| Trichlorofluoromethane                | ND         |           | 2.0 | 1.8  | ug/L |   |          | 07/12/18 20:16 | 2       |
| Vinyl chloride                        | ND         |           | 2.0 | 1.8  | ug/L |   |          | 07/12/18 20:16 | 2       |
| Xylenes, Total                        | ND         |           | 4.0 | 1.3  | ug/L |   |          | 07/12/18 20:16 | 2       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

**Client Sample ID: IW-2(07112018)**

**Lab Sample ID: 480-138698-1**

**Date Collected: 07/11/18 10:20**

**Matrix: Water**

**Date Received: 07/12/18 01:15**

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 110       |           | 77 - 120 |          | 07/12/18 20:16 | 2       |
| Toluene-d8 (Surr)            | 100       |           | 80 - 120 |          | 07/12/18 20:16 | 2       |
| 4-Bromofluorobenzene (Surr)  | 101       |           | 73 - 120 |          | 07/12/18 20:16 | 2       |
| Dibromofluoromethane (Surr)  | 103       |           | 75 - 123 |          | 07/12/18 20:16 | 2       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 330 | 66  | ug/L |   |          | 07/12/18 16:00 | 44      |
| Ethene  | ND     |           | 310 | 66  | ug/L |   |          | 07/12/18 16:00 | 44      |
| Methane | 4700   |           | 180 | 44  | ug/L |   |          | 07/12/18 16:00 | 44      |

## Method: 6010C - Metals (ICP)

| Analyte   | Result | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | 0.23   |           | 0.20   | 0.060   | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Antimony  | ND     |           | 0.020  | 0.0068  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Arsenic   | 0.036  |           | 0.015  | 0.0056  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Barium    | 1.4    |           | 0.0020 | 0.00070 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Beryllium | ND     |           | 0.0020 | 0.00030 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Cadmium   | ND     |           | 0.0020 | 0.00050 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Calcium   | 207    |           | 0.50   | 0.10    | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Chromium  | 0.0075 |           | 0.0040 | 0.0010  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Cobalt    | 0.17   |           | 0.0040 | 0.00063 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Copper    | 0.0082 | J         | 0.010  | 0.0016  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Iron      | 26.7   |           | 0.050  | 0.019   | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Lead      | 0.0057 | J         | 0.010  | 0.0030  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Magnesium | 42.8   |           | 0.20   | 0.043   | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Manganese | 16.6   |           | 0.0030 | 0.00040 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Nickel    | 0.70   |           | 0.010  | 0.0013  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Potassium | 5.2    |           | 0.50   | 0.10    | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Selenium  | ND     |           | 0.025  | 0.0087  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Silver    | ND     |           | 0.0060 | 0.0017  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Sodium    | 141    |           | 1.0    | 0.32    | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Thallium  | ND     |           | 0.020  | 0.010   | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Vanadium  | 0.0021 | J         | 0.0050 | 0.0015  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |
| Zinc      | 0.0092 | J B       | 0.010  | 0.0015  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:33 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 15:26 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 308    |           | 2.5  | 1.4  | mg/L |   |          | 07/13/18 11:22 | 5       |
| Nitrate              | ND     | H         | 0.25 | 0.13 | mg/L |   |          | 07/13/18 11:22 | 5       |
| Sulfate              | ND     |           | 10.0 | 1.7  | mg/L |   |          | 07/13/18 11:22 | 5       |
| Total Organic Carbon | 159    | B         | 2.0  | 0.87 | mg/L |   |          | 07/25/18 03:30 | 2       |
| Alkalinity, Total    | 542    |           | 5.0  | 0.79 | mg/L |   |          | 07/18/18 14:17 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

Client Sample ID: MW-2(07112018)

Lab Sample ID: 480-138698-2

Date Collected: 07/11/18 09:40

Matrix: Water

Date Received: 07/12/18 01:15

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 1.0 | 0.82 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,1,2-Trichloroethane                 | ND     |           | 1.0 | 0.23 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 1.0 | 0.31 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,1-Dichloroethane                    | ND     |           | 1.0 | 0.38 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,1-Dichloroethene                    | ND     |           | 1.0 | 0.29 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,2,4-Trichlorobenzene                | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,2-Dibromoethane                     | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,2-Dichlorobenzene                   | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,2-Dichloroethane                    | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,2-Dichloropropane                   | ND     |           | 1.0 | 0.72 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,3-Dichlorobenzene                   | ND     |           | 1.0 | 0.78 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 1,4-Dichlorobenzene                   | ND     |           | 1.0 | 0.84 | ug/L |   |          | 07/12/18 19:26 | 1       |
| 2-Hexanone                            | ND     |           | 5.0 | 1.2  | ug/L |   |          | 07/12/18 19:26 | 1       |
| 2-Butanone (MEK)                      | ND     |           | 10  | 1.3  | ug/L |   |          | 07/12/18 19:26 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND     |           | 5.0 | 2.1  | ug/L |   |          | 07/12/18 19:26 | 1       |
| Acetone                               | ND     |           | 10  | 3.0  | ug/L |   |          | 07/12/18 19:26 | 1       |
| Benzene                               | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Bromodichloromethane                  | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Bromoform                             | ND     |           | 1.0 | 0.26 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Bromomethane                          | ND     |           | 1.0 | 0.69 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Carbon disulfide                      | ND     |           | 1.0 | 0.19 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Carbon tetrachloride                  | ND     |           | 1.0 | 0.27 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Chlorobenzene                         | ND     |           | 1.0 | 0.75 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Dibromochloromethane                  | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Chloroethane                          | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Chloroform                            | ND     |           | 1.0 | 0.34 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Chloromethane                         | ND     |           | 1.0 | 0.35 | ug/L |   |          | 07/12/18 19:26 | 1       |
| cis-1,2-Dichloroethene                | 9.3    |           | 1.0 | 0.81 | ug/L |   |          | 07/12/18 19:26 | 1       |
| cis-1,3-Dichloropropene               | ND     |           | 1.0 | 0.36 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Cyclohexane                           | ND     |           | 1.0 | 0.18 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Dichlorodifluoromethane               | ND     |           | 1.0 | 0.68 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Ethylbenzene                          | ND     |           | 1.0 | 0.74 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Isopropylbenzene                      | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Methyl acetate                        | ND     |           | 2.5 | 1.3  | ug/L |   |          | 07/12/18 19:26 | 1       |
| Methyl tert-butyl ether               | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Methylcyclohexane                     | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Methylene Chloride                    | ND     |           | 1.0 | 0.44 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Styrene                               | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Tetrachloroethene                     | 13     |           | 1.0 | 0.36 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Toluene                               | ND     |           | 1.0 | 0.51 | ug/L |   |          | 07/12/18 19:26 | 1       |
| trans-1,2-Dichloroethene              | ND     |           | 1.0 | 0.90 | ug/L |   |          | 07/12/18 19:26 | 1       |
| trans-1,3-Dichloropropene             | ND     |           | 1.0 | 0.37 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Trichloroethene                       | 0.57 J |           | 1.0 | 0.46 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Trichlorofluoromethane                | ND     |           | 1.0 | 0.88 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Vinyl chloride                        | 1.3    |           | 1.0 | 0.90 | ug/L |   |          | 07/12/18 19:26 | 1       |
| Xylenes, Total                        | ND     |           | 2.0 | 0.66 | ug/L |   |          | 07/12/18 19:26 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

**Client Sample ID: MW-2(07112018)**

**Lab Sample ID: 480-138698-2**

**Date Collected: 07/11/18 09:40**

**Matrix: Water**

**Date Received: 07/12/18 01:15**

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 97        |           | 77 - 120 |          | 07/12/18 19:26 | 1       |
| Toluene-d8 (Surr)            | 97        |           | 80 - 120 |          | 07/12/18 19:26 | 1       |
| 4-Bromofluorobenzene (Surr)  | 102       |           | 73 - 120 |          | 07/12/18 19:26 | 1       |
| Dibromofluoromethane (Surr)  | 98        |           | 75 - 123 |          | 07/12/18 19:26 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 7.5 | 1.5 | ug/L |   |          | 07/12/18 13:29 | 1       |
| Ethene  | ND     |           | 7.0 | 1.5 | ug/L |   |          | 07/12/18 13:29 | 1       |

## Method: RSK-175 - Dissolved Gases (GC) - DL

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Methane | 2600   |           | 180 | 44  | ug/L |   |          | 07/15/18 13:04 | 44      |

## Method: 6010C - Metals (ICP)

| Analyte   | Result | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | ND     |           | 0.20   | 0.060   | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Antimony  | ND     |           | 0.020  | 0.0068  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Arsenic   | ND     |           | 0.015  | 0.0056  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Barium    | 0.15   |           | 0.0020 | 0.00070 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Beryllium | ND     |           | 0.0020 | 0.00030 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Cadmium   | ND     |           | 0.0020 | 0.00050 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Calcium   | 146    |           | 0.50   | 0.10    | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Chromium  | ND     |           | 0.0040 | 0.0010  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Cobalt    | 0.0017 | J         | 0.0040 | 0.00063 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Copper    | 0.0018 | J         | 0.010  | 0.0016  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Iron      | 0.021  | J         | 0.050  | 0.019   | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Lead      | ND     |           | 0.010  | 0.0030  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Magnesium | 26.0   |           | 0.20   | 0.043   | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Manganese | 2.3    |           | 0.0030 | 0.00040 | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Nickel    | 0.0035 | J         | 0.010  | 0.0013  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Potassium | 3.4    |           | 0.50   | 0.10    | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Selenium  | ND     |           | 0.025  | 0.0087  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Silver    | ND     |           | 0.0060 | 0.0017  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Sodium    | 145    |           | 1.0    | 0.32    | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Thallium  | ND     |           | 0.020  | 0.010   | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Vanadium  | ND     |           | 0.0050 | 0.0015  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |
| Zinc      | 0.0057 | J B       | 0.010  | 0.0015  | mg/L |   | 07/14/18 07:59 | 07/17/18 12:36 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 15:28 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 274    |           | 2.5  | 1.4  | mg/L |   |          | 07/13/18 11:30 | 5       |
| Nitrate              | ND     | H         | 0.25 | 0.13 | mg/L |   |          | 07/13/18 11:30 | 5       |
| Sulfate              | 28.0   |           | 10.0 | 1.7  | mg/L |   |          | 07/13/18 11:30 | 5       |
| Total Organic Carbon | 1.1    | B         | 1.0  | 0.43 | mg/L |   |          | 07/20/18 05:19 | 1       |
| Alkalinity, Total    | 364    |           | 5.0  | 0.79 | mg/L |   |          | 07/18/18 14:44 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138698-3**

**Date Collected: 07/11/18 00:00**

**Matrix: Water**

**Date Received: 07/12/18 01:15**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 1.0 | 0.82 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,1,2-Trichloroethane                 | ND     |           | 1.0 | 0.23 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 1.0 | 0.31 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,1-Dichloroethane                    | ND     |           | 1.0 | 0.38 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,1-Dichloroethene                    | ND     |           | 1.0 | 0.29 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,2,4-Trichlorobenzene                | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,2-Dibromoethane                     | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,2-Dichlorobenzene                   | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,2-Dichloroethane                    | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,2-Dichloropropane                   | ND     |           | 1.0 | 0.72 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,3-Dichlorobenzene                   | ND     |           | 1.0 | 0.78 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 1,4-Dichlorobenzene                   | ND     |           | 1.0 | 0.84 | ug/L |   |          | 07/12/18 20:40 | 1       |
| 2-Hexanone                            | ND     |           | 5.0 | 1.2  | ug/L |   |          | 07/12/18 20:40 | 1       |
| 2-Butanone (MEK)                      | ND     |           | 10  | 1.3  | ug/L |   |          | 07/12/18 20:40 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND     |           | 5.0 | 2.1  | ug/L |   |          | 07/12/18 20:40 | 1       |
| Acetone                               | 8.5    | J         | 10  | 3.0  | ug/L |   |          | 07/12/18 20:40 | 1       |
| Benzene                               | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Bromodichloromethane                  | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Bromoform                             | ND     |           | 1.0 | 0.26 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Bromomethane                          | ND     |           | 1.0 | 0.69 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Carbon disulfide                      | ND     |           | 1.0 | 0.19 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Carbon tetrachloride                  | ND     |           | 1.0 | 0.27 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Chlorobenzene                         | ND     |           | 1.0 | 0.75 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Dibromochloromethane                  | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Chloroethane                          | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Chloroform                            | ND     |           | 1.0 | 0.34 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Chloromethane                         | ND     |           | 1.0 | 0.35 | ug/L |   |          | 07/12/18 20:40 | 1       |
| cis-1,2-Dichloroethene                | ND     |           | 1.0 | 0.81 | ug/L |   |          | 07/12/18 20:40 | 1       |
| cis-1,3-Dichloropropene               | ND     |           | 1.0 | 0.36 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Cyclohexane                           | ND     |           | 1.0 | 0.18 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Dichlorodifluoromethane               | ND     |           | 1.0 | 0.68 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Ethylbenzene                          | ND     |           | 1.0 | 0.74 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Isopropylbenzene                      | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Methyl acetate                        | ND     |           | 2.5 | 1.3  | ug/L |   |          | 07/12/18 20:40 | 1       |
| Methyl tert-butyl ether               | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Methylcyclohexane                     | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Methylene Chloride                    | ND     |           | 1.0 | 0.44 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Styrene                               | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Tetrachloroethene                     | ND     |           | 1.0 | 0.36 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Toluene                               | 0.63   | J         | 1.0 | 0.51 | ug/L |   |          | 07/12/18 20:40 | 1       |
| trans-1,2-Dichloroethene              | ND     |           | 1.0 | 0.90 | ug/L |   |          | 07/12/18 20:40 | 1       |
| trans-1,3-Dichloropropene             | ND     |           | 1.0 | 0.37 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Trichloroethene                       | ND     |           | 1.0 | 0.46 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Trichlorofluoromethane                | ND     |           | 1.0 | 0.88 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Vinyl chloride                        | ND     |           | 1.0 | 0.90 | ug/L |   |          | 07/12/18 20:40 | 1       |
| Xylenes, Total                        | ND     |           | 2.0 | 0.66 | ug/L |   |          | 07/12/18 20:40 | 1       |

TestAmerica Buffalo



## Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138698-3**

**Date Collected: 07/11/18 00:00**

**Matrix: Water**

**Date Received: 07/12/18 01:15**

| <i>Surrogate</i>             | <i>%Recovery</i> | <i>Qualifier</i> | <i>Limits</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Dil Fac</i> |
|------------------------------|------------------|------------------|---------------|-----------------|-----------------|----------------|
| 1,2-Dichloroethane-d4 (Surr) | 101              |                  | 77 - 120      |                 | 07/12/18 20:40  | 1              |
| Toluene-d8 (Surr)            | 101              |                  | 80 - 120      |                 | 07/12/18 20:40  | 1              |
| 4-Bromofluorobenzene (Surr)  | 99               |                  | 73 - 120      |                 | 07/12/18 20:40  | 1              |
| Dibromofluoromethane (Surr)  | 103              |                  | 75 - 123      |                 | 07/12/18 20:40  | 1              |

## Surrogate Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                  |
|------------------|--------------------|------------------------------------------------|-----------------|-----------------|------------------|
|                  |                    | DCA<br>(77-120)                                | TOL<br>(80-120) | BFB<br>(73-120) | DBFM<br>(75-123) |
| 480-138698-1     | IW-2(07112018)     | 110                                            | 100             | 101             | 103              |
| 480-138698-2     | MW-2(07112018)     | 97                                             | 97              | 102             | 98               |
| 480-138698-3     | TRIP BLANK         | 101                                            | 101             | 99              | 103              |
| LCS 480-424088/4 | Lab Control Sample | 83                                             | 100             | 104             | 86               |
| LCS 480-424236/5 | Lab Control Sample | 110                                            | 100             | 99              | 109              |
| MB 480-424088/7  | Method Blank       | 95                                             | 98              | 98              | 96               |
| MB 480-424236/7  | Method Blank       | 104                                            | 100             | 97              | 103              |

#### Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-424088/7

Matrix: Water

Analysis Batch: 424088

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                               | MB<br>Result | MB<br>Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------------|-----------------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND           |                 | 1.0 | 0.82 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND           |                 | 1.0 | 0.21 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,1,2-Trichloroethane                 | ND           |                 | 1.0 | 0.23 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND           |                 | 1.0 | 0.31 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,1-Dichloroethane                    | ND           |                 | 1.0 | 0.38 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,1-Dichloroethene                    | ND           |                 | 1.0 | 0.29 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,2,4-Trichlorobenzene                | ND           |                 | 1.0 | 0.41 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND           |                 | 1.0 | 0.39 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,2-Dibromoethane                     | ND           |                 | 1.0 | 0.73 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,2-Dichlorobenzene                   | ND           |                 | 1.0 | 0.79 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,2-Dichloroethane                    | ND           |                 | 1.0 | 0.21 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,2-Dichloropropane                   | ND           |                 | 1.0 | 0.72 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,3-Dichlorobenzene                   | ND           |                 | 1.0 | 0.78 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 1,4-Dichlorobenzene                   | ND           |                 | 1.0 | 0.84 | ug/L |   |          | 07/12/18 11:31 | 1       |
| 2-Hexanone                            | ND           |                 | 5.0 | 1.2  | ug/L |   |          | 07/12/18 11:31 | 1       |
| 2-Butanone (MEK)                      | ND           |                 | 10  | 1.3  | ug/L |   |          | 07/12/18 11:31 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND           |                 | 5.0 | 2.1  | ug/L |   |          | 07/12/18 11:31 | 1       |
| Acetone                               | ND           |                 | 10  | 3.0  | ug/L |   |          | 07/12/18 11:31 | 1       |
| Benzene                               | ND           |                 | 1.0 | 0.41 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Bromodichloromethane                  | ND           |                 | 1.0 | 0.39 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Bromoform                             | ND           |                 | 1.0 | 0.26 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Bromomethane                          | ND           |                 | 1.0 | 0.69 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Carbon disulfide                      | 0.264        | J               | 1.0 | 0.19 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Carbon tetrachloride                  | ND           |                 | 1.0 | 0.27 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Chlorobenzene                         | ND           |                 | 1.0 | 0.75 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Dibromochloromethane                  | ND           |                 | 1.0 | 0.32 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Chloroethane                          | ND           |                 | 1.0 | 0.32 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Chloroform                            | ND           |                 | 1.0 | 0.34 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Chloromethane                         | ND           |                 | 1.0 | 0.35 | ug/L |   |          | 07/12/18 11:31 | 1       |
| cis-1,2-Dichloroethene                | ND           |                 | 1.0 | 0.81 | ug/L |   |          | 07/12/18 11:31 | 1       |
| cis-1,3-Dichloropropene               | ND           |                 | 1.0 | 0.36 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Cyclohexane                           | ND           |                 | 1.0 | 0.18 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Dichlorodifluoromethane               | ND           |                 | 1.0 | 0.68 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Ethylbenzene                          | ND           |                 | 1.0 | 0.74 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Isopropylbenzene                      | ND           |                 | 1.0 | 0.79 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Methyl acetate                        | ND           |                 | 2.5 | 1.3  | ug/L |   |          | 07/12/18 11:31 | 1       |
| Methyl tert-butyl ether               | ND           |                 | 1.0 | 0.16 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Methylcyclohexane                     | ND           |                 | 1.0 | 0.16 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Methylene Chloride                    | ND           |                 | 1.0 | 0.44 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Styrene                               | ND           |                 | 1.0 | 0.73 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Tetrachloroethene                     | ND           |                 | 1.0 | 0.36 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Toluene                               | ND           |                 | 1.0 | 0.51 | ug/L |   |          | 07/12/18 11:31 | 1       |
| trans-1,2-Dichloroethene              | ND           |                 | 1.0 | 0.90 | ug/L |   |          | 07/12/18 11:31 | 1       |
| trans-1,3-Dichloropropene             | ND           |                 | 1.0 | 0.37 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Trichloroethene                       | ND           |                 | 1.0 | 0.46 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Trichlorofluoromethane                | ND           |                 | 1.0 | 0.88 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Vinyl chloride                        | ND           |                 | 1.0 | 0.90 | ug/L |   |          | 07/12/18 11:31 | 1       |
| Xylenes, Total                        | ND           |                 | 2.0 | 0.66 | ug/L |   |          | 07/12/18 11:31 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 95           |              | 77 - 120 |          | 07/12/18 11:31 | 1       |
| Toluene-d8 (Surr)            | 98           |              | 80 - 120 |          | 07/12/18 11:31 | 1       |
| 4-Bromofluorobenzene (Surr)  | 98           |              | 73 - 120 |          | 07/12/18 11:31 | 1       |
| Dibromofluoromethane (Surr)  | 96           |              | 75 - 123 |          | 07/12/18 11:31 | 1       |

Lab Sample ID: LCS 480-424088/4

Matrix: Water

Analysis Batch: 424088

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1-Trichloroethane                 | 25.0        | 23.2       |               | ug/L |   | 93   | 73 - 126     |
| 1,1,2,2-Tetrachloroethane             | 25.0        | 26.3       |               | ug/L |   | 105  | 76 - 120     |
| 1,1,2-Trichloroethane                 | 25.0        | 25.1       |               | ug/L |   | 100  | 76 - 122     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0        | 24.8       |               | ug/L |   | 99   | 61 - 148     |
| 1,1-Dichloroethane                    | 25.0        | 22.2       |               | ug/L |   | 89   | 77 - 120     |
| 1,1-Dichloroethene                    | 25.0        | 22.6       |               | ug/L |   | 91   | 66 - 127     |
| 1,2,4-Trichlorobenzene                | 25.0        | 25.1       |               | ug/L |   | 100  | 79 - 122     |
| 1,2-Dibromo-3-Chloropropane           | 25.0        | 22.7       |               | ug/L |   | 91   | 56 - 134     |
| 1,2-Dibromoethane                     | 25.0        | 25.3       |               | ug/L |   | 101  | 77 - 120     |
| 1,2-Dichlorobenzene                   | 25.0        | 26.0       |               | ug/L |   | 104  | 80 - 124     |
| 1,2-Dichloroethane                    | 25.0        | 20.1       |               | ug/L |   | 80   | 75 - 120     |
| 1,2-Dichloropropane                   | 25.0        | 21.8       |               | ug/L |   | 87   | 76 - 120     |
| 1,3-Dichlorobenzene                   | 25.0        | 26.5       |               | ug/L |   | 106  | 77 - 120     |
| 1,4-Dichlorobenzene                   | 25.0        | 26.0       |               | ug/L |   | 104  | 80 - 120     |
| 2-Hexanone                            | 125         | 195 *      |               | ug/L |   | 156  | 65 - 127     |
| 2-Butanone (MEK)                      | 125         | 113        |               | ug/L |   | 90   | 57 - 140     |
| 4-Methyl-2-pentanone (MIBK)           | 125         | 130        |               | ug/L |   | 104  | 71 - 125     |
| Acetone                               | 125         | 116        |               | ug/L |   | 92   | 56 - 142     |
| Benzene                               | 25.0        | 21.3       |               | ug/L |   | 85   | 71 - 124     |
| Bromodichloromethane                  | 25.0        | 21.8       |               | ug/L |   | 87   | 80 - 122     |
| Bromoform                             | 25.0        | 25.1       |               | ug/L |   | 100  | 61 - 132     |
| Bromomethane                          | 25.0        | 21.3       |               | ug/L |   | 85   | 55 - 144     |
| Carbon disulfide                      | 25.0        | 22.2       |               | ug/L |   | 89   | 59 - 134     |
| Carbon tetrachloride                  | 25.0        | 23.4       |               | ug/L |   | 94   | 72 - 134     |
| Chlorobenzene                         | 25.0        | 26.1       |               | ug/L |   | 104  | 80 - 120     |
| Dibromochloromethane                  | 25.0        | 24.9       |               | ug/L |   | 99   | 75 - 125     |
| Chloroethane                          | 25.0        | 21.8       |               | ug/L |   | 87   | 69 - 136     |
| Chloroform                            | 25.0        | 21.6       |               | ug/L |   | 86   | 73 - 127     |
| Chloromethane                         | 25.0        | 20.2       |               | ug/L |   | 81   | 68 - 124     |
| cis-1,2-Dichloroethene                | 25.0        | 21.1       |               | ug/L |   | 84   | 74 - 124     |
| cis-1,3-Dichloropropene               | 25.0        | 21.3       |               | ug/L |   | 85   | 74 - 124     |
| Cyclohexane                           | 25.0        | 25.4       |               | ug/L |   | 102  | 59 - 135     |
| Dichlorodifluoromethane               | 25.0        | 21.0       |               | ug/L |   | 84   | 59 - 135     |
| Ethylbenzene                          | 25.0        | 27.4       |               | ug/L |   | 110  | 77 - 123     |
| Isopropylbenzene                      | 25.0        | 28.1       |               | ug/L |   | 112  | 77 - 122     |
| Methyl acetate                        | 50.0        | 41.0       |               | ug/L |   | 82   | 74 - 133     |
| Methyl tert-butyl ether               | 25.0        | 21.0       |               | ug/L |   | 84   | 77 - 120     |
| Methylcyclohexane                     | 25.0        | 25.8       |               | ug/L |   | 103  | 68 - 134     |
| Methylene Chloride                    | 25.0        | 21.5       |               | ug/L |   | 86   | 75 - 124     |
| Styrene                               | 25.0        | 27.4       |               | ug/L |   | 110  | 80 - 120     |
| Tetrachloroethene                     | 25.0        | 29.9       |               | ug/L |   | 120  | 74 - 122     |
| Toluene                               | 25.0        | 26.6       |               | ug/L |   | 106  | 80 - 122     |
| trans-1,2-Dichloroethene              | 25.0        | 22.4       |               | ug/L |   | 89   | 73 - 127     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-424088/4

Matrix: Water

Analysis Batch: 424088

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Trichloroethene        | 25.0        | 22.9       |               | ug/L |   | 92   | 74 - 123     |
| Trichlorofluoromethane | 25.0        | 22.6       |               | ug/L |   | 90   | 62 - 150     |
| Vinyl chloride         | 25.0        | 21.2       |               | ug/L |   | 85   | 65 - 133     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 83            |               | 77 - 120 |
| Toluene-d8 (Surr)            | 100           |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr)  | 104           |               | 73 - 120 |
| Dibromofluoromethane (Surr)  | 86            |               | 75 - 123 |

Lab Sample ID: MB 480-424236/7

Matrix: Water

Analysis Batch: 424236

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                                 | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                   | ND        |              | 1.0 | 0.82 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,1,1,2-Tetrachloroethane               | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,1,1,2-Trichloroethane                 | ND        |              | 1.0 | 0.23 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,1,1,2-Trichloro-1,2,2-trifluoroethane | ND        |              | 1.0 | 0.31 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,1-Dichloroethane                      | ND        |              | 1.0 | 0.38 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,1-Dichloroethene                      | ND        |              | 1.0 | 0.29 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,2,4-Trichlorobenzene                  | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,2-Dibromo-3-Chloropropane             | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,2-Dibromoethane                       | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,2-Dichlorobenzene                     | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,2-Dichloroethane                      | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,2-Dichloropropane                     | ND        |              | 1.0 | 0.72 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,3-Dichlorobenzene                     | ND        |              | 1.0 | 0.78 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 1,4-Dichlorobenzene                     | ND        |              | 1.0 | 0.84 | ug/L |   |          | 07/12/18 19:13 | 1       |
| 2-Hexanone                              | ND        |              | 5.0 | 1.2  | ug/L |   |          | 07/12/18 19:13 | 1       |
| 2-Butanone (MEK)                        | ND        |              | 10  | 1.3  | ug/L |   |          | 07/12/18 19:13 | 1       |
| 4-Methyl-2-pentanone (MIBK)             | ND        |              | 5.0 | 2.1  | ug/L |   |          | 07/12/18 19:13 | 1       |
| Acetone                                 | ND        |              | 10  | 3.0  | ug/L |   |          | 07/12/18 19:13 | 1       |
| Benzene                                 | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Bromodichloromethane                    | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Bromoform                               | ND        |              | 1.0 | 0.26 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Bromomethane                            | ND        |              | 1.0 | 0.69 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Carbon disulfide                        | ND        |              | 1.0 | 0.19 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Carbon tetrachloride                    | ND        |              | 1.0 | 0.27 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Chlorobenzene                           | ND        |              | 1.0 | 0.75 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Dibromochloromethane                    | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Chloroethane                            | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Chloroform                              | ND        |              | 1.0 | 0.34 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Chloromethane                           | ND        |              | 1.0 | 0.35 | ug/L |   |          | 07/12/18 19:13 | 1       |
| cis-1,2-Dichloroethene                  | ND        |              | 1.0 | 0.81 | ug/L |   |          | 07/12/18 19:13 | 1       |
| cis-1,3-Dichloropropene                 | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Cyclohexane                             | ND        |              | 1.0 | 0.18 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Dichlorodifluoromethane                 | ND        |              | 1.0 | 0.68 | ug/L |   |          | 07/12/18 19:13 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-424236/7

Matrix: Water

Analysis Batch: 424236

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                   | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Ethylbenzene              | ND        |              | 1.0 | 0.74 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Isopropylbenzene          | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Methyl acetate            | ND        |              | 2.5 | 1.3  | ug/L |   |          | 07/12/18 19:13 | 1       |
| Methyl tert-butyl ether   | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Methylcyclohexane         | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Methylene Chloride        | ND        |              | 1.0 | 0.44 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Styrene                   | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Tetrachloroethene         | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Toluene                   | ND        |              | 1.0 | 0.51 | ug/L |   |          | 07/12/18 19:13 | 1       |
| trans-1,2-Dichloroethene  | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/12/18 19:13 | 1       |
| trans-1,3-Dichloropropene | ND        |              | 1.0 | 0.37 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Trichloroethene           | ND        |              | 1.0 | 0.46 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Trichlorofluoromethane    | ND        |              | 1.0 | 0.88 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Vinyl chloride            | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/12/18 19:13 | 1       |
| Xylenes, Total            | ND        |              | 2.0 | 0.66 | ug/L |   |          | 07/12/18 19:13 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 104          |              | 77 - 120 |          | 07/12/18 19:13 | 1       |
| Toluene-d8 (Surr)            | 100          |              | 80 - 120 |          | 07/12/18 19:13 | 1       |
| 4-Bromofluorobenzene (Surr)  | 97           |              | 73 - 120 |          | 07/12/18 19:13 | 1       |
| Dibromofluoromethane (Surr)  | 103          |              | 75 - 123 |          | 07/12/18 19:13 | 1       |

Lab Sample ID: LCS 480-424236/5

Matrix: Water

Analysis Batch: 424236

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1-Trichloroethane                 | 25.0        | 27.9       |               | ug/L |   | 112  | 73 - 126     |
| 1,1,2,2-Tetrachloroethane             | 25.0        | 27.2       |               | ug/L |   | 109  | 76 - 120     |
| 1,1,2-Trichloroethane                 | 25.0        | 26.1       |               | ug/L |   | 104  | 76 - 122     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0        | 25.3       |               | ug/L |   | 101  | 61 - 148     |
| 1,1-Dichloroethane                    | 25.0        | 27.3       |               | ug/L |   | 109  | 77 - 120     |
| 1,1-Dichloroethene                    | 25.0        | 29.6       |               | ug/L |   | 118  | 66 - 127     |
| 1,2,4-Trichlorobenzene                | 25.0        | 26.9       |               | ug/L |   | 108  | 79 - 122     |
| 1,2-Dibromo-3-Chloropropane           | 25.0        | 26.2       |               | ug/L |   | 105  | 56 - 134     |
| 1,2-Dibromoethane                     | 25.0        | 26.0       |               | ug/L |   | 104  | 77 - 120     |
| 1,2-Dichlorobenzene                   | 25.0        | 25.2       |               | ug/L |   | 101  | 80 - 124     |
| 1,2-Dichloroethane                    | 25.0        | 26.2       |               | ug/L |   | 105  | 75 - 120     |
| 1,2-Dichloropropane                   | 25.0        | 26.8       |               | ug/L |   | 107  | 76 - 120     |
| 1,3-Dichlorobenzene                   | 25.0        | 26.3       |               | ug/L |   | 105  | 77 - 120     |
| 1,4-Dichlorobenzene                   | 25.0        | 25.9       |               | ug/L |   | 104  | 80 - 120     |
| 2-Hexanone                            | 125         | 138        |               | ug/L |   | 110  | 65 - 127     |
| 2-Butanone (MEK)                      | 125         | 144        |               | ug/L |   | 115  | 57 - 140     |
| 4-Methyl-2-pentanone (MIBK)           | 125         | 136        |               | ug/L |   | 109  | 71 - 125     |
| Acetone                               | 125         | 140        |               | ug/L |   | 112  | 56 - 142     |
| Benzene                               | 25.0        | 27.4       |               | ug/L |   | 110  | 71 - 124     |
| Bromodichloromethane                  | 25.0        | 28.0       |               | ug/L |   | 112  | 80 - 122     |

TestAmerica Buffalo



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-424236/5

Matrix: Water

Analysis Batch: 424236

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------|-------------|------------|---------------|------|---|------|--------------|
| Bromoform                | 25.0        | 29.2       |               | ug/L |   | 117  | 61 - 132     |
| Bromomethane             | 25.0        | 25.9       |               | ug/L |   | 104  | 55 - 144     |
| Carbon disulfide         | 25.0        | 27.0       |               | ug/L |   | 108  | 59 - 134     |
| Carbon tetrachloride     | 25.0        | 30.1       |               | ug/L |   | 120  | 72 - 134     |
| Chlorobenzene            | 25.0        | 25.8       |               | ug/L |   | 103  | 80 - 120     |
| Dibromochloromethane     | 25.0        | 28.1       |               | ug/L |   | 113  | 75 - 125     |
| Chloroethane             | 25.0        | 26.9       |               | ug/L |   | 108  | 69 - 136     |
| Chloroform               | 25.0        | 26.3       |               | ug/L |   | 105  | 73 - 127     |
| Chloromethane            | 25.0        | 26.5       |               | ug/L |   | 106  | 68 - 124     |
| cis-1,2-Dichloroethene   | 25.0        | 27.3       |               | ug/L |   | 109  | 74 - 124     |
| cis-1,3-Dichloropropene  | 25.0        | 26.2       |               | ug/L |   | 105  | 74 - 124     |
| Cyclohexane              | 25.0        | 30.3       |               | ug/L |   | 121  | 59 - 135     |
| Dichlorodifluoromethane  | 25.0        | 27.8       |               | ug/L |   | 111  | 59 - 135     |
| Ethylbenzene             | 25.0        | 27.1       |               | ug/L |   | 108  | 77 - 123     |
| Isopropylbenzene         | 25.0        | 27.2       |               | ug/L |   | 109  | 77 - 122     |
| Methyl acetate           | 50.0        | 53.9       |               | ug/L |   | 108  | 74 - 133     |
| Methyl tert-butyl ether  | 25.0        | 25.6       |               | ug/L |   | 102  | 77 - 120     |
| Methylcyclohexane        | 25.0        | 30.7       |               | ug/L |   | 123  | 68 - 134     |
| Methylene Chloride       | 25.0        | 26.1       |               | ug/L |   | 104  | 75 - 124     |
| Styrene                  | 25.0        | 26.3       |               | ug/L |   | 105  | 80 - 120     |
| Tetrachloroethene        | 25.0        | 27.8       |               | ug/L |   | 111  | 74 - 122     |
| Toluene                  | 25.0        | 26.1       |               | ug/L |   | 104  | 80 - 122     |
| trans-1,2-Dichloroethene | 25.0        | 27.3       |               | ug/L |   | 109  | 73 - 127     |
| Trichloroethene          | 25.0        | 27.4       |               | ug/L |   | 110  | 74 - 123     |
| Trichlorofluoromethane   | 25.0        | 28.9       |               | ug/L |   | 116  | 62 - 150     |
| Vinyl chloride           | 25.0        | 27.5       |               | ug/L |   | 110  | 65 - 133     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 110           |               | 77 - 120 |
| Toluene-d8 (Surr)            | 100           |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr)  | 99            |               | 73 - 120 |
| Dibromofluoromethane (Surr)  | 109           |               | 75 - 123 |

## Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-424107/4

Matrix: Water

Analysis Batch: 424107

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND        |              | 7.5 | 1.5 | ug/L |   |          | 07/12/18 10:54 | 1       |
| Ethene  | ND        |              | 7.0 | 1.5 | ug/L |   |          | 07/12/18 10:54 | 1       |
| Methane | ND        |              | 4.0 | 1.0 | ug/L |   |          | 07/12/18 10:54 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCS 480-424107/5

Matrix: Water

Analysis Batch: 424107

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Ethane  | 14.6        | 14.7       |               | ug/L |   | 101  | 79 - 120     |
| Ethene  | 13.6        | 14.0       |               | ug/L |   | 103  | 85 - 120     |
| Methane | 7.77        | 6.98       |               | ug/L |   | 90   | 85 - 120     |

Lab Sample ID: LCSD 480-424107/6

Matrix: Water

Analysis Batch: 424107

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Ethane  | 14.6        | 15.2        |                | ug/L |   | 105  | 79 - 120     | 4   | 50        |
| Ethene  | 13.6        | 14.9        |                | ug/L |   | 110  | 85 - 120     | 6   | 50        |
| Methane | 7.77        | 7.33        |                | ug/L |   | 94   | 85 - 120     | 5   | 50        |

Lab Sample ID: MB 480-424508/3

Matrix: Water

Analysis Batch: 424508

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND        |              | 7.5 | 1.5 | ug/L |   |          | 07/15/18 10:29 | 1       |
| Ethene  | ND        |              | 7.0 | 1.5 | ug/L |   |          | 07/15/18 10:29 | 1       |
| Methane | ND        |              | 4.0 | 1.0 | ug/L |   |          | 07/15/18 10:29 | 1       |

Lab Sample ID: LCS 480-424508/4

Matrix: Water

Analysis Batch: 424508

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Ethane  | 14.6        | 13.5       |               | ug/L |   | 93   | 79 - 120     |
| Ethene  | 13.6        | 12.6       |               | ug/L |   | 93   | 85 - 120     |
| Methane | 7.77        | 7.00       |               | ug/L |   | 90   | 85 - 120     |

## Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-424419/1-A

Matrix: Water

Analysis Batch: 424968

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424419

| Analyte   | MB Result | MB Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | ND        |              | 0.20   | 0.060   | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Antimony  | ND        |              | 0.020  | 0.0068  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Arsenic   | ND        |              | 0.015  | 0.0056  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Barium    | ND        |              | 0.0020 | 0.00070 | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Beryllium | ND        |              | 0.0020 | 0.00030 | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Cadmium   | ND        |              | 0.0020 | 0.00050 | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Calcium   | ND        |              | 0.50   | 0.10    | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Chromium  | ND        |              | 0.0040 | 0.0010  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Cobalt    | ND        |              | 0.0040 | 0.00063 | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Copper    | ND        |              | 0.010  | 0.0016  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Iron      | ND        |              | 0.050  | 0.019   | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-424419/1-A

Matrix: Water

Analysis Batch: 424968

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424419

| Analyte   | MB Result | MB Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| Lead      | ND        |              | 0.010  | 0.0030  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Magnesium | ND        |              | 0.20   | 0.043   | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Manganese | ND        |              | 0.0030 | 0.00040 | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Nickel    | ND        |              | 0.010  | 0.0013  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Potassium | ND        |              | 0.50   | 0.10    | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Selenium  | ND        |              | 0.025  | 0.0087  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Silver    | ND        |              | 0.0060 | 0.0017  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Sodium    | ND        |              | 1.0    | 0.32    | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Thallium  | ND        |              | 0.020  | 0.010   | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Vanadium  | ND        |              | 0.0050 | 0.0015  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |
| Zinc      | 0.00197   | J            | 0.010  | 0.0015  | mg/L |   | 07/14/18 07:59 | 07/17/18 11:16 | 1       |

Lab Sample ID: LCS 480-424419/2-A

Matrix: Water

Analysis Batch: 424968

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424419

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| Aluminum  | 10.0        | 9.68       |               | mg/L |   | 97   | 80 - 120     |
| Antimony  | 0.200       | 0.197      |               | mg/L |   | 98   | 80 - 120     |
| Arsenic   | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Barium    | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Beryllium | 0.200       | 0.205      |               | mg/L |   | 102  | 80 - 120     |
| Cadmium   | 0.200       | 0.202      |               | mg/L |   | 101  | 80 - 120     |
| Calcium   | 10.0        | 9.88       |               | mg/L |   | 99   | 80 - 120     |
| Chromium  | 0.200       | 0.195      |               | mg/L |   | 97   | 80 - 120     |
| Cobalt    | 0.200       | 0.192      |               | mg/L |   | 96   | 80 - 120     |
| Copper    | 0.200       | 0.201      |               | mg/L |   | 100  | 80 - 120     |
| Iron      | 10.0        | 9.93       |               | mg/L |   | 99   | 80 - 120     |
| Lead      | 0.200       | 0.206      |               | mg/L |   | 103  | 80 - 120     |
| Magnesium | 10.0        | 10.01      |               | mg/L |   | 100  | 80 - 120     |
| Manganese | 0.200       | 0.199      |               | mg/L |   | 99   | 80 - 120     |
| Nickel    | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Potassium | 10.0        | 9.55       |               | mg/L |   | 95   | 80 - 120     |
| Selenium  | 0.200       | 0.192      |               | mg/L |   | 96   | 80 - 120     |
| Silver    | 0.0500      | 0.0551     |               | mg/L |   | 110  | 80 - 120     |
| Sodium    | 10.0        | 9.49       |               | mg/L |   | 95   | 80 - 120     |
| Thallium  | 0.200       | 0.210      |               | mg/L |   | 105  | 80 - 120     |
| Vanadium  | 0.200       | 0.202      |               | mg/L |   | 101  | 80 - 120     |
| Zinc      | 0.200       | 0.216      |               | mg/L |   | 108  | 80 - 120     |

Lab Sample ID: LCSD 480-424419/25-A

Matrix: Water

Analysis Batch: 424968

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 424419

| Analyte  | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|----------|-------------|-------------|----------------|------|---|------|--------------|-----|-------|
| Aluminum | 10.0        | 9.44        |                | mg/L |   | 94   | 80 - 120     | 2   | 20    |
| Antimony | 0.200       | 0.193       |                | mg/L |   | 97   | 80 - 120     | 2   | 20    |
| Arsenic  | 0.200       | 0.198       |                | mg/L |   | 99   | 80 - 120     | 1   | 20    |
| Barium   | 0.200       | 0.196       |                | mg/L |   | 98   | 80 - 120     | 2   | 20    |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-424419/25-A

Matrix: Water

Analysis Batch: 424968

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 424419

| Analyte   | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec.    |     | RPD | Limit |
|-----------|-------------|-------------|----------------|------|---|------|----------|-----|-----|-------|
|           |             |             |                |      |   |      | Limits   | RPD |     |       |
| Beryllium | 0.200       | 0.202       |                | mg/L |   | 101  | 80 - 120 | 1   |     | 20    |
| Cadmium   | 0.200       | 0.199       |                | mg/L |   | 100  | 80 - 120 | 1   |     | 20    |
| Calcium   | 10.0        | 9.73        |                | mg/L |   | 97   | 80 - 120 | 2   |     | 20    |
| Chromium  | 0.200       | 0.194       |                | mg/L |   | 97   | 80 - 120 | 0   |     | 20    |
| Cobalt    | 0.200       | 0.189       |                | mg/L |   | 94   | 80 - 120 | 2   |     | 20    |
| Copper    | 0.200       | 0.196       |                | mg/L |   | 98   | 80 - 120 | 2   |     | 20    |
| Iron      | 10.0        | 9.79        |                | mg/L |   | 98   | 80 - 120 | 1   |     | 20    |
| Lead      | 0.200       | 0.202       |                | mg/L |   | 101  | 80 - 120 | 2   |     | 20    |
| Magnesium | 10.0        | 9.90        |                | mg/L |   | 99   | 80 - 120 | 1   |     | 20    |
| Manganese | 0.200       | 0.197       |                | mg/L |   | 98   | 80 - 120 | 1   |     | 20    |
| Nickel    | 0.200       | 0.197       |                | mg/L |   | 98   | 80 - 120 | 2   |     | 20    |
| Potassium | 10.0        | 9.42        |                | mg/L |   | 94   | 80 - 120 | 1   |     | 20    |
| Selenium  | 0.200       | 0.190       |                | mg/L |   | 95   | 80 - 120 | 1   |     | 20    |
| Silver    | 0.0500      | 0.0537      |                | mg/L |   | 107  | 80 - 120 | 3   |     | 20    |
| Sodium    | 10.0        | 9.32        |                | mg/L |   | 93   | 80 - 120 | 2   |     | 20    |
| Thallium  | 0.200       | 0.207       |                | mg/L |   | 104  | 80 - 120 | 1   |     | 20    |
| Vanadium  | 0.200       | 0.201       |                | mg/L |   | 101  | 80 - 120 | 1   |     | 20    |
| Zinc      | 0.200       | 0.208       |                | mg/L |   | 104  | 80 - 120 | 4   |     | 20    |

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-425844/1-A

Matrix: Water

Analysis Batch: 426099

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425844

| Analyte | MB MB  |           | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
|         | Result | Qualifier |         |         |      |   |                |                |         |
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 14:57 | 1       |

Lab Sample ID: LCS 480-425844/2-A

Matrix: Water

Analysis Batch: 426099

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425844

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec.    |     | RPD | Limit |
|---------|-------------|------------|---------------|------|---|------|----------|-----|-----|-------|
|         |             |            |               |      |   |      | Limits   | RPD |     |       |
| Mercury | 0.00667     | 0.00610    |               | mg/L |   | 91   | 80 - 120 |     |     |       |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-424336/4

Matrix: Water

Analysis Batch: 424336

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte  | MB MB  |           | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|------|------|---|----------|----------------|---------|
|          | Result | Qualifier |      |      |      |   |          |                |         |
| Chloride | ND     |           | 0.50 | 0.28 | mg/L |   |          | 07/13/18 11:14 | 1       |
| Sulfate  | ND     |           | 2.0  | 0.35 | mg/L |   |          | 07/13/18 11:14 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-424336/3

Matrix: Water

Analysis Batch: 424336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Chloride | 50.0        | 49.63      |               | mg/L |   | 99   | 90 - 110     |
| Sulfate  | 50.0        | 47.53      |               | mg/L |   | 95   | 90 - 110     |

Lab Sample ID: MB 480-424339/4

Matrix: Water

Analysis Batch: 424339

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| Nitrate | ND        |              | 0.050 | 0.025 | mg/L |   |          | 07/13/18 11:14 | 1       |

Lab Sample ID: LCS 480-424339/3

Matrix: Water

Analysis Batch: 424339

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Nitrate | 5.00        | 4.93       |               | mg/L |   | 99   | 90 - 110     |

## Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-425698/4

Matrix: Water

Analysis Batch: 425698

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte              | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Total Organic Carbon | 0.720     | J            | 1.0 | 0.43 | mg/L |   |          | 07/19/18 20:03 | 1       |

Lab Sample ID: MB 480-425698/52

Matrix: Water

Analysis Batch: 425698

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte              | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Total Organic Carbon | 0.785     | J            | 1.0 | 0.43 | mg/L |   |          | 07/20/18 18:18 | 1       |

Lab Sample ID: LCS 480-425698/5

Matrix: Water

Analysis Batch: 425698

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte              | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|-------------|------------|---------------|------|---|------|--------------|
| Total Organic Carbon | 60.0        | 57.62      |               | mg/L |   | 96   | 90 - 110     |

Lab Sample ID: LCS 480-425698/53

Matrix: Water

Analysis Batch: 425698

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte              | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|-------------|------------|---------------|------|---|------|--------------|
| Total Organic Carbon | 60.0        | 57.38      |               | mg/L |   | 96   | 90 - 110     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 480-426555/4

Matrix: Water

Analysis Batch: 426555

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte              | MB<br>Result | MB<br>Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------------|-----------------|-----|------|------|---|----------|----------------|---------|
| Total Organic Carbon | 0.836        | J               | 1.0 | 0.43 | mg/L | - |          | 07/24/18 19:40 | 1       |

Lab Sample ID: LCS 480-426555/5

Matrix: Water

Analysis Batch: 426555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte              | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|----------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Total Organic Carbon | 60.0           | 58.03         |                  | mg/L | - | 97   | 90 - 110        |

## Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-425143/30

Matrix: Water

Analysis Batch: 425143

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte           | MB<br>Result | MB<br>Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------|--------------|-----------------|-----|------|------|---|----------|----------------|---------|
| Alkalinity, Total | ND           |                 | 5.0 | 0.79 | mg/L | - |          | 07/18/18 12:22 | 1       |

Lab Sample ID: MB 480-425143/54

Matrix: Water

Analysis Batch: 425143

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte           | MB<br>Result | MB<br>Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------|--------------|-----------------|-----|------|------|---|----------|----------------|---------|
| Alkalinity, Total | ND           |                 | 5.0 | 0.79 | mg/L | - |          | 07/18/18 14:32 | 1       |

Lab Sample ID: LCS 480-425143/31

Matrix: Water

Analysis Batch: 425143

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte           | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|-------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Alkalinity, Total | 100            | 93.60         |                  | mg/L | - | 94   | 90 - 110        |

Lab Sample ID: LCS 480-425143/55

Matrix: Water

Analysis Batch: 425143

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte           | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|-------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Alkalinity, Total | 100            | 93.94         |                  | mg/L | - | 94   | 90 - 110        |

TestAmerica Buffalo



## QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

### GC/MS VOA

#### Analysis Batch: 424088

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138698-2     | MW-2(07112018)     | Total/NA  | Water  | 8260C  |            |
| MB 480-424088/7  | Method Blank       | Total/NA  | Water  | 8260C  |            |
| LCS 480-424088/4 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |

#### Analysis Batch: 424236

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138698-1     | IW-2(07112018)     | Total/NA  | Water  | 8260C  |            |
| 480-138698-3     | TRIP BLANK         | Total/NA  | Water  | 8260C  |            |
| MB 480-424236/7  | Method Blank       | Total/NA  | Water  | 8260C  |            |
| LCS 480-424236/5 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |

### GC VOA

#### Analysis Batch: 424107

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method  | Prep Batch |
|-------------------|------------------------|-----------|--------|---------|------------|
| 480-138698-1      | IW-2(07112018)         | Total/NA  | Water  | RSK-175 |            |
| 480-138698-2      | MW-2(07112018)         | Total/NA  | Water  | RSK-175 |            |
| MB 480-424107/4   | Method Blank           | Total/NA  | Water  | RSK-175 |            |
| LCS 480-424107/5  | Lab Control Sample     | Total/NA  | Water  | RSK-175 |            |
| LCSD 480-424107/6 | Lab Control Sample Dup | Total/NA  | Water  | RSK-175 |            |

#### Analysis Batch: 424508

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method  | Prep Batch |
|-------------------|--------------------|-----------|--------|---------|------------|
| 480-138698-2 - DL | MW-2(07112018)     | Total/NA  | Water  | RSK-175 |            |
| MB 480-424508/3   | Method Blank       | Total/NA  | Water  | RSK-175 |            |
| LCS 480-424508/4  | Lab Control Sample | Total/NA  | Water  | RSK-175 |            |

### Metals

#### Prep Batch: 424419

| Lab Sample ID        | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|----------------------|------------------------|-----------|--------|--------|------------|
| 480-138698-1         | IW-2(07112018)         | Total/NA  | Water  | 3005A  |            |
| 480-138698-2         | MW-2(07112018)         | Total/NA  | Water  | 3005A  |            |
| MB 480-424419/1-A    | Method Blank           | Total/NA  | Water  | 3005A  |            |
| LCS 480-424419/2-A   | Lab Control Sample     | Total/NA  | Water  | 3005A  |            |
| LCSD 480-424419/25-A | Lab Control Sample Dup | Total/NA  | Water  | 3005A  |            |

#### Analysis Batch: 424968

| Lab Sample ID        | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|----------------------|------------------------|-----------|--------|--------|------------|
| 480-138698-1         | IW-2(07112018)         | Total/NA  | Water  | 6010C  | 424419     |
| 480-138698-2         | MW-2(07112018)         | Total/NA  | Water  | 6010C  | 424419     |
| MB 480-424419/1-A    | Method Blank           | Total/NA  | Water  | 6010C  | 424419     |
| LCS 480-424419/2-A   | Lab Control Sample     | Total/NA  | Water  | 6010C  | 424419     |
| LCSD 480-424419/25-A | Lab Control Sample Dup | Total/NA  | Water  | 6010C  | 424419     |

#### Prep Batch: 425844

| Lab Sample ID     | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| 480-138698-1      | IW-2(07112018)   | Total/NA  | Water  | 7470A  |            |
| 480-138698-2      | MW-2(07112018)   | Total/NA  | Water  | 7470A  |            |
| MB 480-425844/1-A | Method Blank     | Total/NA  | Water  | 7470A  |            |

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

## Metals (Continued)

### Prep Batch: 425844 (Continued)

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| LCS 480-425844/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  |            |

### Analysis Batch: 426099

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138698-1       | IW-2(07112018)     | Total/NA  | Water  | 7470A  | 425844     |
| 480-138698-2       | MW-2(07112018)     | Total/NA  | Water  | 7470A  | 425844     |
| MB 480-425844/1-A  | Method Blank       | Total/NA  | Water  | 7470A  | 425844     |
| LCS 480-425844/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  | 425844     |

## General Chemistry

### Analysis Batch: 424336

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138698-1     | IW-2(07112018)     | Total/NA  | Water  | 300.0  |            |
| 480-138698-2     | MW-2(07112018)     | Total/NA  | Water  | 300.0  |            |
| MB 480-424336/4  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-424336/3 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 424339

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138698-1     | IW-2(07112018)     | Total/NA  | Water  | 300.0  |            |
| 480-138698-2     | MW-2(07112018)     | Total/NA  | Water  | 300.0  |            |
| MB 480-424339/4  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-424339/3 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 425143

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method   | Prep Batch |
|-------------------|--------------------|-----------|--------|----------|------------|
| 480-138698-1      | IW-2(07112018)     | Total/NA  | Water  | SM 2320B |            |
| 480-138698-2      | MW-2(07112018)     | Total/NA  | Water  | SM 2320B |            |
| MB 480-425143/30  | Method Blank       | Total/NA  | Water  | SM 2320B |            |
| MB 480-425143/54  | Method Blank       | Total/NA  | Water  | SM 2320B |            |
| LCS 480-425143/31 | Lab Control Sample | Total/NA  | Water  | SM 2320B |            |
| LCS 480-425143/55 | Lab Control Sample | Total/NA  | Water  | SM 2320B |            |

### Analysis Batch: 425698

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 480-138698-2      | MW-2(07112018)     | Total/NA  | Water  | 9060A  |            |
| MB 480-425698/4   | Method Blank       | Total/NA  | Water  | 9060A  |            |
| MB 480-425698/52  | Method Blank       | Total/NA  | Water  | 9060A  |            |
| LCS 480-425698/5  | Lab Control Sample | Total/NA  | Water  | 9060A  |            |
| LCS 480-425698/53 | Lab Control Sample | Total/NA  | Water  | 9060A  |            |

### Analysis Batch: 426555

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138698-1     | IW-2(07112018)     | Total/NA  | Water  | 9060A  |            |
| MB 480-426555/4  | Method Blank       | Total/NA  | Water  | 9060A  |            |
| LCS 480-426555/5 | Lab Control Sample | Total/NA  | Water  | 9060A  |            |

TestAmerica Buffalo

## Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

**Client Sample ID: IW-2(07112018)**

**Date Collected: 07/11/18 10:20**

**Date Received: 07/12/18 01:15**

**Lab Sample ID: 480-138698-1**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 2               | 424236       | 07/12/18 20:16       | KMN     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 44              | 424107       | 07/12/18 16:00       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424419       | 07/14/18 07:59       | KMP     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 424968       | 07/17/18 12:33       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425844       | 07/23/18 12:10       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426099       | 07/23/18 15:26       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 424336       | 07/13/18 11:22       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 424339       | 07/13/18 11:22       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 2               | 426555       | 07/25/18 03:30       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425143       | 07/18/18 14:17       | JAH     | TAL BUF |

**Client Sample ID: MW-2(07112018)**

**Date Collected: 07/11/18 09:40**

**Date Received: 07/12/18 01:15**

**Lab Sample ID: 480-138698-2**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 424088       | 07/12/18 19:26       | LCH     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      | DL  | 44              | 424508       | 07/15/18 13:04       | DSC     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 1               | 424107       | 07/12/18 13:29       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424419       | 07/14/18 07:59       | KMP     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 424968       | 07/17/18 12:36       | AMH     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425844       | 07/23/18 12:10       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426099       | 07/23/18 15:28       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 424336       | 07/13/18 11:30       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 424339       | 07/13/18 11:30       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425698       | 07/20/18 05:19       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425143       | 07/18/18 14:44       | JAH     | TAL BUF |

**Client Sample ID: TRIP BLANK**

**Date Collected: 07/11/18 00:00**

**Date Received: 07/12/18 01:15**

**Lab Sample ID: 480-138698-3**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 424236       | 07/12/18 20:40       | KMN     | TAL BUF |

**Laboratory References:**

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

## Accreditation/Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138698-1

### Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| New York  | NELAP   | 2          | 10026                 | 03-31-19        |

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|---------|
| 300.0           |             | Water  | Nitrate |

## Method Summary

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-138698-1

Project/Site: NYSDEC - Former Cleanerama, Site# 401056

| Method   | Method Description                  | Protocol | Laboratory |
|----------|-------------------------------------|----------|------------|
| 8260C    | Volatile Organic Compounds by GC/MS | SW846    | TAL BUF    |
| RSK-175  | Dissolved Gases (GC)                | RSK      | TAL BUF    |
| 6010C    | Metals (ICP)                        | SW846    | TAL BUF    |
| 7470A    | Mercury (CVAA)                      | SW846    | TAL BUF    |
| 300.0    | Anions, Ion Chromatography          | MCAWW    | TAL BUF    |
| 9060A    | Organic Carbon, Total (TOC)         | SW846    | TAL BUF    |
| SM 2320B | Alkalinity                          | SM       | TAL BUF    |
| 3005A    | Preparation, Total Metals           | SW846    | TAL BUF    |
| 5030C    | Purge and Trap                      | SW846    | TAL BUF    |
| 7470A    | Preparation, Mercury                | SW846    | TAL BUF    |

### Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

### Laboratory References:

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

## Sample Summary

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-138698-1

Project/Site: NYSDEC - Former Cleanerama, Site# 401056

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 480-138698-1  | IW-2(07112018)   | Water  | 07/11/18 10:20 | 07/12/18 01:15 |
| 480-138698-2  | MW-2(07112018)   | Water  | 07/11/18 09:40 | 07/12/18 01:15 |
| 480-138698-3  | TRIP BLANK       | Water  | 07/11/18 00:00 | 07/12/18 01:15 |



# Chain of Custody Record

1300 COMMERCIAL BUILDING  
10 Hazelwood Drive  
Amherst, NY 14228-2298  
Phone (716) 691-2600 Fax (716) 691-7991

480507-ALBANY

**Client Information**  
 Client Contact: Josh Duquette  
 Company: ARCADIS U.S. Inc.  
 Address: 855 Route 146 Suite 210  
 City: Clifton Park  
 State, Zip: NY, 12065  
 Phone: 518 769 8487  
 Lab PM: Deyo, Melissa L.  
 E-Mail: melissa.deyo@testamericainc.com  
 Project #: 48014618  
 Project Name: NYSDEC - Former Cleanerama, Site# 401056  
 Site:

Analysis Requested

**Due Date Requested:**  
 TAT Requested (days): 5  
 PO #: 00256438.0000  
 WO #:   
 Project #: 48014618  
 Project Name: NYSDEC - Former Cleanerama, Site# 401056  
 Site:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=Water, S=Solid, O=Other) | Preservation Code: (87=Thiourea, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 300.0, 280 - Chloride & Sulfate | 6010C, 7470A | RSK_176 - Methane, Ethane, Ethene | 8260C - TCL VOCs | 9060A - TOC | 2320B - Alkalinity | 300.45HR - Nitrate | PFC_IDA - PFAS, Standard List (21 analytes) | 8270D_SIM_MS_ID - 1,4-Dioxane | Total Number of Containers | Special Instructions/Note: |
|-----------------------|-------------|-------------|------------------------------|------------------------------------|-----------------------------------------|-----------------------------------|----------------------------|---------------------------------|--------------|-----------------------------------|------------------|-------------|--------------------|--------------------|---------------------------------------------|-------------------------------|----------------------------|----------------------------|
| FW-2(07112018)        | 7/11/18     | 1020        | G                            | Water                              |                                         |                                   |                            |                                 |              |                                   |                  |             |                    |                    |                                             |                               |                            |                            |
| MW-2(07112018)        | 7/11/18     | 0940        | G                            | Water                              |                                         |                                   |                            |                                 |              |                                   |                  |             |                    |                    |                                             |                               |                            |                            |
| Top Blank             |             |             | G                            | Water                              |                                         |                                   |                            |                                 |              |                                   |                  |             |                    |                    |                                             |                               |                            |                            |
|                       |             |             |                              | Water                              |                                         |                                   |                            |                                 |              |                                   |                  |             |                    |                    |                                             |                               |                            |                            |
|                       |             |             |                              | Water                              |                                         |                                   |                            |                                 |              |                                   |                  |             |                    |                    |                                             |                               |                            |                            |
|                       |             |             |                              | Water                              |                                         |                                   |                            |                                 |              |                                   |                  |             |                    |                    |                                             |                               |                            |                            |
|                       |             |             |                              | Water                              |                                         |                                   |                            |                                 |              |                                   |                  |             |                    |                    |                                             |                               |                            |                            |
|                       |             |             |                              | Water                              |                                         |                                   |                            |                                 |              |                                   |                  |             |                    |                    |                                             |                               |                            |                            |
|                       |             |             |                              | Water                              |                                         |                                   |                            |                                 |              |                                   |                  |             |                    |                    |                                             |                               |                            |                            |

**Possible Hazard Identification**  
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological  
 Deliverable Requested: ☒ DLI, V, Other (specify)  
 Empty Kit Relinquished by:   
 Relinquished by: J. Duquette  
 Relinquished by: Karl Joehn  
 Relinquished by:   
 Custody Seal No.:   
 Custody Seal Intact:   
 Date: 7/11/18 1315  
 Date: 7-11-18 1800  
 Date:   
 Company: ARCADIS  
 Company:   
 Company:   
 Date/Time: 7-11-18 1530  
 Date/Time: 7-12-18 0115  
 Date/Time:   
 Company:   
 Company:   
 Company:   
 Cooler Temperature(s) °C and Other Remarks: 0.4 #1  
 Ver: 08/04/2016

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-138698-1

**Login Number: 138698**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Williams, Christopher S**

| 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   |         |
| 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   | ARCADIS |
| Samples received within 48 hours of sampling.                                    | True   |         |
| Samples requiring field filtration have been filtered in the field.              | N/A    |         |
| Chlorine Residual checked.                                                       | N/A    |         |

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-138821-1

Client Project/Site: NYSDEC - Former Cleanerama, Site#  
401056

For:

ARCADIS U.S. Inc

855 Route 146

Suite 210

Clifton Park, New York 12065

Attn: Andy Vitolins



Authorized for release by:

7/30/2018 5:53:16 PM

Rebecca Jones, Project Management Assistant I

[rebecca.jones@testamericainc.com](mailto:rebecca.jones@testamericainc.com)

Designee for

Melissa Deyo, Project Manager I

(716)504-9874

[melissa.deyo@testamericainc.com](mailto:melissa.deyo@testamericainc.com)

### LINKS

Review your project  
results through

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[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

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## Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

### Qualifiers

#### GC/MS 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. |
| *         | LCS or LCSD is outside acceptance limits.                                                                      |

#### Metals

| 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. |
| B         | Compound was found in the blank and sample.                                                                    |

#### General Chemistry

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| B         | Compound was found in the blank and sample.                                                                    |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| E         | Result exceeded calibration range.                                                                             |
| ^         | ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance 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: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Job ID: 480-138821-1

### Laboratory: TestAmerica Buffalo

#### Narrative

#### Job Narrative 480-138821-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 7/13/2018 12:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.2° C.

#### Receipt Exceptions

The lab recieved two samples labeled MW-8. The labels listed sample collection times of 13:40 and 11:10. The bottles labeled with 13:40 as the sample collection time are for sample MW-8. The bottles labeled with the sample collection time of 11:10 are for sample IW-1. There were bottles labeled IW-1 with the labels listing a sample collection time of 09:45. This sample is actually MW-5. This was confirmed by the client.

#### GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-424431 recovered above the upper control limit for 2-Hexanone, 2-Butanone (MEK) and Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-1 (07122018) (480-138821-2), MW-8 (07122018) (480-138821-3), MW-5 (07122018) (480-138821-6) and TRIP BLANK (480-138821-7).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1 (07122018) (480-138821-2) and MW-8 (07122018) (480-138821-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-424431 recovered outside control limits for the following analytes: Acetone and 2-Hexanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-1 (07122018) (480-138821-2), MW-8 (07122018) (480-138821-3), MW-5 (07122018) (480-138821-6) and TRIP BLANK (480-138821-7).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-424506 recovered above the upper control limit for 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: IW-1 (07122018) (480-138821-4) and DUP-1 (07122018) (480-138821-5).

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: OS-10 (07122018) (480-138821-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-424745 recovered outside control limits for the following analytes: 2-Hexanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: OS-10 (07122018) (480-138821-1).

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

#### HPLC/IC

Method(s) 300.0: The following samples were reported with elevated reporting limits for all analytes: MW-1 (07122018) (480-138821-2), MW-8 (07122018) (480-138821-3), IW-1 (07122018) (480-138821-4), DUP-1 (07122018) (480-138821-5) and MW-5 (07122018) (480-138821-6). The sample was analyzed at a dilution based on screening results.

Method(s) 300.0: The continuing calibration blank (CCB) for analytical batch 480-424684 contained Chloride above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: IW-1 (07122018) (480-138821-4). Elevated reporting limits (RLs) are provided.



## Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

### Job ID: 480-138821-1 (Continued)

#### Laboratory: TestAmerica Buffalo (Continued)

Method(s) 300.0: The following samples were reported with elevated reporting limits for all analytes: MW-1 (07122018) (480-138821-2), MW-8 (07122018) (480-138821-3), IW-1 (07122018) (480-138821-4), DUP-1 (07122018) (480-138821-5) and MW-5 (07122018) (480-138821-6). The sample was analyzed at a dilution based on screening results.

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

#### GC VOA

Method(s) RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-8 (07122018) (480-138821-3), IW-1 (07122018) (480-138821-4) and DUP-1 (07122018) (480-138821-5). 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.

#### Metals

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

#### General Chemistry

Method(s) SM 2320B: The following sample(s) was received with headspace in the sample container. This sample container was received with headspace. OS-10 (07122018) (480-138821-1), MW-1 (07122018) (480-138821-2), MW-8 (07122018) (480-138821-3) and IW-1 (07122018) (480-138821-4).

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

## Detection Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: OS-10 (07122018)**

**Lab Sample ID: 480-138821-1**

| Analyte                | Result | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method   | Prep Type |
|------------------------|--------|-----------|--------|---------|------|---------|---|----------|-----------|
| 2-Butanone (MEK)       | 7.6    | J         | 20     | 2.6     | ug/L | 2       |   | 8260C    | Total/NA  |
| Acetone                | 23     |           | 20     | 6.0     | ug/L | 2       |   | 8260C    | Total/NA  |
| cis-1,2-Dichloroethene | 2.6    |           | 2.0    | 1.6     | ug/L | 2       |   | 8260C    | Total/NA  |
| Methylene Chloride     | 0.96   | J         | 2.0    | 0.88    | ug/L | 2       |   | 8260C    | Total/NA  |
| Tetrachloroethene      | 2.6    |           | 2.0    | 0.72    | ug/L | 2       |   | 8260C    | Total/NA  |
| Trichloroethene        | 3.0    |           | 2.0    | 0.92    | ug/L | 2       |   | 8260C    | Total/NA  |
| Methane                | 150    |           | 4.0    | 1.0     | ug/L | 1       |   | RSK-175  | Total/NA  |
| Aluminum               | 2.7    |           | 0.20   | 0.060   | mg/L | 1       |   | 6010C    | Total/NA  |
| Arsenic                | 0.0060 | J         | 0.015  | 0.0056  | mg/L | 1       |   | 6010C    | Total/NA  |
| Barium                 | 0.032  |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Total/NA  |
| Calcium                | 31.5   |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Chromium               | 0.0054 |           | 0.0040 | 0.0010  | mg/L | 1       |   | 6010C    | Total/NA  |
| Cobalt                 | 0.0011 | J         | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C    | Total/NA  |
| Copper                 | 0.018  |           | 0.010  | 0.0016  | mg/L | 1       |   | 6010C    | Total/NA  |
| Iron                   | 4.9    |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Total/NA  |
| Lead                   | 0.0081 | J         | 0.010  | 0.0030  | mg/L | 1       |   | 6010C    | Total/NA  |
| Magnesium              | 4.4    |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Total/NA  |
| Manganese              | 0.28   |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Total/NA  |
| Nickel                 | 0.0041 | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Total/NA  |
| Potassium              | 2.0    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Sodium                 | 71.2   |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Total/NA  |
| Vanadium               | 0.0078 |           | 0.0050 | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Zinc                   | 0.080  |           | 0.010  | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Barium                 | 0.013  |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Dissolved |
| Calcium                | 28.9   | B         | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Dissolved |
| Iron                   | 0.14   |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Dissolved |
| Magnesium              | 3.1    |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Dissolved |
| Manganese              | 0.24   |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Dissolved |
| Potassium              | 1.1    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Dissolved |
| Sodium                 | 76.8   |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Dissolved |
| Zinc                   | 0.014  | B         | 0.010  | 0.0015  | mg/L | 1       |   | 6010C    | Dissolved |
| Chloride               | 63.6   |           | 0.50   | 0.28    | mg/L | 1       |   | 300.0    | Total/NA  |
| Sulfate                | 14.1   |           | 2.0    | 0.35    | mg/L | 1       |   | 300.0    | Total/NA  |
| Total Organic Carbon   | 7.1    | B         | 1.0    | 0.43    | mg/L | 1       |   | 9060A    | Total/NA  |
| Alkalinity, Total      | 116    |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B | Total/NA  |

**Client Sample ID: MW-1 (07122018)**

**Lab Sample ID: 480-138821-2**

| Analyte                | Result | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|---------|------|---------|---|--------|-----------|
| cis-1,2-Dichloroethene | 4.2    |           | 4.0    | 3.2     | ug/L | 4       |   | 8260C  | Total/NA  |
| Tetrachloroethene      | 140    |           | 4.0    | 1.4     | ug/L | 4       |   | 8260C  | Total/NA  |
| Trichloroethene        | 11     |           | 4.0    | 1.8     | ug/L | 4       |   | 8260C  | Total/NA  |
| Aluminum               | 0.20   |           | 0.20   | 0.060   | mg/L | 1       |   | 6010C  | Total/NA  |
| Barium                 | 0.14   |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C  | Total/NA  |
| Calcium                | 155    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C  | Total/NA  |
| Iron                   | 0.23   |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C  | Total/NA  |
| Magnesium              | 26.7   |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C  | Total/NA  |
| Manganese              | 1.9    |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C  | Total/NA  |
| Nickel                 | 0.0036 | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C  | Total/NA  |
| Potassium              | 4.5    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C  | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

### Client Sample ID: MW-1 (07122018) (Continued)

Lab Sample ID: 480-138821-2

| Analyte              | Result | Qualifier | RL    | MDL    | Unit | Dil Fac | D | Method   | Prep Type |
|----------------------|--------|-----------|-------|--------|------|---------|---|----------|-----------|
| Sodium               | 171    |           | 1.0   | 0.32   | mg/L | 1       |   | 6010C    | Total/NA  |
| Zinc                 | 0.0065 | J         | 0.010 | 0.0015 | mg/L | 1       |   | 6010C    | Total/NA  |
| Chloride             | 360    |           | 2.5   | 1.4    | mg/L | 5       |   | 300.0    | Total/NA  |
| Sulfate              | 51.7   |           | 10.0  | 1.7    | mg/L | 5       |   | 300.0    | Total/NA  |
| Total Organic Carbon | 0.67   | J B       | 1.0   | 0.43   | mg/L | 1       |   | 9060A    | Total/NA  |
| Alkalinity, Total    | 326    |           | 5.0   | 0.79   | mg/L | 1       |   | SM 2320B | Total/NA  |

### Client Sample ID: MW-8 (07122018)

Lab Sample ID: 480-138821-3

| Analyte                | Result  | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method   | Prep Type |
|------------------------|---------|-----------|--------|---------|------|---------|---|----------|-----------|
| cis-1,2-Dichloroethene | 48      |           | 4.0    | 3.2     | ug/L | 4       |   | 8260C    | Total/NA  |
| Methylene Chloride     | 2.8     | J         | 4.0    | 1.8     | ug/L | 4       |   | 8260C    | Total/NA  |
| Tetrachloroethene      | 110     |           | 4.0    | 1.4     | ug/L | 4       |   | 8260C    | Total/NA  |
| Trichloroethene        | 12      |           | 4.0    | 1.8     | ug/L | 4       |   | 8260C    | Total/NA  |
| Methane                | 3800    |           | 180    | 44      | ug/L | 44      |   | RSK-175  | Total/NA  |
| Aluminum               | 0.077   | J         | 0.20   | 0.060   | mg/L | 1       |   | 6010C    | Total/NA  |
| Barium                 | 0.18    |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Total/NA  |
| Calcium                | 151     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Cobalt                 | 0.00068 | J         | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C    | Total/NA  |
| Iron                   | 5.1     |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Total/NA  |
| Magnesium              | 21.1    |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Total/NA  |
| Manganese              | 0.29    |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Total/NA  |
| Nickel                 | 0.0023  | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Total/NA  |
| Potassium              | 6.2     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Sodium                 | 307     |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Total/NA  |
| Zinc                   | 0.0024  | J         | 0.010  | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Chloride               | 638     |           | 5.0    | 2.8     | mg/L | 10      |   | 300.0    | Total/NA  |
| Nitrate                | 1.1     |           | 0.50   | 0.25    | mg/L | 10      |   | 300.0    | Total/NA  |
| Sulfate                | 31.1    |           | 20.0   | 3.5     | mg/L | 10      |   | 300.0    | Total/NA  |
| Total Organic Carbon   | 0.85    | J B       | 1.0    | 0.43    | mg/L | 1       |   | 9060A    | Total/NA  |
| Alkalinity, Total      | 220     |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B | Total/NA  |

### Client Sample ID: IW-1 (07122018)

Lab Sample ID: 480-138821-4

| Analyte                | Result  | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method  | Prep Type |
|------------------------|---------|-----------|--------|---------|------|---------|---|---------|-----------|
| cis-1,2-Dichloroethene | 38      |           | 2.0    | 1.6     | ug/L | 2       |   | 8260C   | Total/NA  |
| Tetrachloroethene      | 74      |           | 2.0    | 0.72    | ug/L | 2       |   | 8260C   | Total/NA  |
| Trichloroethene        | 27      |           | 2.0    | 0.92    | ug/L | 2       |   | 8260C   | Total/NA  |
| Methane                | 4000    |           | 180    | 44      | ug/L | 44      |   | RSK-175 | Total/NA  |
| Aluminum               | 0.080   | J         | 0.20   | 0.060   | mg/L | 1       |   | 6010C   | Total/NA  |
| Barium                 | 0.15    |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C   | Total/NA  |
| Calcium                | 184     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C   | Total/NA  |
| Chromium               | 0.030   |           | 0.0040 | 0.0010  | mg/L | 1       |   | 6010C   | Total/NA  |
| Cobalt                 | 0.00091 | J         | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C   | Total/NA  |
| Iron                   | 13.9    |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C   | Total/NA  |
| Magnesium              | 26.7    |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C   | Total/NA  |
| Manganese              | 0.28    |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C   | Total/NA  |
| Nickel                 | 0.0041  | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C   | Total/NA  |
| Potassium              | 5.3     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C   | Total/NA  |
| Sodium                 | 276     |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C   | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

### Client Sample ID: IW-1 (07122018) (Continued)

Lab Sample ID: 480-138821-4

| Analyte              | Result | Qualifier | RL    | MDL    | Unit | Dil Fac | D | Method   | Prep Type |
|----------------------|--------|-----------|-------|--------|------|---------|---|----------|-----------|
| Zinc                 | 0.0024 | J         | 0.010 | 0.0015 | mg/L | 1       |   | 6010C    | Total/NA  |
| Chloride             | 1030   | ^         | 10.0  | 5.6    | mg/L | 20      |   | 300.0    | Total/NA  |
| Sulfate              | 89.5   |           | 20.0  | 3.5    | mg/L | 10      |   | 300.0    | Total/NA  |
| Total Organic Carbon | 1.0    | B         | 1.0   | 0.43   | mg/L | 1       |   | 9060A    | Total/NA  |
| Alkalinity, Total    | 207    |           | 5.0   | 0.79   | mg/L | 1       |   | SM 2320B | Total/NA  |

### Client Sample ID: DUP-1 (07122018)

Lab Sample ID: 480-138821-5

| Analyte                | Result  | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method   | Prep Type |
|------------------------|---------|-----------|--------|---------|------|---------|---|----------|-----------|
| cis-1,2-Dichloroethene | 40      |           | 2.0    | 1.6     | ug/L | 2       |   | 8260C    | Total/NA  |
| Tetrachloroethene      | 79      |           | 2.0    | 0.72    | ug/L | 2       |   | 8260C    | Total/NA  |
| Trichloroethene        | 30      |           | 2.0    | 0.92    | ug/L | 2       |   | 8260C    | Total/NA  |
| Methane                | 3500    |           | 180    | 44      | ug/L | 44      |   | RSK-175  | Total/NA  |
| Aluminum               | 0.073   | J         | 0.20   | 0.060   | mg/L | 1       |   | 6010C    | Total/NA  |
| Barium                 | 0.14    |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Total/NA  |
| Calcium                | 172     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Chromium               | 0.028   |           | 0.0040 | 0.0010  | mg/L | 1       |   | 6010C    | Total/NA  |
| Cobalt                 | 0.00099 | J         | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C    | Total/NA  |
| Iron                   | 12.9    |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Total/NA  |
| Magnesium              | 25.1    |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Total/NA  |
| Manganese              | 0.26    |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Total/NA  |
| Nickel                 | 0.0033  | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Total/NA  |
| Potassium              | 5.0     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Sodium                 | 258     |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Total/NA  |
| Chloride               | 638     |           | 5.0    | 2.8     | mg/L | 10      |   | 300.0    | Total/NA  |
| Sulfate                | 34.9    |           | 20.0   | 3.5     | mg/L | 10      |   | 300.0    | Total/NA  |
| Total Organic Carbon   | 1.1     | B         | 1.0    | 0.43    | mg/L | 1       |   | 9060A    | Total/NA  |
| Alkalinity, Total      | 207     |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B | Total/NA  |

### Client Sample ID: MW-5 (07122018)

Lab Sample ID: 480-138821-6

| Analyte           | Result | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method   | Prep Type |
|-------------------|--------|-----------|--------|---------|------|---------|---|----------|-----------|
| Aluminum          | 0.11   | J         | 0.20   | 0.060   | mg/L | 1       |   | 6010C    | Total/NA  |
| Barium            | 0.097  |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Total/NA  |
| Calcium           | 265    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Cobalt            | 0.0023 | J         | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C    | Total/NA  |
| Iron              | 0.24   |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Total/NA  |
| Magnesium         | 72.5   |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Total/NA  |
| Manganese         | 0.85   |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Total/NA  |
| Nickel            | 0.0042 | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Total/NA  |
| Potassium         | 6.3    |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Sodium            | 385    |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Total/NA  |
| Zinc              | 0.0029 | J         | 0.010  | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Chloride          | 641    |           | 5.0    | 2.8     | mg/L | 10      |   | 300.0    | Total/NA  |
| Sulfate           | 35.4   |           | 20.0   | 3.5     | mg/L | 10      |   | 300.0    | Total/NA  |
| Alkalinity, Total | 275    |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B | Total/NA  |

### Client Sample ID: TRIP BLANK

Lab Sample ID: 480-138821-7

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-138821-1

Project/Site: NYSDEC - Former Cleanerama, Site# 401056

**Client Sample ID: TRIP BLANK (Continued)**

**Lab Sample ID: 480-138821-7**

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|----|-----|------|---------|---|--------|-----------|
| Acetone | 6.1    | J *       | 10 | 3.0 | ug/L | 1       |   | 8260C  | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: OS-10 (07122018)**

**Lab Sample ID: 480-138821-1**

**Date Collected: 07/12/18 15:15**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result      | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|-------------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND          |           | 2.0 | 1.6  | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,1,2,2-Tetrachloroethane             | ND          |           | 2.0 | 0.42 | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,1,2-Trichloroethane                 | ND          |           | 2.0 | 0.46 | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND          |           | 2.0 | 0.62 | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,1-Dichloroethane                    | ND          |           | 2.0 | 0.76 | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,1-Dichloroethene                    | ND          |           | 2.0 | 0.58 | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,2,4-Trichlorobenzene                | ND          |           | 2.0 | 0.82 | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,2-Dibromo-3-Chloropropane           | ND          |           | 2.0 | 0.78 | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,2-Dibromoethane                     | ND          |           | 2.0 | 1.5  | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,2-Dichlorobenzene                   | ND          |           | 2.0 | 1.6  | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,2-Dichloroethane                    | ND          |           | 2.0 | 0.42 | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,2-Dichloropropane                   | ND          |           | 2.0 | 1.4  | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,3-Dichlorobenzene                   | ND          |           | 2.0 | 1.6  | ug/L |   |          | 07/17/18 19:22 | 2       |
| 1,4-Dichlorobenzene                   | ND          |           | 2.0 | 1.7  | ug/L |   |          | 07/17/18 19:22 | 2       |
| 2-Hexanone                            | ND          | *         | 10  | 2.5  | ug/L |   |          | 07/17/18 19:22 | 2       |
| <b>2-Butanone (MEK)</b>               | <b>7.6</b>  | <b>J</b>  | 20  | 2.6  | ug/L |   |          | 07/17/18 19:22 | 2       |
| 4-Methyl-2-pentanone (MIBK)           | ND          |           | 10  | 4.2  | ug/L |   |          | 07/17/18 19:22 | 2       |
| <b>Acetone</b>                        | <b>23</b>   |           | 20  | 6.0  | ug/L |   |          | 07/17/18 19:22 | 2       |
| Benzene                               | ND          |           | 2.0 | 0.82 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Bromodichloromethane                  | ND          |           | 2.0 | 0.78 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Bromoform                             | ND          |           | 2.0 | 0.52 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Bromomethane                          | ND          |           | 2.0 | 1.4  | ug/L |   |          | 07/17/18 19:22 | 2       |
| Carbon disulfide                      | ND          |           | 2.0 | 0.38 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Carbon tetrachloride                  | ND          |           | 2.0 | 0.54 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Chlorobenzene                         | ND          |           | 2.0 | 1.5  | ug/L |   |          | 07/17/18 19:22 | 2       |
| Dibromochloromethane                  | ND          |           | 2.0 | 0.64 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Chloroethane                          | ND          |           | 2.0 | 0.64 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Chloroform                            | ND          |           | 2.0 | 0.68 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Chloromethane                         | ND          |           | 2.0 | 0.70 | ug/L |   |          | 07/17/18 19:22 | 2       |
| <b>cis-1,2-Dichloroethene</b>         | <b>2.6</b>  |           | 2.0 | 1.6  | ug/L |   |          | 07/17/18 19:22 | 2       |
| cis-1,3-Dichloropropene               | ND          |           | 2.0 | 0.72 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Cyclohexane                           | ND          |           | 2.0 | 0.36 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Dichlorodifluoromethane               | ND          |           | 2.0 | 1.4  | ug/L |   |          | 07/17/18 19:22 | 2       |
| Ethylbenzene                          | ND          |           | 2.0 | 1.5  | ug/L |   |          | 07/17/18 19:22 | 2       |
| Isopropylbenzene                      | ND          |           | 2.0 | 1.6  | ug/L |   |          | 07/17/18 19:22 | 2       |
| Methyl acetate                        | ND          |           | 5.0 | 2.6  | ug/L |   |          | 07/17/18 19:22 | 2       |
| Methyl tert-butyl ether               | ND          |           | 2.0 | 0.32 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Methylcyclohexane                     | ND          |           | 2.0 | 0.32 | ug/L |   |          | 07/17/18 19:22 | 2       |
| <b>Methylene Chloride</b>             | <b>0.96</b> | <b>J</b>  | 2.0 | 0.88 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Styrene                               | ND          |           | 2.0 | 1.5  | ug/L |   |          | 07/17/18 19:22 | 2       |
| <b>Tetrachloroethene</b>              | <b>2.6</b>  |           | 2.0 | 0.72 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Toluene                               | ND          |           | 2.0 | 1.0  | ug/L |   |          | 07/17/18 19:22 | 2       |
| trans-1,2-Dichloroethene              | ND          |           | 2.0 | 1.8  | ug/L |   |          | 07/17/18 19:22 | 2       |
| trans-1,3-Dichloropropene             | ND          |           | 2.0 | 0.74 | ug/L |   |          | 07/17/18 19:22 | 2       |
| <b>Trichloroethene</b>                | <b>3.0</b>  |           | 2.0 | 0.92 | ug/L |   |          | 07/17/18 19:22 | 2       |
| Trichlorofluoromethane                | ND          |           | 2.0 | 1.8  | ug/L |   |          | 07/17/18 19:22 | 2       |
| Vinyl chloride                        | ND          |           | 2.0 | 1.8  | ug/L |   |          | 07/17/18 19:22 | 2       |
| Xylenes, Total                        | ND          |           | 4.0 | 1.3  | ug/L |   |          | 07/17/18 19:22 | 2       |

TestAmerica Buffalo



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: OS-10 (07122018)**

**Lab Sample ID: 480-138821-1**

**Date Collected: 07/12/18 15:15**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 91        |           | 77 - 120 |          | 07/17/18 19:22 | 2       |
| Toluene-d8 (Surr)            | 96        |           | 80 - 120 |          | 07/17/18 19:22 | 2       |
| 4-Bromofluorobenzene (Surr)  | 96        |           | 73 - 120 |          | 07/17/18 19:22 | 2       |
| Dibromofluoromethane (Surr)  | 95        |           | 75 - 123 |          | 07/17/18 19:22 | 2       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 7.5 | 1.5 | ug/L |   |          | 07/16/18 13:31 | 1       |
| Ethene  | ND     |           | 7.0 | 1.5 | ug/L |   |          | 07/16/18 13:31 | 1       |
| Methane | 150    |           | 4.0 | 1.0 | ug/L |   |          | 07/16/18 13:31 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte   | Result | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | 2.7    |           | 0.20   | 0.060   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Antimony  | ND     |           | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Arsenic   | 0.0060 | J         | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Barium    | 0.032  |           | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Beryllium | ND     |           | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Cadmium   | ND     |           | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Calcium   | 31.5   |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Chromium  | 0.0054 |           | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Cobalt    | 0.0011 | J         | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Copper    | 0.018  |           | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Iron      | 4.9    |           | 0.050  | 0.019   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Lead      | 0.0081 | J         | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Magnesium | 4.4    |           | 0.20   | 0.043   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Manganese | 0.28   |           | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Nickel    | 0.0041 | J         | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Potassium | 2.0    |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Selenium  | ND     |           | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Silver    | ND     |           | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Sodium    | 71.2   |           | 1.0    | 0.32    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Thallium  | ND     |           | 0.020  | 0.010   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Vanadium  | 0.0078 |           | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |
| Zinc      | 0.080  |           | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:19 | 1       |

## Method: 6010C - Metals (ICP) - Dissolved

| Analyte   | Result | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | ND     |           | 0.20   | 0.060   | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Antimony  | ND     |           | 0.020  | 0.0068  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Arsenic   | ND     |           | 0.015  | 0.0056  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Barium    | 0.013  |           | 0.0020 | 0.00070 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Beryllium | ND     |           | 0.0020 | 0.00030 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Cadmium   | ND     |           | 0.0020 | 0.00050 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Calcium   | 28.9   | B         | 0.50   | 0.10    | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Chromium  | ND     |           | 0.0040 | 0.0010  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Cobalt    | ND     |           | 0.0040 | 0.00063 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Copper    | ND     |           | 0.010  | 0.0016  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Iron      | 0.14   |           | 0.050  | 0.019   | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Lead      | ND     |           | 0.010  | 0.0030  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Magnesium | 3.1    |           | 0.20   | 0.043   | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: OS-10 (07122018)**

**Lab Sample ID: 480-138821-1**

**Date Collected: 07/12/18 15:15**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 6010C - Metals (ICP) - Dissolved (Continued)

| Analyte   | Result | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Manganese | 0.24   |           | 0.0030 | 0.00040 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Nickel    | ND     |           | 0.010  | 0.0013  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Potassium | 1.1    |           | 0.50   | 0.10    | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Selenium  | ND     |           | 0.025  | 0.0087  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Silver    | ND     |           | 0.0060 | 0.0017  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Sodium    | 76.8   |           | 1.0    | 0.32    | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Thallium  | ND     |           | 0.020  | 0.010   | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Vanadium  | ND     |           | 0.0050 | 0.0015  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |
| Zinc      | 0.014  | B         | 0.010  | 0.0015  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:23 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 16:19 | 1       |

## Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/18/18 11:20 | 07/18/18 14:10 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Chloride             | 63.6   |           | 0.50  | 0.28  | mg/L |   |          | 07/13/18 11:55 | 1       |
| Nitrate              | ND     |           | 0.050 | 0.025 | mg/L |   |          | 07/13/18 11:55 | 1       |
| Sulfate              | 14.1   |           | 2.0   | 0.35  | mg/L |   |          | 07/13/18 11:55 | 1       |
| Total Organic Carbon | 7.1    | B         | 1.0   | 0.43  | mg/L |   |          | 07/21/18 04:02 | 1       |
| Alkalinity, Total    | 116    |           | 5.0   | 0.79  | mg/L |   |          | 07/18/18 22:50 | 1       |

**Client Sample ID: MW-1 (07122018)**

**Lab Sample ID: 480-138821-2**

**Date Collected: 07/12/18 14:30**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 4.0 | 3.3  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 4.0 | 0.84 | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,1,2-Trichloroethane                 | ND     |           | 4.0 | 0.92 | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 4.0 | 1.2  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,1-Dichloroethane                    | ND     |           | 4.0 | 1.5  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,1-Dichloroethene                    | ND     |           | 4.0 | 1.2  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,2,4-Trichlorobenzene                | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,2-Dibromoethane                     | ND     |           | 4.0 | 2.9  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,2-Dichlorobenzene                   | ND     |           | 4.0 | 3.2  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,2-Dichloroethane                    | ND     |           | 4.0 | 0.84 | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,2-Dichloropropane                   | ND     |           | 4.0 | 2.9  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,3-Dichlorobenzene                   | ND     |           | 4.0 | 3.1  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 1,4-Dichlorobenzene                   | ND     |           | 4.0 | 3.4  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 2-Hexanone                            | ND     | *         | 20  | 5.0  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 2-Butanone (MEK)                      | ND     |           | 40  | 5.3  | ug/L |   |          | 07/14/18 00:05 | 4       |
| 4-Methyl-2-pentanone (MIBK)           | ND     |           | 20  | 8.4  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Acetone                               | ND     | *         | 40  | 12   | ug/L |   |          | 07/14/18 00:05 | 4       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

Client Sample ID: MW-1 (07122018)

Lab Sample ID: 480-138821-2

Date Collected: 07/12/18 14:30

Matrix: Water

Date Received: 07/13/18 00:30

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                   | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Benzene                   | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Bromodichloromethane      | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Bromoform                 | ND     |           | 4.0 | 1.0  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Bromomethane              | ND     |           | 4.0 | 2.8  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Carbon disulfide          | ND     |           | 4.0 | 0.76 | ug/L |   |          | 07/14/18 00:05 | 4       |
| Carbon tetrachloride      | ND     |           | 4.0 | 1.1  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Chlorobenzene             | ND     |           | 4.0 | 3.0  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Dibromochloromethane      | ND     |           | 4.0 | 1.3  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Chloroethane              | ND     |           | 4.0 | 1.3  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Chloroform                | ND     |           | 4.0 | 1.4  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Chloromethane             | ND     |           | 4.0 | 1.4  | ug/L |   |          | 07/14/18 00:05 | 4       |
| cis-1,2-Dichloroethene    | 4.2    |           | 4.0 | 3.2  | ug/L |   |          | 07/14/18 00:05 | 4       |
| cis-1,3-Dichloropropene   | ND     |           | 4.0 | 1.4  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Cyclohexane               | ND     |           | 4.0 | 0.72 | ug/L |   |          | 07/14/18 00:05 | 4       |
| Dichlorodifluoromethane   | ND     |           | 4.0 | 2.7  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Ethylbenzene              | ND     |           | 4.0 | 3.0  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Isopropylbenzene          | ND     |           | 4.0 | 3.2  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Methyl acetate            | ND     |           | 10  | 5.2  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Methyl tert-butyl ether   | ND     |           | 4.0 | 0.64 | ug/L |   |          | 07/14/18 00:05 | 4       |
| Methylcyclohexane         | ND     |           | 4.0 | 0.64 | ug/L |   |          | 07/14/18 00:05 | 4       |
| Methylene Chloride        | ND     |           | 4.0 | 1.8  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Styrene                   | ND     |           | 4.0 | 2.9  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Tetrachloroethene         | 140    |           | 4.0 | 1.4  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Toluene                   | ND     |           | 4.0 | 2.0  | ug/L |   |          | 07/14/18 00:05 | 4       |
| trans-1,2-Dichloroethene  | ND     |           | 4.0 | 3.6  | ug/L |   |          | 07/14/18 00:05 | 4       |
| trans-1,3-Dichloropropene | ND     |           | 4.0 | 1.5  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Trichloroethene           | 11     |           | 4.0 | 1.8  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Trichlorofluoromethane    | ND     |           | 4.0 | 3.5  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Vinyl chloride            | ND     |           | 4.0 | 3.6  | ug/L |   |          | 07/14/18 00:05 | 4       |
| Xylenes, Total            | ND     |           | 8.0 | 2.6  | ug/L |   |          | 07/14/18 00:05 | 4       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 110       |           | 77 - 120 |          | 07/14/18 00:05 | 4       |
| Toluene-d8 (Surr)            | 90        |           | 80 - 120 |          | 07/14/18 00:05 | 4       |
| 4-Bromofluorobenzene (Surr)  | 108       |           | 73 - 120 |          | 07/14/18 00:05 | 4       |
| Dibromofluoromethane (Surr)  | 98        |           | 75 - 123 |          | 07/14/18 00:05 | 4       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 7.5 | 1.5 | ug/L |   |          | 07/16/18 11:56 | 1       |
| Ethene  | ND     |           | 7.0 | 1.5 | ug/L |   |          | 07/16/18 11:56 | 1       |
| Methane | ND     |           | 4.0 | 1.0 | ug/L |   |          | 07/16/18 11:56 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte   | Result | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | 0.20   |           | 0.20   | 0.060   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Antimony  | ND     |           | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Arsenic   | ND     |           | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Barium    | 0.14   |           | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Beryllium | ND     |           | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: MW-1 (07122018)**

**Lab Sample ID: 480-138821-2**

**Date Collected: 07/12/18 14:30**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 6010C - Metals (ICP) (Continued)

| Analyte   | Result | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Cadmium   | ND     |           | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Calcium   | 155    |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Chromium  | ND     |           | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Cobalt    | ND     |           | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Copper    | ND     |           | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Iron      | 0.23   |           | 0.050  | 0.019   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Lead      | ND     |           | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Magnesium | 26.7   |           | 0.20   | 0.043   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Manganese | 1.9    |           | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Nickel    | 0.0036 | J         | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Potassium | 4.5    |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Selenium  | ND     |           | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Silver    | ND     |           | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Sodium    | 171    |           | 1.0    | 0.32    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Thallium  | ND     |           | 0.020  | 0.010   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Vanadium  | ND     |           | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |
| Zinc      | 0.0065 | J         | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:33 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 16:26 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 360    |           | 2.5  | 1.4  | mg/L |   |          | 07/13/18 12:03 | 5       |
| Nitrate              | ND     |           | 0.25 | 0.13 | mg/L |   |          | 07/13/18 12:03 | 5       |
| Sulfate              | 51.7   |           | 10.0 | 1.7  | mg/L |   |          | 07/13/18 12:03 | 5       |
| Total Organic Carbon | 0.67   | J B       | 1.0  | 0.43 | mg/L |   |          | 07/21/18 08:13 | 1       |
| Alkalinity, Total    | 326    |           | 5.0  | 0.79 | mg/L |   |          | 07/18/18 22:56 | 1       |

**Client Sample ID: MW-8 (07122018)**

**Lab Sample ID: 480-138821-3**

**Date Collected: 07/12/18 13:40**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 4.0 | 3.3  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 4.0 | 0.84 | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,1,2-Trichloroethane                 | ND     |           | 4.0 | 0.92 | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 4.0 | 1.2  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,1-Dichloroethane                    | ND     |           | 4.0 | 1.5  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,1-Dichloroethene                    | ND     |           | 4.0 | 1.2  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,2,4-Trichlorobenzene                | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,2-Dibromoethane                     | ND     |           | 4.0 | 2.9  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,2-Dichlorobenzene                   | ND     |           | 4.0 | 3.2  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,2-Dichloroethane                    | ND     |           | 4.0 | 0.84 | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,2-Dichloropropane                   | ND     |           | 4.0 | 2.9  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,3-Dichlorobenzene                   | ND     |           | 4.0 | 3.1  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 1,4-Dichlorobenzene                   | ND     |           | 4.0 | 3.4  | ug/L |   |          | 07/14/18 00:33 | 4       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: MW-8 (07122018)**

**Lab Sample ID: 480-138821-3**

**Date Collected: 07/12/18 13:40**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                     | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 2-Hexanone                  | ND     | *         | 20  | 5.0  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 2-Butanone (MEK)            | ND     |           | 40  | 5.3  | ug/L |   |          | 07/14/18 00:33 | 4       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 20  | 8.4  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Acetone                     | ND     | *         | 40  | 12   | ug/L |   |          | 07/14/18 00:33 | 4       |
| Benzene                     | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Bromodichloromethane        | ND     |           | 4.0 | 1.6  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Bromoform                   | ND     |           | 4.0 | 1.0  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Bromomethane                | ND     |           | 4.0 | 2.8  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Carbon disulfide            | ND     |           | 4.0 | 0.76 | ug/L |   |          | 07/14/18 00:33 | 4       |
| Carbon tetrachloride        | ND     |           | 4.0 | 1.1  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Chlorobenzene               | ND     |           | 4.0 | 3.0  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Dibromochloromethane        | ND     |           | 4.0 | 1.3  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Chloroethane                | ND     |           | 4.0 | 1.3  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Chloroform                  | ND     |           | 4.0 | 1.4  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Chloromethane               | ND     |           | 4.0 | 1.4  | ug/L |   |          | 07/14/18 00:33 | 4       |
| cis-1,2-Dichloroethene      | 48     |           | 4.0 | 3.2  | ug/L |   |          | 07/14/18 00:33 | 4       |
| cis-1,3-Dichloropropene     | ND     |           | 4.0 | 1.4  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Cyclohexane                 | ND     |           | 4.0 | 0.72 | ug/L |   |          | 07/14/18 00:33 | 4       |
| Dichlorodifluoromethane     | ND     |           | 4.0 | 2.7  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Ethylbenzene                | ND     |           | 4.0 | 3.0  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Isopropylbenzene            | ND     |           | 4.0 | 3.2  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Methyl acetate              | ND     |           | 10  | 5.2  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Methyl tert-butyl ether     | ND     |           | 4.0 | 0.64 | ug/L |   |          | 07/14/18 00:33 | 4       |
| Methylcyclohexane           | ND     |           | 4.0 | 0.64 | ug/L |   |          | 07/14/18 00:33 | 4       |
| Methylene Chloride          | 2.8    | J         | 4.0 | 1.8  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Styrene                     | ND     |           | 4.0 | 2.9  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Tetrachloroethene           | 110    |           | 4.0 | 1.4  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Toluene                     | ND     |           | 4.0 | 2.0  | ug/L |   |          | 07/14/18 00:33 | 4       |
| trans-1,2-Dichloroethene    | ND     |           | 4.0 | 3.6  | ug/L |   |          | 07/14/18 00:33 | 4       |
| trans-1,3-Dichloropropene   | ND     |           | 4.0 | 1.5  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Trichloroethene             | 12     |           | 4.0 | 1.8  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Trichlorofluoromethane      | ND     |           | 4.0 | 3.5  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Vinyl chloride              | ND     |           | 4.0 | 3.6  | ug/L |   |          | 07/14/18 00:33 | 4       |
| Xylenes, Total              | ND     |           | 8.0 | 2.6  | ug/L |   |          | 07/14/18 00:33 | 4       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 112       |           | 77 - 120 |          | 07/14/18 00:33 | 4       |
| Toluene-d8 (Surr)            | 87        |           | 80 - 120 |          | 07/14/18 00:33 | 4       |
| 4-Bromofluorobenzene (Surr)  | 102       |           | 73 - 120 |          | 07/14/18 00:33 | 4       |
| Dibromofluoromethane (Surr)  | 99        |           | 75 - 123 |          | 07/14/18 00:33 | 4       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 330 | 66  | ug/L |   |          | 07/16/18 13:49 | 44      |
| Ethene  | ND     |           | 310 | 66  | ug/L |   |          | 07/16/18 13:49 | 44      |
| Methane | 3800   |           | 180 | 44  | ug/L |   |          | 07/16/18 13:49 | 44      |

## Method: 6010C - Metals (ICP)

| Analyte  | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Aluminum | 0.077  | J         | 0.20 | 0.060 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: MW-8 (07122018)**

**Lab Sample ID: 480-138821-3**

**Date Collected: 07/12/18 13:40**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 6010C - Metals (ICP) (Continued)

| Analyte   | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Antimony  | ND      |           | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Arsenic   | ND      |           | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Barium    | 0.18    |           | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Beryllium | ND      |           | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Cadmium   | ND      |           | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Calcium   | 151     |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Chromium  | ND      |           | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Cobalt    | 0.00068 | J         | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Copper    | ND      |           | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Iron      | 5.1     |           | 0.050  | 0.019   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Lead      | ND      |           | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Magnesium | 21.1    |           | 0.20   | 0.043   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Manganese | 0.29    |           | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Nickel    | 0.0023  | J         | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Potassium | 6.2     |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Selenium  | ND      |           | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Silver    | ND      |           | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Sodium    | 307     |           | 1.0    | 0.32    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Thallium  | ND      |           | 0.020  | 0.010   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Vanadium  | ND      |           | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |
| Zinc      | 0.0024  | J         | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:37 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 16:28 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 638    |           | 5.0  | 2.8  | mg/L |   |          | 07/13/18 12:44 | 10      |
| Nitrate              | 1.1    |           | 0.50 | 0.25 | mg/L |   |          | 07/13/18 12:44 | 10      |
| Sulfate              | 31.1   |           | 20.0 | 3.5  | mg/L |   |          | 07/13/18 12:44 | 10      |
| Total Organic Carbon | 0.85   | J B       | 1.0  | 0.43 | mg/L |   |          | 07/21/18 08:42 | 1       |
| Alkalinity, Total    | 220    |           | 5.0  | 0.79 | mg/L |   |          | 07/18/18 23:01 | 1       |

**Client Sample ID: IW-1 (07122018)**

**Lab Sample ID: 480-138821-4**

**Date Collected: 07/12/18 11:10**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 2.0 | 1.6  | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 2.0 | 0.42 | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,1,2-Trichloroethane                 | ND     |           | 2.0 | 0.46 | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 2.0 | 0.62 | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,1-Dichloroethane                    | ND     |           | 2.0 | 0.76 | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,1-Dichloroethene                    | ND     |           | 2.0 | 0.58 | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,2,4-Trichlorobenzene                | ND     |           | 2.0 | 0.82 | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 2.0 | 0.78 | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,2-Dibromoethane                     | ND     |           | 2.0 | 1.5  | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,2-Dichlorobenzene                   | ND     |           | 2.0 | 1.6  | ug/L |   |          | 07/15/18 12:41 | 2       |

TestAmerica Buffalo



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

Client Sample ID: IW-1 (07122018)

Lab Sample ID: 480-138821-4

Date Collected: 07/12/18 11:10

Matrix: Water

Date Received: 07/13/18 00:30

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                     | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,2-Dichloroethane          | ND     |           | 2.0 | 0.42 | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,2-Dichloropropane         | ND     |           | 2.0 | 1.4  | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,3-Dichlorobenzene         | ND     |           | 2.0 | 1.6  | ug/L |   |          | 07/15/18 12:41 | 2       |
| 1,4-Dichlorobenzene         | ND     |           | 2.0 | 1.7  | ug/L |   |          | 07/15/18 12:41 | 2       |
| 2-Hexanone                  | ND     |           | 10  | 2.5  | ug/L |   |          | 07/15/18 12:41 | 2       |
| 2-Butanone (MEK)            | ND     |           | 20  | 2.6  | ug/L |   |          | 07/15/18 12:41 | 2       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 10  | 4.2  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Acetone                     | ND     |           | 20  | 6.0  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Benzene                     | ND     |           | 2.0 | 0.82 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Bromodichloromethane        | ND     |           | 2.0 | 0.78 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Bromoform                   | ND     |           | 2.0 | 0.52 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Bromomethane                | ND     |           | 2.0 | 1.4  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Carbon disulfide            | ND     |           | 2.0 | 0.38 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Carbon tetrachloride        | ND     |           | 2.0 | 0.54 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Chlorobenzene               | ND     |           | 2.0 | 1.5  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Dibromochloromethane        | ND     |           | 2.0 | 0.64 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Chloroethane                | ND     |           | 2.0 | 0.64 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Chloroform                  | ND     |           | 2.0 | 0.68 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Chloromethane               | ND     |           | 2.0 | 0.70 | ug/L |   |          | 07/15/18 12:41 | 2       |
| cis-1,2-Dichloroethene      | 38     |           | 2.0 | 1.6  | ug/L |   |          | 07/15/18 12:41 | 2       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 | 0.72 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Cyclohexane                 | ND     |           | 2.0 | 0.36 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Dichlorodifluoromethane     | ND     |           | 2.0 | 1.4  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Ethylbenzene                | ND     |           | 2.0 | 1.5  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Isopropylbenzene            | ND     |           | 2.0 | 1.6  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Methyl acetate              | ND     |           | 5.0 | 2.6  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Methyl tert-butyl ether     | ND     |           | 2.0 | 0.32 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Methylcyclohexane           | ND     |           | 2.0 | 0.32 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Methylene Chloride          | ND     |           | 2.0 | 0.88 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Styrene                     | ND     |           | 2.0 | 1.5  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Tetrachloroethene           | 74     |           | 2.0 | 0.72 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Toluene                     | ND     |           | 2.0 | 1.0  | ug/L |   |          | 07/15/18 12:41 | 2       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 | 1.8  | ug/L |   |          | 07/15/18 12:41 | 2       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 | 0.74 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Trichloroethene             | 27     |           | 2.0 | 0.92 | ug/L |   |          | 07/15/18 12:41 | 2       |
| Trichlorofluoromethane      | ND     |           | 2.0 | 1.8  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Vinyl chloride              | ND     |           | 2.0 | 1.8  | ug/L |   |          | 07/15/18 12:41 | 2       |
| Xylenes, Total              | ND     |           | 4.0 | 1.3  | ug/L |   |          | 07/15/18 12:41 | 2       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 103       |           | 77 - 120 |          | 07/15/18 12:41 | 2       |
| Toluene-d8 (Surr)            | 101       |           | 80 - 120 |          | 07/15/18 12:41 | 2       |
| 4-Bromofluorobenzene (Surr)  | 99        |           | 73 - 120 |          | 07/15/18 12:41 | 2       |
| Dibromofluoromethane (Surr)  | 102       |           | 75 - 123 |          | 07/15/18 12:41 | 2       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 330 | 66  | ug/L |   |          | 07/16/18 14:08 | 44      |
| Ethene  | ND     |           | 310 | 66  | ug/L |   |          | 07/16/18 14:08 | 44      |
| Methane | 4000   |           | 180 | 44  | ug/L |   |          | 07/16/18 14:08 | 44      |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 6010C - Metals (ICP)

| Analyte   | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | 0.080   | J         | 0.20   | 0.060   | mg/L | - | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Antimony  | ND      |           | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Arsenic   | ND      |           | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Barium    | 0.15    |           | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Beryllium | ND      |           | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Cadmium   | ND      |           | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Calcium   | 184     |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Chromium  | 0.030   |           | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Cobalt    | 0.00091 | J         | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Copper    | ND      |           | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Iron      | 13.9    |           | 0.050  | 0.019   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Lead      | ND      |           | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Magnesium | 26.7    |           | 0.20   | 0.043   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Manganese | 0.28    |           | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Nickel    | 0.0041  | J         | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Potassium | 5.3     |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Selenium  | ND      |           | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Silver    | ND      |           | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Sodium    | 276     |           | 1.0    | 0.32    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Thallium  | ND      |           | 0.020  | 0.010   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Vanadium  | ND      |           | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |
| Zinc      | 0.0024  | J         | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:41 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 16:29 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 1030   | ^         | 10.0 | 5.6  | mg/L | - |          | 07/16/18 22:01 | 20      |
| Nitrate              | ND     |           | 0.50 | 0.25 | mg/L |   |          | 07/13/18 12:52 | 10      |
| Sulfate              | 89.5   |           | 20.0 | 3.5  | mg/L |   |          | 07/13/18 12:52 | 10      |
| Total Organic Carbon | 1.0    | B         | 1.0  | 0.43 | mg/L |   |          | 07/21/18 09:09 | 1       |
| Alkalinity, Total    | 207    |           | 5.0  | 0.79 | mg/L |   |          | 07/18/18 23:07 | 1       |

Client Sample ID: DUP-1 (07122018)

Lab Sample ID: 480-138821-5

Date Collected: 07/12/18 00:00

Matrix: Water

Date Received: 07/13/18 00:30

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 2.0 | 1.6  | ug/L | - |          | 07/15/18 13:04 | 2       |
| 1,1,1,2-Tetrachloroethane             | ND     |           | 2.0 | 0.42 | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,1,1,2-Trichloroethane               | ND     |           | 2.0 | 0.46 | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 2.0 | 0.62 | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,1-Dichloroethane                    | ND     |           | 2.0 | 0.76 | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,1-Dichloroethene                    | ND     |           | 2.0 | 0.58 | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,2,4-Trichlorobenzene                | ND     |           | 2.0 | 0.82 | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 2.0 | 0.78 | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,2-Dibromoethane                     | ND     |           | 2.0 | 1.5  | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,2-Dichlorobenzene                   | ND     |           | 2.0 | 1.6  | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,2-Dichloroethane                    | ND     |           | 2.0 | 0.42 | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,2-Dichloropropane                   | ND     |           | 2.0 | 1.4  | ug/L |   |          | 07/15/18 13:04 | 2       |
| 1,3-Dichlorobenzene                   | ND     |           | 2.0 | 1.6  | ug/L |   |          | 07/15/18 13:04 | 2       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

Client Sample ID: DUP-1 (07122018)

Lab Sample ID: 480-138821-5

Date Collected: 07/12/18 00:00

Matrix: Water

Date Received: 07/13/18 00:30

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                     | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,4-Dichlorobenzene         | ND     |           | 2.0 | 1.7  | ug/L |   |          | 07/15/18 13:04 | 2       |
| 2-Hexanone                  | ND     |           | 10  | 2.5  | ug/L |   |          | 07/15/18 13:04 | 2       |
| 2-Butanone (MEK)            | ND     |           | 20  | 2.6  | ug/L |   |          | 07/15/18 13:04 | 2       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 10  | 4.2  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Acetone                     | ND     |           | 20  | 6.0  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Benzene                     | ND     |           | 2.0 | 0.82 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Bromodichloromethane        | ND     |           | 2.0 | 0.78 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Bromoform                   | ND     |           | 2.0 | 0.52 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Bromomethane                | ND     |           | 2.0 | 1.4  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Carbon disulfide            | ND     |           | 2.0 | 0.38 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Carbon tetrachloride        | ND     |           | 2.0 | 0.54 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Chlorobenzene               | ND     |           | 2.0 | 1.5  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Dibromochloromethane        | ND     |           | 2.0 | 0.64 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Chloroethane                | ND     |           | 2.0 | 0.64 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Chloroform                  | ND     |           | 2.0 | 0.68 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Chloromethane               | ND     |           | 2.0 | 0.70 | ug/L |   |          | 07/15/18 13:04 | 2       |
| cis-1,2-Dichloroethene      | 40     |           | 2.0 | 1.6  | ug/L |   |          | 07/15/18 13:04 | 2       |
| cis-1,3-Dichloropropene     | ND     |           | 2.0 | 0.72 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Cyclohexane                 | ND     |           | 2.0 | 0.36 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Dichlorodifluoromethane     | ND     |           | 2.0 | 1.4  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Ethylbenzene                | ND     |           | 2.0 | 1.5  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Isopropylbenzene            | ND     |           | 2.0 | 1.6  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Methyl acetate              | ND     |           | 5.0 | 2.6  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Methyl tert-butyl ether     | ND     |           | 2.0 | 0.32 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Methylcyclohexane           | ND     |           | 2.0 | 0.32 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Methylene Chloride          | ND     |           | 2.0 | 0.88 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Styrene                     | ND     |           | 2.0 | 1.5  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Tetrachloroethene           | 79     |           | 2.0 | 0.72 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Toluene                     | ND     |           | 2.0 | 1.0  | ug/L |   |          | 07/15/18 13:04 | 2       |
| trans-1,2-Dichloroethene    | ND     |           | 2.0 | 1.8  | ug/L |   |          | 07/15/18 13:04 | 2       |
| trans-1,3-Dichloropropene   | ND     |           | 2.0 | 0.74 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Trichloroethene             | 30     |           | 2.0 | 0.92 | ug/L |   |          | 07/15/18 13:04 | 2       |
| Trichlorofluoromethane      | ND     |           | 2.0 | 1.8  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Vinyl chloride              | ND     |           | 2.0 | 1.8  | ug/L |   |          | 07/15/18 13:04 | 2       |
| Xylenes, Total              | ND     |           | 4.0 | 1.3  | ug/L |   |          | 07/15/18 13:04 | 2       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 108       |           | 77 - 120 |          | 07/15/18 13:04 | 2       |
| Toluene-d8 (Surr)            | 101       |           | 80 - 120 |          | 07/15/18 13:04 | 2       |
| 4-Bromofluorobenzene (Surr)  | 100       |           | 73 - 120 |          | 07/15/18 13:04 | 2       |
| Dibromofluoromethane (Surr)  | 103       |           | 75 - 123 |          | 07/15/18 13:04 | 2       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 330 | 66  | ug/L |   |          | 07/16/18 14:27 | 44      |
| Ethene  | ND     |           | 310 | 66  | ug/L |   |          | 07/16/18 14:27 | 44      |
| Methane | 3500   |           | 180 | 44  | ug/L |   |          | 07/16/18 14:27 | 44      |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: DUP-1 (07122018)**

**Lab Sample ID: 480-138821-5**

**Date Collected: 07/12/18 00:00**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 6010C - Metals (ICP)

| Analyte   | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | 0.073   | J         | 0.20   | 0.060   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Antimony  | ND      |           | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Arsenic   | ND      |           | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Barium    | 0.14    |           | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Beryllium | ND      |           | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Cadmium   | ND      |           | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Calcium   | 172     |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Chromium  | 0.028   |           | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Cobalt    | 0.00099 | J         | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Copper    | ND      |           | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Iron      | 12.9    |           | 0.050  | 0.019   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Lead      | ND      |           | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Magnesium | 25.1    |           | 0.20   | 0.043   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Manganese | 0.26    |           | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Nickel    | 0.0033  | J         | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Potassium | 5.0     |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Selenium  | ND      |           | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Silver    | ND      |           | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Sodium    | 258     |           | 1.0    | 0.32    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Thallium  | ND      |           | 0.020  | 0.010   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Vanadium  | ND      |           | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |
| Zinc      | ND      |           | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:45 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 16:31 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 638    |           | 5.0  | 2.8  | mg/L |   |          | 07/13/18 13:00 | 10      |
| Nitrate              | ND     |           | 0.50 | 0.25 | mg/L |   |          | 07/13/18 13:00 | 10      |
| Sulfate              | 34.9   |           | 20.0 | 3.5  | mg/L |   |          | 07/13/18 13:00 | 10      |
| Total Organic Carbon | 1.1    | B         | 1.0  | 0.43 | mg/L |   |          | 07/21/18 09:37 | 1       |
| Alkalinity, Total    | 207    |           | 5.0  | 0.79 | mg/L |   |          | 07/18/18 23:13 | 1       |

**Client Sample ID: MW-5 (07122018)**

**Lab Sample ID: 480-138821-6**

**Date Collected: 07/12/18 09:45**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 1.0 | 0.82 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,1,2-Trichloroethane                 | ND     |           | 1.0 | 0.23 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 1.0 | 0.31 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,1-Dichloroethane                    | ND     |           | 1.0 | 0.38 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,1-Dichloroethene                    | ND     |           | 1.0 | 0.29 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,2,4-Trichlorobenzene                | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,2-Dibromoethane                     | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/14/18 01:54 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: MW-5 (07122018)**

**Lab Sample ID: 480-138821-6**

**Date Collected: 07/12/18 09:45**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                     | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,2-Dichlorobenzene         | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,2-Dichloroethane          | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,2-Dichloropropane         | ND     |           | 1.0 | 0.72 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 1.0 | 0.78 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 1.0 | 0.84 | ug/L |   |          | 07/14/18 01:54 | 1       |
| 2-Hexanone                  | ND *   |           | 5.0 | 1.2  | ug/L |   |          | 07/14/18 01:54 | 1       |
| 2-Butanone (MEK)            | ND     |           | 10  | 1.3  | ug/L |   |          | 07/14/18 01:54 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 5.0 | 2.1  | ug/L |   |          | 07/14/18 01:54 | 1       |
| Acetone                     | ND *   |           | 10  | 3.0  | ug/L |   |          | 07/14/18 01:54 | 1       |
| Benzene                     | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Bromodichloromethane        | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Bromoform                   | ND     |           | 1.0 | 0.26 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Bromomethane                | ND     |           | 1.0 | 0.69 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Carbon disulfide            | ND     |           | 1.0 | 0.19 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Carbon tetrachloride        | ND     |           | 1.0 | 0.27 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Chlorobenzene               | ND     |           | 1.0 | 0.75 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Dibromochloromethane        | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Chloroethane                | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Chloroform                  | ND     |           | 1.0 | 0.34 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Chloromethane               | ND     |           | 1.0 | 0.35 | ug/L |   |          | 07/14/18 01:54 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 1.0 | 0.81 | ug/L |   |          | 07/14/18 01:54 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 1.0 | 0.36 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Cyclohexane                 | ND     |           | 1.0 | 0.18 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Dichlorodifluoromethane     | ND     |           | 1.0 | 0.68 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Ethylbenzene                | ND     |           | 1.0 | 0.74 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Isopropylbenzene            | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Methyl acetate              | ND     |           | 2.5 | 1.3  | ug/L |   |          | 07/14/18 01:54 | 1       |
| Methyl tert-butyl ether     | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Methylcyclohexane           | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Methylene Chloride          | ND     |           | 1.0 | 0.44 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Styrene                     | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Tetrachloroethene           | ND     |           | 1.0 | 0.36 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Toluene                     | ND     |           | 1.0 | 0.51 | ug/L |   |          | 07/14/18 01:54 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 1.0 | 0.90 | ug/L |   |          | 07/14/18 01:54 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 1.0 | 0.37 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Trichloroethene             | ND     |           | 1.0 | 0.46 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Trichlorofluoromethane      | ND     |           | 1.0 | 0.88 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Vinyl chloride              | ND     |           | 1.0 | 0.90 | ug/L |   |          | 07/14/18 01:54 | 1       |
| Xylenes, Total              | ND     |           | 2.0 | 0.66 | ug/L |   |          | 07/14/18 01:54 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 108       |           | 77 - 120 |          | 07/14/18 01:54 | 1       |
| Toluene-d8 (Surr)            | 89        |           | 80 - 120 |          | 07/14/18 01:54 | 1       |
| 4-Bromofluorobenzene (Surr)  | 102       |           | 73 - 120 |          | 07/14/18 01:54 | 1       |
| Dibromofluoromethane (Surr)  | 95        |           | 75 - 123 |          | 07/14/18 01:54 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 7.5 | 1.5 | ug/L |   |          | 07/16/18 13:12 | 1       |
| Ethene  | ND     |           | 7.0 | 1.5 | ug/L |   |          | 07/16/18 13:12 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: MW-5 (07122018)**

**Lab Sample ID: 480-138821-6**

**Date Collected: 07/12/18 09:45**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: RSK-175 - Dissolved Gases (GC) (Continued)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Methane | ND     |           | 4.0 | 1.0 | ug/L |   |          | 07/16/18 13:12 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte   | Result | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | 0.11   | J         | 0.20   | 0.060   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Antimony  | ND     |           | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Arsenic   | ND     |           | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Barium    | 0.097  |           | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Beryllium | ND     |           | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Cadmium   | ND     |           | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Calcium   | 265    |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Chromium  | ND     |           | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Cobalt    | 0.0023 | J         | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Copper    | ND     |           | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Iron      | 0.24   |           | 0.050  | 0.019   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Lead      | ND     |           | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Magnesium | 72.5   |           | 0.20   | 0.043   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Manganese | 0.85   |           | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Nickel    | 0.0042 | J         | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Potassium | 6.3    |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Selenium  | ND     |           | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Silver    | ND     |           | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Sodium    | 385    |           | 1.0    | 0.32    | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Thallium  | ND     |           | 0.020  | 0.010   | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Vanadium  | ND     |           | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |
| Zinc      | 0.0029 | J         | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 10:48 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 16:34 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 641    |           | 5.0  | 2.8  | mg/L |   |          | 07/13/18 13:08 | 10      |
| Nitrate              | ND     |           | 0.50 | 0.25 | mg/L |   |          | 07/13/18 13:08 | 10      |
| Sulfate              | 35.4   |           | 20.0 | 3.5  | mg/L |   |          | 07/13/18 13:08 | 10      |
| Total Organic Carbon | ND     |           | 1.0  | 0.43 | mg/L |   |          | 07/25/18 09:59 | 1       |
| Alkalinity, Total    | 275    |           | 5.0  | 0.79 | mg/L |   |          | 07/18/18 23:19 | 1       |

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138821-7**

**Date Collected: 07/12/18 00:00**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 1.0 | 0.82 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,1,2-Trichloroethane                 | ND     |           | 1.0 | 0.23 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 1.0 | 0.31 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,1-Dichloroethane                    | ND     |           | 1.0 | 0.38 | ug/L |   |          | 07/14/18 02:22 | 1       |

TestAmerica Buffalo



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-138821-7

Date Collected: 07/12/18 00:00

Matrix: Water

Date Received: 07/13/18 00:30

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                     | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene          | ND     |           | 1.0 | 0.29 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,2,4-Trichlorobenzene      | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,2-Dibromoethane           | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,2-Dichlorobenzene         | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,2-Dichloroethane          | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,2-Dichloropropane         | ND     |           | 1.0 | 0.72 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,3-Dichlorobenzene         | ND     |           | 1.0 | 0.78 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 1,4-Dichlorobenzene         | ND     |           | 1.0 | 0.84 | ug/L |   |          | 07/14/18 02:22 | 1       |
| 2-Hexanone                  | ND *   |           | 5.0 | 1.2  | ug/L |   |          | 07/14/18 02:22 | 1       |
| 2-Butanone (MEK)            | ND     |           | 10  | 1.3  | ug/L |   |          | 07/14/18 02:22 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 5.0 | 2.1  | ug/L |   |          | 07/14/18 02:22 | 1       |
| Acetone                     | 6.1    | J *       | 10  | 3.0  | ug/L |   |          | 07/14/18 02:22 | 1       |
| Benzene                     | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Bromodichloromethane        | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Bromoform                   | ND     |           | 1.0 | 0.26 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Bromomethane                | ND     |           | 1.0 | 0.69 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Carbon disulfide            | ND     |           | 1.0 | 0.19 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Carbon tetrachloride        | ND     |           | 1.0 | 0.27 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Chlorobenzene               | ND     |           | 1.0 | 0.75 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Dibromochloromethane        | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Chloroethane                | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Chloroform                  | ND     |           | 1.0 | 0.34 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Chloromethane               | ND     |           | 1.0 | 0.35 | ug/L |   |          | 07/14/18 02:22 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 1.0 | 0.81 | ug/L |   |          | 07/14/18 02:22 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 1.0 | 0.36 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Cyclohexane                 | ND     |           | 1.0 | 0.18 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Dichlorodifluoromethane     | ND     |           | 1.0 | 0.68 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Ethylbenzene                | ND     |           | 1.0 | 0.74 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Isopropylbenzene            | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Methyl acetate              | ND     |           | 2.5 | 1.3  | ug/L |   |          | 07/14/18 02:22 | 1       |
| Methyl tert-butyl ether     | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Methylcyclohexane           | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Methylene Chloride          | ND     |           | 1.0 | 0.44 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Styrene                     | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Tetrachloroethene           | ND     |           | 1.0 | 0.36 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Toluene                     | ND     |           | 1.0 | 0.51 | ug/L |   |          | 07/14/18 02:22 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 1.0 | 0.90 | ug/L |   |          | 07/14/18 02:22 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 1.0 | 0.37 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Trichloroethene             | ND     |           | 1.0 | 0.46 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Trichlorofluoromethane      | ND     |           | 1.0 | 0.88 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Vinyl chloride              | ND     |           | 1.0 | 0.90 | ug/L |   |          | 07/14/18 02:22 | 1       |
| Xylenes, Total              | ND     |           | 2.0 | 0.66 | ug/L |   |          | 07/14/18 02:22 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 106       |           | 77 - 120 |          | 07/14/18 02:22 | 1       |
| Toluene-d8 (Surr)            | 90        |           | 80 - 120 |          | 07/14/18 02:22 | 1       |
| 4-Bromofluorobenzene (Surr)  | 104       |           | 73 - 120 |          | 07/14/18 02:22 | 1       |
| Dibromofluoromethane (Surr)  | 91        |           | 75 - 123 |          | 07/14/18 02:22 | 1       |

TestAmerica Buffalo

# Surrogate Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                  |
|------------------|--------------------|------------------------------------------------|-----------------|-----------------|------------------|
|                  |                    | DCA<br>(77-120)                                | TOL<br>(80-120) | BFB<br>(73-120) | DBFM<br>(75-123) |
| 480-138821-1     | OS-10 (07122018)   | 91                                             | 96              | 96              | 95               |
| 480-138821-2     | MW-1 (07122018)    | 110                                            | 90              | 108             | 98               |
| 480-138821-3     | MW-8 (07122018)    | 112                                            | 87              | 102             | 99               |
| 480-138821-4     | IW-1 (07122018)    | 103                                            | 101             | 99              | 102              |
| 480-138821-5     | DUP-1 (07122018)   | 108                                            | 101             | 100             | 103              |
| 480-138821-6     | MW-5 (07122018)    | 108                                            | 89              | 102             | 95               |
| 480-138821-7     | TRIP BLANK         | 106                                            | 90              | 104             | 91               |
| LCS 480-424431/4 | Lab Control Sample | 102                                            | 92              | 103             | 95               |
| LCS 480-424506/5 | Lab Control Sample | 106                                            | 103             | 103             | 106              |
| LCS 480-424745/5 | Lab Control Sample | 94                                             | 96              | 101             | 92               |
| MB 480-424431/6  | Method Blank       | 105                                            | 89              | 104             | 95               |
| MB 480-424506/9  | Method Blank       | 106                                            | 102             | 99              | 98               |
| MB 480-424745/8  | Method Blank       | 95                                             | 100             | 103             | 94               |

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)  
TOL = Toluene-d8 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)  
DBFM = Dibromofluoromethane (Surr)

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-424431/6

Matrix: Water

Analysis Batch: 424431

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                               | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND        |              | 1.0 | 0.82 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,1,2-Trichloroethane                 | ND        |              | 1.0 | 0.23 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND        |              | 1.0 | 0.31 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,1-Dichloroethane                    | ND        |              | 1.0 | 0.38 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,1-Dichloroethene                    | ND        |              | 1.0 | 0.29 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,2,4-Trichlorobenzene                | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,2-Dibromoethane                     | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,2-Dichlorobenzene                   | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,2-Dichloroethane                    | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,2-Dichloropropane                   | ND        |              | 1.0 | 0.72 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,3-Dichlorobenzene                   | ND        |              | 1.0 | 0.78 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 1,4-Dichlorobenzene                   | ND        |              | 1.0 | 0.84 | ug/L |   |          | 07/13/18 19:51 | 1       |
| 2-Hexanone                            | ND        |              | 5.0 | 1.2  | ug/L |   |          | 07/13/18 19:51 | 1       |
| 2-Butanone (MEK)                      | ND        |              | 10  | 1.3  | ug/L |   |          | 07/13/18 19:51 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND        |              | 5.0 | 2.1  | ug/L |   |          | 07/13/18 19:51 | 1       |
| Acetone                               | ND        |              | 10  | 3.0  | ug/L |   |          | 07/13/18 19:51 | 1       |
| Benzene                               | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Bromodichloromethane                  | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Bromoform                             | ND        |              | 1.0 | 0.26 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Bromomethane                          | ND        |              | 1.0 | 0.69 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Carbon disulfide                      | ND        |              | 1.0 | 0.19 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Carbon tetrachloride                  | ND        |              | 1.0 | 0.27 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Chlorobenzene                         | ND        |              | 1.0 | 0.75 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Dibromochloromethane                  | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Chloroethane                          | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Chloroform                            | ND        |              | 1.0 | 0.34 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Chloromethane                         | ND        |              | 1.0 | 0.35 | ug/L |   |          | 07/13/18 19:51 | 1       |
| cis-1,2-Dichloroethene                | ND        |              | 1.0 | 0.81 | ug/L |   |          | 07/13/18 19:51 | 1       |
| cis-1,3-Dichloropropene               | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Cyclohexane                           | ND        |              | 1.0 | 0.18 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Dichlorodifluoromethane               | ND        |              | 1.0 | 0.68 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Ethylbenzene                          | ND        |              | 1.0 | 0.74 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Isopropylbenzene                      | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Methyl acetate                        | ND        |              | 2.5 | 1.3  | ug/L |   |          | 07/13/18 19:51 | 1       |
| Methyl tert-butyl ether               | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Methylcyclohexane                     | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Methylene Chloride                    | ND        |              | 1.0 | 0.44 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Styrene                               | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Tetrachloroethene                     | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Toluene                               | ND        |              | 1.0 | 0.51 | ug/L |   |          | 07/13/18 19:51 | 1       |
| trans-1,2-Dichloroethene              | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/13/18 19:51 | 1       |
| trans-1,3-Dichloropropene             | ND        |              | 1.0 | 0.37 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Trichloroethene                       | ND        |              | 1.0 | 0.46 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Trichlorofluoromethane                | ND        |              | 1.0 | 0.88 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Vinyl chloride                        | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/13/18 19:51 | 1       |
| Xylenes, Total                        | ND        |              | 2.0 | 0.66 | ug/L |   |          | 07/13/18 19:51 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-138821-1

Project/Site: NYSDEC - Former Cleanerama, Site# 401056

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 105          |              | 77 - 120 |          | 07/13/18 19:51 | 1       |
| Toluene-d8 (Surr)            | 89           |              | 80 - 120 |          | 07/13/18 19:51 | 1       |
| 4-Bromofluorobenzene (Surr)  | 104          |              | 73 - 120 |          | 07/13/18 19:51 | 1       |
| Dibromofluoromethane (Surr)  | 95           |              | 75 - 123 |          | 07/13/18 19:51 | 1       |

Lab Sample ID: LCS 480-424431/4

Matrix: Water

Analysis Batch: 424431

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1-Trichloroethane                 | 25.0        | 24.7       |               | ug/L |   | 99   | 73 - 126     |
| 1,1,2,2-Tetrachloroethane             | 25.0        | 23.8       |               | ug/L |   | 95   | 76 - 120     |
| 1,1,2-Trichloroethane                 | 25.0        | 24.9       |               | ug/L |   | 99   | 76 - 122     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0        | 25.6       |               | ug/L |   | 102  | 61 - 148     |
| 1,1-Dichloroethane                    | 25.0        | 24.7       |               | ug/L |   | 99   | 77 - 120     |
| 1,1-Dichloroethene                    | 25.0        | 22.5       |               | ug/L |   | 90   | 66 - 127     |
| 1,2,4-Trichlorobenzene                | 25.0        | 24.8       |               | ug/L |   | 99   | 79 - 122     |
| 1,2-Dibromo-3-Chloropropane           | 25.0        | 21.9       |               | ug/L |   | 88   | 56 - 134     |
| 1,2-Dibromoethane                     | 25.0        | 25.1       |               | ug/L |   | 101  | 77 - 120     |
| 1,2-Dichlorobenzene                   | 25.0        | 24.7       |               | ug/L |   | 99   | 80 - 124     |
| 1,2-Dichloroethane                    | 25.0        | 27.0       |               | ug/L |   | 108  | 75 - 120     |
| 1,2-Dichloropropane                   | 25.0        | 24.1       |               | ug/L |   | 97   | 76 - 120     |
| 1,3-Dichlorobenzene                   | 25.0        | 25.2       |               | ug/L |   | 101  | 77 - 120     |
| 1,4-Dichlorobenzene                   | 25.0        | 25.1       |               | ug/L |   | 100  | 80 - 120     |
| 2-Hexanone                            | 125         | 160        | *             | ug/L |   | 128  | 65 - 127     |
| 2-Butanone (MEK)                      | 125         | 171        |               | ug/L |   | 137  | 57 - 140     |
| 4-Methyl-2-pentanone (MIBK)           | 125         | 144        |               | ug/L |   | 115  | 71 - 125     |
| Acetone                               | 125         | 192        | *             | ug/L |   | 154  | 56 - 142     |
| Benzene                               | 25.0        | 23.8       |               | ug/L |   | 95   | 71 - 124     |
| Bromodichloromethane                  | 25.0        | 25.2       |               | ug/L |   | 101  | 80 - 122     |
| Bromoform                             | 25.0        | 24.6       |               | ug/L |   | 98   | 61 - 132     |
| Bromomethane                          | 25.0        | 26.0       |               | ug/L |   | 104  | 55 - 144     |
| Carbon disulfide                      | 25.0        | 22.4       |               | ug/L |   | 90   | 59 - 134     |
| Carbon tetrachloride                  | 25.0        | 27.4       |               | ug/L |   | 110  | 72 - 134     |
| Chlorobenzene                         | 25.0        | 24.8       |               | ug/L |   | 99   | 80 - 120     |
| Dibromochloromethane                  | 25.0        | 23.7       |               | ug/L |   | 95   | 75 - 125     |
| Chloroethane                          | 25.0        | 28.7       |               | ug/L |   | 115  | 69 - 136     |
| Chloroform                            | 25.0        | 24.2       |               | ug/L |   | 97   | 73 - 127     |
| Chloromethane                         | 25.0        | 25.7       |               | ug/L |   | 103  | 68 - 124     |
| cis-1,2-Dichloroethene                | 25.0        | 23.7       |               | ug/L |   | 95   | 74 - 124     |
| cis-1,3-Dichloropropene               | 25.0        | 23.5       |               | ug/L |   | 94   | 74 - 124     |
| Cyclohexane                           | 25.0        | 26.3       |               | ug/L |   | 105  | 59 - 135     |
| Dichlorodifluoromethane               | 25.0        | 19.5       |               | ug/L |   | 78   | 59 - 135     |
| Ethylbenzene                          | 25.0        | 24.3       |               | ug/L |   | 97   | 77 - 123     |
| Isopropylbenzene                      | 25.0        | 24.0       |               | ug/L |   | 96   | 77 - 122     |
| Methyl acetate                        | 50.0        | 60.2       |               | ug/L |   | 120  | 74 - 133     |
| Methyl tert-butyl ether               | 25.0        | 22.7       |               | ug/L |   | 91   | 77 - 120     |
| Methylcyclohexane                     | 25.0        | 25.6       |               | ug/L |   | 102  | 68 - 134     |
| Methylene Chloride                    | 25.0        | 21.9       |               | ug/L |   | 88   | 75 - 124     |
| Styrene                               | 25.0        | 24.9       |               | ug/L |   | 100  | 80 - 120     |
| Tetrachloroethene                     | 25.0        | 25.8       |               | ug/L |   | 103  | 74 - 122     |
| Toluene                               | 25.0        | 24.1       |               | ug/L |   | 96   | 80 - 122     |
| trans-1,2-Dichloroethene              | 25.0        | 22.2       |               | ug/L |   | 89   | 73 - 127     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-424431/4

Matrix: Water

Analysis Batch: 424431

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Trichloroethene        | 25.0        | 24.1       |               | ug/L |   | 96   | 74 - 123     |
| Trichlorofluoromethane | 25.0        | 28.3       |               | ug/L |   | 113  | 62 - 150     |
| Vinyl chloride         | 25.0        | 23.3       |               | ug/L |   | 93   | 65 - 133     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 102           |               | 77 - 120 |
| Toluene-d8 (Surr)            | 92            |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr)  | 103           |               | 73 - 120 |
| Dibromofluoromethane (Surr)  | 95            |               | 75 - 123 |

Lab Sample ID: MB 480-424506/9

Matrix: Water

Analysis Batch: 424506

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                                 | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                   | ND        |              | 1.0 | 0.82 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,1,1,2-Tetrachloroethane               | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,1,1,2-Trichloroethane                 | ND        |              | 1.0 | 0.23 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,1,1,2-Trichloro-1,2,2-trifluoroethane | ND        |              | 1.0 | 0.31 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,1-Dichloroethane                      | ND        |              | 1.0 | 0.38 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,1-Dichloroethene                      | ND        |              | 1.0 | 0.29 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,2,4-Trichlorobenzene                  | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,2-Dibromo-3-Chloropropane             | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,2-Dibromoethane                       | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,2-Dichlorobenzene                     | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,2-Dichloroethane                      | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,2-Dichloropropane                     | ND        |              | 1.0 | 0.72 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,3-Dichlorobenzene                     | ND        |              | 1.0 | 0.78 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 1,4-Dichlorobenzene                     | ND        |              | 1.0 | 0.84 | ug/L |   |          | 07/15/18 11:43 | 1       |
| 2-Hexanone                              | ND        |              | 5.0 | 1.2  | ug/L |   |          | 07/15/18 11:43 | 1       |
| 2-Butanone (MEK)                        | ND        |              | 10  | 1.3  | ug/L |   |          | 07/15/18 11:43 | 1       |
| 4-Methyl-2-pentanone (MIBK)             | ND        |              | 5.0 | 2.1  | ug/L |   |          | 07/15/18 11:43 | 1       |
| Acetone                                 | ND        |              | 10  | 3.0  | ug/L |   |          | 07/15/18 11:43 | 1       |
| Benzene                                 | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Bromodichloromethane                    | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Bromoform                               | ND        |              | 1.0 | 0.26 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Bromomethane                            | ND        |              | 1.0 | 0.69 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Carbon disulfide                        | ND        |              | 1.0 | 0.19 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Carbon tetrachloride                    | ND        |              | 1.0 | 0.27 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Chlorobenzene                           | ND        |              | 1.0 | 0.75 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Dibromochloromethane                    | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Chloroethane                            | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Chloroform                              | ND        |              | 1.0 | 0.34 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Chloromethane                           | ND        |              | 1.0 | 0.35 | ug/L |   |          | 07/15/18 11:43 | 1       |
| cis-1,2-Dichloroethene                  | ND        |              | 1.0 | 0.81 | ug/L |   |          | 07/15/18 11:43 | 1       |
| cis-1,3-Dichloropropene                 | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Cyclohexane                             | ND        |              | 1.0 | 0.18 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Dichlorodifluoromethane                 | ND        |              | 1.0 | 0.68 | ug/L |   |          | 07/15/18 11:43 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-424506/9

Matrix: Water

Analysis Batch: 424506

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                   | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Ethylbenzene              | ND        |              | 1.0 | 0.74 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Isopropylbenzene          | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Methyl acetate            | ND        |              | 2.5 | 1.3  | ug/L |   |          | 07/15/18 11:43 | 1       |
| Methyl tert-butyl ether   | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Methylcyclohexane         | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Methylene Chloride        | ND        |              | 1.0 | 0.44 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Styrene                   | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Tetrachloroethene         | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Toluene                   | ND        |              | 1.0 | 0.51 | ug/L |   |          | 07/15/18 11:43 | 1       |
| trans-1,2-Dichloroethene  | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/15/18 11:43 | 1       |
| trans-1,3-Dichloropropene | ND        |              | 1.0 | 0.37 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Trichloroethene           | ND        |              | 1.0 | 0.46 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Trichlorofluoromethane    | ND        |              | 1.0 | 0.88 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Vinyl chloride            | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/15/18 11:43 | 1       |
| Xylenes, Total            | ND        |              | 2.0 | 0.66 | ug/L |   |          | 07/15/18 11:43 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 106          |              | 77 - 120 |          | 07/15/18 11:43 | 1       |
| Toluene-d8 (Surr)            | 102          |              | 80 - 120 |          | 07/15/18 11:43 | 1       |
| 4-Bromofluorobenzene (Surr)  | 99           |              | 73 - 120 |          | 07/15/18 11:43 | 1       |
| Dibromofluoromethane (Surr)  | 98           |              | 75 - 123 |          | 07/15/18 11:43 | 1       |

Lab Sample ID: LCS 480-424506/5

Matrix: Water

Analysis Batch: 424506

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1-Trichloroethane                 | 25.0        | 26.9       |               | ug/L |   | 107  | 73 - 126     |
| 1,1,2,2-Tetrachloroethane             | 25.0        | 28.3       |               | ug/L |   | 113  | 76 - 120     |
| 1,1,2-Trichloroethane                 | 25.0        | 28.1       |               | ug/L |   | 112  | 76 - 122     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0        | 27.4       |               | ug/L |   | 110  | 61 - 148     |
| 1,1-Dichloroethane                    | 25.0        | 26.2       |               | ug/L |   | 105  | 77 - 120     |
| 1,1-Dichloroethene                    | 25.0        | 27.2       |               | ug/L |   | 109  | 66 - 127     |
| 1,2,4-Trichlorobenzene                | 25.0        | 26.9       |               | ug/L |   | 107  | 79 - 122     |
| 1,2-Dibromo-3-Chloropropane           | 25.0        | 28.2       |               | ug/L |   | 113  | 56 - 134     |
| 1,2-Dibromoethane                     | 25.0        | 27.0       |               | ug/L |   | 108  | 77 - 120     |
| 1,2-Dichlorobenzene                   | 25.0        | 25.6       |               | ug/L |   | 102  | 80 - 124     |
| 1,2-Dichloroethane                    | 25.0        | 25.5       |               | ug/L |   | 102  | 75 - 120     |
| 1,2-Dichloropropane                   | 25.0        | 25.3       |               | ug/L |   | 101  | 76 - 120     |
| 1,3-Dichlorobenzene                   | 25.0        | 26.7       |               | ug/L |   | 107  | 77 - 120     |
| 1,4-Dichlorobenzene                   | 25.0        | 26.3       |               | ug/L |   | 105  | 80 - 120     |
| 2-Hexanone                            | 125         | 146        |               | ug/L |   | 117  | 65 - 127     |
| 2-Butanone (MEK)                      | 125         | 139        |               | ug/L |   | 111  | 57 - 140     |
| 4-Methyl-2-pentanone (MIBK)           | 125         | 143        |               | ug/L |   | 115  | 71 - 125     |
| Acetone                               | 125         | 142        |               | ug/L |   | 114  | 56 - 142     |
| Benzene                               | 25.0        | 25.9       |               | ug/L |   | 104  | 71 - 124     |
| Bromodichloromethane                  | 25.0        | 27.9       |               | ug/L |   | 112  | 80 - 122     |

TestAmerica Buffalo



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-424506/5

Matrix: Water

Analysis Batch: 424506

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------|-------------|------------|---------------|------|---|------|--------------|
| Bromoform                | 25.0        | 29.2       |               | ug/L |   | 117  | 61 - 132     |
| Bromomethane             | 25.0        | 24.2       |               | ug/L |   | 97   | 55 - 144     |
| Carbon disulfide         | 25.0        | 25.9       |               | ug/L |   | 104  | 59 - 134     |
| Carbon tetrachloride     | 25.0        | 27.5       |               | ug/L |   | 110  | 72 - 134     |
| Chlorobenzene            | 25.0        | 27.1       |               | ug/L |   | 108  | 80 - 120     |
| Dibromochloromethane     | 25.0        | 29.0       |               | ug/L |   | 116  | 75 - 125     |
| Chloroethane             | 25.0        | 26.1       |               | ug/L |   | 105  | 69 - 136     |
| Chloroform               | 25.0        | 25.1       |               | ug/L |   | 100  | 73 - 127     |
| Chloromethane            | 25.0        | 23.8       |               | ug/L |   | 95   | 68 - 124     |
| cis-1,2-Dichloroethene   | 25.0        | 26.2       |               | ug/L |   | 105  | 74 - 124     |
| cis-1,3-Dichloropropene  | 25.0        | 25.9       |               | ug/L |   | 104  | 74 - 124     |
| Cyclohexane              | 25.0        | 28.1       |               | ug/L |   | 112  | 59 - 135     |
| Dichlorodifluoromethane  | 25.0        | 24.2       |               | ug/L |   | 97   | 59 - 135     |
| Ethylbenzene             | 25.0        | 27.3       |               | ug/L |   | 109  | 77 - 123     |
| Isopropylbenzene         | 25.0        | 27.3       |               | ug/L |   | 109  | 77 - 122     |
| Methyl acetate           | 50.0        | 50.6       |               | ug/L |   | 101  | 74 - 133     |
| Methyl tert-butyl ether  | 25.0        | 25.1       |               | ug/L |   | 100  | 77 - 120     |
| Methylcyclohexane        | 25.0        | 29.4       |               | ug/L |   | 117  | 68 - 134     |
| Methylene Chloride       | 25.0        | 24.7       |               | ug/L |   | 99   | 75 - 124     |
| Styrene                  | 25.0        | 27.0       |               | ug/L |   | 108  | 80 - 120     |
| Tetrachloroethene        | 25.0        | 27.7       |               | ug/L |   | 111  | 74 - 122     |
| Toluene                  | 25.0        | 26.6       |               | ug/L |   | 106  | 80 - 122     |
| trans-1,2-Dichloroethene | 25.0        | 25.8       |               | ug/L |   | 103  | 73 - 127     |
| Trichloroethene          | 25.0        | 25.7       |               | ug/L |   | 103  | 74 - 123     |
| Trichlorofluoromethane   | 25.0        | 28.0       |               | ug/L |   | 112  | 62 - 150     |
| Vinyl chloride           | 25.0        | 25.7       |               | ug/L |   | 103  | 65 - 133     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 106           |               | 77 - 120 |
| Toluene-d8 (Surr)            | 103           |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr)  | 103           |               | 73 - 120 |
| Dibromofluoromethane (Surr)  | 106           |               | 75 - 123 |

Lab Sample ID: MB 480-424745/8

Matrix: Water

Analysis Batch: 424745

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                               | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND        |              | 1.0 | 0.82 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,1,1,2,2-Tetrachloroethane           | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,1,2-Trichloroethane                 | ND        |              | 1.0 | 0.23 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND        |              | 1.0 | 0.31 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,1-Dichloroethane                    | ND        |              | 1.0 | 0.38 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,1-Dichloroethene                    | ND        |              | 1.0 | 0.29 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,2,4-Trichlorobenzene                | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,2-Dibromoethane                     | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,2-Dichlorobenzene                   | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/17/18 12:01 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-424745/8

Matrix: Water

Analysis Batch: 424745

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,2-Dichloroethane          | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,2-Dichloropropane         | ND        |              | 1.0 | 0.72 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,3-Dichlorobenzene         | ND        |              | 1.0 | 0.78 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 1,4-Dichlorobenzene         | ND        |              | 1.0 | 0.84 | ug/L |   |          | 07/17/18 12:01 | 1       |
| 2-Hexanone                  | ND        |              | 5.0 | 1.2  | ug/L |   |          | 07/17/18 12:01 | 1       |
| 2-Butanone (MEK)            | ND        |              | 10  | 1.3  | ug/L |   |          | 07/17/18 12:01 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND        |              | 5.0 | 2.1  | ug/L |   |          | 07/17/18 12:01 | 1       |
| Acetone                     | ND        |              | 10  | 3.0  | ug/L |   |          | 07/17/18 12:01 | 1       |
| Benzene                     | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Bromodichloromethane        | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Bromoform                   | ND        |              | 1.0 | 0.26 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Bromomethane                | ND        |              | 1.0 | 0.69 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Carbon disulfide            | 0.259     | J            | 1.0 | 0.19 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Carbon tetrachloride        | ND        |              | 1.0 | 0.27 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Chlorobenzene               | ND        |              | 1.0 | 0.75 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Dibromochloromethane        | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Chloroethane                | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Chloroform                  | ND        |              | 1.0 | 0.34 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Chloromethane               | ND        |              | 1.0 | 0.35 | ug/L |   |          | 07/17/18 12:01 | 1       |
| cis-1,2-Dichloroethene      | ND        |              | 1.0 | 0.81 | ug/L |   |          | 07/17/18 12:01 | 1       |
| cis-1,3-Dichloropropene     | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Cyclohexane                 | ND        |              | 1.0 | 0.18 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Dichlorodifluoromethane     | ND        |              | 1.0 | 0.68 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Ethylbenzene                | ND        |              | 1.0 | 0.74 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Isopropylbenzene            | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Methyl acetate              | ND        |              | 2.5 | 1.3  | ug/L |   |          | 07/17/18 12:01 | 1       |
| Methyl tert-butyl ether     | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Methylcyclohexane           | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Methylene Chloride          | ND        |              | 1.0 | 0.44 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Styrene                     | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Tetrachloroethene           | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Toluene                     | ND        |              | 1.0 | 0.51 | ug/L |   |          | 07/17/18 12:01 | 1       |
| trans-1,2-Dichloroethene    | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/17/18 12:01 | 1       |
| trans-1,3-Dichloropropene   | ND        |              | 1.0 | 0.37 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Trichloroethene             | ND        |              | 1.0 | 0.46 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Trichlorofluoromethane      | ND        |              | 1.0 | 0.88 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Vinyl chloride              | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/17/18 12:01 | 1       |
| Xylenes, Total              | ND        |              | 2.0 | 0.66 | ug/L |   |          | 07/17/18 12:01 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 95           |              | 77 - 120 |          | 07/17/18 12:01 | 1       |
| Toluene-d8 (Surr)            | 100          |              | 80 - 120 |          | 07/17/18 12:01 | 1       |
| 4-Bromofluorobenzene (Surr)  | 103          |              | 73 - 120 |          | 07/17/18 12:01 | 1       |
| Dibromofluoromethane (Surr)  | 94           |              | 75 - 123 |          | 07/17/18 12:01 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-424745/5

Matrix: Water

Analysis Batch: 424745

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

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1-Trichloroethane                 | 25.0        | 24.3       |               | ug/L |   | 97   | 73 - 126     |
| 1,1,1,2-Tetrachloroethane             | 25.0        | 26.3       |               | ug/L |   | 105  | 76 - 120     |
| 1,1,2-Trichloroethane                 | 25.0        | 24.7       |               | ug/L |   | 99   | 76 - 122     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0        | 25.4       |               | ug/L |   | 102  | 61 - 148     |
| 1,1-Dichloroethane                    | 25.0        | 23.9       |               | ug/L |   | 95   | 77 - 120     |
| 1,1-Dichloroethene                    | 25.0        | 22.9       |               | ug/L |   | 92   | 66 - 127     |
| 1,2,4-Trichlorobenzene                | 25.0        | 23.4       |               | ug/L |   | 93   | 79 - 122     |
| 1,2-Dibromo-3-Chloropropane           | 25.0        | 23.2       |               | ug/L |   | 93   | 56 - 134     |
| 1,2-Dibromoethane                     | 25.0        | 24.9       |               | ug/L |   | 99   | 77 - 120     |
| 1,2-Dichlorobenzene                   | 25.0        | 25.1       |               | ug/L |   | 100  | 80 - 124     |
| 1,2-Dichloroethane                    | 25.0        | 21.8       |               | ug/L |   | 87   | 75 - 120     |
| 1,2-Dichloropropane                   | 25.0        | 23.5       |               | ug/L |   | 94   | 76 - 120     |
| 1,3-Dichlorobenzene                   | 25.0        | 24.8       |               | ug/L |   | 99   | 77 - 120     |
| 1,4-Dichlorobenzene                   | 25.0        | 25.2       |               | ug/L |   | 101  | 80 - 120     |
| 2-Hexanone                            | 125         | 194 *      |               | ug/L |   | 156  | 65 - 127     |
| 2-Butanone (MEK)                      | 125         | 122        |               | ug/L |   | 98   | 57 - 140     |
| 4-Methyl-2-pentanone (MIBK)           | 125         | 131        |               | ug/L |   | 105  | 71 - 125     |
| Acetone                               | 125         | 111        |               | ug/L |   | 89   | 56 - 142     |
| Benzene                               | 25.0        | 22.7       |               | ug/L |   | 91   | 71 - 124     |
| Bromodichloromethane                  | 25.0        | 23.8       |               | ug/L |   | 95   | 80 - 122     |
| Bromoform                             | 25.0        | 25.0       |               | ug/L |   | 100  | 61 - 132     |
| Bromomethane                          | 25.0        | 24.0       |               | ug/L |   | 96   | 55 - 144     |
| Carbon disulfide                      | 25.0        | 23.4       |               | ug/L |   | 94   | 59 - 134     |
| Carbon tetrachloride                  | 25.0        | 24.2       |               | ug/L |   | 97   | 72 - 134     |
| Chlorobenzene                         | 25.0        | 24.9       |               | ug/L |   | 100  | 80 - 120     |
| Dibromochloromethane                  | 25.0        | 24.5       |               | ug/L |   | 98   | 75 - 125     |
| Chloroethane                          | 25.0        | 24.4       |               | ug/L |   | 97   | 69 - 136     |
| Chloroform                            | 25.0        | 23.1       |               | ug/L |   | 92   | 73 - 127     |
| Chloromethane                         | 25.0        | 25.3       |               | ug/L |   | 101  | 68 - 124     |
| cis-1,2-Dichloroethene                | 25.0        | 22.5       |               | ug/L |   | 90   | 74 - 124     |
| cis-1,3-Dichloropropene               | 25.0        | 23.4       |               | ug/L |   | 94   | 74 - 124     |
| Cyclohexane                           | 25.0        | 26.4       |               | ug/L |   | 106  | 59 - 135     |
| Dichlorodifluoromethane               | 25.0        | 29.2       |               | ug/L |   | 117  | 59 - 135     |
| Ethylbenzene                          | 25.0        | 25.9       |               | ug/L |   | 104  | 77 - 123     |
| Isopropylbenzene                      | 25.0        | 26.6       |               | ug/L |   | 106  | 77 - 122     |
| Methyl acetate                        | 50.0        | 46.2       |               | ug/L |   | 92   | 74 - 133     |
| Methyl tert-butyl ether               | 25.0        | 22.9       |               | ug/L |   | 92   | 77 - 120     |
| Methylcyclohexane                     | 25.0        | 26.4       |               | ug/L |   | 106  | 68 - 134     |
| Methylene Chloride                    | 25.0        | 23.1       |               | ug/L |   | 92   | 75 - 124     |
| Styrene                               | 25.0        | 26.4       |               | ug/L |   | 106  | 80 - 120     |
| Tetrachloroethene                     | 25.0        | 29.2       |               | ug/L |   | 117  | 74 - 122     |
| Toluene                               | 25.0        | 25.2       |               | ug/L |   | 101  | 80 - 122     |
| trans-1,2-Dichloroethene              | 25.0        | 23.7       |               | ug/L |   | 95   | 73 - 127     |
| Trichloroethene                       | 25.0        | 24.1       |               | ug/L |   | 96   | 74 - 123     |
| Trichlorofluoromethane                | 25.0        | 25.5       |               | ug/L |   | 102  | 62 - 150     |
| Vinyl chloride                        | 25.0        | 25.3       |               | ug/L |   | 101  | 65 - 133     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-424745/5

Matrix: Water

Analysis Batch: 424745

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Surrogate                    | LCS<br>%Recovery | LCS<br>Qualifier | Limits   |
|------------------------------|------------------|------------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 94               |                  | 77 - 120 |
| Toluene-d8 (Surr)            | 96               |                  | 80 - 120 |
| 4-Bromofluorobenzene (Surr)  | 101              |                  | 73 - 120 |
| Dibromofluoromethane (Surr)  | 92               |                  | 75 - 123 |

## Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-424560/4

Matrix: Water

Analysis Batch: 424560

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB<br>Result | MB<br>Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------------|-----------------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND           |                 | 7.5 | 1.5 | ug/L |   |          | 07/16/18 10:04 | 1       |
| Ethene  | ND           |                 | 7.0 | 1.5 | ug/L |   |          | 07/16/18 10:04 | 1       |
| Methane | ND           |                 | 4.0 | 1.0 | ug/L |   |          | 07/16/18 10:04 | 1       |

Lab Sample ID: LCS 480-424560/5

Matrix: Water

Analysis Batch: 424560

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Ethane  | 14.6           | 15.2          |                  | ug/L |   | 104  | 79 - 120        |
| Ethene  | 13.6           | 14.6          |                  | ug/L |   | 108  | 85 - 120        |
| Methane | 7.77           | 8.06          |                  | ug/L |   | 104  | 85 - 120        |

Lab Sample ID: LCSD 480-424560/6

Matrix: Water

Analysis Batch: 424560

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits | RPD | RPD<br>Limit |
|---------|----------------|----------------|-------------------|------|---|------|-----------------|-----|--------------|
| Ethane  | 14.6           | 15.8           |                   | ug/L |   | 108  | 79 - 120        | 4   | 50           |
| Ethene  | 13.6           | 15.0           |                   | ug/L |   | 110  | 85 - 120        | 2   | 50           |
| Methane | 7.77           | 8.22           |                   | ug/L |   | 106  | 85 - 120        | 2   | 50           |

## Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-424487/1-A

Matrix: Water

Analysis Batch: 425215

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424487

| Analyte   | MB<br>Result | MB<br>Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | ND           |                 | 0.20   | 0.060   | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Antimony  | ND           |                 | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Arsenic   | ND           |                 | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Barium    | ND           |                 | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Beryllium | ND           |                 | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Cadmium   | ND           |                 | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Calcium   | ND           |                 | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-424487/1-A

Matrix: Water

Analysis Batch: 425215

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424487

| Analyte   | MB Result | MB Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| Chromium  | ND        |              | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Cobalt    | ND        |              | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Copper    | ND        |              | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Iron      | ND        |              | 0.050  | 0.019   | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Lead      | ND        |              | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Magnesium | ND        |              | 0.20   | 0.043   | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Manganese | ND        |              | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Nickel    | ND        |              | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Potassium | ND        |              | 0.50   | 0.10    | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Selenium  | ND        |              | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Silver    | ND        |              | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Sodium    | ND        |              | 1.0    | 0.32    | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Thallium  | ND        |              | 0.020  | 0.010   | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Vanadium  | ND        |              | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |
| Zinc      | ND        |              | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:08 | 07/18/18 09:50 | 1       |

Lab Sample ID: LCS 480-424487/2-A

Matrix: Water

Analysis Batch: 425215

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424487

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| Aluminum  | 10.0        | 9.85       |               | mg/L |   | 99   | 80 - 120     |
| Antimony  | 0.200       | 0.199      |               | mg/L |   | 100  | 80 - 120     |
| Arsenic   | 0.200       | 0.204      |               | mg/L |   | 102  | 80 - 120     |
| Barium    | 0.200       | 0.203      |               | mg/L |   | 102  | 80 - 120     |
| Beryllium | 0.200       | 0.209      |               | mg/L |   | 105  | 80 - 120     |
| Cadmium   | 0.200       | 0.204      |               | mg/L |   | 102  | 80 - 120     |
| Calcium   | 10.0        | 10.05      |               | mg/L |   | 100  | 80 - 120     |
| Chromium  | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Cobalt    | 0.200       | 0.192      |               | mg/L |   | 96   | 80 - 120     |
| Copper    | 0.200       | 0.203      |               | mg/L |   | 102  | 80 - 120     |
| Iron      | 10.0        | 10.09      |               | mg/L |   | 101  | 80 - 120     |
| Lead      | 0.200       | 0.206      |               | mg/L |   | 103  | 80 - 120     |
| Magnesium | 10.0        | 10.06      |               | mg/L |   | 101  | 80 - 120     |
| Manganese | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Nickel    | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Potassium | 10.0        | 9.71       |               | mg/L |   | 97   | 80 - 120     |
| Selenium  | 0.200       | 0.199      |               | mg/L |   | 99   | 80 - 120     |
| Silver    | 0.0500      | 0.0557     |               | mg/L |   | 111  | 80 - 120     |
| Sodium    | 10.0        | 9.79       |               | mg/L |   | 98   | 80 - 120     |
| Thallium  | 0.200       | 0.213      |               | mg/L |   | 106  | 80 - 120     |
| Vanadium  | 0.200       | 0.207      |               | mg/L |   | 103  | 80 - 120     |
| Zinc      | 0.200       | 0.210      |               | mg/L |   | 105  | 80 - 120     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-424475/1-B

Matrix: Water

Analysis Batch: 425224

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 424817

| Analyte   | MB Result | MB Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | ND        |              | 0.20   | 0.060   | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Antimony  | ND        |              | 0.020  | 0.0068  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Arsenic   | ND        |              | 0.015  | 0.0056  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Barium    | ND        |              | 0.0020 | 0.00070 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Beryllium | ND        |              | 0.0020 | 0.00030 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Cadmium   | ND        |              | 0.0020 | 0.00050 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Calcium   | 0.110     | J            | 0.50   | 0.10    | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Chromium  | ND        |              | 0.0040 | 0.0010  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Cobalt    | ND        |              | 0.0040 | 0.00063 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Copper    | ND        |              | 0.010  | 0.0016  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Iron      | ND        |              | 0.050  | 0.019   | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Lead      | ND        |              | 0.010  | 0.0030  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Magnesium | ND        |              | 0.20   | 0.043   | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Manganese | ND        |              | 0.0030 | 0.00040 | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Nickel    | ND        |              | 0.010  | 0.0013  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Potassium | ND        |              | 0.50   | 0.10    | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Selenium  | ND        |              | 0.025  | 0.0087  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Silver    | ND        |              | 0.0060 | 0.0017  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Sodium    | ND        |              | 1.0    | 0.32    | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Thallium  | ND        |              | 0.020  | 0.010   | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Vanadium  | ND        |              | 0.0050 | 0.0015  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |
| Zinc      | 0.00672   | J            | 0.010  | 0.0015  | mg/L |   | 07/18/18 08:47 | 07/18/18 16:12 | 1       |

Lab Sample ID: LCS 480-424475/2-B

Matrix: Water

Analysis Batch: 425224

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 424817

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| Aluminum  | 10.0        | 9.54       |               | mg/L |   | 95   | 80 - 120     |
| Antimony  | 0.200       | 0.193      |               | mg/L |   | 96   | 80 - 120     |
| Arsenic   | 0.200       | 0.198      |               | mg/L |   | 99   | 80 - 120     |
| Barium    | 0.200       | 0.199      |               | mg/L |   | 100  | 80 - 120     |
| Beryllium | 0.200       | 0.202      |               | mg/L |   | 101  | 80 - 120     |
| Cadmium   | 0.200       | 0.199      |               | mg/L |   | 100  | 80 - 120     |
| Calcium   | 10.0        | 9.71       |               | mg/L |   | 97   | 80 - 120     |
| Chromium  | 0.200       | 0.194      |               | mg/L |   | 97   | 80 - 120     |
| Cobalt    | 0.200       | 0.188      |               | mg/L |   | 94   | 80 - 120     |
| Copper    | 0.200       | 0.194      |               | mg/L |   | 97   | 80 - 120     |
| Iron      | 10.0        | 9.70       |               | mg/L |   | 97   | 80 - 120     |
| Lead      | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Magnesium | 10.0        | 9.76       |               | mg/L |   | 98   | 80 - 120     |
| Manganese | 0.200       | 0.196      |               | mg/L |   | 98   | 80 - 120     |
| Nickel    | 0.200       | 0.195      |               | mg/L |   | 98   | 80 - 120     |
| Potassium | 10.0        | 9.15       |               | mg/L |   | 91   | 80 - 120     |
| Selenium  | 0.200       | 0.191      |               | mg/L |   | 95   | 80 - 120     |
| Silver    | 0.0500      | 0.0524     |               | mg/L |   | 105  | 80 - 120     |
| Sodium    | 10.0        | 9.28       |               | mg/L |   | 93   | 80 - 120     |
| Thallium  | 0.200       | 0.201      |               | mg/L |   | 100  | 80 - 120     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-424475/2-B

Matrix: Water

Analysis Batch: 425224

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 424817

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Vanadium | 0.200       | 0.201      |               | mg/L |   | 100  | 80 - 120     |
| Zinc     | 0.200       | 0.212      |               | mg/L |   | 106  | 80 - 120     |

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-425846/1-A

Matrix: Water

Analysis Batch: 426099

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425846

| Analyte | MB Result | MB Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND        |              | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 15:50 | 1       |

Lab Sample ID: LCS 480-425846/2-A

Matrix: Water

Analysis Batch: 426099

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425846

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Mercury | 0.00667     | 0.00620    |               | mg/L |   | 93   | 80 - 120     |

Lab Sample ID: MB 480-424475/1-E

Matrix: Water

Analysis Batch: 425137

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 424914

| Analyte | MB Result | MB Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND        |              | 0.00020 | 0.00012 | mg/L |   | 07/18/18 11:20 | 07/18/18 14:00 | 1       |

Lab Sample ID: LCS 480-424475/2-E

Matrix: Water

Analysis Batch: 425137

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 424914

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Mercury | 0.00667     | 0.00612    |               | mg/L |   | 92   | 80 - 120     |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-424336/4

Matrix: Water

Analysis Batch: 424336

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte  | MB Result | MB Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|------|------|---|----------|----------------|---------|
| Chloride | ND        |              | 0.50 | 0.28 | mg/L |   |          | 07/13/18 11:14 | 1       |
| Sulfate  | ND        |              | 2.0  | 0.35 | mg/L |   |          | 07/13/18 11:14 | 1       |

Lab Sample ID: LCS 480-424336/3

Matrix: Water

Analysis Batch: 424336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Chloride | 50.0        | 49.63      |               | mg/L |   | 99   | 90 - 110     |

TestAmerica Buffalo



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-424336/3

Matrix: Water

Analysis Batch: 424336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Sulfate | 50.0        | 47.53      |               | mg/L |   | 95   | 90 - 110     |

Lab Sample ID: 480-138821-2 MS

Matrix: Water

Analysis Batch: 424336

Client Sample ID: MW-1 (07122018)

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Chloride | 360           |                  | 250         | 584.0     | E            | mg/L |   | 89   | 81 - 120     |
| Sulfate  | 51.7          |                  | 250         | 289.1     |              | mg/L |   | 95   | 80 - 120     |

Lab Sample ID: 480-138821-2 MSD

Matrix: Water

Analysis Batch: 424336

Client Sample ID: MW-1 (07122018)

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chloride | 360           |                  | 250         | 583.3      | E             | mg/L |   | 89   | 81 - 120     | 0   | 20        |
| Sulfate  | 51.7          |                  | 250         | 288.8      |               | mg/L |   | 95   | 80 - 120     | 0   | 20        |

Lab Sample ID: 480-138821-6 MS

Matrix: Water

Analysis Batch: 424336

Client Sample ID: MW-5 (07122018)

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Chloride | 641           |                  | 500         | 1101      | E            | mg/L |   | 92   | 81 - 120     |
| Sulfate  | 35.4          |                  | 500         | 522.6     |              | mg/L |   | 97   | 80 - 120     |

Lab Sample ID: MB 480-424339/4

Matrix: Water

Analysis Batch: 424339

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| Nitrate | ND        |              | 0.050 | 0.025 | mg/L |   |          | 07/13/18 11:14 | 1       |

Lab Sample ID: LCS 480-424339/3

Matrix: Water

Analysis Batch: 424339

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Nitrate | 5.00        | 4.93       |               | mg/L |   | 99   | 90 - 110     |

Lab Sample ID: 480-138821-2 MS

Matrix: Water

Analysis Batch: 424339

Client Sample ID: MW-1 (07122018)

Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Nitrate | ND            |                  | 25.0        | 23.81     |              | mg/L |   | 95   | 80 - 120     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-138821-2 MSD

Matrix: Water

Analysis Batch: 424339

Client Sample ID: MW-1 (07122018)

Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Nitrate | ND            |                  | 25.0        | 23.79      |               | mg/L |   | 95   | 80 - 120     | 0   | 20        |

Lab Sample ID: 480-138821-6 MS

Matrix: Water

Analysis Batch: 424339

Client Sample ID: MW-5 (07122018)

Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |  |  |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|--|--|
| Nitrate | ND            |                  | 50.0        | 48.41     |              | mg/L |   | 97   | 80 - 120     |  |  |

Lab Sample ID: MB 480-424684/4

Matrix: Water

Analysis Batch: 424684

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte  | MB Result | MB Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|------|------|---|----------|----------------|---------|
| Chloride | ND        |              | 0.50 | 0.28 | mg/L |   |          | 07/16/18 21:36 | 1       |
| Sulfate  | ND        |              | 2.0  | 0.35 | mg/L |   |          | 07/16/18 21:36 | 1       |

Lab Sample ID: LCS 480-424684/3

Matrix: Water

Analysis Batch: 424684

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |  |  |
|----------|-------------|------------|---------------|------|---|------|--------------|--|--|
| Chloride | 50.0        | 50.03      |               | mg/L |   | 100  | 90 - 110     |  |  |
| Sulfate  | 50.0        | 48.62      |               | mg/L |   | 97   | 90 - 110     |  |  |

## Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-425698/52

Matrix: Water

Analysis Batch: 425698

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte              | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Total Organic Carbon | 0.785     | J            | 1.0 | 0.43 | mg/L |   |          | 07/20/18 18:18 | 1       |

Lab Sample ID: MB 480-425698/76

Matrix: Water

Analysis Batch: 425698

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte              | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Total Organic Carbon | 0.724     | J            | 1.0 | 0.43 | mg/L |   |          | 07/21/18 05:26 | 1       |

Lab Sample ID: LCS 480-425698/53

Matrix: Water

Analysis Batch: 425698

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte              | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |  |  |
|----------------------|-------------|------------|---------------|------|---|------|--------------|--|--|
| Total Organic Carbon | 60.0        | 57.38      |               | mg/L |   | 96   | 90 - 110     |  |  |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 480-425698/77

Matrix: Water

Analysis Batch: 425698

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte              | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|-------------|------------|---------------|------|---|------|--------------|
| Total Organic Carbon | 60.0        | 56.83      |               | mg/L |   | 95   | 90 - 110     |

Lab Sample ID: MB 480-426555/28

Matrix: Water

Analysis Batch: 426555

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte              | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Total Organic Carbon | 0.755     | J            | 1.0 | 0.43 | mg/L |   |          | 07/25/18 06:45 | 1       |

Lab Sample ID: LCS 480-426555/29

Matrix: Water

Analysis Batch: 426555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte              | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|-------------|------------|---------------|------|---|------|--------------|
| Total Organic Carbon | 60.0        | 57.49      |               | mg/L |   | 96   | 90 - 110     |

## Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-425244/30

Matrix: Water

Analysis Batch: 425244

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte           | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Alkalinity, Total | ND        |              | 5.0 | 0.79 | mg/L |   |          | 07/18/18 20:46 | 1       |

Lab Sample ID: MB 480-425244/7

Matrix: Water

Analysis Batch: 425244

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte           | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Alkalinity, Total | ND        |              | 5.0 | 0.79 | mg/L |   |          | 07/18/18 18:44 | 1       |

Lab Sample ID: LCS 480-425244/31

Matrix: Water

Analysis Batch: 425244

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte           | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-------------------|-------------|------------|---------------|------|---|------|--------------|
| Alkalinity, Total | 100         | 94.68      |               | mg/L |   | 95   | 90 - 110     |

Lab Sample ID: LCS 480-425244/8

Matrix: Water

Analysis Batch: 425244

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte           | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-------------------|-------------|------------|---------------|------|---|------|--------------|
| Alkalinity, Total | 100         | 93.44      |               | mg/L |   | 93   | 90 - 110     |

TestAmerica Buffalo

## QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

### GC/MS VOA

#### Analysis Batch: 424431

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-2     | MW-1 (07122018)    | Total/NA  | Water  | 8260C  |            |
| 480-138821-3     | MW-8 (07122018)    | Total/NA  | Water  | 8260C  |            |
| 480-138821-6     | MW-5 (07122018)    | Total/NA  | Water  | 8260C  |            |
| 480-138821-7     | TRIP BLANK         | Total/NA  | Water  | 8260C  |            |
| MB 480-424431/6  | Method Blank       | Total/NA  | Water  | 8260C  |            |
| LCS 480-424431/4 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |

#### Analysis Batch: 424506

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-4     | IW-1 (07122018)    | Total/NA  | Water  | 8260C  |            |
| 480-138821-5     | DUP-1 (07122018)   | Total/NA  | Water  | 8260C  |            |
| MB 480-424506/9  | Method Blank       | Total/NA  | Water  | 8260C  |            |
| LCS 480-424506/5 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |

#### Analysis Batch: 424745

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1     | OS-10 (07122018)   | Total/NA  | Water  | 8260C  |            |
| MB 480-424745/8  | Method Blank       | Total/NA  | Water  | 8260C  |            |
| LCS 480-424745/5 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |

### GC VOA

#### Analysis Batch: 424560

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method  | Prep Batch |
|-------------------|------------------------|-----------|--------|---------|------------|
| 480-138821-1      | OS-10 (07122018)       | Total/NA  | Water  | RSK-175 |            |
| 480-138821-2      | MW-1 (07122018)        | Total/NA  | Water  | RSK-175 |            |
| 480-138821-3      | MW-8 (07122018)        | Total/NA  | Water  | RSK-175 |            |
| 480-138821-4      | IW-1 (07122018)        | Total/NA  | Water  | RSK-175 |            |
| 480-138821-5      | DUP-1 (07122018)       | Total/NA  | Water  | RSK-175 |            |
| 480-138821-6      | MW-5 (07122018)        | Total/NA  | Water  | RSK-175 |            |
| MB 480-424560/4   | Method Blank           | Total/NA  | Water  | RSK-175 |            |
| LCS 480-424560/5  | Lab Control Sample     | Total/NA  | Water  | RSK-175 |            |
| LCSD 480-424560/6 | Lab Control Sample Dup | Total/NA  | Water  | RSK-175 |            |

### Metals

#### Filtration Batch: 424475

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method     | Prep Batch |
|--------------------|--------------------|-----------|--------|------------|------------|
| 480-138821-1       | OS-10 (07122018)   | Dissolved | Water  | FILTRATION |            |
| MB 480-424475/1-B  | Method Blank       | Dissolved | Water  | FILTRATION |            |
| MB 480-424475/1-E  | Method Blank       | Dissolved | Water  | FILTRATION |            |
| LCS 480-424475/2-B | Lab Control Sample | Dissolved | Water  | FILTRATION |            |
| LCS 480-424475/2-E | Lab Control Sample | Dissolved | Water  | FILTRATION |            |

#### Prep Batch: 424487

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 480-138821-1  | OS-10 (07122018) | Total/NA  | Water  | 3005A  |            |
| 480-138821-2  | MW-1 (07122018)  | Total/NA  | Water  | 3005A  |            |
| 480-138821-3  | MW-8 (07122018)  | Total/NA  | Water  | 3005A  |            |
| 480-138821-4  | IW-1 (07122018)  | Total/NA  | Water  | 3005A  |            |

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Metals (Continued)

### Prep Batch: 424487 (Continued)

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-5       | DUP-1 (07122018)   | Total/NA  | Water  | 3005A  |            |
| 480-138821-6       | MW-5 (07122018)    | Total/NA  | Water  | 3005A  |            |
| MB 480-424487/1-A  | Method Blank       | Total/NA  | Water  | 3005A  |            |
| LCS 480-424487/2-A | Lab Control Sample | Total/NA  | Water  | 3005A  |            |

### Prep Batch: 424817

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1       | OS-10 (07122018)   | Dissolved | Water  | 3005A  | 424475     |
| MB 480-424475/1-B  | Method Blank       | Dissolved | Water  | 3005A  | 424475     |
| LCS 480-424475/2-B | Lab Control Sample | Dissolved | Water  | 3005A  | 424475     |

### Prep Batch: 424914

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1       | OS-10 (07122018)   | Dissolved | Water  | 7470A  | 424475     |
| MB 480-424475/1-E  | Method Blank       | Dissolved | Water  | 7470A  | 424475     |
| LCS 480-424475/2-E | Lab Control Sample | Dissolved | Water  | 7470A  | 424475     |

### Analysis Batch: 425137

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1       | OS-10 (07122018)   | Dissolved | Water  | 7470A  | 424914     |
| MB 480-424475/1-E  | Method Blank       | Dissolved | Water  | 7470A  | 424914     |
| LCS 480-424475/2-E | Lab Control Sample | Dissolved | Water  | 7470A  | 424914     |

### Analysis Batch: 425215

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1       | OS-10 (07122018)   | Total/NA  | Water  | 6010C  | 424487     |
| 480-138821-2       | MW-1 (07122018)    | Total/NA  | Water  | 6010C  | 424487     |
| 480-138821-3       | MW-8 (07122018)    | Total/NA  | Water  | 6010C  | 424487     |
| 480-138821-4       | IW-1 (07122018)    | Total/NA  | Water  | 6010C  | 424487     |
| 480-138821-5       | DUP-1 (07122018)   | Total/NA  | Water  | 6010C  | 424487     |
| 480-138821-6       | MW-5 (07122018)    | Total/NA  | Water  | 6010C  | 424487     |
| MB 480-424487/1-A  | Method Blank       | Total/NA  | Water  | 6010C  | 424487     |
| LCS 480-424487/2-A | Lab Control Sample | Total/NA  | Water  | 6010C  | 424487     |

### Analysis Batch: 425224

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1       | OS-10 (07122018)   | Dissolved | Water  | 6010C  | 424817     |
| MB 480-424475/1-B  | Method Blank       | Dissolved | Water  | 6010C  | 424817     |
| LCS 480-424475/2-B | Lab Control Sample | Dissolved | Water  | 6010C  | 424817     |

### Prep Batch: 425846

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1       | OS-10 (07122018)   | Total/NA  | Water  | 7470A  |            |
| 480-138821-2       | MW-1 (07122018)    | Total/NA  | Water  | 7470A  |            |
| 480-138821-3       | MW-8 (07122018)    | Total/NA  | Water  | 7470A  |            |
| 480-138821-4       | IW-1 (07122018)    | Total/NA  | Water  | 7470A  |            |
| 480-138821-5       | DUP-1 (07122018)   | Total/NA  | Water  | 7470A  |            |
| 480-138821-6       | MW-5 (07122018)    | Total/NA  | Water  | 7470A  |            |
| MB 480-425846/1-A  | Method Blank       | Total/NA  | Water  | 7470A  |            |
| LCS 480-425846/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  |            |

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## Metals (Continued)

### Analysis Batch: 426099

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1       | OS-10 (07122018)   | Total/NA  | Water  | 7470A  | 425846     |
| 480-138821-2       | MW-1 (07122018)    | Total/NA  | Water  | 7470A  | 425846     |
| 480-138821-3       | MW-8 (07122018)    | Total/NA  | Water  | 7470A  | 425846     |
| 480-138821-4       | IW-1 (07122018)    | Total/NA  | Water  | 7470A  | 425846     |
| 480-138821-5       | DUP-1 (07122018)   | Total/NA  | Water  | 7470A  | 425846     |
| 480-138821-6       | MW-5 (07122018)    | Total/NA  | Water  | 7470A  | 425846     |
| MB 480-425846/1-A  | Method Blank       | Total/NA  | Water  | 7470A  | 425846     |
| LCS 480-425846/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  | 425846     |

## General Chemistry

### Analysis Batch: 424336

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1     | OS-10 (07122018)   | Total/NA  | Water  | 300.0  |            |
| 480-138821-2     | MW-1 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-3     | MW-8 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-4     | IW-1 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-5     | DUP-1 (07122018)   | Total/NA  | Water  | 300.0  |            |
| 480-138821-6     | MW-5 (07122018)    | Total/NA  | Water  | 300.0  |            |
| MB 480-424336/4  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-424336/3 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |
| 480-138821-2 MS  | MW-1 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-2 MSD | MW-1 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-6 MS  | MW-5 (07122018)    | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 424339

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1     | OS-10 (07122018)   | Total/NA  | Water  | 300.0  |            |
| 480-138821-2     | MW-1 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-3     | MW-8 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-4     | IW-1 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-5     | DUP-1 (07122018)   | Total/NA  | Water  | 300.0  |            |
| 480-138821-6     | MW-5 (07122018)    | Total/NA  | Water  | 300.0  |            |
| MB 480-424339/4  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-424339/3 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |
| 480-138821-2 MS  | MW-1 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-2 MSD | MW-1 (07122018)    | Total/NA  | Water  | 300.0  |            |
| 480-138821-6 MS  | MW-5 (07122018)    | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 424684

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-4     | IW-1 (07122018)    | Total/NA  | Water  | 300.0  |            |
| MB 480-424684/4  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-424684/3 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 425244

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method   | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 480-138821-1  | OS-10 (07122018) | Total/NA  | Water  | SM 2320B |            |
| 480-138821-2  | MW-1 (07122018)  | Total/NA  | Water  | SM 2320B |            |
| 480-138821-3  | MW-8 (07122018)  | Total/NA  | Water  | SM 2320B |            |

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

## General Chemistry (Continued)

### Analysis Batch: 425244 (Continued)

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method   | Prep Batch |
|-------------------|--------------------|-----------|--------|----------|------------|
| 480-138821-4      | IW-1 (07122018)    | Total/NA  | Water  | SM 2320B |            |
| 480-138821-5      | DUP-1 (07122018)   | Total/NA  | Water  | SM 2320B |            |
| 480-138821-6      | MW-5 (07122018)    | Total/NA  | Water  | SM 2320B |            |
| MB 480-425244/30  | Method Blank       | Total/NA  | Water  | SM 2320B |            |
| MB 480-425244/7   | Method Blank       | Total/NA  | Water  | SM 2320B |            |
| LCS 480-425244/31 | Lab Control Sample | Total/NA  | Water  | SM 2320B |            |
| LCS 480-425244/8  | Lab Control Sample | Total/NA  | Water  | SM 2320B |            |

### Analysis Batch: 425698

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-1      | OS-10 (07122018)   | Total/NA  | Water  | 9060A  |            |
| 480-138821-2      | MW-1 (07122018)    | Total/NA  | Water  | 9060A  |            |
| 480-138821-3      | MW-8 (07122018)    | Total/NA  | Water  | 9060A  |            |
| 480-138821-4      | IW-1 (07122018)    | Total/NA  | Water  | 9060A  |            |
| 480-138821-5      | DUP-1 (07122018)   | Total/NA  | Water  | 9060A  |            |
| MB 480-425698/52  | Method Blank       | Total/NA  | Water  | 9060A  |            |
| MB 480-425698/76  | Method Blank       | Total/NA  | Water  | 9060A  |            |
| LCS 480-425698/53 | Lab Control Sample | Total/NA  | Water  | 9060A  |            |
| LCS 480-425698/77 | Lab Control Sample | Total/NA  | Water  | 9060A  |            |

### Analysis Batch: 426555

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 480-138821-6      | MW-5 (07122018)    | Total/NA  | Water  | 9060A  |            |
| MB 480-426555/28  | Method Blank       | Total/NA  | Water  | 9060A  |            |
| LCS 480-426555/29 | Lab Control Sample | Total/NA  | Water  | 9060A  |            |



# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: OS-10 (07122018)**

**Date Collected: 07/12/18 15:15**

**Date Received: 07/13/18 00:30**

**Lab Sample ID: 480-138821-1**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 2               | 424745       | 07/17/18 19:22       | NMC     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 1               | 424560       | 07/16/18 13:31       | DSC     | TAL BUF |
| Dissolved | Filtration | FILTRATION   |     |                 | 424475       | 07/14/18 08:32       | KMP     | TAL BUF |
| Dissolved | Prep       | 3005A        |     |                 | 424817       | 07/18/18 08:47       | KMP     | TAL BUF |
| Dissolved | Analysis   | 6010C        |     | 1               | 425224       | 07/18/18 16:23       | EMB     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424487       | 07/16/18 10:08       | VEG     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 425215       | 07/18/18 10:19       | S1P     | TAL BUF |
| Dissolved | Filtration | FILTRATION   |     |                 | 424475       | 07/14/18 08:32       | KMP     | TAL BUF |
| Dissolved | Prep       | 7470A        |     |                 | 424914       | 07/18/18 11:20       | BMB     | TAL BUF |
| Dissolved | Analysis   | 7470A        |     | 1               | 425137       | 07/18/18 14:10       | BMB     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425846       | 07/23/18 12:10       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426099       | 07/23/18 16:19       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 1               | 424336       | 07/13/18 11:55       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 1               | 424339       | 07/13/18 11:55       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425698       | 07/21/18 04:02       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425244       | 07/18/18 22:50       | JAH     | TAL BUF |

**Client Sample ID: MW-1 (07122018)**

**Date Collected: 07/12/18 14:30**

**Date Received: 07/13/18 00:30**

**Lab Sample ID: 480-138821-2**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 4               | 424431       | 07/14/18 00:05       | AMM     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 1               | 424560       | 07/16/18 11:56       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424487       | 07/16/18 10:08       | VEG     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 425215       | 07/18/18 10:33       | S1P     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425846       | 07/23/18 12:10       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426099       | 07/23/18 16:26       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 424336       | 07/13/18 12:03       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 5               | 424339       | 07/13/18 12:03       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425698       | 07/21/18 08:13       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425244       | 07/18/18 22:56       | JAH     | TAL BUF |

**Client Sample ID: MW-8 (07122018)**

**Date Collected: 07/12/18 13:40**

**Date Received: 07/13/18 00:30**

**Lab Sample ID: 480-138821-3**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 4               | 424431       | 07/14/18 00:33       | AMM     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 44              | 424560       | 07/16/18 13:49       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424487       | 07/16/18 10:08       | VEG     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 425215       | 07/18/18 10:37       | S1P     | TAL BUF |

TestAmerica Buffalo

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: MW-8 (07122018)**

**Lab Sample ID: 480-138821-3**

**Date Collected: 07/12/18 13:40**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 7470A        |     |                 | 425846       | 07/23/18 12:10       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426099       | 07/23/18 16:28       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424336       | 07/13/18 12:44       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424339       | 07/13/18 12:44       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425698       | 07/21/18 08:42       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425244       | 07/18/18 23:01       | JAH     | TAL BUF |

**Client Sample ID: IW-1 (07122018)**

**Lab Sample ID: 480-138821-4**

**Date Collected: 07/12/18 11:10**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 2               | 424506       | 07/15/18 12:41       | AMM     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 44              | 424560       | 07/16/18 14:08       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424487       | 07/16/18 10:08       | VEG     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 425215       | 07/18/18 10:41       | S1P     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425846       | 07/23/18 12:10       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426099       | 07/23/18 16:29       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 20              | 424684       | 07/16/18 22:01       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424336       | 07/13/18 12:52       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424339       | 07/13/18 12:52       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425698       | 07/21/18 09:09       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425244       | 07/18/18 23:07       | JAH     | TAL BUF |

**Client Sample ID: DUP-1 (07122018)**

**Lab Sample ID: 480-138821-5**

**Date Collected: 07/12/18 00:00**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 2               | 424506       | 07/15/18 13:04       | AMM     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 44              | 424560       | 07/16/18 14:27       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424487       | 07/16/18 10:08       | VEG     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 425215       | 07/18/18 10:45       | S1P     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425846       | 07/23/18 12:10       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426099       | 07/23/18 16:31       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424336       | 07/13/18 13:00       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424339       | 07/13/18 13:00       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425698       | 07/21/18 09:37       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425244       | 07/18/18 23:13       | JAH     | TAL BUF |

TestAmerica Buffalo

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

**Client Sample ID: MW-5 (07122018)**

**Lab Sample ID: 480-138821-6**

**Date Collected: 07/12/18 09:45**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 424431       | 07/14/18 01:54       | AMM     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 1               | 424560       | 07/16/18 13:12       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424487       | 07/16/18 10:08       | VEG     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 425215       | 07/18/18 10:48       | S1P     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425846       | 07/23/18 12:10       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426099       | 07/23/18 16:34       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424336       | 07/13/18 13:08       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424339       | 07/13/18 13:08       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 426555       | 07/25/18 09:59       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425244       | 07/18/18 23:19       | JAH     | TAL BUF |

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138821-7**

**Date Collected: 07/12/18 00:00**

**Matrix: Water**

**Date Received: 07/13/18 00:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 424431       | 07/14/18 02:22       | AMM     | TAL BUF |

## Laboratory References:

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

## Accreditation/Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138821-1

### Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| New York  | NELAP   | 2          | 10026                 | 03-31-19        |

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|---------|
| 300.0           |             | Water  | Nitrate |

## Method Summary

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-138821-1

Project/Site: NYSDEC - Former Cleanerama, Site# 401056

| Method     | Method Description                                 | Protocol | Laboratory |
|------------|----------------------------------------------------|----------|------------|
| 8260C      | Volatile Organic Compounds by GC/MS                | SW846    | TAL BUF    |
| RSK-175    | Dissolved Gases (GC)                               | RSK      | TAL BUF    |
| 6010C      | Metals (ICP)                                       | SW846    | TAL BUF    |
| 7470A      | Mercury (CVAA)                                     | SW846    | TAL BUF    |
| 300.0      | Anions, Ion Chromatography                         | MCAWW    | TAL BUF    |
| 9060A      | Organic Carbon, Total (TOC)                        | SW846    | TAL BUF    |
| SM 2320B   | Alkalinity                                         | SM       | TAL BUF    |
| 3005A      | Preparation, Total Metals                          | SW846    | TAL BUF    |
| 3005A      | Preparation, Total Recoverable or Dissolved Metals | SW846    | TAL BUF    |
| 5030C      | Purge and Trap                                     | SW846    | TAL BUF    |
| 7470A      | Preparation, Mercury                               | SW846    | TAL BUF    |
| FILTRATION | Sample Filtration                                  | None     | TAL BUF    |

### Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

### Laboratory References:

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

## Sample Summary

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-138821-1

Project/Site: NYSDEC - Former Cleanerama, Site# 401056

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 480-138821-1  | OS-10 (07122018) | Water  | 07/12/18 15:15 | 07/13/18 00:30 |
| 480-138821-2  | MW-1 (07122018)  | Water  | 07/12/18 14:30 | 07/13/18 00:30 |
| 480-138821-3  | MW-8 (07122018)  | Water  | 07/12/18 13:40 | 07/13/18 00:30 |
| 480-138821-4  | IW-1 (07122018)  | Water  | 07/12/18 11:10 | 07/13/18 00:30 |
| 480-138821-5  | DUP-1 (07122018) | Water  | 07/12/18 00:00 | 07/13/18 00:30 |
| 480-138821-6  | MW-5 (07122018)  | Water  | 07/12/18 09:45 | 07/13/18 00:30 |
| 480-138821-7  | TRIP BLANK       | Water  | 07/12/18 00:00 | 07/13/18 00:30 |



# Chain of Custody Record

|                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                          |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Client Information</b><br>Client Contact: Josh Duquette<br>Company: ARCADIS U.S. Inc.<br>Address: 855 Route 146 Suite 210<br>City: Clifton Park<br>State, Zip: NY, 12065<br>Phone: PO # 00256438.0000<br>Email: Josh.Duquette@arcadis.com<br>Project Name: NYSEDEC - Former Cleanerama, Site# 401056<br>Site: |  | Lab PM: Deyo, Melissa L<br>E-Mail: melissa.deyo@testamericainc.com<br>480-138821 COC                                                                                                                                                                                                                                                                                                     |  |
| COC No: 480-115507-26700.2<br>Page: 2 of 2<br>Job #: 101                                                                                                                                                                                                                                                         |  | Analysis Requested                                                                                                                                                                                                                                                                                                                                                                       |  |
| Due Date Requested:<br>TAT Requested (days): Std.                                                                                                                                                                                                                                                                |  | Preservation Codes:<br>A - HCL<br>B - NaOH<br>C - Zn Acetate<br>D - Nitric Acid<br>E - NaHSO4<br>F - MeOH<br>G - Amchlor<br>H - Ascorbic Acid<br>I - Ice<br>J - DI Water<br>K - EDTA<br>L - EDA<br>M - Hexane<br>N - None<br>O - AsNaO2<br>P - Na2O4S<br>Q - Na2SO3<br>R - Na2S2O3<br>S - H2SO4<br>T - TSP Dodecahydrate<br>U - Acetone<br>V - MCAA<br>W - pH 4.5<br>Z - other (specify) |  |
| Sample Identification<br>OS-10 (07122018)<br>MW-1 (07122018)<br>MW-8 (07122018)<br>IW-1 (07122018)<br>DW-1 (07122018)<br>MW-5 (07122018)<br>Trip Blank                                                                                                                                                           |  | Special Instructions/Note:<br>Metals to be lab filtered                                                                                                                                                                                                                                                                                                                                  |  |
| Sample Date<br>7/12/18<br>7/12/18<br>7/12/18<br>7/12/18<br>7/12/18<br>7/12/18                                                                                                                                                                                                                                    |  | Sample Time<br>1515<br>1430<br>1340<br>1110<br>—<br>0945<br>—                                                                                                                                                                                                                                                                                                                            |  |
| Sample Type<br>(C=Comp, G=grab)<br>G<br>G<br>G<br>G<br>G<br>G<br>G                                                                                                                                                                                                                                               |  | Matrix<br>(W=water, S=solid, O=wastewater, BT=tissue, AA=air)<br>Water<br>Water<br>Water<br>Water<br>Water<br>Water<br>Water                                                                                                                                                                                                                                                             |  |
| Field Filtered Sample (Yes or No)<br>N<br>N<br>N<br>N<br>N<br>N<br>N                                                                                                                                                                                                                                             |  | Perform MS/MSD (Yes or No)<br>N<br>N<br>N<br>N<br>N<br>N<br>N                                                                                                                                                                                                                                                                                                                            |  |
| RSK_176 - Methane, Ethane, Ethene<br>8260C - TCL VOCs<br>9060A - TOC<br>2320B - Alkalinity<br>300_45HR - Nitrate<br>PFC_IDA - PFA, Standard List (21 analytes)<br>8270D - SIM_MS_ID - 1,4-Dioxane<br>Total Number of containers                                                                                  |  | Special Instructions/Note:<br>Metals to be lab filtered                                                                                                                                                                                                                                                                                                                                  |  |
| Possible Hazard Identification<br><input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Deliverable Requested: I, II, III, IV, Other (specify)                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Empty Kit Relinquished by:                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Relinquished by: J. Duquette<br>Date/Time: 7/12/18 1610                                                                                                                                                                                                                                                          |  | Relinquished by: J. Duquette<br>Date/Time: 7/12/18 1600                                                                                                                                                                                                                                                                                                                                  |  |
| Relinquished by: J. Duquette<br>Date/Time: 7/12/18 1600                                                                                                                                                                                                                                                          |  | Relinquished by: J. Duquette<br>Date/Time: 7/12/18 1600                                                                                                                                                                                                                                                                                                                                  |  |
| Custody Seals Intact:<br>Δ Yes Δ No                                                                                                                                                                                                                                                                              |  | Custody Seal No.:                                                                                                                                                                                                                                                                                                                                                                        |  |
| Cooler Temperature(s) °C and Other Remarks:                                                                                                                                                                                                                                                                      |  | Cooler Temperature(s) °C and Other Remarks:                                                                                                                                                                                                                                                                                                                                              |  |



## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-138821-1

**Login Number: 138821**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Williams, Christopher S**

| 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   |         |
| 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   | arcadis |
| Samples received within 48 hours of sampling.                                    | True   |         |
| Samples requiring field filtration have been filtered in the field.              | N/A    |         |
| Chlorine Residual checked.                                                       | N/A    |         |

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-138905-1

Client Project/Site: NYSDEC - Former Cleanerama, Site#  
401056

For:

ARCADIS U.S. Inc

855 Route 146

Suite 210

Clifton Park, New York 12065

Attn: Andy Vitolins



Authorized for release by:

7/26/2018 8:34:56 PM

Rebecca Jones, Project Management Assistant I

[rebecca.jones@testamericainc.com](mailto:rebecca.jones@testamericainc.com)

Designee for

Melissa Deyo, Project Manager I

(716)504-9874

[melissa.deyo@testamericainc.com](mailto:melissa.deyo@testamericainc.com)

### LINKS

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results through

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

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# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| *         | LCS or LCSD is outside acceptance limits.                                                                      |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| B         | Compound was found in the blank and sample.                                                                    |
| E         | Result exceeded calibration range.                                                                             |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### LCMS

| 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. |
| B         | Compound was found in the blank and sample.                                                                    |

### Metals

| 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. |
| B         | Compound was found in the blank and sample.                                                                    |

### General Chemistry

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| H         | Sample was prepped or analyzed beyond the specified holding time                                               |
| B         | Compound was found in the blank and sample.                                                                    |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## 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: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Job ID: 480-138905-1**

**Laboratory: TestAmerica Buffalo**

## Narrative

### Job Narrative 480-138905-1

#### Receipt

The samples were received on 7/14/2018 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0° C.

#### Receipt Exceptions

Buffalo did not receive 1L Ambers for sample point Field blank.

#### GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-424746 recovered above the upper control limit for 2-Hexanone, Acetone, Chloromethane and 2-Butanone (MEK). The samples associated with this CCV were non-detects above the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-6(07132018) (480-138905-1) and MW-9R(07132018) (480-138905-3).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-424746 recovered outside control limits for the following analytes: 2-Hexanone, Acetone and 2-Butanone (MEK). These analytes were biased high in the LCS and were not detected above the reporting limit (RL) in the associated samples; therefore, the data have been reported. The following sample is impacted: MW-6(07132018) (480-138905-1).

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

#### GC/MS Semi VOA

Method(s) 8270D SIM ID: The 1,4-Dioxane result reported for sample (LCS 480-424644/2-A) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope.

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

#### HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: OS-12(07132018) (480-138905-4). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-6(07132018) (480-138905-1), MW-9R(07132018) (480-138905-3) and OS-12(07132018) (480-138905-4). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: MW-6(07132018) (480-138905-1), MW-9R(07132018) (480-138905-3) and OS-12(07132018) (480-138905-4).

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-6(07132018) (480-138905-1) and MW-9R(07132018) (480-138905-3). 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.

#### GC VOA

Method(s) RSK-175: The following sample was diluted due to the nature of the sample matrix: OS-12(07132018) (480-138905-4). 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.

## Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

### Job ID: 480-138905-1 (Continued)

#### Laboratory: TestAmerica Buffalo (Continued)

##### Metals

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

##### LCMS

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

##### General Chemistry

Method(s) SM 2320B: The following sample(s) was received with headspace in the sample container. This sample container was received with headspace. MW-6(07132018) (480-138905-1), MW-9R(07132018) (480-138905-3), OS-12(07132018) (480-138905-4), (480-138946-B-1), (480-138946-B-1 DU), (480-138946-B-2), (480-138946-B-2 MS), (480-138946-B-3), (480-138946-B-3 MS), (480-138974-I-3), (480-138974-I-3 MS) and (480-138974-I-3 MSD).

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

##### Organic Prep

Method(s) 3535: The following samples: MW-8(07132018) (480-138905-2) and DUP-1(07132018) (480-138905-5) in preparation batch 320-234430 were observed to be a yellow color prior to extraction.

Method(s) 3535: The following samples: MW-8(07132018) (480-138905-2) and DUP-1(07132018) (480-138905-5) in preparation batch 320-234430 were observed to contain sediment. .

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 320-234430.

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

# Detection Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Client Sample ID: MW-6(07132018)

## Lab Sample ID: 480-138905-1

| Analyte           | Result  | Qualifier | RL     | MDL     | Unit | Dil | Fac | D | Method   | Prep Type |
|-------------------|---------|-----------|--------|---------|------|-----|-----|---|----------|-----------|
| Tetrachloroethene | 25      |           | 1.0    | 0.36    | ug/L | 1   |     |   | 8260C    | Total/NA  |
| Trichloroethene   | 0.59    | J         | 1.0    | 0.46    | ug/L | 1   |     |   | 8260C    | Total/NA  |
| Aluminum          | 0.089   | J         | 0.20   | 0.060   | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Barium            | 0.17    |           | 0.0020 | 0.00070 | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Calcium           | 217     |           | 0.50   | 0.10    | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Cobalt            | 0.00087 | J         | 0.0040 | 0.00063 | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Iron              | 0.18    |           | 0.050  | 0.019   | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Magnesium         | 54.7    |           | 0.20   | 0.043   | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Manganese         | 0.080   |           | 0.0030 | 0.00040 | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Nickel            | 0.0023  | J         | 0.010  | 0.0013  | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Potassium         | 4.4     |           | 0.50   | 0.10    | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Sodium            | 444     |           | 1.0    | 0.32    | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Zinc              | 0.0036  | J         | 0.010  | 0.0015  | mg/L | 1   |     |   | 6010C    | Total/NA  |
| Chloride          | 1000    |           | 10.0   | 5.6     | mg/L | 20  |     |   | 300.0    | Total/NA  |
| Nitrate           | 2.0     | H         | 0.50   | 0.25    | mg/L | 10  |     |   | 300.0    | Total/NA  |
| Sulfate           | 57.9    |           | 40.0   | 7.0     | mg/L | 20  |     |   | 300.0    | Total/NA  |
| Alkalinity, Total | 293     |           | 5.0    | 0.79    | mg/L | 1   |     |   | SM 2320B | Total/NA  |

## Client Sample ID: MW-8(07132018)

## Lab Sample ID: 480-138905-2

| Analyte                               | Result | Qualifier | RL   | MDL  | Unit | Dil | Fac | D | Method         | Prep Type |
|---------------------------------------|--------|-----------|------|------|------|-----|-----|---|----------------|-----------|
| 1,4-Dioxane                           | 0.58   | B         | 0.20 | 0.10 | ug/L | 1   |     |   | 8270D SIM ID   | Total/NA  |
| Perfluorobutanoic acid (PFBA)         | 3.8    |           | 2.1  | 0.38 | ng/L | 1   |     |   | 537 (modified) | Total/NA  |
| Perfluoropentanoic acid (PFPeA)       | 4.6    |           | 2.1  | 0.53 | ng/L | 1   |     |   | 537 (modified) | Total/NA  |
| Perfluorohexanoic acid (PFHxA)        | 4.3    |           | 2.1  | 0.62 | ng/L | 1   |     |   | 537 (modified) | Total/NA  |
| Perfluoroheptanoic acid (PFHpA)       | 3.3    |           | 2.1  | 0.27 | ng/L | 1   |     |   | 537 (modified) | Total/NA  |
| Perfluorooctanoic acid (PFOA)         | 17     |           | 2.1  | 0.91 | ng/L | 1   |     |   | 537 (modified) | Total/NA  |
| Perfluorobutanesulfonic acid (PFBS)   | 1.8    | J         | 2.1  | 0.21 | ng/L | 1   |     |   | 537 (modified) | Total/NA  |
| Perfluorohexanesulfonic acid (PFHxS)  | 3.4    | B         | 2.1  | 0.18 | ng/L | 1   |     |   | 537 (modified) | Total/NA  |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.86   | J         | 2.1  | 0.20 | ng/L | 1   |     |   | 537 (modified) | Total/NA  |
| Perfluorooctanesulfonic acid (PFOS)   | 7.4    |           | 2.1  | 0.58 | ng/L | 1   |     |   | 537 (modified) | Total/NA  |

## Client Sample ID: MW-9R(07132018)

## Lab Sample ID: 480-138905-3

| Analyte           | Result | Qualifier | RL     | MDL     | Unit | Dil | Fac | D | Method | Prep Type |
|-------------------|--------|-----------|--------|---------|------|-----|-----|---|--------|-----------|
| Tetrachloroethene | 24     |           | 1.0    | 0.36    | ug/L | 1   |     |   | 8260C  | Total/NA  |
| Aluminum          | 0.83   |           | 0.20   | 0.060   | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Barium            | 0.24   |           | 0.0020 | 0.00070 | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Calcium           | 216    |           | 0.50   | 0.10    | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Chromium          | 0.0031 | J         | 0.0040 | 0.0010  | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Cobalt            | 0.0017 | J         | 0.0040 | 0.00063 | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Iron              | 2.1    |           | 0.050  | 0.019   | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Magnesium         | 51.7   |           | 0.20   | 0.043   | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Manganese         | 0.21   |           | 0.0030 | 0.00040 | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Nickel            | 0.0036 | J         | 0.010  | 0.0013  | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Potassium         | 5.1    |           | 0.50   | 0.10    | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Sodium            | 502    |           | 1.0    | 0.32    | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Vanadium          | 0.0018 | J         | 0.0050 | 0.0015  | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Zinc              | 0.0033 | J         | 0.010  | 0.0015  | mg/L | 1   |     |   | 6010C  | Total/NA  |
| Chloride          | 1080   |           | 10.0   | 5.6     | mg/L | 20  |     |   | 300.0  | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo



# Detection Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Client Sample ID: MW-9R(07132018) (Continued)

Lab Sample ID: 480-138905-3

| Analyte           | Result | Qualifier | RL   | MDL  | Unit | Dil Fac | D | Method   | Prep Type |
|-------------------|--------|-----------|------|------|------|---------|---|----------|-----------|
| Nitrate           | 3.2    | H         | 0.50 | 0.25 | mg/L | 10      |   | 300.0    | Total/NA  |
| Sulfate           | 52.0   |           | 40.0 | 7.0  | mg/L | 20      |   | 300.0    | Total/NA  |
| Alkalinity, Total | 296    |           | 5.0  | 0.79 | mg/L | 1       |   | SM 2320B | Total/NA  |

## Client Sample ID: OS-12(07132018)

Lab Sample ID: 480-138905-4

| Analyte              | Result  | Qualifier | RL     | MDL     | Unit | Dil Fac | D | Method   | Prep Type |
|----------------------|---------|-----------|--------|---------|------|---------|---|----------|-----------|
| Tetrachloroethene    | 14      |           | 1.0    | 0.36    | ug/L | 1       |   | 8260C    | Total/NA  |
| Aluminum             | 3.4     |           | 0.20   | 0.060   | mg/L | 1       |   | 6010C    | Total/NA  |
| Barium               | 0.16    |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Total/NA  |
| Cadmium              | 0.0031  |           | 0.0020 | 0.00050 | mg/L | 1       |   | 6010C    | Total/NA  |
| Calcium              | 206     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Chromium             | 0.014   |           | 0.0040 | 0.0010  | mg/L | 1       |   | 6010C    | Total/NA  |
| Cobalt               | 0.0038  | J         | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C    | Total/NA  |
| Copper               | 0.0079  | J         | 0.010  | 0.0016  | mg/L | 1       |   | 6010C    | Total/NA  |
| Iron                 | 5.4     |           | 0.050  | 0.019   | mg/L | 1       |   | 6010C    | Total/NA  |
| Lead                 | 0.0068  | J         | 0.010  | 0.0030  | mg/L | 1       |   | 6010C    | Total/NA  |
| Magnesium            | 52.9    |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Total/NA  |
| Manganese            | 0.55    |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Total/NA  |
| Nickel               | 0.015   |           | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Total/NA  |
| Potassium            | 5.8     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Total/NA  |
| Sodium               | 411     |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Total/NA  |
| Vanadium             | 0.0077  |           | 0.0050 | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Zinc                 | 0.050   |           | 0.010  | 0.0015  | mg/L | 1       |   | 6010C    | Total/NA  |
| Barium               | 0.14    |           | 0.0020 | 0.00070 | mg/L | 1       |   | 6010C    | Dissolved |
| Calcium              | 227     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Dissolved |
| Cobalt               | 0.00078 | J         | 0.0040 | 0.00063 | mg/L | 1       |   | 6010C    | Dissolved |
| Lead                 | 0.0055  | J         | 0.010  | 0.0030  | mg/L | 1       |   | 6010C    | Dissolved |
| Magnesium            | 59.5    |           | 0.20   | 0.043   | mg/L | 1       |   | 6010C    | Dissolved |
| Manganese            | 0.36    |           | 0.0030 | 0.00040 | mg/L | 1       |   | 6010C    | Dissolved |
| Nickel               | 0.0046  | J         | 0.010  | 0.0013  | mg/L | 1       |   | 6010C    | Dissolved |
| Potassium            | 5.5     |           | 0.50   | 0.10    | mg/L | 1       |   | 6010C    | Dissolved |
| Sodium               | 416     |           | 1.0    | 0.32    | mg/L | 1       |   | 6010C    | Dissolved |
| Zinc                 | 0.062   | B         | 0.010  | 0.0015  | mg/L | 1       |   | 6010C    | Dissolved |
| Chloride             | 936     |           | 5.0    | 2.8     | mg/L | 10      |   | 300.0    | Total/NA  |
| Nitrate              | 0.94    | H         | 0.50   | 0.25    | mg/L | 10      |   | 300.0    | Total/NA  |
| Sulfate              | 73.8    |           | 20.0   | 3.5     | mg/L | 10      |   | 300.0    | Total/NA  |
| Total Organic Carbon | 0.60    | J B       | 1.0    | 0.43    | mg/L | 1       |   | 9060A    | Total/NA  |
| Alkalinity, Total    | 319     |           | 5.0    | 0.79    | mg/L | 1       |   | SM 2320B | Total/NA  |

## Client Sample ID: DUP-1(07132018)

Lab Sample ID: 480-138905-5

| Analyte                             | Result | Qualifier | RL   | MDL  | Unit | Dil Fac | D | Method         | Prep Type |
|-------------------------------------|--------|-----------|------|------|------|---------|---|----------------|-----------|
| 1,4-Dioxane                         | 0.98   | B         | 0.20 | 0.10 | ug/L | 1       |   | 8270D SIM ID   | Total/NA  |
| Perfluorobutanoic acid (PFBA)       | 3.8    |           | 2.1  | 0.37 | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluoropentanoic acid (PFPeA)     | 4.5    |           | 2.1  | 0.52 | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorohexanoic acid (PFHxA)      | 3.8    |           | 2.1  | 0.61 | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluoroheptanoic acid (PFHpA)     | 3.0    |           | 2.1  | 0.26 | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorooctanoic acid (PFOA)       | 16     |           | 2.1  | 0.89 | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorobutanesulfonic acid (PFBS) | 2.0    | J         | 2.1  | 0.21 | ng/L | 1       |   | 537 (modified) | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

### Client Sample ID: DUP-1(07132018) (Continued)

Lab Sample ID: 480-138905-5

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method         | Prep Type |
|---------------------------------------|--------|-----------|-----|------|------|---------|---|----------------|-----------|
| Perfluorohexanesulfonic acid (PFHxS)  | 3.3    | B         | 2.1 | 0.18 | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluoroheptanesulfonic Acid (PFHpS) | 0.84   | J         | 2.1 | 0.20 | ng/L | 1       |   | 537 (modified) | Total/NA  |
| Perfluorooctanesulfonic acid (PFOS)   | 7.2    |           | 2.1 | 0.57 | ng/L | 1       |   | 537 (modified) | Total/NA  |

### Client Sample ID: TRIP BLANK

Lab Sample ID: 480-138905-6

| Analyte              | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| Bromodichloromethane | 0.45   | J         | 1.0 | 0.39 | ug/L | 1       |   | 8260C  | Total/NA  |
| Chloroform           | 5.3    |           | 1.0 | 0.34 | ug/L | 1       |   | 8260C  | Total/NA  |

### Client Sample ID: FIELD BLANK(07132018)

Lab Sample ID: 480-138905-7

| Analyte                              | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method         | Prep Type |
|--------------------------------------|--------|-----------|-----|------|------|---------|---|----------------|-----------|
| Perfluorohexanesulfonic acid (PFHxS) | 0.20   | J B       | 1.7 | 0.14 | ng/L | 1       |   | 537 (modified) | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: MW-6(07132018)**

**Lab Sample ID: 480-138905-1**

**Date Collected: 07/13/18 09:20**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result        | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|---------------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND            |           | 1.0 | 0.82 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND            |           | 1.0 | 0.21 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,1,2-Trichloroethane                 | ND            |           | 1.0 | 0.23 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND            |           | 1.0 | 0.31 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,1-Dichloroethane                    | ND            |           | 1.0 | 0.38 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,1-Dichloroethene                    | ND            |           | 1.0 | 0.29 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,2,4-Trichlorobenzene                | ND            |           | 1.0 | 0.41 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND            |           | 1.0 | 0.39 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,2-Dibromoethane                     | ND            |           | 1.0 | 0.73 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,2-Dichlorobenzene                   | ND            |           | 1.0 | 0.79 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,2-Dichloroethane                    | ND            |           | 1.0 | 0.21 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,2-Dichloropropane                   | ND            |           | 1.0 | 0.72 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,3-Dichlorobenzene                   | ND            |           | 1.0 | 0.78 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 1,4-Dichlorobenzene                   | ND            |           | 1.0 | 0.84 | ug/L |   |          | 07/17/18 14:40 | 1       |
| 2-Hexanone                            | ND            | *         | 5.0 | 1.2  | ug/L |   |          | 07/17/18 14:40 | 1       |
| 2-Butanone (MEK)                      | ND            | *         | 10  | 1.3  | ug/L |   |          | 07/17/18 14:40 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND            |           | 5.0 | 2.1  | ug/L |   |          | 07/17/18 14:40 | 1       |
| Acetone                               | ND            | *         | 10  | 3.0  | ug/L |   |          | 07/17/18 14:40 | 1       |
| Benzene                               | ND            |           | 1.0 | 0.41 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Bromodichloromethane                  | ND            |           | 1.0 | 0.39 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Bromoform                             | ND            |           | 1.0 | 0.26 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Bromomethane                          | ND            |           | 1.0 | 0.69 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Carbon disulfide                      | ND            |           | 1.0 | 0.19 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Carbon tetrachloride                  | ND            |           | 1.0 | 0.27 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Chlorobenzene                         | ND            |           | 1.0 | 0.75 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Dibromochloromethane                  | ND            |           | 1.0 | 0.32 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Chloroethane                          | ND            |           | 1.0 | 0.32 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Chloroform                            | ND            |           | 1.0 | 0.34 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Chloromethane                         | ND            |           | 1.0 | 0.35 | ug/L |   |          | 07/17/18 14:40 | 1       |
| cis-1,2-Dichloroethene                | ND            |           | 1.0 | 0.81 | ug/L |   |          | 07/17/18 14:40 | 1       |
| cis-1,3-Dichloropropene               | ND            |           | 1.0 | 0.36 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Cyclohexane                           | ND            |           | 1.0 | 0.18 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Dichlorodifluoromethane               | ND            |           | 1.0 | 0.68 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Ethylbenzene                          | ND            |           | 1.0 | 0.74 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Isopropylbenzene                      | ND            |           | 1.0 | 0.79 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Methyl acetate                        | ND            |           | 2.5 | 1.3  | ug/L |   |          | 07/17/18 14:40 | 1       |
| Methyl tert-butyl ether               | ND            |           | 1.0 | 0.16 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Methylcyclohexane                     | ND            |           | 1.0 | 0.16 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Methylene Chloride                    | ND            |           | 1.0 | 0.44 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Styrene                               | ND            |           | 1.0 | 0.73 | ug/L |   |          | 07/17/18 14:40 | 1       |
| <b>Tetrachloroethene</b>              | <b>25</b>     |           | 1.0 | 0.36 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Toluene                               | ND            |           | 1.0 | 0.51 | ug/L |   |          | 07/17/18 14:40 | 1       |
| trans-1,2-Dichloroethene              | ND            |           | 1.0 | 0.90 | ug/L |   |          | 07/17/18 14:40 | 1       |
| trans-1,3-Dichloropropene             | ND            |           | 1.0 | 0.37 | ug/L |   |          | 07/17/18 14:40 | 1       |
| <b>Trichloroethene</b>                | <b>0.59 J</b> |           | 1.0 | 0.46 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Trichlorofluoromethane                | ND            |           | 1.0 | 0.88 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Vinyl chloride                        | ND            |           | 1.0 | 0.90 | ug/L |   |          | 07/17/18 14:40 | 1       |
| Xylenes, Total                        | ND            |           | 2.0 | 0.66 | ug/L |   |          | 07/17/18 14:40 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: MW-6(07132018)**

**Lab Sample ID: 480-138905-1**

**Date Collected: 07/13/18 09:20**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 116       |           | 77 - 120 |          | 07/17/18 14:40 | 1       |
| Toluene-d8 (Surr)            | 95        |           | 80 - 120 |          | 07/17/18 14:40 | 1       |
| 4-Bromofluorobenzene (Surr)  | 104       |           | 73 - 120 |          | 07/17/18 14:40 | 1       |
| Dibromofluoromethane (Surr)  | 102       |           | 75 - 123 |          | 07/17/18 14:40 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 7.5 | 1.5 | ug/L |   |          | 07/15/18 13:17 | 1       |
| Ethene  | ND     |           | 7.0 | 1.5 | ug/L |   |          | 07/15/18 13:17 | 1       |
| Methane | ND     |           | 4.0 | 1.0 | ug/L |   |          | 07/15/18 13:17 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte   | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | 0.089   | J         | 0.20   | 0.060   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Antimony  | ND      |           | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Arsenic   | ND      |           | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Barium    | 0.17    |           | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Beryllium | ND      |           | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Cadmium   | ND      |           | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Calcium   | 217     |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Chromium  | ND      |           | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Cobalt    | 0.00087 | J         | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Copper    | ND      |           | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Iron      | 0.18    |           | 0.050  | 0.019   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Lead      | ND      |           | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Magnesium | 54.7    |           | 0.20   | 0.043   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Manganese | 0.080   |           | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Nickel    | 0.0023  | J         | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Potassium | 4.4     |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Selenium  | ND      |           | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Silver    | ND      |           | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Sodium    | 444     |           | 1.0    | 0.32    | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Thallium  | ND      |           | 0.020  | 0.010   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Vanadium  | ND      |           | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |
| Zinc      | 0.0036  | J         | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:25 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 14:05 | 07/23/18 17:58 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 1000   |           | 10.0 | 5.6  | mg/L |   |          | 07/19/18 19:44 | 20      |
| Nitrate              | 2.0    | H         | 0.50 | 0.25 | mg/L |   |          | 07/17/18 03:04 | 10      |
| Sulfate              | 57.9   |           | 40.0 | 7.0  | mg/L |   |          | 07/19/18 19:44 | 20      |
| Total Organic Carbon | ND     |           | 1.0  | 0.43 | mg/L |   |          | 07/20/18 21:33 | 1       |
| Alkalinity, Total    | 293    |           | 5.0  | 0.79 | mg/L |   |          | 07/19/18 14:05 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: MW-8(07132018)**

**Lab Sample ID: 480-138905-2**

**Date Collected: 07/13/18 10:15**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte          | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | 0.58      | B         | 0.20     | 0.10 | ug/L |   | 07/16/18 14:12 | 07/19/18 19:35 | 1       |
| Isotope Dilution | %Recovery | Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 37        |           | 15 - 110 |      |      |   | 07/16/18 14:12 | 07/19/18 19:35 | 1       |

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte                                                    | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------------------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)                              | 3.8       |           | 2.1      | 0.38 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluoropentanoic acid (PFPeA)                            | 4.6       |           | 2.1      | 0.53 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorohexanoic acid (PFHxA)                             | 4.3       |           | 2.1      | 0.62 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluoroheptanoic acid (PFHpA)                            | 3.3       |           | 2.1      | 0.27 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorooctanoic acid (PFOA)                              | 17        |           | 2.1      | 0.91 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorononanoic acid (PFNA)                              | ND        |           | 2.1      | 0.29 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorodecanoic acid (PFDA)                              | ND        |           | 2.1      | 0.33 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluoroundecanoic acid (PFUnA)                           | ND        |           | 2.1      | 1.2  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorododecanoic acid (PFDoA)                           | ND        |           | 2.1      | 0.59 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorotridecanoic Acid (PFTriA)                         | ND        |           | 2.1      | 1.4  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorotetradecanoic acid (PFTeA)                        | ND        |           | 2.1      | 0.31 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorobutanesulfonic acid (PFBS)                        | 1.8       | J         | 2.1      | 0.21 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)                       | 3.4       | B         | 2.1      | 0.18 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | 0.86      | J         | 2.1      | 0.20 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                        | 7.4       |           | 2.1      | 0.58 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorodecanesulfonic acid (PFDS)                        | ND        |           | 2.1      | 0.34 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Perfluorooctane Sulfonamide (FOSA)                         | ND        |           | 2.1      | 0.38 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | ND        |           | 21       | 3.3  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | ND        |           | 21       | 2.0  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 6:2 FTS                                                    | ND        |           | 21       | 2.1  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 8:2 FTS                                                    | ND        |           | 21       | 2.1  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| Isotope Dilution                                           | %Recovery | Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 13C4 PFBA                                                  | 63        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C5 PFPeA                                                 | 80        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C2 PFHxA                                                 | 73        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C4-PFHpA                                                 | 78        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C4 PFOA                                                  | 77        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C5 PFNA                                                  | 82        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C2 PFDA                                                  | 70        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C2 PFUnA                                                 | 61        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C2 PFDoA                                                 | 52        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C2-PFTeDA                                                | 52        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C3-PFBS                                                  | 70        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 18O2 PFHxS                                                 | 77        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C4 PFOS                                                  | 68        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| 13C8 FOSA                                                  | 60        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| d3-NMeFOSAA                                                | 64        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| d5-NEtFOSAA                                                | 60        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |
| M2-6:2FTS                                                  | 90        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:17 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: MW-8(07132018)**

**Date Collected: 07/13/18 10:15**

**Date Received: 07/14/18 02:00**

**Lab Sample ID: 480-138905-2**

**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| Isotope Dilution | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| M2-8:2FTS        | 78        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:17 | 1       |

**Client Sample ID: MW-9R(07132018)**

**Date Collected: 07/13/18 12:20**

**Date Received: 07/14/18 02:00**

**Lab Sample ID: 480-138905-3**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

| Analyte                               | Result    | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|-----------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND        |           | 1.0 | 0.82 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND        |           | 1.0 | 0.21 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,1,2-Trichloroethane                 | ND        |           | 1.0 | 0.23 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND        |           | 1.0 | 0.31 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,1-Dichloroethane                    | ND        |           | 1.0 | 0.38 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,1-Dichloroethene                    | ND        |           | 1.0 | 0.29 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,2,4-Trichlorobenzene                | ND        |           | 1.0 | 0.41 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND        |           | 1.0 | 0.39 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,2-Dibromoethane                     | ND        |           | 1.0 | 0.73 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,2-Dichlorobenzene                   | ND        |           | 1.0 | 0.79 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,2-Dichloroethane                    | ND        |           | 1.0 | 0.21 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,2-Dichloropropane                   | ND        |           | 1.0 | 0.72 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,3-Dichlorobenzene                   | ND        |           | 1.0 | 0.78 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 1,4-Dichlorobenzene                   | ND        |           | 1.0 | 0.84 | ug/L |   |          | 07/17/18 15:08 | 1       |
| 2-Hexanone                            | ND *      |           | 5.0 | 1.2  | ug/L |   |          | 07/17/18 15:08 | 1       |
| 2-Butanone (MEK)                      | ND *      |           | 10  | 1.3  | ug/L |   |          | 07/17/18 15:08 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND        |           | 5.0 | 2.1  | ug/L |   |          | 07/17/18 15:08 | 1       |
| Acetone                               | ND *      |           | 10  | 3.0  | ug/L |   |          | 07/17/18 15:08 | 1       |
| Benzene                               | ND        |           | 1.0 | 0.41 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Bromodichloromethane                  | ND        |           | 1.0 | 0.39 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Bromoform                             | ND        |           | 1.0 | 0.26 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Bromomethane                          | ND        |           | 1.0 | 0.69 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Carbon disulfide                      | ND        |           | 1.0 | 0.19 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Carbon tetrachloride                  | ND        |           | 1.0 | 0.27 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Chlorobenzene                         | ND        |           | 1.0 | 0.75 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Dibromochloromethane                  | ND        |           | 1.0 | 0.32 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Chloroethane                          | ND        |           | 1.0 | 0.32 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Chloroform                            | ND        |           | 1.0 | 0.34 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Chloromethane                         | ND        |           | 1.0 | 0.35 | ug/L |   |          | 07/17/18 15:08 | 1       |
| cis-1,2-Dichloroethene                | ND        |           | 1.0 | 0.81 | ug/L |   |          | 07/17/18 15:08 | 1       |
| cis-1,3-Dichloropropene               | ND        |           | 1.0 | 0.36 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Cyclohexane                           | ND        |           | 1.0 | 0.18 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Dichlorodifluoromethane               | ND        |           | 1.0 | 0.68 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Ethylbenzene                          | ND        |           | 1.0 | 0.74 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Isopropylbenzene                      | ND        |           | 1.0 | 0.79 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Methyl acetate                        | ND        |           | 2.5 | 1.3  | ug/L |   |          | 07/17/18 15:08 | 1       |
| Methyl tert-butyl ether               | ND        |           | 1.0 | 0.16 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Methylcyclohexane                     | ND        |           | 1.0 | 0.16 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Methylene Chloride                    | ND        |           | 1.0 | 0.44 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Styrene                               | ND        |           | 1.0 | 0.73 | ug/L |   |          | 07/17/18 15:08 | 1       |
| <b>Tetrachloroethene</b>              | <b>24</b> |           | 1.0 | 0.36 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Toluene                               | ND        |           | 1.0 | 0.51 | ug/L |   |          | 07/17/18 15:08 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: MW-9R(07132018)**

**Lab Sample ID: 480-138905-3**

**Date Collected: 07/13/18 12:20**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                   | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| trans-1,2-Dichloroethene  | ND     |           | 1.0 | 0.90 | ug/L |   |          | 07/17/18 15:08 | 1       |
| trans-1,3-Dichloropropene | ND     |           | 1.0 | 0.37 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Trichloroethene           | ND     |           | 1.0 | 0.46 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Trichlorofluoromethane    | ND     |           | 1.0 | 0.88 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Vinyl chloride            | ND     |           | 1.0 | 0.90 | ug/L |   |          | 07/17/18 15:08 | 1       |
| Xylenes, Total            | ND     |           | 2.0 | 0.66 | ug/L |   |          | 07/17/18 15:08 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 111       |           | 77 - 120 |          | 07/17/18 15:08 | 1       |
| Toluene-d8 (Surr)            | 94        |           | 80 - 120 |          | 07/17/18 15:08 | 1       |
| 4-Bromofluorobenzene (Surr)  | 103       |           | 73 - 120 |          | 07/17/18 15:08 | 1       |
| Dibromofluoromethane (Surr)  | 99        |           | 75 - 123 |          | 07/17/18 15:08 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 7.5 | 1.5 | ug/L |   |          | 07/15/18 13:36 | 1       |
| Ethene  | ND     |           | 7.0 | 1.5 | ug/L |   |          | 07/15/18 13:36 | 1       |
| Methane | ND     |           | 4.0 | 1.0 | ug/L |   |          | 07/15/18 13:36 | 1       |

## Method: 6010C - Metals (ICP)

| Analyte          | Result        | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|---------------|-----------|--------|---------|------|---|----------------|----------------|---------|
| <b>Aluminum</b>  | <b>0.83</b>   |           | 0.20   | 0.060   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| Antimony         | ND            |           | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| Arsenic          | ND            |           | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Barium</b>    | <b>0.24</b>   |           | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| Beryllium        | ND            |           | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| Cadmium          | ND            |           | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Calcium</b>   | <b>216</b>    |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Chromium</b>  | <b>0.0031</b> | J         | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Cobalt</b>    | <b>0.0017</b> | J         | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| Copper           | ND            |           | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Iron</b>      | <b>2.1</b>    |           | 0.050  | 0.019   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| Lead             | ND            |           | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Magnesium</b> | <b>51.7</b>   |           | 0.20   | 0.043   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Manganese</b> | <b>0.21</b>   |           | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Nickel</b>    | <b>0.0036</b> | J         | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Potassium</b> | <b>5.1</b>    |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| Selenium         | ND            |           | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| Silver           | ND            |           | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Sodium</b>    | <b>502</b>    |           | 1.0    | 0.32    | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| Thallium         | ND            |           | 0.020  | 0.010   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Vanadium</b>  | <b>0.0018</b> | J         | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |
| <b>Zinc</b>      | <b>0.0033</b> | J         | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:29 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 14:05 | 07/23/18 18:00 | 1       |

## General Chemistry

| Analyte         | Result      | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------|-------------|-----------|------|-----|------|---|----------|----------------|---------|
| <b>Chloride</b> | <b>1080</b> |           | 10.0 | 5.6 | mg/L |   |          | 07/19/18 19:52 | 20      |

TestAmerica Buffalo



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: MW-9R(07132018)**

**Lab Sample ID: 480-138905-3**

**Date Collected: 07/13/18 12:20**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## General Chemistry (Continued)

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Nitrate              | 3.2    | H         | 0.50 | 0.25 | mg/L |   |          | 07/17/18 03:12 | 10      |
| Sulfate              | 52.0   |           | 40.0 | 7.0  | mg/L |   |          | 07/19/18 19:52 | 20      |
| Total Organic Carbon | ND     |           | 1.0  | 0.43 | mg/L |   |          | 07/20/18 22:00 | 1       |
| Alkalinity, Total    | 296    |           | 5.0  | 0.79 | mg/L |   |          | 07/19/18 14:11 | 1       |

**Client Sample ID: OS-12(07132018)**

**Lab Sample ID: 480-138905-4**

**Date Collected: 07/13/18 13:30**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND     |           | 1.0 | 0.82 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,1,2-Trichloroethane                 | ND     |           | 1.0 | 0.23 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND     |           | 1.0 | 0.31 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,1-Dichloroethane                    | ND     |           | 1.0 | 0.38 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,1-Dichloroethene                    | ND     |           | 1.0 | 0.29 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,2,4-Trichlorobenzene                | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,2-Dibromoethane                     | ND     |           | 1.0 | 0.73 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,2-Dichlorobenzene                   | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,2-Dichloroethane                    | ND     |           | 1.0 | 0.21 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,2-Dichloropropane                   | ND     |           | 1.0 | 0.72 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,3-Dichlorobenzene                   | ND     |           | 1.0 | 0.78 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 1,4-Dichlorobenzene                   | ND     |           | 1.0 | 0.84 | ug/L |   |          | 07/19/18 02:19 | 1       |
| 2-Hexanone                            | ND     |           | 5.0 | 1.2  | ug/L |   |          | 07/19/18 02:19 | 1       |
| 2-Butanone (MEK)                      | ND     |           | 10  | 1.3  | ug/L |   |          | 07/19/18 02:19 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND     |           | 5.0 | 2.1  | ug/L |   |          | 07/19/18 02:19 | 1       |
| Acetone                               | ND     |           | 10  | 3.0  | ug/L |   |          | 07/19/18 02:19 | 1       |
| Benzene                               | ND     |           | 1.0 | 0.41 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Bromodichloromethane                  | ND     |           | 1.0 | 0.39 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Bromoform                             | ND     |           | 1.0 | 0.26 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Bromomethane                          | ND     |           | 1.0 | 0.69 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Carbon disulfide                      | ND     |           | 1.0 | 0.19 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Carbon tetrachloride                  | ND     |           | 1.0 | 0.27 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Chlorobenzene                         | ND     |           | 1.0 | 0.75 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Dibromochloromethane                  | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Chloroethane                          | ND     |           | 1.0 | 0.32 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Chloroform                            | ND     |           | 1.0 | 0.34 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Chloromethane                         | ND     |           | 1.0 | 0.35 | ug/L |   |          | 07/19/18 02:19 | 1       |
| cis-1,2-Dichloroethene                | ND     |           | 1.0 | 0.81 | ug/L |   |          | 07/19/18 02:19 | 1       |
| cis-1,3-Dichloropropene               | ND     |           | 1.0 | 0.36 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Cyclohexane                           | ND     |           | 1.0 | 0.18 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Dichlorodifluoromethane               | ND     |           | 1.0 | 0.68 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Ethylbenzene                          | ND     |           | 1.0 | 0.74 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Isopropylbenzene                      | ND     |           | 1.0 | 0.79 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Methyl acetate                        | ND     |           | 2.5 | 1.3  | ug/L |   |          | 07/19/18 02:19 | 1       |
| Methyl tert-butyl ether               | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Methylcyclohexane                     | ND     |           | 1.0 | 0.16 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Methylene Chloride                    | ND     |           | 1.0 | 0.44 | ug/L |   |          | 07/19/18 02:19 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: OS-12(07132018)**

**Lab Sample ID: 480-138905-4**

**Date Collected: 07/13/18 13:30**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte                   | Result    | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|-----------|-----------|-----|------|------|---|----------|----------------|---------|
| Styrene                   | ND        |           | 1.0 | 0.73 | ug/L |   |          | 07/19/18 02:19 | 1       |
| <b>Tetrachloroethene</b>  | <b>14</b> |           | 1.0 | 0.36 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Toluene                   | ND        |           | 1.0 | 0.51 | ug/L |   |          | 07/19/18 02:19 | 1       |
| trans-1,2-Dichloroethene  | ND        |           | 1.0 | 0.90 | ug/L |   |          | 07/19/18 02:19 | 1       |
| trans-1,3-Dichloropropene | ND        |           | 1.0 | 0.37 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Trichloroethene           | ND        |           | 1.0 | 0.46 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Trichlorofluoromethane    | ND        |           | 1.0 | 0.88 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Vinyl chloride            | ND        |           | 1.0 | 0.90 | ug/L |   |          | 07/19/18 02:19 | 1       |
| Xylenes, Total            | ND        |           | 2.0 | 0.66 | ug/L |   |          | 07/19/18 02:19 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 99        |           | 77 - 120 |          | 07/19/18 02:19 | 1       |
| Toluene-d8 (Surr)            | 93        |           | 80 - 120 |          | 07/19/18 02:19 | 1       |
| 4-Bromofluorobenzene (Surr)  | 96        |           | 73 - 120 |          | 07/19/18 02:19 | 1       |
| Dibromofluoromethane (Surr)  | 106       |           | 75 - 123 |          | 07/19/18 02:19 | 1       |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND     |           | 330 | 66  | ug/L |   |          | 07/15/18 13:55 | 44      |
| Ethene  | ND     |           | 310 | 66  | ug/L |   |          | 07/15/18 13:55 | 44      |
| Methane | ND     |           | 180 | 44  | ug/L |   |          | 07/15/18 13:55 | 44      |

## Method: 6010C - Metals (ICP)

| Analyte          | Result        | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|---------------|-----------|--------|---------|------|---|----------------|----------------|---------|
| <b>Aluminum</b>  | <b>3.4</b>    |           | 0.20   | 0.060   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| Antimony         | ND            |           | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| Arsenic          | ND            |           | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Barium</b>    | <b>0.16</b>   |           | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| Beryllium        | ND            |           | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Cadmium</b>   | <b>0.0031</b> |           | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Calcium</b>   | <b>206</b>    |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Chromium</b>  | <b>0.014</b>  |           | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Cobalt</b>    | <b>0.0038</b> | J         | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Copper</b>    | <b>0.0079</b> | J         | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Iron</b>      | <b>5.4</b>    |           | 0.050  | 0.019   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Lead</b>      | <b>0.0068</b> | J         | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Magnesium</b> | <b>52.9</b>   |           | 0.20   | 0.043   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Manganese</b> | <b>0.55</b>   |           | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Nickel</b>    | <b>0.015</b>  |           | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Potassium</b> | <b>5.8</b>    |           | 0.50   | 0.10    | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| Selenium         | ND            |           | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| Silver           | ND            |           | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Sodium</b>    | <b>411</b>    |           | 1.0    | 0.32    | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| Thallium         | ND            |           | 0.020  | 0.010   | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Vanadium</b>  | <b>0.0077</b> |           | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |
| <b>Zinc</b>      | <b>0.050</b>  |           | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:11 | 07/18/18 15:33 | 1       |

## Method: 6010C - Metals (ICP) - Dissolved

| Analyte  | Result | Qualifier | RL   | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Aluminum | ND     |           | 0.20 | 0.060 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: OS-12(07132018)**

**Lab Sample ID: 480-138905-4**

**Date Collected: 07/13/18 13:30**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## Method: 6010C - Metals (ICP) - Dissolved (Continued)

| Analyte   | Result  | Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Antimony  | ND      |           | 0.020  | 0.0068  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Arsenic   | ND      |           | 0.015  | 0.0056  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Barium    | 0.14    |           | 0.0020 | 0.00070 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Beryllium | ND      |           | 0.0020 | 0.00030 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Cadmium   | ND      |           | 0.0020 | 0.00050 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Calcium   | 227     |           | 0.50   | 0.10    | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Chromium  | ND      |           | 0.0040 | 0.0010  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Cobalt    | 0.00078 | J         | 0.0040 | 0.00063 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Copper    | ND      |           | 0.010  | 0.0016  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Iron      | ND      |           | 0.050  | 0.019   | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Lead      | 0.0055  | J         | 0.010  | 0.0030  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Magnesium | 59.5    |           | 0.20   | 0.043   | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Manganese | 0.36    |           | 0.0030 | 0.00040 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Nickel    | 0.0046  | J         | 0.010  | 0.0013  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Potassium | 5.5     |           | 0.50   | 0.10    | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Selenium  | ND      |           | 0.025  | 0.0087  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Silver    | ND      |           | 0.0060 | 0.0017  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Sodium    | 416     |           | 1.0    | 0.32    | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Thallium  | ND      |           | 0.020  | 0.010   | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Vanadium  | ND      |           | 0.0050 | 0.0015  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |
| Zinc      | 0.062   | B         | 0.010  | 0.0015  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:50 | 1       |

## Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 16:07 | 1       |

## Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND     |           | 0.00020 | 0.00012 | mg/L |   | 07/19/18 12:40 | 07/19/18 17:34 | 1       |

## General Chemistry

| Analyte              | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride             | 936    |           | 5.0  | 2.8  | mg/L |   |          | 07/17/18 04:01 | 10      |
| Nitrate              | 0.94   | H         | 0.50 | 0.25 | mg/L |   |          | 07/17/18 04:01 | 10      |
| Sulfate              | 73.8   |           | 20.0 | 3.5  | mg/L |   |          | 07/17/18 04:01 | 10      |
| Total Organic Carbon | 0.60   | J B       | 1.0  | 0.43 | mg/L |   |          | 07/20/18 22:28 | 1       |
| Alkalinity, Total    | 319    |           | 5.0  | 0.79 | mg/L |   |          | 07/19/18 14:16 | 1       |

**Client Sample ID: DUP-1(07132018)**

**Lab Sample ID: 480-138905-5**

**Date Collected: 07/13/18 00:00**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte          | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | 0.98      | B         | 0.20     | 0.10 | ug/L |   | 07/16/18 14:12 | 07/19/18 19:59 | 1       |
| Isotope Dilution | %Recovery | Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 58        |           | 15 - 110 |      |      |   | 07/16/18 14:12 | 07/19/18 19:59 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: DUP-1(07132018)**

**Lab Sample ID: 480-138905-5**

**Date Collected: 07/13/18 00:00**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte                                                    | Result | Qualifier | RL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------------------------------|--------|-----------|-----|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)                              | 3.8    |           | 2.1 | 0.37 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluoropentanoic acid (PFPeA)                            | 4.5    |           | 2.1 | 0.52 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorohexanoic acid (PFHxA)                             | 3.8    |           | 2.1 | 0.61 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluoroheptanoic acid (PFHpA)                            | 3.0    |           | 2.1 | 0.26 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorooctanoic acid (PFOA)                              | 16     |           | 2.1 | 0.89 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorononanoic acid (PFNA)                              | ND     |           | 2.1 | 0.28 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorodecanoic acid (PFDA)                              | ND     |           | 2.1 | 0.33 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluoroundecanoic acid (PFUnA)                           | ND     |           | 2.1 | 1.2  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorododecanoic acid (PFDoA)                           | ND     |           | 2.1 | 0.58 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorotridecanoic Acid (PFTriA)                         | ND     |           | 2.1 | 1.4  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorotetradecanoic acid (PFTeA)                        | ND     |           | 2.1 | 0.31 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorobutanesulfonic acid (PFBS)                        | 2.0    | J         | 2.1 | 0.21 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)                       | 3.3    | B         | 2.1 | 0.18 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | 0.84   | J         | 2.1 | 0.20 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                        | 7.2    |           | 2.1 | 0.57 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorodecanesulfonic acid (PFDS)                        | ND     |           | 2.1 | 0.34 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| Perfluorooctane Sulfonamide (FOSA)                         | ND     |           | 2.1 | 0.37 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | ND     |           | 21  | 3.3  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | ND     |           | 21  | 2.0  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 6:2 FTS                                                    | ND     |           | 21  | 2.1  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 8:2 FTS                                                    | ND     |           | 21  | 2.1  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:25 | 1       |

| Isotope Dilution | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| 13C4 PFBA        | 60        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C5 PFPeA       | 78        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C2 PFHxA       | 74        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C4-PFHpA       | 79        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C4 PFOA        | 74        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C5 PFNA        | 71        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C2 PFDA        | 68        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C2 PFUnA       | 60        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C2 PFDoA       | 53        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C2-PFTeDA      | 49        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C3-PFBS        | 71        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 18O2 PFHxS       | 76        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C4 PFOS        | 64        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| 13C8 FOSA        | 60        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| d3-NMeFOSAA      | 61        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| d5-NEtFOSAA      | 62        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| M2-6:2FTS        | 89        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |
| M2-8:2FTS        | 74        |           | 25 - 150 | 07/17/18 07:31 | 07/20/18 06:25 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138905-6**

**Date Collected: 07/13/18 00:00**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte                               | Result      | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|-------------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND          |           | 1.0 | 0.82 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND          |           | 1.0 | 0.21 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,1,2-Trichloroethane                 | ND          |           | 1.0 | 0.23 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND          |           | 1.0 | 0.31 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,1-Dichloroethane                    | ND          |           | 1.0 | 0.38 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,1-Dichloroethene                    | ND          |           | 1.0 | 0.29 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,2,4-Trichlorobenzene                | ND          |           | 1.0 | 0.41 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND          |           | 1.0 | 0.39 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,2-Dibromoethane                     | ND          |           | 1.0 | 0.73 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,2-Dichlorobenzene                   | ND          |           | 1.0 | 0.79 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,2-Dichloroethane                    | ND          |           | 1.0 | 0.21 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,2-Dichloropropane                   | ND          |           | 1.0 | 0.72 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,3-Dichlorobenzene                   | ND          |           | 1.0 | 0.78 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 1,4-Dichlorobenzene                   | ND          |           | 1.0 | 0.84 | ug/L |   |          | 07/19/18 04:38 | 1       |
| 2-Hexanone                            | ND          |           | 5.0 | 1.2  | ug/L |   |          | 07/19/18 04:38 | 1       |
| 2-Butanone (MEK)                      | ND          |           | 10  | 1.3  | ug/L |   |          | 07/19/18 04:38 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND          |           | 5.0 | 2.1  | ug/L |   |          | 07/19/18 04:38 | 1       |
| Acetone                               | ND          |           | 10  | 3.0  | ug/L |   |          | 07/19/18 04:38 | 1       |
| Benzene                               | ND          |           | 1.0 | 0.41 | ug/L |   |          | 07/19/18 04:38 | 1       |
| <b>Bromodichloromethane</b>           | <b>0.45</b> | <b>J</b>  | 1.0 | 0.39 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Bromoform                             | ND          |           | 1.0 | 0.26 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Bromomethane                          | ND          |           | 1.0 | 0.69 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Carbon disulfide                      | ND          |           | 1.0 | 0.19 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Carbon tetrachloride                  | ND          |           | 1.0 | 0.27 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Chlorobenzene                         | ND          |           | 1.0 | 0.75 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Dibromochloromethane                  | ND          |           | 1.0 | 0.32 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Chloroethane                          | ND          |           | 1.0 | 0.32 | ug/L |   |          | 07/19/18 04:38 | 1       |
| <b>Chloroform</b>                     | <b>5.3</b>  |           | 1.0 | 0.34 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Chloromethane                         | ND          |           | 1.0 | 0.35 | ug/L |   |          | 07/19/18 04:38 | 1       |
| cis-1,2-Dichloroethene                | ND          |           | 1.0 | 0.81 | ug/L |   |          | 07/19/18 04:38 | 1       |
| cis-1,3-Dichloropropene               | ND          |           | 1.0 | 0.36 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Cyclohexane                           | ND          |           | 1.0 | 0.18 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Dichlorodifluoromethane               | ND          |           | 1.0 | 0.68 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Ethylbenzene                          | ND          |           | 1.0 | 0.74 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Isopropylbenzene                      | ND          |           | 1.0 | 0.79 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Methyl acetate                        | ND          |           | 2.5 | 1.3  | ug/L |   |          | 07/19/18 04:38 | 1       |
| Methyl tert-butyl ether               | ND          |           | 1.0 | 0.16 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Methylcyclohexane                     | ND          |           | 1.0 | 0.16 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Methylene Chloride                    | ND          |           | 1.0 | 0.44 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Styrene                               | ND          |           | 1.0 | 0.73 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Tetrachloroethene                     | ND          |           | 1.0 | 0.36 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Toluene                               | ND          |           | 1.0 | 0.51 | ug/L |   |          | 07/19/18 04:38 | 1       |
| trans-1,2-Dichloroethene              | ND          |           | 1.0 | 0.90 | ug/L |   |          | 07/19/18 04:38 | 1       |
| trans-1,3-Dichloropropene             | ND          |           | 1.0 | 0.37 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Trichloroethene                       | ND          |           | 1.0 | 0.46 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Trichlorofluoromethane                | ND          |           | 1.0 | 0.88 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Vinyl chloride                        | ND          |           | 1.0 | 0.90 | ug/L |   |          | 07/19/18 04:38 | 1       |
| Xylenes, Total                        | ND          |           | 2.0 | 0.66 | ug/L |   |          | 07/19/18 04:38 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Client Sample ID: TRIP BLANK

Date Collected: 07/13/18 00:00

Date Received: 07/14/18 02:00

## Lab Sample ID: 480-138905-6

Matrix: Water

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 98        |           | 77 - 120 |          | 07/19/18 04:38 | 1       |
| Toluene-d8 (Surr)            | 95        |           | 80 - 120 |          | 07/19/18 04:38 | 1       |
| 4-Bromofluorobenzene (Surr)  | 100       |           | 73 - 120 |          | 07/19/18 04:38 | 1       |
| Dibromofluoromethane (Surr)  | 100       |           | 75 - 123 |          | 07/19/18 04:38 | 1       |

## Client Sample ID: FIELD BLANK(07132018)

Date Collected: 07/13/18 10:30

Date Received: 07/14/18 02:00

## Lab Sample ID: 480-138905-7

Matrix: Water

### Method: 537 (modified) - Fluorinated Alkyl Substances

| Analyte                                                    | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------------------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)                              | ND        |           | 1.7      | 0.29 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluoropentanoic acid (PFPeA)                            | ND        |           | 1.7      | 0.41 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorohexanoic acid (PFHxA)                             | ND        |           | 1.7      | 0.49 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluoroheptanoic acid (PFHpA)                            | ND        |           | 1.7      | 0.21 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorooctanoic acid (PFOA)                              | ND        |           | 1.7      | 0.71 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorononanoic acid (PFNA)                              | ND        |           | 1.7      | 0.23 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorodecanoic acid (PFDA)                              | ND        |           | 1.7      | 0.26 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluoroundecanoic acid (PFUnA)                           | ND        |           | 1.7      | 0.92 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorododecanoic acid (PFDoA)                           | ND        |           | 1.7      | 0.46 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorotridecanoic Acid (PFTriA)                         | ND        |           | 1.7      | 1.1  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorotetradecanoic acid (PFTeA)                        | ND        |           | 1.7      | 0.24 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorobutanesulfonic acid (PFBS)                        | ND        |           | 1.7      | 0.17 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)                       | 0.20      | J B       | 1.7      | 0.14 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | ND        |           | 1.7      | 0.16 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                        | ND        |           | 1.7      | 0.45 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorodecanesulfonic acid (PFDS)                        | ND        |           | 1.7      | 0.27 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Perfluorooctane Sulfonamide (FOSA)                         | ND        |           | 1.7      | 0.29 | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | ND        |           | 17       | 2.6  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | ND        |           | 17       | 1.6  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 6:2 FTS                                                    | ND        |           | 17       | 1.7  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 8:2 FTS                                                    | ND        |           | 17       | 1.7  | ng/L |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| Isotope Dilution                                           | %Recovery | Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 13C4 PFBA                                                  | 96        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C5 PFPeA                                                 | 96        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C2 PFHxA                                                 | 91        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C4-PFHpA                                                 | 102       |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C4 PFOA                                                  | 94        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C5 PFNA                                                  | 96        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C2 PFDA                                                  | 104       |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C2 PFUnA                                                 | 95        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C2 PFDoA                                                 | 92        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C2-PFTeDA                                                | 89        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C3-PFBS                                                  | 89        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 18O2 PFHxS                                                 | 99        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C4 PFOS                                                  | 93        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |
| 13C8 FOSA                                                  | 91        |           | 25 - 150 |      |      |   | 07/17/18 07:31 | 07/20/18 06:41 | 1       |

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: FIELD BLANK(07132018)**

**Lab Sample ID: 480-138905-7**

**Date Collected: 07/13/18 10:30**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

| <i>Isotope Dilution</i> | <i>%Recovery</i> | <i>Qualifier</i> | <i>Limits</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Dil Fac</i> |
|-------------------------|------------------|------------------|---------------|-----------------|-----------------|----------------|
| d3-NMeFOSAA             | 95               |                  | 25 - 150      | 07/17/18 07:31  | 07/20/18 06:41  | 1              |
| d5-NEtFOSAA             | 92               |                  | 25 - 150      | 07/17/18 07:31  | 07/20/18 06:41  | 1              |
| M2-6:2FTS               | 106              |                  | 25 - 150      | 07/17/18 07:31  | 07/20/18 06:41  | 1              |
| M2-8:2FTS               | 102              |                  | 25 - 150      | 07/17/18 07:31  | 07/20/18 06:41  | 1              |



## Surrogate Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

|                  |                    | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                  |
|------------------|--------------------|------------------------------------------------|-----------------|-----------------|------------------|
| Lab Sample ID    | Client Sample ID   | DCA<br>(77-120)                                | TOL<br>(80-120) | BFB<br>(73-120) | DBFM<br>(75-123) |
| 480-138905-1     | MW-6(07132018)     | 116                                            | 95              | 104             | 102              |
| 480-138905-3     | MW-9R(07132018)    | 111                                            | 94              | 103             | 99               |
| 480-138905-4     | OS-12(07132018)    | 99                                             | 93              | 96              | 106              |
| 480-138905-6     | TRIP BLANK         | 98                                             | 95              | 100             | 100              |
| LCS 480-424746/5 | Lab Control Sample | 105                                            | 94              | 107             | 97               |
| LCS 480-425155/5 | Lab Control Sample | 100                                            | 95              | 102             | 105              |
| MB 480-424746/7  | Method Blank       | 114                                            | 95              | 103             | 105              |
| MB 480-425155/7  | Method Blank       | 99                                             | 92              | 100             | 100              |

#### Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

# Isotope Dilution Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID   | DXE<br>(15-110) |
|--------------------|--------------------|-----------------|
| 480-138905-2       | MW-8(07132018)     | 37              |
| 480-138905-5       | DUP-1(07132018)    | 58              |
| LCS 480-424644/2-A | Lab Control Sample | 32              |
| MB 480-424644/1-A  | Method Blank       | 67              |

#### Surrogate Legend

DXE = 1,4-Dioxane-d8

## Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID       | Client Sample ID       | PFBA<br>(25-150) | PFPeA<br>(25-150) | PFHxA<br>(25-150) | PFHpA<br>(25-150) | PFOA<br>(25-150) | PFNA<br>(25-150) | PFDA<br>(25-150) | PFUnA<br>(25-150) |
|---------------------|------------------------|------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|-------------------|
| 480-138905-2        | MW-8(07132018)         | 63               | 80                | 73                | 78                | 77               | 82               | 70               | 61                |
| 480-138905-5        | DUP-1(07132018)        | 60               | 78                | 74                | 79                | 74               | 71               | 68               | 60                |
| 480-138905-7        | FIELD BLANK(07132018)  | 96               | 96                | 91                | 102               | 94               | 96               | 104              | 95                |
| LCS 320-234430/2-A  | Lab Control Sample     | 95               | 96                | 92                | 97                | 93               | 93               | 98               | 97                |
| LCSD 320-234430/3-A | Lab Control Sample Dup | 100              | 96                | 100               | 103               | 98               | 98               | 103              | 101               |
| MB 320-234430/1-A   | Method Blank           | 99               | 98                | 97                | 98                | 98               | 98               | 104              | 98                |

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID       | Client Sample ID       | PFDaA<br>(25-150) | PFTDA<br>(25-150) | 3C3-PFB<br>(25-150) | PFHxS<br>(25-150) | PFOS<br>(25-150) | PFOSA<br>(25-150) | NMeFOS<br>(25-150) | NEtFOS<br>(25-150) |
|---------------------|------------------------|-------------------|-------------------|---------------------|-------------------|------------------|-------------------|--------------------|--------------------|
| 480-138905-2        | MW-8(07132018)         | 52                | 52                | 70                  | 77                | 68               | 60                | 64                 | 60                 |
| 480-138905-5        | DUP-1(07132018)        | 53                | 49                | 71                  | 76                | 64               | 60                | 61                 | 62                 |
| 480-138905-7        | FIELD BLANK(07132018)  | 92                | 89                | 89                  | 99                | 93               | 91                | 95                 | 92                 |
| LCS 320-234430/2-A  | Lab Control Sample     | 94                | 84                | 88                  | 92                | 89               | 85                | 91                 | 91                 |
| LCSD 320-234430/3-A | Lab Control Sample Dup | 97                | 88                | 92                  | 102               | 97               | 89                | 97                 | 99                 |
| MB 320-234430/1-A   | Method Blank           | 95                | 91                | 87                  | 101               | 95               | 93                | 101                | 98                 |

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID       | Client Sample ID       | M262FTS<br>(25-150) | M282FTS<br>(25-150) |
|---------------------|------------------------|---------------------|---------------------|
| 480-138905-2        | MW-8(07132018)         | 90                  | 78                  |
| 480-138905-5        | DUP-1(07132018)        | 89                  | 74                  |
| 480-138905-7        | FIELD BLANK(07132018)  | 106                 | 102                 |
| LCS 320-234430/2-A  | Lab Control Sample     | 101                 | 101                 |
| LCSD 320-234430/3-A | Lab Control Sample Dup | 101                 | 98                  |
| MB 320-234430/1-A   | Method Blank           | 101                 | 111                 |

#### Surrogate Legend

PFBA = 13C4 PFBA  
PFPeA = 13C5 PFPeA  
PFHxA = 13C2 PFHxA  
PFHpA = 13C4-PFHpA  
PFOA = 13C4 PFOA  
PFNA = 13C5 PFNA  
PFDA = 13C2 PFDA  
PFUnA = 13C2 PFUnA  
PFDaA = 13C2 PFDaA

TestAmerica Buffalo

# Isotope Dilution Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

PFTDA = 13C2-PFTeDA  
13C3-PFBS = 13C3-PFBS  
PFHxS = 18O2 PFHxS  
PFOS = 13C4 PFOS  
PFOSA = 13C8 FOSA  
d3-NMeFOSAA = d3-NMeFOSAA  
d5-NEtFOSAA = d5-NEtFOSAA  
M262FTS = M2-6:2FTS  
M282FTS = M2-8:2FTS

1  
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17

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-424746/7

Matrix: Water

Analysis Batch: 424746

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                               | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND        |              | 1.0 | 0.82 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,1,2-Trichloroethane                 | ND        |              | 1.0 | 0.23 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND        |              | 1.0 | 0.31 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,1-Dichloroethane                    | ND        |              | 1.0 | 0.38 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,1-Dichloroethene                    | ND        |              | 1.0 | 0.29 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,2,4-Trichlorobenzene                | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,2-Dibromoethane                     | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,2-Dichlorobenzene                   | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,2-Dichloroethane                    | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,2-Dichloropropane                   | ND        |              | 1.0 | 0.72 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,3-Dichlorobenzene                   | ND        |              | 1.0 | 0.78 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 1,4-Dichlorobenzene                   | ND        |              | 1.0 | 0.84 | ug/L |   |          | 07/17/18 10:48 | 1       |
| 2-Hexanone                            | ND        |              | 5.0 | 1.2  | ug/L |   |          | 07/17/18 10:48 | 1       |
| 2-Butanone (MEK)                      | ND        |              | 10  | 1.3  | ug/L |   |          | 07/17/18 10:48 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND        |              | 5.0 | 2.1  | ug/L |   |          | 07/17/18 10:48 | 1       |
| Acetone                               | ND        |              | 10  | 3.0  | ug/L |   |          | 07/17/18 10:48 | 1       |
| Benzene                               | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Bromodichloromethane                  | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Bromoform                             | ND        |              | 1.0 | 0.26 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Bromomethane                          | ND        |              | 1.0 | 0.69 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Carbon disulfide                      | ND        |              | 1.0 | 0.19 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Carbon tetrachloride                  | ND        |              | 1.0 | 0.27 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Chlorobenzene                         | ND        |              | 1.0 | 0.75 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Dibromochloromethane                  | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Chloroethane                          | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Chloroform                            | ND        |              | 1.0 | 0.34 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Chloromethane                         | ND        |              | 1.0 | 0.35 | ug/L |   |          | 07/17/18 10:48 | 1       |
| cis-1,2-Dichloroethene                | ND        |              | 1.0 | 0.81 | ug/L |   |          | 07/17/18 10:48 | 1       |
| cis-1,3-Dichloropropene               | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Cyclohexane                           | ND        |              | 1.0 | 0.18 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Dichlorodifluoromethane               | ND        |              | 1.0 | 0.68 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Ethylbenzene                          | ND        |              | 1.0 | 0.74 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Isopropylbenzene                      | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Methyl acetate                        | ND        |              | 2.5 | 1.3  | ug/L |   |          | 07/17/18 10:48 | 1       |
| Methyl tert-butyl ether               | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Methylcyclohexane                     | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Methylene Chloride                    | ND        |              | 1.0 | 0.44 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Styrene                               | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Tetrachloroethene                     | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Toluene                               | ND        |              | 1.0 | 0.51 | ug/L |   |          | 07/17/18 10:48 | 1       |
| trans-1,2-Dichloroethene              | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/17/18 10:48 | 1       |
| trans-1,3-Dichloropropene             | ND        |              | 1.0 | 0.37 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Trichloroethene                       | ND        |              | 1.0 | 0.46 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Trichlorofluoromethane                | ND        |              | 1.0 | 0.88 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Vinyl chloride                        | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/17/18 10:48 | 1       |
| Xylenes, Total                        | ND        |              | 2.0 | 0.66 | ug/L |   |          | 07/17/18 10:48 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 114          |              | 77 - 120 |          | 07/17/18 10:48 | 1       |
| Toluene-d8 (Surr)            | 95           |              | 80 - 120 |          | 07/17/18 10:48 | 1       |
| 4-Bromofluorobenzene (Surr)  | 103          |              | 73 - 120 |          | 07/17/18 10:48 | 1       |
| Dibromofluoromethane (Surr)  | 105          |              | 75 - 123 |          | 07/17/18 10:48 | 1       |

Lab Sample ID: LCS 480-424746/5

Matrix: Water

Analysis Batch: 424746

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

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1-Trichloroethane                 | 25.0        | 22.1       |               | ug/L |   | 88   | 73 - 126     |
| 1,1,2,2-Tetrachloroethane             | 25.0        | 23.1       |               | ug/L |   | 92   | 76 - 120     |
| 1,1,2-Trichloroethane                 | 25.0        | 24.5       |               | ug/L |   | 98   | 76 - 122     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0        | 24.0       |               | ug/L |   | 96   | 61 - 148     |
| 1,1-Dichloroethane                    | 25.0        | 23.6       |               | ug/L |   | 95   | 77 - 120     |
| 1,1-Dichloroethene                    | 25.0        | 19.6       |               | ug/L |   | 78   | 66 - 127     |
| 1,2,4-Trichlorobenzene                | 25.0        | 24.7       |               | ug/L |   | 99   | 79 - 122     |
| 1,2-Dibromo-3-Chloropropane           | 25.0        | 22.2       |               | ug/L |   | 89   | 56 - 134     |
| 1,2-Dibromoethane                     | 25.0        | 24.3       |               | ug/L |   | 97   | 77 - 120     |
| 1,2-Dichlorobenzene                   | 25.0        | 24.4       |               | ug/L |   | 98   | 80 - 124     |
| 1,2-Dichloroethane                    | 25.0        | 24.6       |               | ug/L |   | 98   | 75 - 120     |
| 1,2-Dichloropropane                   | 25.0        | 25.0       |               | ug/L |   | 100  | 76 - 120     |
| 1,3-Dichlorobenzene                   | 25.0        | 24.7       |               | ug/L |   | 99   | 77 - 120     |
| 1,4-Dichlorobenzene                   | 25.0        | 24.7       |               | ug/L |   | 99   | 80 - 120     |
| 2-Hexanone                            | 125         | 168        | *             | ug/L |   | 134  | 65 - 127     |
| 2-Butanone (MEK)                      | 125         | 177        | *             | ug/L |   | 141  | 57 - 140     |
| 4-Methyl-2-pentanone (MIBK)           | 125         | 143        |               | ug/L |   | 114  | 71 - 125     |
| Acetone                               | 125         | 208        | *             | ug/L |   | 167  | 56 - 142     |
| Benzene                               | 25.0        | 22.8       |               | ug/L |   | 91   | 71 - 124     |
| Bromodichloromethane                  | 25.0        | 22.7       |               | ug/L |   | 91   | 80 - 122     |
| Bromoform                             | 25.0        | 23.1       |               | ug/L |   | 93   | 61 - 132     |
| Bromomethane                          | 25.0        | 25.1       |               | ug/L |   | 100  | 55 - 144     |
| Carbon disulfide                      | 25.0        | 20.8       |               | ug/L |   | 83   | 59 - 134     |
| Carbon tetrachloride                  | 25.0        | 24.0       |               | ug/L |   | 96   | 72 - 134     |
| Chlorobenzene                         | 25.0        | 23.7       |               | ug/L |   | 95   | 80 - 120     |
| Dibromochloromethane                  | 25.0        | 23.1       |               | ug/L |   | 92   | 75 - 125     |
| Chloroethane                          | 25.0        | 28.3       |               | ug/L |   | 113  | 69 - 136     |
| Chloroform                            | 25.0        | 22.3       |               | ug/L |   | 89   | 73 - 127     |
| Chloromethane                         | 25.0        | 28.8       |               | ug/L |   | 115  | 68 - 124     |
| cis-1,2-Dichloroethene                | 25.0        | 22.1       |               | ug/L |   | 88   | 74 - 124     |
| cis-1,3-Dichloropropene               | 25.0        | 22.0       |               | ug/L |   | 88   | 74 - 124     |
| Cyclohexane                           | 25.0        | 23.9       |               | ug/L |   | 95   | 59 - 135     |
| Dichlorodifluoromethane               | 25.0        | 24.2       |               | ug/L |   | 97   | 59 - 135     |
| Ethylbenzene                          | 25.0        | 23.2       |               | ug/L |   | 93   | 77 - 123     |
| Isopropylbenzene                      | 25.0        | 22.9       |               | ug/L |   | 92   | 77 - 122     |
| Methyl acetate                        | 50.0        | 57.7       |               | ug/L |   | 115  | 74 - 133     |
| Methyl tert-butyl ether               | 25.0        | 21.9       |               | ug/L |   | 88   | 77 - 120     |
| Methylcyclohexane                     | 25.0        | 23.3       |               | ug/L |   | 93   | 68 - 134     |
| Methylene Chloride                    | 25.0        | 20.2       |               | ug/L |   | 81   | 75 - 124     |
| Styrene                               | 25.0        | 24.0       |               | ug/L |   | 96   | 80 - 120     |
| Tetrachloroethene                     | 25.0        | 25.4       |               | ug/L |   | 102  | 74 - 122     |
| Toluene                               | 25.0        | 23.4       |               | ug/L |   | 93   | 80 - 122     |
| trans-1,2-Dichloroethene              | 25.0        | 20.8       |               | ug/L |   | 83   | 73 - 127     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-424746/5

Matrix: Water

Analysis Batch: 424746

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Trichloroethene        | 25.0        | 22.7       |               | ug/L |   | 91   | 74 - 123     |
| Trichlorofluoromethane | 25.0        | 25.4       |               | ug/L |   | 102  | 62 - 150     |
| Vinyl chloride         | 25.0        | 24.5       |               | ug/L |   | 98   | 65 - 133     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 105           |               | 77 - 120 |
| Toluene-d8 (Surr)            | 94            |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr)  | 107           |               | 73 - 120 |
| Dibromofluoromethane (Surr)  | 97            |               | 75 - 123 |

Lab Sample ID: MB 480-425155/7

Matrix: Water

Analysis Batch: 425155

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                               | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1,1-Trichloroethane                 | ND        |              | 1.0 | 0.82 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,1,2,2-Tetrachloroethane             | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,1,2-Trichloroethane                 | ND        |              | 1.0 | 0.23 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND        |              | 1.0 | 0.31 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,1-Dichloroethane                    | ND        |              | 1.0 | 0.38 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,1-Dichloroethene                    | ND        |              | 1.0 | 0.29 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,2,4-Trichlorobenzene                | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,2-Dibromo-3-Chloropropane           | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,2-Dibromoethane                     | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,2-Dichlorobenzene                   | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,2-Dichloroethane                    | ND        |              | 1.0 | 0.21 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,2-Dichloropropane                   | ND        |              | 1.0 | 0.72 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,3-Dichlorobenzene                   | ND        |              | 1.0 | 0.78 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 1,4-Dichlorobenzene                   | ND        |              | 1.0 | 0.84 | ug/L |   |          | 07/18/18 20:57 | 1       |
| 2-Hexanone                            | ND        |              | 5.0 | 1.2  | ug/L |   |          | 07/18/18 20:57 | 1       |
| 2-Butanone (MEK)                      | ND        |              | 10  | 1.3  | ug/L |   |          | 07/18/18 20:57 | 1       |
| 4-Methyl-2-pentanone (MIBK)           | ND        |              | 5.0 | 2.1  | ug/L |   |          | 07/18/18 20:57 | 1       |
| Acetone                               | ND        |              | 10  | 3.0  | ug/L |   |          | 07/18/18 20:57 | 1       |
| Benzene                               | ND        |              | 1.0 | 0.41 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Bromodichloromethane                  | ND        |              | 1.0 | 0.39 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Bromoform                             | ND        |              | 1.0 | 0.26 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Bromomethane                          | ND        |              | 1.0 | 0.69 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Carbon disulfide                      | ND        |              | 1.0 | 0.19 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Carbon tetrachloride                  | ND        |              | 1.0 | 0.27 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Chlorobenzene                         | ND        |              | 1.0 | 0.75 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Dibromochloromethane                  | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Chloroethane                          | ND        |              | 1.0 | 0.32 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Chloroform                            | ND        |              | 1.0 | 0.34 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Chloromethane                         | ND        |              | 1.0 | 0.35 | ug/L |   |          | 07/18/18 20:57 | 1       |
| cis-1,2-Dichloroethene                | ND        |              | 1.0 | 0.81 | ug/L |   |          | 07/18/18 20:57 | 1       |
| cis-1,3-Dichloropropene               | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Cyclohexane                           | ND        |              | 1.0 | 0.18 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Dichlorodifluoromethane               | ND        |              | 1.0 | 0.68 | ug/L |   |          | 07/18/18 20:57 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-425155/7

Matrix: Water

Analysis Batch: 425155

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                   | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Ethylbenzene              | ND        |              | 1.0 | 0.74 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Isopropylbenzene          | ND        |              | 1.0 | 0.79 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Methyl acetate            | ND        |              | 2.5 | 1.3  | ug/L |   |          | 07/18/18 20:57 | 1       |
| Methyl tert-butyl ether   | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Methylcyclohexane         | ND        |              | 1.0 | 0.16 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Methylene Chloride        | ND        |              | 1.0 | 0.44 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Styrene                   | ND        |              | 1.0 | 0.73 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Tetrachloroethene         | ND        |              | 1.0 | 0.36 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Toluene                   | ND        |              | 1.0 | 0.51 | ug/L |   |          | 07/18/18 20:57 | 1       |
| trans-1,2-Dichloroethene  | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/18/18 20:57 | 1       |
| trans-1,3-Dichloropropene | ND        |              | 1.0 | 0.37 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Trichloroethene           | ND        |              | 1.0 | 0.46 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Trichlorofluoromethane    | ND        |              | 1.0 | 0.88 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Vinyl chloride            | ND        |              | 1.0 | 0.90 | ug/L |   |          | 07/18/18 20:57 | 1       |
| Xylenes, Total            | ND        |              | 2.0 | 0.66 | ug/L |   |          | 07/18/18 20:57 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 99           |              | 77 - 120 |          | 07/18/18 20:57 | 1       |
| Toluene-d8 (Surr)            | 92           |              | 80 - 120 |          | 07/18/18 20:57 | 1       |
| 4-Bromofluorobenzene (Surr)  | 100          |              | 73 - 120 |          | 07/18/18 20:57 | 1       |
| Dibromofluoromethane (Surr)  | 100          |              | 75 - 123 |          | 07/18/18 20:57 | 1       |

Lab Sample ID: LCS 480-425155/5

Matrix: Water

Analysis Batch: 425155

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                               | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| 1,1,1-Trichloroethane                 | 25.0        | 21.5       |               | ug/L |   | 86   | 73 - 126     |
| 1,1,2,2-Tetrachloroethane             | 25.0        | 23.6       |               | ug/L |   | 94   | 76 - 120     |
| 1,1,2-Trichloroethane                 | 25.0        | 24.8       |               | ug/L |   | 99   | 76 - 122     |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0        | 16.5       |               | ug/L |   | 66   | 61 - 148     |
| 1,1-Dichloroethane                    | 25.0        | 23.6       |               | ug/L |   | 94   | 77 - 120     |
| 1,1-Dichloroethene                    | 25.0        | 22.2       |               | ug/L |   | 89   | 66 - 127     |
| 1,2,4-Trichlorobenzene                | 25.0        | 23.5       |               | ug/L |   | 94   | 79 - 122     |
| 1,2-Dibromo-3-Chloropropane           | 25.0        | 21.1       |               | ug/L |   | 84   | 56 - 134     |
| 1,2-Dibromoethane                     | 25.0        | 24.2       |               | ug/L |   | 97   | 77 - 120     |
| 1,2-Dichlorobenzene                   | 25.0        | 22.7       |               | ug/L |   | 91   | 80 - 124     |
| 1,2-Dichloroethane                    | 25.0        | 24.4       |               | ug/L |   | 98   | 75 - 120     |
| 1,2-Dichloropropane                   | 25.0        | 23.5       |               | ug/L |   | 94   | 76 - 120     |
| 1,3-Dichlorobenzene                   | 25.0        | 22.7       |               | ug/L |   | 91   | 77 - 120     |
| 1,4-Dichlorobenzene                   | 25.0        | 23.0       |               | ug/L |   | 92   | 80 - 120     |
| 2-Hexanone                            | 125         | 113        |               | ug/L |   | 90   | 65 - 127     |
| 2-Butanone (MEK)                      | 125         | 124        |               | ug/L |   | 99   | 57 - 140     |
| 4-Methyl-2-pentanone (MIBK)           | 125         | 114        |               | ug/L |   | 91   | 71 - 125     |
| Acetone                               | 125         | 120        |               | ug/L |   | 96   | 56 - 142     |
| Benzene                               | 25.0        | 23.3       |               | ug/L |   | 93   | 71 - 124     |
| Bromodichloromethane                  | 25.0        | 24.5       |               | ug/L |   | 98   | 80 - 122     |

TestAmerica Buffalo



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-425155/5

Matrix: Water

Analysis Batch: 425155

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------|-------------|------------|---------------|------|---|------|--------------|
| Bromoform                | 25.0        | 25.4       |               | ug/L |   | 102  | 61 - 132     |
| Bromomethane             | 25.0        | 23.9       |               | ug/L |   | 95   | 55 - 144     |
| Carbon disulfide         | 25.0        | 20.7       |               | ug/L |   | 83   | 59 - 134     |
| Carbon tetrachloride     | 25.0        | 21.9       |               | ug/L |   | 88   | 72 - 134     |
| Chlorobenzene            | 25.0        | 23.9       |               | ug/L |   | 96   | 80 - 120     |
| Dibromochloromethane     | 25.0        | 24.9       |               | ug/L |   | 100  | 75 - 125     |
| Chloroethane             | 25.0        | 25.4       |               | ug/L |   | 102  | 69 - 136     |
| Chloroform               | 25.0        | 23.1       |               | ug/L |   | 92   | 73 - 127     |
| Chloromethane            | 25.0        | 25.8       |               | ug/L |   | 103  | 68 - 124     |
| cis-1,2-Dichloroethene   | 25.0        | 25.3       |               | ug/L |   | 101  | 74 - 124     |
| cis-1,3-Dichloropropene  | 25.0        | 24.2       |               | ug/L |   | 97   | 74 - 124     |
| Cyclohexane              | 25.0        | 16.9       |               | ug/L |   | 68   | 59 - 135     |
| Dichlorodifluoromethane  | 25.0        | 21.9       |               | ug/L |   | 88   | 59 - 135     |
| Ethylbenzene             | 25.0        | 23.0       |               | ug/L |   | 92   | 77 - 123     |
| Isopropylbenzene         | 25.0        | 21.9       |               | ug/L |   | 88   | 77 - 122     |
| Methyl acetate           | 50.0        | 50.4       |               | ug/L |   | 101  | 74 - 133     |
| Methyl tert-butyl ether  | 25.0        | 23.1       |               | ug/L |   | 93   | 77 - 120     |
| Methylcyclohexane        | 25.0        | 19.0       |               | ug/L |   | 76   | 68 - 134     |
| Methylene Chloride       | 25.0        | 22.0       |               | ug/L |   | 88   | 75 - 124     |
| Styrene                  | 25.0        | 23.5       |               | ug/L |   | 94   | 80 - 120     |
| Tetrachloroethene        | 25.0        | 23.1       |               | ug/L |   | 92   | 74 - 122     |
| Toluene                  | 25.0        | 23.1       |               | ug/L |   | 92   | 80 - 122     |
| trans-1,2-Dichloroethene | 25.0        | 24.6       |               | ug/L |   | 98   | 73 - 127     |
| Trichloroethene          | 25.0        | 22.5       |               | ug/L |   | 90   | 74 - 123     |
| Trichlorofluoromethane   | 25.0        | 22.1       |               | ug/L |   | 88   | 62 - 150     |
| Vinyl chloride           | 25.0        | 24.3       |               | ug/L |   | 97   | 65 - 133     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 100           |               | 77 - 120 |
| Toluene-d8 (Surr)            | 95            |               | 80 - 120 |
| 4-Bromofluorobenzene (Surr)  | 102           |               | 73 - 120 |
| Dibromofluoromethane (Surr)  | 105           |               | 75 - 123 |

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-424644/1-A

Matrix: Water

Analysis Batch: 425352

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424644

| Analyte          | MB Result    | MB Qualifier | RL       | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|--------------|--------------|----------|------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | 0.179        | J            | 0.20     | 0.10 | ug/L |   | 07/16/18 14:12 | 07/19/18 15:34 | 1       |
| Isotope Dilution | MB %Recovery | MB Qualifier | Limits   |      |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 67           |              | 15 - 110 |      |      |   | 07/16/18 14:12 | 07/19/18 15:34 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: LCS 480-424644/2-A

Matrix: Water

Analysis Batch: 425352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424644

| Analyte          | Spike Added   | LCS Result    | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------|---------------|---------------|---------------|------|---|------|--------------|
| 1,4-Dioxane      | 1.00          | 1.24          | E             | ug/L |   | 124  | 40 - 140     |
|                  |               |               |               |      |   |      |              |
| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits        |      |   |      |              |
| 1,4-Dioxane-d8   | 32            |               | 15 - 110      |      |   |      |              |

## Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-424509/4

Matrix: Water

Analysis Batch: 424509

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL  | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-----|-----|------|---|----------|----------------|---------|
| Ethane  | ND        |              | 7.5 | 1.5 | ug/L |   |          | 07/15/18 10:38 | 1       |
| Ethene  | ND        |              | 7.0 | 1.5 | ug/L |   |          | 07/15/18 10:38 | 1       |
| Methane | ND        |              | 4.0 | 1.0 | ug/L |   |          | 07/15/18 10:38 | 1       |

Lab Sample ID: LCS 480-424509/5

Matrix: Water

Analysis Batch: 424509

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Ethane  | 14.6        | 13.9       |               | ug/L |   | 95   | 79 - 120     |
| Ethene  | 13.6        | 13.7       |               | ug/L |   | 101  | 85 - 120     |
| Methane | 7.77        | 6.68       |               | ug/L |   | 86   | 85 - 120     |

Lab Sample ID: LCSD 480-424509/6

Matrix: Water

Analysis Batch: 424509

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Ethane  | 14.6        | 14.2        |                | ug/L |   | 97   | 79 - 120     | 2   | 50        |
| Ethene  | 13.6        | 13.9        |                | ug/L |   | 102  | 85 - 120     | 1   | 50        |
| Methane | 7.77        | 6.87        |                | ug/L |   | 88   | 85 - 120     | 3   | 50        |

## Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-234430/1-A

Matrix: Water

Analysis Batch: 235123

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 234430

| Analyte                         | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------------------------------|-----------|--------------|-----|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid (PFBA)   | ND        |              | 2.0 | 0.35 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluoropentanoic acid (PFPeA) | ND        |              | 2.0 | 0.49 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorohexanoic acid (PFHxA)  | ND        |              | 2.0 | 0.58 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluoroheptanoic acid (PFHpA) | ND        |              | 2.0 | 0.25 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorooctanoic acid (PFOA)   | ND        |              | 2.0 | 0.85 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorononanoic acid (PFNA)   | ND        |              | 2.0 | 0.27 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-234430/1-A

Matrix: Water

Analysis Batch: 235123

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 234430

| Analyte                                                    | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------------------------------|-----------|--------------|-----|------|------|---|----------------|----------------|---------|
| Perfluorodecanoic acid (PFDA)                              | ND        |              | 2.0 | 0.31 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluoroundecanoic acid (PFUnA)                           | ND        |              | 2.0 | 1.1  | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorododecanoic acid (PFDoA)                           | ND        |              | 2.0 | 0.55 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorotridecanoic Acid (PFTriA)                         | ND        |              | 2.0 | 1.3  | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorotetradecanoic acid (PFTeA)                        | ND        |              | 2.0 | 0.29 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorobutanesulfonic acid (PFBS)                        | ND        |              | 2.0 | 0.20 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorohexanesulfonic acid (PFHxS)                       | 0.242     | J            | 2.0 | 0.17 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | ND        |              | 2.0 | 0.19 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorooctanesulfonic acid (PFOS)                        | ND        |              | 2.0 | 0.54 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorodecanesulfonic acid (PFDS)                        | ND        |              | 2.0 | 0.32 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| Perfluorooctane Sulfonamide (FOSA)                         | ND        |              | 2.0 | 0.35 | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | ND        |              | 20  | 1.9  | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | ND        |              | 20  | 2.0  | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 6:2 FTS                                                    | ND        |              | 20  | 2.0  | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 8:2 FTS                                                    | ND        |              | 20  | 2.0  | ng/L |   | 07/17/18 07:31 | 07/20/18 04:43 | 1       |

| Isotope Dilution | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|--------------|--------------|----------|----------------|----------------|---------|
| 13C4 PFBA        | 99           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C5 PFPeA       | 98           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C2 PFHxA       | 97           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C4-PFHpA       | 98           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C4 PFOA        | 98           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C5 PFNA        | 98           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C2 PFDA        | 104          |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C2 PFUnA       | 98           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C2 PFDoA       | 95           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C2-PFTeDA      | 91           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C3-PFBS        | 87           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 18O2 PFHxS       | 101          |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C4 PFOS        | 95           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| 13C8 FOSA        | 93           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| d3-NMeFOSAA      | 101          |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| d5-NEtFOSAA      | 98           |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| M2-6:2FTS        | 101          |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |
| M2-8:2FTS        | 111          |              | 25 - 150 | 07/17/18 07:31 | 07/20/18 04:43 | 1       |

Lab Sample ID: LCS 320-234430/2-A

Matrix: Water

Analysis Batch: 235123

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 234430

| Analyte                         | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------------------|-------------|------------|---------------|------|---|------|--------------|
| Perfluorobutanoic acid (PFBA)   | 40.0        | 35.2       |               | ng/L |   | 88   | 70 - 130     |
| Perfluoropentanoic acid (PFPeA) | 40.0        | 34.2       |               | ng/L |   | 85   | 66 - 126     |
| Perfluorohexanoic acid (PFHxA)  | 40.0        | 35.7       |               | ng/L |   | 89   | 66 - 126     |
| Perfluoroheptanoic acid (PFHpA) | 40.0        | 35.2       |               | ng/L |   | 88   | 66 - 126     |
| Perfluorooctanoic acid (PFOA)   | 40.0        | 34.6       |               | ng/L |   | 86   | 64 - 124     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-234430/2-A

Matrix: Water

Analysis Batch: 235123

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 234430

| Analyte                                                    | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------------------------------------------|-------------|------------|---------------|------|---|------|--------------|
| Perfluorononanoic acid (PFNA)                              | 40.0        | 34.5       |               | ng/L |   | 86   | 68 - 128     |
| Perfluorodecanoic acid (PFDA)                              | 40.0        | 32.8       |               | ng/L |   | 82   | 69 - 129     |
| Perfluoroundecanoic acid (PFUnA)                           | 40.0        | 34.8       |               | ng/L |   | 87   | 60 - 120     |
| Perfluorododecanoic acid (PFDoA)                           | 40.0        | 33.3       |               | ng/L |   | 83   | 71 - 131     |
| Perfluorotridecanoic Acid (PFTriA)                         | 40.0        | 29.7       |               | ng/L |   | 74   | 72 - 132     |
| Perfluorotetradecanoic acid (PFTeA)                        | 40.0        | 36.9       |               | ng/L |   | 92   | 68 - 128     |
| Perfluorobutanesulfonic acid (PFBS)                        | 35.4        | 33.6       |               | ng/L |   | 95   | 73 - 133     |
| Perfluorohexanesulfonic acid (PFHxS)                       | 36.4        | 32.2       |               | ng/L |   | 88   | 63 - 123     |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | 38.1        | 35.5       |               | ng/L |   | 93   | 68 - 128     |
| Perfluorooctanesulfonic acid (PFOS)                        | 37.1        | 32.5       |               | ng/L |   | 87   | 67 - 127     |
| Perfluorodecanesulfonic acid (PFDS)                        | 38.6        | 34.2       |               | ng/L |   | 89   | 68 - 128     |
| Perfluorooctane Sulfonamide (FOSA)                         | 40.0        | 37.0       |               | ng/L |   | 92   | 70 - 130     |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | 40.0        | 35.3       |               | ng/L |   | 88   | 67 - 127     |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | 40.0        | 36.1       |               | ng/L |   | 90   | 65 - 125     |
| 6:2 FTS                                                    | 37.9        | 32.6       |               | ng/L |   | 86   | 66 - 126     |
| 8:2 FTS                                                    | 38.3        | 32.4       |               | ng/L |   | 84   | 67 - 127     |

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits   |
|------------------|---------------|---------------|----------|
| 13C4 PFBA        | 95            |               | 25 - 150 |
| 13C5 PFPeA       | 96            |               | 25 - 150 |
| 13C2 PFHxA       | 92            |               | 25 - 150 |
| 13C4-PFHpA       | 97            |               | 25 - 150 |
| 13C4 PFOA        | 93            |               | 25 - 150 |
| 13C5 PFNA        | 93            |               | 25 - 150 |
| 13C2 PFDA        | 98            |               | 25 - 150 |
| 13C2 PFUnA       | 97            |               | 25 - 150 |
| 13C2 PFDoA       | 94            |               | 25 - 150 |
| 13C2-PFTeDA      | 84            |               | 25 - 150 |
| 13C3-PFBS        | 88            |               | 25 - 150 |
| 18O2 PFHxS       | 92            |               | 25 - 150 |
| 13C4 PFOS        | 89            |               | 25 - 150 |
| 13C8 FOSA        | 85            |               | 25 - 150 |
| d3-NMeFOSAA      | 91            |               | 25 - 150 |
| d5-NEtFOSAA      | 91            |               | 25 - 150 |
| M2-6:2FTS        | 101           |               | 25 - 150 |
| M2-8:2FTS        | 101           |               | 25 - 150 |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-234430/3-A

Matrix: Water

Analysis Batch: 235123

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 234430

| Analyte                                                    | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------------------------------------------------------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Perfluorobutanoic acid (PFBA)                              | 40.0        | 34.6        |                | ng/L |   | 86   | 70 - 130     | 2   | 30        |
| Perfluoropentanoic acid (PFPeA)                            | 40.0        | 35.7        |                | ng/L |   | 89   | 66 - 126     | 4   | 30        |
| Perfluorohexanoic acid (PFHxA)                             | 40.0        | 35.3        |                | ng/L |   | 88   | 66 - 126     | 1   | 30        |
| Perfluoroheptanoic acid (PFHpA)                            | 40.0        | 34.8        |                | ng/L |   | 87   | 66 - 126     | 1   | 30        |
| Perfluorooctanoic acid (PFOA)                              | 40.0        | 34.5        |                | ng/L |   | 86   | 64 - 124     | 0   | 30        |
| Perfluorononanoic acid (PFNA)                              | 40.0        | 34.5        |                | ng/L |   | 86   | 68 - 128     | 0   | 30        |
| Perfluorodecanoic acid (PFDA)                              | 40.0        | 34.7        |                | ng/L |   | 87   | 69 - 129     | 6   | 30        |
| Perfluoroundecanoic acid (PFUnA)                           | 40.0        | 33.4        |                | ng/L |   | 84   | 60 - 120     | 4   | 30        |
| Perfluorododecanoic acid (PFDoA)                           | 40.0        | 35.5        |                | ng/L |   | 89   | 71 - 131     | 6   | 30        |
| Perfluorotridecanoic Acid (PFTriA)                         | 40.0        | 31.0        |                | ng/L |   | 78   | 72 - 132     | 4   | 30        |
| Perfluorotetradecanoic acid (PFTeA)                        | 40.0        | 38.6        |                | ng/L |   | 96   | 68 - 128     | 4   | 30        |
| Perfluorobutanesulfonic acid (PFBS)                        | 35.4        | 33.1        |                | ng/L |   | 94   | 73 - 133     | 2   | 30        |
| Perfluorohexanesulfonic acid (PFHxS)                       | 36.4        | 30.4        |                | ng/L |   | 84   | 63 - 123     | 6   | 30        |
| Perfluoroheptanesulfonic Acid (PFHpS)                      | 38.1        | 33.9        |                | ng/L |   | 89   | 68 - 128     | 4   | 30        |
| Perfluorooctanesulfonic acid (PFOS)                        | 37.1        | 32.9        |                | ng/L |   | 89   | 67 - 127     | 1   | 30        |
| Perfluorodecanesulfonic acid (PFDS)                        | 38.6        | 34.1        |                | ng/L |   | 88   | 68 - 128     | 0   | 30        |
| Perfluorooctane Sulfonamide (FOSA)                         | 40.0        | 37.3        |                | ng/L |   | 93   | 70 - 130     | 1   | 30        |
| N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA) | 40.0        | 36.3        |                | ng/L |   | 91   | 67 - 127     | 3   | 30        |
| N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)  | 40.0        | 37.8        |                | ng/L |   | 95   | 65 - 125     | 5   | 30        |
| 6:2 FTS                                                    | 37.9        | 35.8        |                | ng/L |   | 94   | 66 - 126     | 9   | 30        |
| 8:2 FTS                                                    | 38.3        | 34.9        |                | ng/L |   | 91   | 67 - 127     | 8   | 30        |

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits   |
|------------------|----------------|----------------|----------|
| 13C4 PFBA        | 100            |                | 25 - 150 |
| 13C5 PFPeA       | 96             |                | 25 - 150 |
| 13C2 PFHxA       | 100            |                | 25 - 150 |
| 13C4-PFHpA       | 103            |                | 25 - 150 |
| 13C4 PFOA        | 98             |                | 25 - 150 |
| 13C5 PFNA        | 98             |                | 25 - 150 |
| 13C2 PFDA        | 103            |                | 25 - 150 |
| 13C2 PFUnA       | 101            |                | 25 - 150 |
| 13C2 PFDoA       | 97             |                | 25 - 150 |
| 13C2-PFTeDA      | 88             |                | 25 - 150 |
| 13C3-PFBS        | 92             |                | 25 - 150 |
| 18O2 PFHxS       | 102            |                | 25 - 150 |
| 13C4 PFOS        | 97             |                | 25 - 150 |
| 13C8 FOSA        | 89             |                | 25 - 150 |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-234430/3-A

Matrix: Water

Analysis Batch: 235123

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 234430

| Isotope Dilution | LCSD<br>%Recovery | LCSD<br>Qualifier | Limits   |
|------------------|-------------------|-------------------|----------|
| d3-NMeFOSAA      | 97                |                   | 25 - 150 |
| d5-NEtFOSAA      | 99                |                   | 25 - 150 |
| M2-6:2FTS        | 101               |                   | 25 - 150 |
| M2-8:2FTS        | 98                |                   | 25 - 150 |

## Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-424485/1-A

Matrix: Water

Analysis Batch: 425223

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 424485

| Analyte   | MB<br>Result | MB<br>Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | ND           |                 | 0.20   | 0.060   | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Antimony  | ND           |                 | 0.020  | 0.0068  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Arsenic   | ND           |                 | 0.015  | 0.0056  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Barium    | ND           |                 | 0.0020 | 0.00070 | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Beryllium | ND           |                 | 0.0020 | 0.00030 | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Cadmium   | ND           |                 | 0.0020 | 0.00050 | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Calcium   | ND           |                 | 0.50   | 0.10    | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Chromium  | ND           |                 | 0.0040 | 0.0010  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Cobalt    | ND           |                 | 0.0040 | 0.00063 | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Copper    | ND           |                 | 0.010  | 0.0016  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Iron      | ND           |                 | 0.050  | 0.019   | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Lead      | ND           |                 | 0.010  | 0.0030  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Magnesium | ND           |                 | 0.20   | 0.043   | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Manganese | 0.000480     | J               | 0.0030 | 0.00040 | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Nickel    | ND           |                 | 0.010  | 0.0013  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Potassium | ND           |                 | 0.50   | 0.10    | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Selenium  | ND           |                 | 0.025  | 0.0087  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Silver    | ND           |                 | 0.0060 | 0.0017  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Sodium    | ND           |                 | 1.0    | 0.32    | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Thallium  | ND           |                 | 0.020  | 0.010   | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Vanadium  | ND           |                 | 0.0050 | 0.0015  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |
| Zinc      | ND           |                 | 0.010  | 0.0015  | mg/L |   | 07/16/18 10:11 | 07/18/18 13:54 | 1       |

Lab Sample ID: LCS 480-424485/2-A

Matrix: Water

Analysis Batch: 425223

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424485

| Analyte   | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | Limits   |
|-----------|----------------|---------------|------------------|------|---|------|----------|
| Aluminum  | 10.0           | 10.26         |                  | mg/L |   | 103  | 80 - 120 |
| Antimony  | 0.200          | 0.205         |                  | mg/L |   | 103  | 80 - 120 |
| Arsenic   | 0.200          | 0.210         |                  | mg/L |   | 105  | 80 - 120 |
| Barium    | 0.200          | 0.213         |                  | mg/L |   | 107  | 80 - 120 |
| Beryllium | 0.200          | 0.218         |                  | mg/L |   | 109  | 80 - 120 |
| Cadmium   | 0.200          | 0.211         |                  | mg/L |   | 106  | 80 - 120 |
| Calcium   | 10.0           | 10.35         |                  | mg/L |   | 104  | 80 - 120 |
| Chromium  | 0.200          | 0.209         |                  | mg/L |   | 104  | 80 - 120 |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-424485/2-A

Matrix: Water

Analysis Batch: 425223

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 424485

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| Cobalt    | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Copper    | 0.200       | 0.210      |               | mg/L |   | 105  | 80 - 120     |
| Iron      | 10.0        | 10.47      |               | mg/L |   | 105  | 80 - 120     |
| Lead      | 0.200       | 0.213      |               | mg/L |   | 107  | 80 - 120     |
| Magnesium | 10.0        | 10.48      |               | mg/L |   | 105  | 80 - 120     |
| Manganese | 0.200       | 0.211      |               | mg/L |   | 105  | 80 - 120     |
| Nickel    | 0.200       | 0.210      |               | mg/L |   | 105  | 80 - 120     |
| Potassium | 10.0        | 9.89       |               | mg/L |   | 99   | 80 - 120     |
| Selenium  | 0.200       | 0.206      |               | mg/L |   | 103  | 80 - 120     |
| Silver    | 0.0500      | 0.0571     |               | mg/L |   | 114  | 80 - 120     |
| Sodium    | 10.0        | 10.02      |               | mg/L |   | 100  | 80 - 120     |
| Thallium  | 0.200       | 0.216      |               | mg/L |   | 108  | 80 - 120     |
| Vanadium  | 0.200       | 0.215      |               | mg/L |   | 107  | 80 - 120     |
| Zinc      | 0.200       | 0.219      |               | mg/L |   | 110  | 80 - 120     |

Lab Sample ID: MB 480-424799/1-E

Matrix: Water

Analysis Batch: 425532

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 425139

| Analyte   | MB Result | MB Qualifier | RL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| Aluminum  | ND        |              | 0.20   | 0.060   | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Antimony  | ND        |              | 0.020  | 0.0068  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Arsenic   | ND        |              | 0.015  | 0.0056  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Barium    | ND        |              | 0.0020 | 0.00070 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Beryllium | ND        |              | 0.0020 | 0.00030 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Cadmium   | ND        |              | 0.0020 | 0.00050 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Calcium   | ND        |              | 0.50   | 0.10    | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Chromium  | ND        |              | 0.0040 | 0.0010  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Cobalt    | ND        |              | 0.0040 | 0.00063 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Copper    | ND        |              | 0.010  | 0.0016  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Iron      | ND        |              | 0.050  | 0.019   | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Lead      | ND        |              | 0.010  | 0.0030  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Magnesium | ND        |              | 0.20   | 0.043   | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Manganese | ND        |              | 0.0030 | 0.00040 | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Nickel    | ND        |              | 0.010  | 0.0013  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Potassium | ND        |              | 0.50   | 0.10    | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Selenium  | ND        |              | 0.025  | 0.0087  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Silver    | ND        |              | 0.0060 | 0.0017  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Sodium    | ND        |              | 1.0    | 0.32    | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Thallium  | ND        |              | 0.020  | 0.010   | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Vanadium  | ND        |              | 0.0050 | 0.0015  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |
| Zinc      | 0.00985   | J            | 0.010  | 0.0015  | mg/L |   | 07/19/18 09:05 | 07/19/18 21:28 | 1       |

Lab Sample ID: LCS 480-424799/2-E

Matrix: Water

Analysis Batch: 425532

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 425139

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Aluminum | 10.0        | 9.63       |               | mg/L |   | 96   | 80 - 120     |

TestAmerica Buffalo



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-424799/2-E

Matrix: Water

Analysis Batch: 425532

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 425139

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| Antimony  | 0.200       | 0.191      |               | mg/L |   | 96   | 80 - 120     |
| Arsenic   | 0.200       | 0.198      |               | mg/L |   | 99   | 80 - 120     |
| Barium    | 0.200       | 0.202      |               | mg/L |   | 101  | 80 - 120     |
| Beryllium | 0.200       | 0.203      |               | mg/L |   | 101  | 80 - 120     |
| Cadmium   | 0.200       | 0.197      |               | mg/L |   | 99   | 80 - 120     |
| Calcium   | 10.0        | 9.74       |               | mg/L |   | 97   | 80 - 120     |
| Chromium  | 0.200       | 0.201      |               | mg/L |   | 100  | 80 - 120     |
| Cobalt    | 0.200       | 0.188      |               | mg/L |   | 94   | 80 - 120     |
| Copper    | 0.200       | 0.195      |               | mg/L |   | 98   | 80 - 120     |
| Iron      | 10.0        | 9.78       |               | mg/L |   | 98   | 80 - 120     |
| Lead      | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Magnesium | 10.0        | 9.91       |               | mg/L |   | 99   | 80 - 120     |
| Manganese | 0.200       | 0.200      |               | mg/L |   | 100  | 80 - 120     |
| Nickel    | 0.200       | 0.198      |               | mg/L |   | 99   | 80 - 120     |
| Potassium | 10.0        | 9.51       |               | mg/L |   | 95   | 80 - 120     |
| Selenium  | 0.200       | 0.192      |               | mg/L |   | 96   | 80 - 120     |
| Silver    | 0.0500      | 0.0554     |               | mg/L |   | 111  | 80 - 120     |
| Sodium    | 10.0        | 9.61       |               | mg/L |   | 96   | 80 - 120     |
| Thallium  | 0.200       | 0.203      |               | mg/L |   | 101  | 80 - 120     |
| Vanadium  | 0.200       | 0.201      |               | mg/L |   | 101  | 80 - 120     |
| Zinc      | 0.200       | 0.214      |               | mg/L |   | 107  | 80 - 120     |

Lab Sample ID: LCSD 480-424799/3-B

Matrix: Water

Analysis Batch: 425532

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 425139

| Analyte   | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Aluminum  | 10.0        | 9.43        |                | mg/L |   | 94   | 80 - 120     | 2   | 20        |
| Antimony  | 0.200       | 0.194       |                | mg/L |   | 97   | 80 - 120     | 2   | 20        |
| Arsenic   | 0.200       | 0.198       |                | mg/L |   | 99   | 80 - 120     | 0   | 20        |
| Barium    | 0.200       | 0.200       |                | mg/L |   | 100  | 80 - 120     | 1   | 20        |
| Beryllium | 0.200       | 0.202       |                | mg/L |   | 101  | 80 - 120     | 0   | 20        |
| Cadmium   | 0.200       | 0.199       |                | mg/L |   | 99   | 80 - 120     | 1   | 20        |
| Calcium   | 10.0        | 9.75        |                | mg/L |   | 98   | 80 - 120     | 0   | 20        |
| Chromium  | 0.200       | 0.199       |                | mg/L |   | 99   | 80 - 120     | 1   | 20        |
| Cobalt    | 0.200       | 0.188       |                | mg/L |   | 94   | 80 - 120     | 0   | 20        |
| Copper    | 0.200       | 0.195       |                | mg/L |   | 97   | 80 - 120     | 0   | 20        |
| Iron      | 10.0        | 9.76        |                | mg/L |   | 98   | 80 - 120     | 0   | 20        |
| Lead      | 0.200       | 0.200       |                | mg/L |   | 100  | 80 - 120     | 0   | 20        |
| Magnesium | 10.0        | 9.92        |                | mg/L |   | 99   | 80 - 120     | 0   | 20        |
| Manganese | 0.200       | 0.199       |                | mg/L |   | 99   | 80 - 120     | 1   | 20        |
| Nickel    | 0.200       | 0.197       |                | mg/L |   | 98   | 80 - 120     | 0   | 20        |
| Potassium | 10.0        | 9.24        |                | mg/L |   | 92   | 80 - 120     | 3   | 20        |
| Selenium  | 0.200       | 0.190       |                | mg/L |   | 95   | 80 - 120     | 1   | 20        |
| Silver    | 0.0500      | 0.0547      |                | mg/L |   | 109  | 80 - 120     | 1   | 20        |
| Sodium    | 10.0        | 9.36        |                | mg/L |   | 93   | 80 - 120     | 3   | 20        |
| Thallium  | 0.200       | 0.203       |                | mg/L |   | 102  | 80 - 120     | 0   | 20        |
| Vanadium  | 0.200       | 0.201       |                | mg/L |   | 101  | 80 - 120     | 0   | 20        |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-424799/3-B

Matrix: Water

Analysis Batch: 425532

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 425139

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-------|
| Zinc    | 0.200       | 0.216       |                | mg/L |   | 108  | 80 - 120     | 1   | 20    |

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-425846/1-A

Matrix: Water

Analysis Batch: 426099

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425846

| Analyte | MB Result | MB Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND        |              | 0.00020 | 0.00012 | mg/L |   | 07/23/18 12:10 | 07/23/18 15:50 | 1       |

Lab Sample ID: LCS 480-425846/2-A

Matrix: Water

Analysis Batch: 426099

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425846

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |  |  |
|---------|-------------|------------|---------------|------|---|------|--------------|--|--|
| Mercury | 0.00667     | 0.00620    |               | mg/L |   | 93   | 80 - 120     |  |  |

Lab Sample ID: MB 480-425875/1-A

Matrix: Water

Analysis Batch: 426098

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 425875

| Analyte | MB Result | MB Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND        |              | 0.00020 | 0.00012 | mg/L |   | 07/23/18 14:05 | 07/23/18 17:20 | 1       |

Lab Sample ID: LCS 480-425875/2-A

Matrix: Water

Analysis Batch: 426098

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 425875

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |  |  |
|---------|-------------|------------|---------------|------|---|------|--------------|--|--|
| Mercury | 0.00667     | 0.00602    |               | mg/L |   | 90   | 80 - 120     |  |  |

Lab Sample ID: MB 480-424799/1-F

Matrix: Water

Analysis Batch: 425438

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 425316

| Analyte | MB Result | MB Qualifier | RL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | ND        |              | 0.00029 | 0.00017 | mg/L |   | 07/19/18 12:40 | 07/19/18 17:26 | 1       |

Lab Sample ID: LCS 480-424799/2-F

Matrix: Water

Analysis Batch: 425438

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 425316

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |  |  |
|---------|-------------|------------|---------------|------|---|------|--------------|--|--|
| Mercury | 0.00667     | 0.00600    |               | mg/L |   | 90   | 80 - 120     |  |  |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 480-138905-4 MS

Matrix: Water

Analysis Batch: 425438

Client Sample ID: OS-12(07132018)

Prep Type: Dissolved

Prep Batch: 425316

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Mercury | ND            |                  | 0.00667     | 0.00593   |              | mg/L |   | 89   | 80 - 120     |

Lab Sample ID: 480-138905-4 MSD

Matrix: Water

Analysis Batch: 425438

Client Sample ID: OS-12(07132018)

Prep Type: Dissolved

Prep Batch: 425316

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Mercury | ND            |                  | 0.00667     | 0.00587    |               | mg/L |   | 88   | 80 - 120     | 1   | 20        |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-424691/52

Matrix: Water

Analysis Batch: 424691

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte  | MB Result | MB Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|------|------|---|----------|----------------|---------|
| Chloride | ND        |              | 0.50 | 0.28 | mg/L |   |          | 07/17/18 03:53 | 1       |
| Sulfate  | ND        |              | 2.0  | 0.35 | mg/L |   |          | 07/17/18 03:53 | 1       |

Lab Sample ID: LCS 480-424691/51

Matrix: Water

Analysis Batch: 424691

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Chloride | 50.0        | 51.63      |               | mg/L |   | 103  | 90 - 110     |
| Sulfate  | 50.0        | 50.42      |               | mg/L |   | 101  | 90 - 110     |

Lab Sample ID: MB 480-424694/28

Matrix: Water

Analysis Batch: 424694

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| Nitrate | ND        |              | 0.050 | 0.025 | mg/L |   |          | 07/17/18 00:38 | 1       |

Lab Sample ID: MB 480-424694/52

Matrix: Water

Analysis Batch: 424694

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL    | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| Nitrate | ND        |              | 0.050 | 0.025 | mg/L |   |          | 07/17/18 03:53 | 1       |

Lab Sample ID: LCS 480-424694/27

Matrix: Water

Analysis Batch: 424694

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Nitrate | 5.00        | 5.13       |               | mg/L |   | 103  | 90 - 110     |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-424694/51  
Matrix: Water  
Analysis Batch: 424694

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Nitrate | 5.00        | 5.12       |               | mg/L |   | 102  | 90 - 110     |

Lab Sample ID: 480-138905-3 MS  
Matrix: Water  
Analysis Batch: 424694

Client Sample ID: MW-9R(07132018)  
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Nitrate | 3.2           | H                | 50.0        | 54.25     |              | mg/L |   | 102  | 80 - 120     |

Lab Sample ID: MB 480-425410/4  
Matrix: Water  
Analysis Batch: 425410

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

| Analyte  | MB Result | MB Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|------|------|---|----------|----------------|---------|
| Chloride | ND        |              | 0.50 | 0.28 | mg/L |   |          | 07/19/18 19:36 | 1       |
| Sulfate  | ND        |              | 2.0  | 0.35 | mg/L |   |          | 07/19/18 19:36 | 1       |

Lab Sample ID: LCS 480-425410/3  
Matrix: Water  
Analysis Batch: 425410

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

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Chloride | 50.0        | 50.69      |               | mg/L |   | 101  | 90 - 110     |
| Sulfate  | 50.0        | 49.10      |               | mg/L |   | 98   | 90 - 110     |

## Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-425698/52  
Matrix: Water  
Analysis Batch: 425698

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

| Analyte              | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Total Organic Carbon | 0.785     | J            | 1.0 | 0.43 | mg/L |   |          | 07/20/18 18:18 | 1       |

Lab Sample ID: LCS 480-425698/53  
Matrix: Water  
Analysis Batch: 425698

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

| Analyte              | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|-------------|------------|---------------|------|---|------|--------------|
| Total Organic Carbon | 60.0        | 57.38      |               | mg/L |   | 96   | 90 - 110     |

## Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-425428/30  
Matrix: Water  
Analysis Batch: 425428

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

| Analyte           | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Alkalinity, Total | ND        |              | 5.0 | 0.79 | mg/L |   |          | 07/19/18 13:30 | 1       |

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

Lab Sample ID: MB 480-425428/54

Matrix: Water

Analysis Batch: 425428

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte           | MB<br>Result | MB<br>Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------|--------------|-----------------|-----|------|------|---|----------|----------------|---------|
| Alkalinity, Total | ND           |                 | 5.0 | 0.79 | mg/L |   |          | 07/19/18 15:42 | 1       |

Lab Sample ID: LCS 480-425428/31

Matrix: Water

Analysis Batch: 425428

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte           | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|-------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Alkalinity, Total | 100            | 93.14         |                  | mg/L |   | 93   | 90 - 110        |

Lab Sample ID: LCS 480-425428/55

Matrix: Water

Analysis Batch: 425428

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte           | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|-------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Alkalinity, Total | 100            | 95.46         |                  | mg/L |   | 95   | 90 - 110        |

# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## GC/MS VOA

### Analysis Batch: 424746

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-1     | MW-6(07132018)     | Total/NA  | Water  | 8260C  |            |
| 480-138905-3     | MW-9R(07132018)    | Total/NA  | Water  | 8260C  |            |
| MB 480-424746/7  | Method Blank       | Total/NA  | Water  | 8260C  |            |
| LCS 480-424746/5 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |

### Analysis Batch: 425155

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-4     | OS-12(07132018)    | Total/NA  | Water  | 8260C  |            |
| 480-138905-6     | TRIP BLANK         | Total/NA  | Water  | 8260C  |            |
| MB 480-425155/7  | Method Blank       | Total/NA  | Water  | 8260C  |            |
| LCS 480-425155/5 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |

## GC/MS Semi VOA

### Prep Batch: 424644

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-2       | MW-8(07132018)     | Total/NA  | Water  | 3510C  |            |
| 480-138905-5       | DUP-1(07132018)    | Total/NA  | Water  | 3510C  |            |
| MB 480-424644/1-A  | Method Blank       | Total/NA  | Water  | 3510C  |            |
| LCS 480-424644/2-A | Lab Control Sample | Total/NA  | Water  | 3510C  |            |

### Analysis Batch: 425352

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method       | Prep Batch |
|--------------------|--------------------|-----------|--------|--------------|------------|
| 480-138905-2       | MW-8(07132018)     | Total/NA  | Water  | 8270D SIM ID | 424644     |
| 480-138905-5       | DUP-1(07132018)    | Total/NA  | Water  | 8270D SIM ID | 424644     |
| MB 480-424644/1-A  | Method Blank       | Total/NA  | Water  | 8270D SIM ID | 424644     |
| LCS 480-424644/2-A | Lab Control Sample | Total/NA  | Water  | 8270D SIM ID | 424644     |

## GC VOA

### Analysis Batch: 424509

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method  | Prep Batch |
|-------------------|------------------------|-----------|--------|---------|------------|
| 480-138905-1      | MW-6(07132018)         | Total/NA  | Water  | RSK-175 |            |
| 480-138905-3      | MW-9R(07132018)        | Total/NA  | Water  | RSK-175 |            |
| 480-138905-4      | OS-12(07132018)        | Total/NA  | Water  | RSK-175 |            |
| MB 480-424509/4   | Method Blank           | Total/NA  | Water  | RSK-175 |            |
| LCS 480-424509/5  | Lab Control Sample     | Total/NA  | Water  | RSK-175 |            |
| LCSD 480-424509/6 | Lab Control Sample Dup | Total/NA  | Water  | RSK-175 |            |

## LCMS

### Prep Batch: 234430

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 480-138905-2        | MW-8(07132018)         | Total/NA  | Water  | 3535   |            |
| 480-138905-5        | DUP-1(07132018)        | Total/NA  | Water  | 3535   |            |
| 480-138905-7        | FIELD BLANK(07132018)  | Total/NA  | Water  | 3535   |            |
| MB 320-234430/1-A   | Method Blank           | Total/NA  | Water  | 3535   |            |
| LCS 320-234430/2-A  | Lab Control Sample     | Total/NA  | Water  | 3535   |            |
| LCSD 320-234430/3-A | Lab Control Sample Dup | Total/NA  | Water  | 3535   |            |

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## LCMS (Continued)

### Analysis Batch: 235123

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method         | Prep Batch |
|---------------------|------------------------|-----------|--------|----------------|------------|
| 480-138905-2        | MW-8(07132018)         | Total/NA  | Water  | 537 (modified) | 234430     |
| 480-138905-5        | DUP-1(07132018)        | Total/NA  | Water  | 537 (modified) | 234430     |
| 480-138905-7        | FIELD BLANK(07132018)  | Total/NA  | Water  | 537 (modified) | 234430     |
| MB 320-234430/1-A   | Method Blank           | Total/NA  | Water  | 537 (modified) | 234430     |
| LCS 320-234430/2-A  | Lab Control Sample     | Total/NA  | Water  | 537 (modified) | 234430     |
| LCSD 320-234430/3-A | Lab Control Sample Dup | Total/NA  | Water  | 537 (modified) | 234430     |

## Metals

### Prep Batch: 424485

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-1       | MW-6(07132018)     | Total/NA  | Water  | 3005A  |            |
| 480-138905-3       | MW-9R(07132018)    | Total/NA  | Water  | 3005A  |            |
| 480-138905-4       | OS-12(07132018)    | Total/NA  | Water  | 3005A  |            |
| MB 480-424485/1-A  | Method Blank       | Total/NA  | Water  | 3005A  |            |
| LCS 480-424485/2-A | Lab Control Sample | Total/NA  | Water  | 3005A  |            |

### Filtration Batch: 424799

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method     | Prep Batch |
|---------------------|------------------------|-----------|--------|------------|------------|
| 480-138905-4        | OS-12(07132018)        | Dissolved | Water  | FILTRATION |            |
| MB 480-424799/1-E   | Method Blank           | Dissolved | Water  | FILTRATION |            |
| MB 480-424799/1-F   | Method Blank           | Dissolved | Water  | FILTRATION |            |
| LCS 480-424799/2-E  | Lab Control Sample     | Dissolved | Water  | FILTRATION |            |
| LCS 480-424799/2-F  | Lab Control Sample     | Dissolved | Water  | FILTRATION |            |
| LCSD 480-424799/3-B | Lab Control Sample Dup | Dissolved | Water  | FILTRATION |            |
| 480-138905-4 MS     | OS-12(07132018)        | Dissolved | Water  | FILTRATION |            |
| 480-138905-4 MSD    | OS-12(07132018)        | Dissolved | Water  | FILTRATION |            |

### Prep Batch: 425139

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 480-138905-4        | OS-12(07132018)        | Dissolved | Water  | 3005A  | 424799     |
| MB 480-424799/1-E   | Method Blank           | Dissolved | Water  | 3005A  | 424799     |
| LCS 480-424799/2-E  | Lab Control Sample     | Dissolved | Water  | 3005A  | 424799     |
| LCSD 480-424799/3-B | Lab Control Sample Dup | Dissolved | Water  | 3005A  | 424799     |

### Analysis Batch: 425223

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-1       | MW-6(07132018)     | Total/NA  | Water  | 6010C  | 424485     |
| 480-138905-3       | MW-9R(07132018)    | Total/NA  | Water  | 6010C  | 424485     |
| 480-138905-4       | OS-12(07132018)    | Total/NA  | Water  | 6010C  | 424485     |
| MB 480-424485/1-A  | Method Blank       | Total/NA  | Water  | 6010C  | 424485     |
| LCS 480-424485/2-A | Lab Control Sample | Total/NA  | Water  | 6010C  | 424485     |

### Prep Batch: 425316

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-4       | OS-12(07132018)    | Dissolved | Water  | 7470A  | 424799     |
| MB 480-424799/1-F  | Method Blank       | Dissolved | Water  | 7470A  | 424799     |
| LCS 480-424799/2-F | Lab Control Sample | Dissolved | Water  | 7470A  | 424799     |
| 480-138905-4 MS    | OS-12(07132018)    | Dissolved | Water  | 7470A  | 424799     |
| 480-138905-4 MSD   | OS-12(07132018)    | Dissolved | Water  | 7470A  | 424799     |

TestAmerica Buffalo



# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Metals (Continued)

### Analysis Batch: 425438

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-4       | OS-12(07132018)    | Dissolved | Water  | 7470A  | 425316     |
| MB 480-424799/1-F  | Method Blank       | Dissolved | Water  | 7470A  | 425316     |
| LCS 480-424799/2-F | Lab Control Sample | Dissolved | Water  | 7470A  | 425316     |
| 480-138905-4 MS    | OS-12(07132018)    | Dissolved | Water  | 7470A  | 425316     |
| 480-138905-4 MSD   | OS-12(07132018)    | Dissolved | Water  | 7470A  | 425316     |

### Analysis Batch: 425532

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 480-138905-4        | OS-12(07132018)        | Dissolved | Water  | 6010C  | 425139     |
| MB 480-424799/1-E   | Method Blank           | Dissolved | Water  | 6010C  | 425139     |
| LCS 480-424799/2-E  | Lab Control Sample     | Dissolved | Water  | 6010C  | 425139     |
| LCSD 480-424799/3-B | Lab Control Sample Dup | Dissolved | Water  | 6010C  | 425139     |

### Prep Batch: 425846

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-4       | OS-12(07132018)    | Total/NA  | Water  | 7470A  |            |
| MB 480-425846/1-A  | Method Blank       | Total/NA  | Water  | 7470A  |            |
| LCS 480-425846/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  |            |

### Prep Batch: 425875

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-1       | MW-6(07132018)     | Total/NA  | Water  | 7470A  |            |
| 480-138905-3       | MW-9R(07132018)    | Total/NA  | Water  | 7470A  |            |
| MB 480-425875/1-A  | Method Blank       | Total/NA  | Water  | 7470A  |            |
| LCS 480-425875/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  |            |

### Analysis Batch: 426098

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-1       | MW-6(07132018)     | Total/NA  | Water  | 7470A  | 425875     |
| 480-138905-3       | MW-9R(07132018)    | Total/NA  | Water  | 7470A  | 425875     |
| MB 480-425875/1-A  | Method Blank       | Total/NA  | Water  | 7470A  | 425875     |
| LCS 480-425875/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  | 425875     |

### Analysis Batch: 426099

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-4       | OS-12(07132018)    | Total/NA  | Water  | 7470A  | 425846     |
| MB 480-425846/1-A  | Method Blank       | Total/NA  | Water  | 7470A  | 425846     |
| LCS 480-425846/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  | 425846     |

## General Chemistry

### Analysis Batch: 424691

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-4      | OS-12(07132018)    | Total/NA  | Water  | 300.0  |            |
| MB 480-424691/52  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-424691/51 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 424694

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 480-138905-1  | MW-6(07132018)   | Total/NA  | Water  | 300.0  |            |

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## General Chemistry (Continued)

### Analysis Batch: 424694 (Continued)

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-3      | MW-9R(07132018)    | Total/NA  | Water  | 300.0  |            |
| 480-138905-4      | OS-12(07132018)    | Total/NA  | Water  | 300.0  |            |
| MB 480-424694/28  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| MB 480-424694/52  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-424694/27 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |
| LCS 480-424694/51 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |
| 480-138905-3 MS   | MW-9R(07132018)    | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 425410

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-1     | MW-6(07132018)     | Total/NA  | Water  | 300.0  |            |
| 480-138905-3     | MW-9R(07132018)    | Total/NA  | Water  | 300.0  |            |
| MB 480-425410/4  | Method Blank       | Total/NA  | Water  | 300.0  |            |
| LCS 480-425410/3 | Lab Control Sample | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 425428

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method   | Prep Batch |
|-------------------|--------------------|-----------|--------|----------|------------|
| 480-138905-1      | MW-6(07132018)     | Total/NA  | Water  | SM 2320B |            |
| 480-138905-3      | MW-9R(07132018)    | Total/NA  | Water  | SM 2320B |            |
| 480-138905-4      | OS-12(07132018)    | Total/NA  | Water  | SM 2320B |            |
| MB 480-425428/30  | Method Blank       | Total/NA  | Water  | SM 2320B |            |
| MB 480-425428/54  | Method Blank       | Total/NA  | Water  | SM 2320B |            |
| LCS 480-425428/31 | Lab Control Sample | Total/NA  | Water  | SM 2320B |            |
| LCS 480-425428/55 | Lab Control Sample | Total/NA  | Water  | SM 2320B |            |

### Analysis Batch: 425698

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 480-138905-1      | MW-6(07132018)     | Total/NA  | Water  | 9060A  |            |
| 480-138905-3      | MW-9R(07132018)    | Total/NA  | Water  | 9060A  |            |
| 480-138905-4      | OS-12(07132018)    | Total/NA  | Water  | 9060A  |            |
| MB 480-425698/52  | Method Blank       | Total/NA  | Water  | 9060A  |            |
| LCS 480-425698/53 | Lab Control Sample | Total/NA  | Water  | 9060A  |            |

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: MW-6(07132018)**

**Date Collected: 07/13/18 09:20**

**Date Received: 07/14/18 02:00**

**Lab Sample ID: 480-138905-1**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 424746       | 07/17/18 14:40       | AMM     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 1               | 424509       | 07/15/18 13:17       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424485       | 07/16/18 10:11       | VEG     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 425223       | 07/18/18 15:25       | S1P     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425875       | 07/23/18 14:05       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426098       | 07/23/18 17:58       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424694       | 07/17/18 03:04       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 20              | 425410       | 07/19/18 19:44       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425698       | 07/20/18 21:33       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425428       | 07/19/18 14:05       | JAH     | TAL BUF |

**Client Sample ID: MW-8(07132018)**

**Date Collected: 07/13/18 10:15**

**Date Received: 07/14/18 02:00**

**Lab Sample ID: 480-138905-2**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3510C          |     |                 | 424644       | 07/16/18 14:12       | MMV     | TAL BUF |
| Total/NA  | Analysis   | 8270D SIM ID   |     | 1               | 425352       | 07/19/18 19:35       | DMR     | TAL BUF |
| Total/NA  | Prep       | 3535           |     |                 | 234430       | 07/17/18 07:31       | SK      | TAL SAC |
| Total/NA  | Analysis   | 537 (modified) |     | 1               | 235123       | 07/20/18 06:17       | JRB     | TAL SAC |

**Client Sample ID: MW-9R(07132018)**

**Date Collected: 07/13/18 12:20**

**Date Received: 07/14/18 02:00**

**Lab Sample ID: 480-138905-3**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 424746       | 07/17/18 15:08       | AMM     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 1               | 424509       | 07/15/18 13:36       | DSC     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424485       | 07/16/18 10:11       | VEG     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 425223       | 07/18/18 15:29       | S1P     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425875       | 07/23/18 14:05       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426098       | 07/23/18 18:00       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424694       | 07/17/18 03:12       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 20              | 425410       | 07/19/18 19:52       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425698       | 07/20/18 22:00       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425428       | 07/19/18 14:11       | JAH     | TAL BUF |

TestAmerica Buffalo

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

**Client Sample ID: OS-12(07132018)**

**Lab Sample ID: 480-138905-4**

**Date Collected: 07/13/18 13:30**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 425155       | 07/19/18 02:19       | LCH     | TAL BUF |
| Total/NA  | Analysis   | RSK-175      |     | 44              | 424509       | 07/15/18 13:55       | DSC     | TAL BUF |
| Dissolved | Filtration | FILTRATION   |     |                 | 424799       | 07/17/18 10:24       | KMP     | TAL BUF |
| Dissolved | Prep       | 3005A        |     |                 | 425139       | 07/19/18 09:05       | JAK     | TAL BUF |
| Dissolved | Analysis   | 6010C        |     | 1               | 425532       | 07/19/18 21:50       | AMH     | TAL BUF |
| Total/NA  | Prep       | 3005A        |     |                 | 424485       | 07/16/18 10:11       | VEG     | TAL BUF |
| Total/NA  | Analysis   | 6010C        |     | 1               | 425223       | 07/18/18 15:33       | S1P     | TAL BUF |
| Dissolved | Filtration | FILTRATION   |     |                 | 424799       | 07/17/18 10:24       | KMP     | TAL BUF |
| Dissolved | Prep       | 7470A        |     |                 | 425316       | 07/19/18 12:40       | BMB     | TAL BUF |
| Dissolved | Analysis   | 7470A        |     | 1               | 425438       | 07/19/18 17:34       | BMB     | TAL BUF |
| Total/NA  | Prep       | 7470A        |     |                 | 425846       | 07/23/18 12:10       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 7470A        |     | 1               | 426099       | 07/23/18 16:07       | BMB     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424691       | 07/17/18 04:01       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 300.0        |     | 10              | 424694       | 07/17/18 04:01       | DMR     | TAL BUF |
| Total/NA  | Analysis   | 9060A        |     | 1               | 425698       | 07/20/18 22:28       | SMH     | TAL BUF |
| Total/NA  | Analysis   | SM 2320B     |     | 1               | 425428       | 07/19/18 14:16       | JAH     | TAL BUF |

**Client Sample ID: DUP-1(07132018)**

**Lab Sample ID: 480-138905-5**

**Date Collected: 07/13/18 00:00**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

| Prep Type | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3510C          |     |                 | 424644       | 07/16/18 14:12       | MMV     | TAL BUF |
| Total/NA  | Analysis   | 8270D SIM ID   |     | 1               | 425352       | 07/19/18 19:59       | DMR     | TAL BUF |
| Total/NA  | Prep       | 3535           |     |                 | 234430       | 07/17/18 07:31       | SK      | TAL SAC |
| Total/NA  | Analysis   | 537 (modified) |     | 1               | 235123       | 07/20/18 06:25       | JRB     | TAL SAC |

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-138905-6**

**Date Collected: 07/13/18 00:00**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C        |     | 1               | 425155       | 07/19/18 04:38       | LCH     | TAL BUF |

**Client Sample ID: FIELD BLANK(07132018)**

**Lab Sample ID: 480-138905-7**

**Date Collected: 07/13/18 10:30**

**Matrix: Water**

**Date Received: 07/14/18 02:00**

| Prep Type | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3535           |     |                 | 234430       | 07/17/18 07:31       | SK      | TAL SAC |
| Total/NA  | Analysis   | 537 (modified) |     | 1               | 235123       | 07/20/18 06:41       | JRB     | TAL SAC |

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600  
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

|    |
|----|
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# Accreditation/Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

## Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| New York  | NELAP   | 2          | 10026                 | 03-31-19        |

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|---------|
| 300.0           |             | Water  | Nitrate |

## Laboratory: TestAmerica Sacramento

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

| Authority          | Program       | EPA Region | Identification Number | Expiration Date |
|--------------------|---------------|------------|-----------------------|-----------------|
| Alaska (UST)       | State Program | 10         | 17-020                | 01-20-21        |
| ANAB               | DoD ELAP      |            | L2468                 | 01-20-21        |
| Arizona            | State Program | 9          | AZ0708                | 08-11-18        |
| Arkansas DEQ       | State Program | 6          | 88-0691               | 06-17-19        |
| California         | State Program | 9          | 2897                  | 01-31-19        |
| Colorado           | State Program | 8          | CA00044               | 08-31-19        |
| Connecticut        | State Program | 1          | PH-0691               | 06-30-19        |
| Florida            | NELAP         | 4          | E87570                | 06-30-19        |
| Georgia            | State Program | 4          | N/A                   | 01-28-19        |
| Hawaii             | State Program | 9          | N/A                   | 01-29-19        |
| Illinois           | NELAP         | 5          | 200060                | 03-17-19        |
| Kansas             | NELAP         | 7          | E-10375               | 10-31-18        |
| Louisiana          | NELAP         | 6          | 30612                 | 06-30-19        |
| Maine              | State Program | 1          | CA0004                | 04-14-20        |
| Michigan           | State Program | 5          | 9947                  | 01-31-20        |
| Nevada             | State Program | 9          | CA00044               | 07-31-18 *      |
| New Hampshire      | NELAP         | 1          | 2997                  | 04-18-19        |
| New Jersey         | NELAP         | 2          | CA005                 | 06-30-19        |
| New York           | NELAP         | 2          | 11666                 | 03-31-19        |
| Oregon             | NELAP         | 10         | 4040                  | 01-29-19        |
| Pennsylvania       | NELAP         | 3          | 68-01272              | 03-31-19        |
| Texas              | NELAP         | 6          | T104704399            | 05-31-19        |
| US Fish & Wildlife | Federal       |            | LE148388-0            | 07-31-18 *      |
| USDA               | Federal       |            | P330-11-00436         | 01-17-21        |
| USEPA UCMR         | Federal       | 1          | CA00044               | 11-06-18        |
| Utah               | NELAP         | 8          | CA00044               | 02-28-19        |
| Vermont            | State Program | 1          | VT-4040               | 04-30-19        |
| Virginia           | NELAP         | 3          | 460278                | 03-14-19        |
| Washington         | State Program | 10         | C581                  | 05-05-19        |
| West Virginia (DW) | State Program | 3          | 9930C                 | 12-31-18        |
| Wyoming            | State Program | 8          | 8TMS-L                | 01-28-19        |

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

TestAmerica Buffalo

## Method Summary

Client: ARCADIS U.S. Inc  
Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

| Method         | Method Description                                            | Protocol | Laboratory |
|----------------|---------------------------------------------------------------|----------|------------|
| 8260C          | Volatile Organic Compounds by GC/MS                           | SW846    | TAL BUF    |
| 8270D SIM ID   | Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) | SW846    | TAL BUF    |
| RSK-175        | Dissolved Gases (GC)                                          | RSK      | TAL BUF    |
| 537 (modified) | Fluorinated Alkyl Substances                                  | EPA      | TAL SAC    |
| 6010C          | Metals (ICP)                                                  | SW846    | TAL BUF    |
| 7470A          | Mercury (CVAA)                                                | SW846    | TAL BUF    |
| 300.0          | Anions, Ion Chromatography                                    | MCAWW    | TAL BUF    |
| 9060A          | Organic Carbon, Total (TOC)                                   | SW846    | TAL BUF    |
| SM 2320B       | Alkalinity                                                    | SM       | TAL BUF    |
| 3005A          | Preparation, Total Metals                                     | SW846    | TAL BUF    |
| 3005A          | Preparation, Total Recoverable or Dissolved Metals            | SW846    | TAL BUF    |
| 3510C          | Liquid-Liquid Extraction (Separatory Funnel)                  | SW846    | TAL BUF    |
| 3535           | Solid-Phase Extraction (SPE)                                  | SW846    | TAL SAC    |
| 5030C          | Purge and Trap                                                | SW846    | TAL BUF    |
| 7470A          | Preparation, Mercury                                          | SW846    | TAL BUF    |
| FILTRATION     | Sample Filtration                                             | None     | TAL BUF    |

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

### Laboratory References:

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

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



## Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: NYSDEC - Former Cleanerama, Site# 401056

TestAmerica Job ID: 480-138905-1

| Lab Sample ID | Client Sample ID      | Matrix | Collected      | Received       |
|---------------|-----------------------|--------|----------------|----------------|
| 480-138905-1  | MW-6(07132018)        | Water  | 07/13/18 09:20 | 07/14/18 02:00 |
| 480-138905-2  | MW-8(07132018)        | Water  | 07/13/18 10:15 | 07/14/18 02:00 |
| 480-138905-3  | MW-9R(07132018)       | Water  | 07/13/18 12:20 | 07/14/18 02:00 |
| 480-138905-4  | OS-12(07132018)       | Water  | 07/13/18 13:30 | 07/14/18 02:00 |
| 480-138905-5  | DUP-1(07132018)       | Water  | 07/13/18 00:00 | 07/14/18 02:00 |
| 480-138905-6  | TRIP BLANK            | Water  | 07/13/18 00:00 | 07/14/18 02:00 |
| 480-138905-7  | FIELD BLANK(07132018) | Water  | 07/13/18 10:30 | 07/14/18 02:00 |



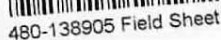
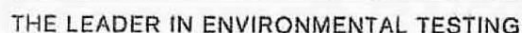


## Chain of Custody Record

TestAmerica

THE FLEET & AIRCRAFT TESTING

|                                                                                                                                                                                                                                                                     |  |                                                                                                                  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------|--|
| <b>Client Information</b><br>Client Contact: Josh Duquette<br>Company: ARCADIS U.S. Inc.<br>Address: 855 Route 146 Suite 210<br>City: Clifton Park<br>State, Zip: NY, 12065<br>Phone:                                                                               |  | Lab PM: Deyo, Melissa L<br>E-Mail: melissa.deyo@testamericainc.com<br>Carrier Tracking No(s): 480-115507-26700 2 |  |
| Sample: J. Duquette<br>Phone: (518) 769-5457                                                                                                                                                                                                                        |  | Lab PM: Deyo, Melissa L<br>E-Mail: melissa.deyo@testamericainc.com<br>Carrier Tracking No(s): 480-115507-26700 2 |  |
| <b>Analysis Requested</b><br>Due Date Requested: TAT Requested (days): 5<br>PO #: 00266438.0000<br>WO #: 48014618<br>Project #: 48014618<br>SOW#:                                                                                                                   |  |                                                                                                                  |  |
| Sample Identification<br>MW-6 (07132018)<br>MW-8 (07132018)<br>MW-9R (07132018)<br>OS-12 (07132018)<br>Dup-1 - 07132018<br>Trip Blank<br>Field Blank (07132018)                                                                                                     |  | Matrix (Water, Soil, Sediment, Other)<br>Water<br>Water<br>Water<br>Water<br>Water<br>Water<br>Water             |  |
| Sample Date<br>7/13/18<br>7/13/18<br>7/13/18<br>7/13/18<br>7/13/18<br>7/13/18<br>7/13/18                                                                                                                                                                            |  | Sample Time<br>0920<br>1015<br>1220<br>1330<br>---<br>---<br>1030                                                |  |
| Sample Type (C=Comp, G=Grab)<br>G<br>G<br>G<br>G<br>G<br>G<br>G                                                                                                                                                                                                     |  | Preservation Code:<br>Water<br>Water<br>Water<br>Water<br>Water<br>Water<br>Water                                |  |
| Field Filtered Sample (Yes or No)<br>N<br>N<br>N<br>N<br>N<br>N<br>N                                                                                                                                                                                                |  | Perform MS/MSD (Yes or No)<br>N<br>N<br>N<br>N<br>N<br>N<br>N                                                    |  |
| RSK 176 - Methane, Ethane, Ethene<br>6010C, 7470A<br>8260C - TCL VOCs<br>9060A - TOC<br>2320B - Alkalinity<br>300.48HR - Nitrate<br>PFC IDA - PFAS, Standard List (21 analytes)<br>8270D - SIM MS ID - 1,4-Dioxane                                                  |  | Total Number of Containers<br>1<br>1<br>1<br>1<br>1<br>1<br>1                                                    |  |
| Special Instructions/Note:<br>PFA's & 1,4-Dioxane only<br>Lab Filter Metals                                                                                                                                                                                         |  | Special Instructions/Note:<br>PFA's & 1,4-Dioxane only<br>Lab Filter Metals                                      |  |
| Barcode: 480-138905 Chain of Custody                                                                                                                                                                                                                                |  |                                                                                                                  |  |
| Sample Disposal (A fee may be assessed):<br><input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months                                                                         |  |                                                                                                                  |  |
| Special Instructions/QC Requirements:                                                                                                                                                                                                                               |  |                                                                                                                  |  |
| Possible Hazard Identification<br><input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological |  | Deliverable Requested: I, II, III, IV, Other (specify)                                                           |  |
| Empty Kit Relinquished by: J. Duquette<br>Relinquished by: Mark Zacher<br>Relinquished by:                                                                                                                                                                          |  | Date: 7/13/18 1410<br>Date/Time: 7-13-18 910<br>Date/Time:                                                       |  |
| Custody Seal No.:<br>Δ Yes Δ No                                                                                                                                                                                                                                     |  | Cooler Temperature(s) °C and Other Remarks: 0.3C                                                                 |  |



SO / PO / FO / UPS / Other

Notes: \_\_\_\_\_

Therm. ID: **AK-2 / AK-3 / AK-5 / AK-6 / HACCP / Other** \_\_\_\_\_

Ice ☒ Wet ☒ Gel \_\_\_\_\_ Other \_\_\_\_\_

Cooler Custody Seal: 041163

Sample Custody Seal: -

Cooler ID: 1012

Temp: Observed 6.30

From: Temp Blank ☒ Sample ☐

NCM Filed: Yes ☐ No ☐

|                                        | Yes                                 | No                                  | NA                                  |
|----------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Perchlorate has headspace?             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Alkalinity has no headspace?           | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| CoC is complete w/o discrepancies?     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Samples received within holding time?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Sample preservatives verified?         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Cooler compromised/tampered with?      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Samples compromised/tampered with?     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Samples w/o discrepancies?             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Sample containers have legible labels? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Containers are not broken or leaking?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Sample date/times are provided.        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Appropriate containers are used?       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Sample bottles are completely filled?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Zero headspace?*                       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Multiphasic samples are not present?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Sample temp OK?                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Sample out of temp?                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

Initials: DH Date: 7/14/18 Time: 9:10

\*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")



TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING

041163

SIGNATURE

DATE

7-13-18 *Pat Gladen*

Custody Seal

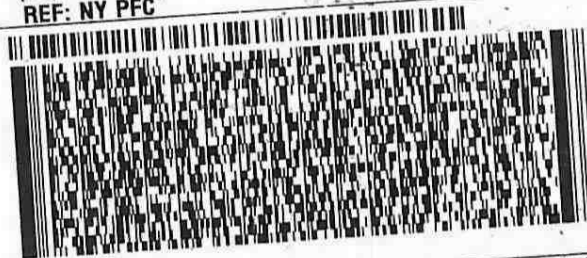
TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING  
041163

ORIGIN ID: SCHA (518) 438-8140  
TIM KNOLLMEYER  
TESTAMERICA LAB INC  
25 KRAFT AVE  
ALBANY, NY 12205  
UNITED STATES US

SHIP DATE: 13JUL18  
ACTWGT: 58.85 LB  
CAD: 0439821/CAFE3210  
DIMS: 26x15x14 IN  
BILL THIRD PARTY

TO **SAMPLE RECEIVING  
TESTAMERICA - W. SACRAMENTO  
880 RIVERSIDE PKWY**

**WEST SACRAMENTO CA 95605**  
(916) 373-5600  
REF: NY PFC



FedEx  
Express



J103118042001uy

1 of 2

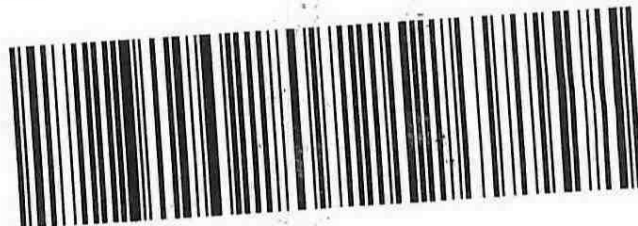
TRK# 4300 6537 0749  
0201  
## MASTER ##

**XO BLUA**

**SATURDAY 12:00P  
PRIORITY OVERNIGHT**

**95605  
CA-US SMF**

Part # 158148-434 R112 04/13



## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-138905-1

Login Number: 138905

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

| 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   |         |
| 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   | ARCADIS |
| Samples received within 48 hours of sampling.                                    | True   |         |
| Samples requiring field filtration have been filtered in the field.              | N/A    |         |
| Chlorine Residual checked.                                                       | N/A    |         |

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-138905-1

**Login Number: 138905**

**List Number: 2**

**Creator: Hytrek, Cheryl**

**List Source: TestAmerica Sacramento**

**List Creation: 07/14/18 01:58 PM**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | True   |         |
| The cooler's custody seal, if present, is intact.                                        | True   |         |
| Sample custody seals, if present, are intact.                                            | N/A    |         |
| 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   | 0.3     |
| 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 containers received 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.                                                            | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |