

New York State Department of Environmental Conservation

SUPPLEMENTAL PRE-DESIGN SUMMARY REPORT

Former Crown Dykman Facility (Site No. 130054), City of Glen Cove, Nassau County, New York

July 2018

Former Crown Dykman Facility (Site No. 130054), City of Glen Cove, Nassau County, New York

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ACRONYMS AND ABBREVIATIONS

bgs below ground surface

COD Chemical oxygen demand

cm/sec Centimeters per second

DCE Dichloroethylene

ft Feet

ft/day Feet per day

gpm gallons per minute

in inches

IRM Interim remedial measure

ISCO In-situ chemical oxidation

K Hydraulic Conductivity

LNAPL Light Non-Aqueous Phase Liquid

mg/kg Milligrams per Kilogram

mg/L Milligrams per Liter

μg/L Micrograms per Liter

ng/L Nanograms per liter

NAPL Non-Aqueous Phase Liquid

NORM Naturally Occurring Radioactive Material

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health

ORP Oxidation-reduction potential

PCE Tetrachloroethylene

PFAS Polyfluorinated alkyl substances

PFOA Perfluorooctanoic acid

PFOS Perfluorooctanesulfonic acid

PID Photoionization Detector

PPB Part per Billion
PPM Part per Million
PVC Polyvinyl Chloride

RI/FS Remedial Investigation (RI) and Feasibility Study (FS)

ROD Record of Decision

SCO Site Cleanup Objective

TCA Trichloroethane
TCE Trichloroethylene

TCL Target Compound List
TOC Total organic carbon

USEPA United States Environmental Protection Agency

UST Underground Storage Tank

VC Vinyl Chloride

VOC Volatile Organic Compound

1 INTRODUCTION

This Supplemental Pre-Design Summary Report (Report) has been developed to summarize the work completed to further evaluate remedial measure alternatives for the Crown Dykman Site (NYSDEC Site number 130054) located at 66 Herb Hill Road in the City of Glen Cove, Nassau County, New York ('Site', see Figures 1 and 2). The Report summarizes work completed at the Site between 2015 and 2017 in support of additional remedial design for the Site, including completion of a supplemental in-situ chemical oxidation (ISCO) pilot study and supplemental sampling and Site investigation activities, as discussed below.

1.1 Purpose and Objectives

The New York State Department of Environmental Conservation (NYSDEC) issued a Record of Decision (ROD) in March 2010 to address the remediation of residual concentrations of tetrachloroethylene (PCE) and other volatile organic compounds (VOCs) in groundwater, following a 2009 Interim Remedial Measure (IRM) in which the source area was believed to be excavated and removed. In addition to other administrative controls, the ROD identified ISCO injection as the preferred remedial alternative to treat the dissolved-phase chlorinated VOC plume at the Site, using sodium permanganate as the preferred oxidant. The ROD further specified implementation of an ISCO Pilot Program to support design of the final ISCO remedy for the Site. Between 2010 and 2014, additional data collected at the Site during various remedial design pilot programs, and the discovery of a remaining source of PCE beneath the building slab, suggested that the preferred ISCO approach may need to be expanded or modified. This Report summarizes activities undertaken to further investigate and evaluate potential modifications to the preferred ISCO remedial approach described in the ROD.

In addition, in the Autumn of 2017, additional groundwater sampling at the request of the NYSDEC suggested the presence of Poly-fluorinated Alkyl Substances (PFAS) in groundwater at levels exceeding the United States Environmental Protection Agency (USEPA) health advisory level of 70 nanograms per liter (ng/L). This Report provides data and conclusions on the presence and distribution of PFAS in groundwater at the Site.

1.2 Summary of Previous Investigations and Activities

During the period of 1987 to 2009, several investigations to determine the environmental conditions at the one-acre Class 2 Inactive Hazardous Waste Site were performed by the Nassau County Department of Health, the property owner, and the NYSDEC (EEA, 1991; 1996; 1997a; 1997b; Weston, 1997; EEA, 1999; 2000; Walden, 2006; Malcolm Pirnie, 2006; 2009a; 2009b). These investigations identified the presence of soil and groundwater contaminated with PCE and associated degradation products, 1,1,1-trichloroethane (TCA), toluene and xylene, associated with historic activities at the Site.

Underground storage tanks (USTs) formerly containing solvents and gasoline were removed from the Site in the early 1990s. In 2005 an IRM was undertaken to remove and dispose of approximately 2,200 tons of contaminated soil from beneath the southern portion of the main building's floor slab (Walden Associates, 2006). Post-removal soil samples taken from the southwestern corner of the excavation,

near the building's footing, indicated the presence of PCE at concentrations of 290 parts per million (ppm) (Walden Associates, 2006). A Post-IRM remedial investigation (RI) identified residual soil and groundwater contamination, including a plume that extended off Site to the south and southwest (Malcolm Pirnie, 2009a).

A soil vapor extraction (SVE) sub-slab system was installed under the main building during additional IRM work in 2005 (Walden Associates, 2006). Additional IRM work was completed in 2009, including the installation and operation of an SVE system at the Site, connected to the previous sub-slab SVE piping (Malcolm Pirnie, 2009a) to mitigate potential soil vapor intrusion issues associated with the remaining contamination.

Based on a Remedial Investigation/ Feasibility Study (RI/FS) completed for the Site in 2009 (Malcolm Pirnie, 2009a; 2009b), the NYSDEC issued a ROD in March 2010 to address the remediation of the remaining Site contamination. The ROD required ISCO of the groundwater plume area with the highest concentrations of chlorinated VOCs, which are present in the southwestern portion of the Site. To accomplish this objective, the ROD included a provision for "an in-situ chemical oxidation pilot test to determine the necessary injection parameters" to be included in the Site's remedial design. The ROD also included a provision for continued operation of the existing SVE system to mitigate the potential for soil vapor intrusion within the main building.

In November 2010, the NYSDEC retained Arcadis/Malcolm Pirnie, Inc. (Arcadis) to develop the design for ISCO to address contamination in the dissolved-phase plume area, as well as the other remedial elements identified in the ROD. Arcadis evaluated the existing data obtained from various historical Site investigations (EEA, 1991; 1996; 1997a; 1997b; Weston, 1997; EEA, 1999; 2000; Walden, 2006; Malcolm Pirnie, 2006; 2009a; 2009b) and developed and implemented an initial ISCO pilot test study in support of the final remedial design for the Site (Arcadis/Malcolm Pirnie, 2012a; 2012b).

The pilot program implemented in 2012 included injection of a 4-percent sodium permanganate into the subsurface at the Site using a proprietary injection technology developed by Badger Technologies, Inc. (Badger), which utilized an alternative slotted injection nozzle method (Arcadis/Malcolm Pirnie, 2012a; 2012b). As an alternate delivery technique, the ISCO pilot program also assessed application through injection into an existing monitoring well at the Site. The pilot program concluded that the stratigraphy and heterogeneity of subsurface materials limited the applicability of Badger injection technology at the Site for full-scale implementation. The alternate delivery methods evaluated during the pilot test (slotted tip injection and well injection) were generally unsuccessful at introducing permanganate to the subsurface. Therefore, evaluation of additional techniques for ISCO implementation, including injection through purpose-built injection wells, was recommended by the NYSDEC.

During the summer and fall of 2013, a second ISCO pilot program was completed using sodium permanganate injection techniques via injection wells. The second ISCO pilot study included injection of approximately 5,170 gallons of 4-percent sodium permanganate over a period of seven days into two purpose-built injection wells (shallow and deep). The work performed, and the results and conclusions are documented in the Crown Dykman Pre-Design Investigation Report (Arcadis, 2014). The results of the pilot study concluded that introduction of sodium permanganate to the subsurface via purpose-build injection wells would be an effective technology to implement the ISCO strategy presented in the ROD for the Site.

The results of the second ISCO pilot also suggested that a continuing groundwater source of chlorinated VOCs was present beneath the main building, within the footprint of the 2005 IRM excavation area (Walden Associates, 2006). Therefore, supplemental investigation work was performed during the summer of 2014, including additional soil and groundwater sampling to further assess the chlorinated VOC source area. Soil sampling results during the July 2014 supplemental investigation indicated that PCE concentrations indicative of non-aqueous phase liquid (NAPL) are present in the soil and groundwater below the southwestern portion of the building. In addition to chlorinated VOCs, petroleum compounds, including ethylbenzene and xylenes, were present in soil samples from all four boring locations within the building footprint. The study concluded that the low groundwater gradient beneath this portion of the building, and the continued presence of a potential source of PCE in the vicinity, is contributing to the continued presence of chlorinated VOCs in both soil and groundwater beneath the building and in downgradient areas. This area provides a continuing a source for the chlorinated VOC groundwater plume that must be addressed in the overall Site remedy.

The supplemental investigation further concluded that the presence of a continuing source area would undermine the effectiveness of a downgradient ISCO remedy for dissolved-phase constituents and would likely lengthen the remedial timeframe if not addressed (ARCADIS, 2014). A second ISCO pilot was completed to assess the efficacy of sodium permanganate injections directly within the presumed PCE source to effectively treat and reduce source area, as further summarized herein.

2 SITE DESCRIPTION AND PHYSICAL CHARACTERISTICS

2.1 Description of Site and Vicinity

The Site (Figure 2) is an approximately one-acre commercial property occupied by a former laundry and dry-cleaning facility, which is now used as an automotive repair shop and a commercial, water-based laundry. The main building consists of a single-story brick and block structure, which is constructed on a concrete slab, with no basement or crawl-space present beneath the building.

The Site is bordered on the south and west by Parcels A and B, respectively, of the former Li Tungsten industrial facility, which are now vacant properties under redevelopment. The Site is bordered to the north and east by a vacant lot that was occupied by the former Konica-Minolta industrial facility. An access road to the former Konica-Minolta facility, now owned by the City of Glen Cove, is present along the western boundary of the Site between the Site and the Former Li Tungsten Parcel B (Figure 2). The surrounding Garvies' Point area to the west and immediately south of the Site are former industrial/commercial properties associated with Li Tungsten and other businesses. These properties are currently undergoing separate remedial actions and commercial/residential redevelopment programs.

2.2 Surface Topography and Surface Water Features

The ground surface of the undeveloped portions of the Site exhibit a gradual slope downward from north to south, with a retaining wall along the southern portion of the Site where the ground surface drops off approximately three to four feet near Herb Hill Road. The section of Herb Hill Road near the Site occupies a low-lying area that frequently floods after precipitation events.

A small wetland area is present at the southern end of the former Li Tungsten Parcel B, and a flooded drainage ditch is present along the northern side of Herb Hill Road at the southern edge of the Site. A small concrete structure is present at the eastern extent of the ditch, from which water flows throughout most of the year (Figure 2).

2.3 Regional and Site Geology

Surficial geology in the vicinity of the Site consist of deposits associated with the Harbor Hill ground moraine, which at the Site is represented by zones of fine to medium sand, medium to coarse sand, and silty sand with silt lenses (Figure 3). The Harbor Hill ground moraine is typically five to 10 feet thick, with some deposits up to 40 feet thick. Upper Pleistocene age deposits associated with the Ronkonkoma glaciation are deposited beneath the Harbor Hill ground moraine deposits. The Ronkonkoma layer consists of interlayered glacial till and outwash deposits, which are not observed at the Site. The glacial sediments associated with both layers range in thickness from less than 10 feet to over 200 feet in the northern part of Long Island (Kilburn and Krulikas, 1987).

At the Site, the saturated thickness of the moraine units generally decreases from north to south, with the upper sand and silty sand units generally extending to a depth of approximately 35 feet below ground surface (bgs) at the northern portion of the Site to approximately 15 feet bgs south of Herb Hill Road. However, in the vicinity of monitoring well cluster MW-1/1D (boring location SB-14), the saturated aquifer thickness increases where the moraine deposits extend to approximately 43 feet bgs (Figure 3) into an

apparent trough in the underlying clay unit. The moraine units at the Site are generally heterogeneous, with numerous fluvial channels (coarse gravel and sand) cutting through the medium to fine moraine sands. These gravel channels represent preferential groundwater flow paths where saturated. One such gravel layer is present along the western edge of the main building in the vicinity of MW-13, IW-1S, MW-26, MW-27, and MW-28 (Figure 3), generally between 18 and 20 feet bgs. The gravel channel present in this area consists of medium to coarse gravels in a coarse sand matrix, contrasting significantly with surrounding material that consists primarily of medium to fine sands and occasional silty sand zones.

Beneath the moraine deposits is an extensive confining unit (Port Washington clay) comprised of clay, silt, and a few layers of sand that correlates to the Pleistocene and Holocene epochs (Kilburn, 1972). Figure 4 depicts the elevation of the top of the Port Washington confining unit in the vicinity of the Site, based on Site boring data from the Pilot Study and past investigation data. As shown on Figure 4, boring data from wells intersecting the Port Washington clay unit indicates the presence of a northeast to southwest oriented depression (trough) in the clay underlying the southern portion of the Site (also, see cross-section, Figures 3a and 3b).

Underlying the moraine sediments and Port Washington clay in the vicinity of the Site are unconsolidated deposits associated with the Raritan Formation. The lower unit of the Raritan Formation is the Lloyd Sand Member, which is up to 125 feet thick in this portion of Long Island. The Lloyd Sand lies above the bedrock, which is encountered at depths of up to 400 to 500 feet below mean sea level (Smolensky et al., 1989).

2.4 Hydrogeology and Groundwater Flow

During 2008, slug tests were completed to evaluate the hydraulic conductivity (K) of the fine sand and silty sand water-bearing units in the vicinity of the Site. These tests utilized on-Site wells MW-1, MW-1D, MW-2, MW-3, MW-4, MW-7, MW-10S and MW-10D, and off-Site wells GM-9, MW-9 and MP-20 (Malcolm Pirnie, 2008). The slug tests included rising-head tests in wells screened across the water table, and both rising- and falling-head slug tests in wells screened below the water table. As shown in Table 1, hydraulic conductivity values resulting from slug test analysis ranged from an average of 82 ft/day (2.89 x 10-2 cm/sec) in GM-9, to 0.4 ft/day (1.46 x 10-4 cm/sec) in MW-9.

Groundwater levels at the Site range from approximately 5 to 7 feet below grade in the vicinity of the building. Groundwater levels become shallower along the southern Site boundary near Herb Hill Road, where the ground level drops abruptly to the south of a retaining wall. Water levels within this area are generally 2-3 feet below the ground surface, with occasional perched water just below the surface. Frequent seeps occur at the MW-1/1D/1DD well cluster, with well MW-1 occasionally full. The drainage swale along the north side of Herb Hill Road at the southern boundary of the Site is frequently wet, and phreatic vegetation has been observed there in the past. As shown by the potentiometric groundwater contours presented on Figure 5, groundwater generally flows southerly and southwesterly toward Glen Cove Creek, at the southern edge of the former Li Tungsten Parcel A. The groundwater gradient slightly decreases beneath the southwestern portion of the building and steepens slightly between the building and Herb Hill Road. Heads in the monitoring well clusters at the southern portion of the Site (MW-10S/D, MW-23S/D, MW-25S/D, and the MW-1/1D/1DD cluster) indicate a downward head gradient indicating downward groundwater flow into the clay trough.

Dewatering associated with on-going redevelopment of the former Li Tungsten Parcel B began during the latter half of 2017. This dewatering is anticipated to alter groundwater flow patterns by redirecting more flow off Site toward the southwest and west. Proposed road and utility reconstruction work on Herb Hill Road may require limited dewatering to re-locate underground utilities within the right-of-way. While the dewatering is anticipated to be transient, the effect on Site flow patterns and contaminant movement will likely be significant and has not yet been fully evaluated.

3 SOURCE AREA ISCO PILOT STUDY

Field work associated with the Source Area ISCO Pilot (Source Pilot) was completed between November 2015 and March 2016. The work completed for the Source Pilot included installation of two additional injection wells within the southwest corner of the main building, additional injection of sodium permanganate, and post-injection groundwater monitoring, as summarized below.

3.1 Summary of Completed Work

3.1.1 Injection Well Installation and Development

During October 2015, two injection wells (IW-02 and IW-03) were installed in the vicinity of MW-27 and MW-28, within the southwestern portion of the main building, as shown on Figure 3 and Figure 6. During drilling, soil samples were collected continuously from the surface to the total boring depth. The soil samples were screened using a photo-ionization detector (PID) from the surface to the total depth of the boring. Soil boring logs and well construction details are provided in Appendix A. Soil was sampled from each boring as a grab sample from the interval where the PID indicated the maximum presence of volatile constituents. The two soil samples were sent to TestAmerica Laboratory in Buffalo, New York, and analyzed for TCL VOCs by USEPA Method 8260B.

Both injection wells were constructed in similar fashion, as shown in the well construction details in Appendix A. The wells consisted of a 10-foot screened interval, constructed with 2-inch diameter stainless-steel screen (continuous wire-wound type, 0.010-inch slot size). A #00-morie sand filter was emplaced around the screen to approximately 2 feet above the well screen, with a 2-foot layer of fine (choker) sand installed in the annulus above the sand filter. A 2-inch diameter steel riser was installed above the screen to the surface and was grouted in place using a neat cement grout to the surface. Well IW-02 was screened approximately 10 to 20 feet bgs, and IW-03 was screened from approximately 9 to 19 feet bgs.

Both injection wells were developed to improve their hydraulic characteristics by using a surge block and check valve for simultaneous purging of washed fines. To assess the effectiveness of the development process, the wells were periodically pumped, and their hydraulic response evaluated. The well development logs are provided in Appendix A.

3.1.2 Baseline Groundwater Sampling

Baseline groundwater sampling was completed during November 2015, after completion of injection well installation and development. Baseline sampling included monitoring wells within the building in the vicinity of the presumed source area, and monitoring wells both upgradient and downgradient of the building source area, as shown on Figure 7.

The wells were sampled using the USEPA's low-flow methodology. Prior to collecting a sample, groundwater parameters, including turbidity, pH, ORP, temperature and conductivity were monitored using a multi-parameter water quality instrument, and recorded until parameters stabilized, or at least three well volumes were purged from the well. Groundwater samples from the monitoring wells were provided to TestAmerica in Buffalo, New York for analysis of Target Compound List (TCL) VOCs using

USEPA Method 8260C. The baseline sampling event included sampling a total of 33 wells on the Site and adjacent Parcels A and B. Well purge logs for the baseline sampling event are provided in Appendix B; laboratory analytical reports are provided in Appendix C.

As shown on Figure 7, and summarized in Table 2, the results of the 2015 baseline sampling indicate a similar distribution of chlorinated VOC contaminants to previous investigations, with high concentrations near the southwestern corner of the building, beneath the building floor slab.

3.1.3 Source Area Pilot Injections

The ISCO Source Area Pilot was completed during early December 2015. Injection data and Daily Field Reports are provided in Appendix D. The injection of the 4-percent sodium permanganate solution into the two injection locations (IW-02 and IW-03) was accomplished using a temporary injection skid consisting of a solution tank, mixing tank, injection diaphragm pump and compressor, injection manifold, and flow meters, as shown on Figure 8. Potable water was obtained from a hydrant present on the opposite side of Herb Hill Road from the Site, connected to a fire hose through a backflow preventer.

A total of 4,816 gallons of 4-percent solution were injected into well IW-02, with the remaining 4,525 gallons injected into well IW-03, resulting in a total of approximately 9,341 gallons injected between the two injection points in 22 total batch injections (see Table 3 and Appendix D). A maximum injection rate of up to approximately 1.5 to 1.6 gpm was achieved in wells IW-03 and IW-02, respectively. At the end of the injections, the sodium permanganate containers and injection equipment were rinsed, and the rinsate injected into well IW-01S, which is outside of the building and immediately downgradient of the source area.

As shown on Figures 9a and 9b, monitoring of water levels and visual assessment of well water using bailers in adjacent wells during the injection did not immediately indicate the presence or entrance of sodium permanganate into adjacent wells. Subsequent post-injection of downgradient monitoring locations indicated effective distribution of sodium permanganate in the subsurface (Figure 10).

3.1.4 Post-Injection Monitoring and Sampling

Two post-injection groundwater monitoring and sampling events were completed between January 2016 and March 2016, representing 1-month and 3-month post-injection sampling intervals, respectively. As shown on Figure 11, the sampling group for these post-injection sampling events consisted of those wells immediately donwgradient from the injection locations, and those within the building.

Prior to sampling, a water sample was removed from the well using a disposable bailer to assess if sodium permanganate was present within the well. Wells where the presence of sodium permanganate was observed were not sampled. The wells were sampled using the USEPA's low-flow methodology; prior to collecting a sample, groundwater parameters, including turbidity, pH, ORP, temperature and conductivity were monitored using a multi-parameter water quality instrument, and recorded until parameters stabilized, or at least three well volumes were purged from the well. Groundwater samples were sent to TestAmerica Laboratories in Buffalo, New York for analysis of VOCs using USEPA Method 8260C. Sixteen wells were sampled during the 1-month post-injection sampling event, and 18 wells were sampled during the 3-month post-injection sampling event. Well purge logs for the 1-month and 3-month sampling events are provided in Appendix B; laboratory analytical reports are provided in Appendix C.

As discussed below in Section 3.2, the planned 6-month and 9-month sampling rounds were not completed due to the initial post-injection monitoring results.

3.2 Pilot Study Results

A summary of analytical results for the post-injection sampling rounds is shown on Figure 11, along with wells showing a visual presence of permanganate (in purple). As shown in Figure 11, injection in wells IW-02 and IW-03 was generally effective in distributing sodium permanganate within and downgradient of the source area, with sodium permanganate observed as far as MW-24, approximately 60 feet downgradient, after just one month. However, permanganate was not observed in well MW-13, which is located less than 30 feet from the injection area. Concentrations of PCE at MW-13, which increased from the baseline to a maximum of 4,100 μ g/L during the 1-month sampling event persisted through to the 3-month event at 3,500 μ g/L (Figure 11). This is suggestive of heterogeneity in the subsurface geology resulting in preferential flow pathways that confound the even distribution of injectate in the subsurface. Such observations are consistent with previous injection pilot studies (Arcadis/Malcolm Pirnie, 2012b; Arcadis, 2014).

After analysis of the subsequent post-injection groundwater sampling events, reduction of chlorinated VOC mass was not evident in the groundwater analytical results from the source area and Site areas down-gradient of the injections. In wells where groundwater monitoring initially showed the presence of permanganate, or slight decreases in contaminant concentrations, later analytical data suggested rebound of contaminant concentrations to near baseline levels. These include IW-01S, which showed the presence of sodium permanganate during the 1-month sampling round (Figure 11) but yielded concentrations of PCE and related degradation compounds during the subsequent 3-month sampling event (Figure 11). Based on these data, subsequent post-injection sampling intervals originally planned for 6- and 9-month post injection periods were postponed pending additional remedial design evaluation.

However, as discussed in Section 4.2.2, virtually all of wells containing sodium permanganate during either the 1-month or 3-month post-injection monitoring events (January 2016 and March 2016, respectively) again had concentrations of PCE and related degradation products present at concentrations exceeding their respective New York State Class GA standards during the most recent synoptic sampling event in November 2017 (see Section 4.4.2, below). These data support the conclusion that ISCO injection within the source area merely temporarily suppressed the concentrations of dissolved-phase constituents but did not have sufficient volume, contact, or residence time to provide effective reduction of contaminant mass in soil or groundwater within the source area.

4 SUPPLEMENTAL SITE INVESTIGATIONS

At the request of the NYSDEC, Arcadis completed additional investigation of the source area to facilitate design the design of the remedy. The supplemental investigations included further assessment of underground drainage facilities at the Site, replacement well installations and groundwater sampling, and assessment of the presence and distribution PFAS in groundwater, including perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). In addition, due to the proximity of the Site to the former Li Tungsten processing facility, additional sub-surface radiological screening (gamma) was also performed in conjunction with replacement well installations and groundwater sampling activities.

4.1 Assessment of Underground Drainage Systems

During July 2017, and again in September 2017, Arcadis assessed the laundry facility process water impoundment and discharge system present at the Site. This included interviews with Site personnel, visual assessment of the system, limited geophysical evaluation using ground-penetrating radar (GPR), and limited analytical sampling of impounded water within the system and adjacent monitoring wells, as summarized below and in Section 4.2.4.

The Site drainage system features were visually assessed, and Site personnel were interviewed to ascertain the function and layout of the system components. According to Site personnel, laundry process water containing residual laundry detergent discharged from the laundry machines collected in concrete sump present within the building, then discharged through a trench in the main laundry area into a 6-inch diameter buried pipe (Figure 12). The water was then conveyed through the pipe to a concrete culvert at the front of the building. Visual inspection of the culvert at the front of the building suggested that the culvert drained toward both the south and west, beneath and along Herb Hill Road. Subsequent geophysical evaluation of the area during October 2017 using underground utility equipment, including ground penetrating radar (GPR) and electromagnetic (EM) techniques, identified the discharge line, along with other utilities present at the front of the Site, as shown on Figure 12.

The information obtained during the assessment was insufficient to draw any conclusions about the facility drainage system and potential connections to municipal systems, and further investigation would be necessary to fully evaluate the on-Site system.

4.2 Monitoring and Sampling

4.2.1 Monitoring Well Replacements

Based on the preliminary groundwater PFAS sampling, it was clear that the upgradient groundwater monitoring wells at the northern boundary of the Site (MW-3, MW-4, and MW-5) needed to be located, assessed, and replaced if necessary. Based on past Site monitoring events, MW-3 had not been located, and was presumed defunct, as was MW-5, which was apparently buried beneath a large rubble pile present along the Access Road. MW-4 appeared to be filled with sand washed into the damaged wellhead.

During October 2017, Arcadis replaced wells MW-4 and MW-5 (with wells MW-4R and MW-5R, respectively), and located well MW-3, which was deemed to be viable with some modifications and

repairs to the wellhead. The two replacement monitoring wells were constructed as the existing wells, with 10-foot, 0.010-inch machine-slotted polyvinyl chloride (PVC) well screens, and Schedule 40 PVC risers. Well MW-5R was completed with an approximately 2-foot above-ground protective casing. Well MW-4R was completed as a flush-mount wellhead, due to its location in the middle of a driveway accessing the rear of the building. However, the concrete pad was installed slightly above the pavement level in attempt to limit siltation of the curb box or well. Well construction logs for the replacement monitoring wells are provided in Appendix A. As the wells were replacement wells, the borings were not sampled or logged. The wells were developed using over-pumping methods to clear fine material from the well and rinse the filter mater emplaced around the well screen.

4.2.2 Synoptic Groundwater Sampling

A synoptic groundwater sampling round was completed at the Site during October 2017, after installation of replacement monitoring wells (MW-4R and MW-5R) at the northern end of the Site (Figure 13). The sampling scope included all viable Site wells, and those downgradient, off-Site monitoring wells included in previous sampling events (MW-9, MW-24, GM-9, GM-1, and MP-20), as shown on Figure 13. However, as shown on Figure 13, these off-Site wells could not be sampled. The wells on the former Li Tungsten parcels were reportedly abandoned in-place, and well MW-24 could not be found. Additionally, Site well MW-12 was missing, and presumed buried by dirt and debris in the area. Attempts to locate the well using a metal detector were not successful. Site wells MW-22S/D were also missing and presumed destroyed by vehicle traffic.

The wells were sampled using USEPA's low-flow methodology. Prior to taking a sample, groundwater parameters, including turbidity, pH, ORP, temperature and conductivity were monitored using a multi-parameter water quality instrument, and recorded until parameters stabilized, or at least three well volumes were purged from the well. Groundwater samples from the monitoring wells were provided to TestAmerica in Buffalo, New York for analysis of:

- TCL VOCs using USEPA Method 8260C; and,
- PFAS Using USEPA Method 537 (Modified).

The analytical results are summarized on Figure 13 (VOCs) and Figure 14 (PFAS), and in Tables 5 and 6 for VOCs and PFAS, respectively. Well purge logs for the synoptic sampling event are provided in Appendix B; laboratory analytical reports are provided in Appendix C.

The results of the 2017 synoptic groundwater sampling indicate a similar distribution of chlorinated VOC contaminants to previous investigations, with relatively high concentrations near the southwestern corner of the building, beneath the building floor slab. PCE and/or related degradation products were present in 31 of the 36 monitoring wells at concentrations exceeding their respective New York State Class GA standards or guidance values (Figure 13b). Elevated concentrations of chlorinated VOCs and other constituents were again present in wells where sodium permanganate was observed during the 1-month and 3-month post-injection monitoring events. These included both injection wells IW-02 and IW-03 (yielding concentrations of PCE at 3,800 μ g/L and 1.9 μ g/L, respectively, and cis-1,2-DCE at 14,000 μ g/L and 1,400 μ g/L, respectively), and monitoring wells MW-27 (including concentrations of PCE at 140,000 μ g/L, and cis-1,2-DCE at 50,000 μ g/L) and MW-28 (including concentrations of PCE at 1,500 μ g/L, and cis-1,2-DCE at 28,000 μ g/L) within the presumed source area (Figure 13b).

Petroleum-related compounds were also present in samples from 9 of the 36 monitoring wells at levels exceeding their respective New York State Class GA standards or guidance values (Figure 13 and Table 5). In addition, methylene chloride and isopropylbenzene were present in groundwater samples at concentrations exceeding their respective New York State Class GA standards (Figure 13). The greatest concentrations of petroleum-related compounds in groundwater were in wells MW-8 and MW-11, at the western side of the Site, and MW-14R within the main building (Figure 13a), with benzene at 21 μ g/L (MW11, based on sample dilution), toluene at 120 μ g/L (MW-14R, based on sample dilution), ethylbenzene at 120 μ g/L (MW-8, based on sample dilution). These are consistent with past groundwater sampling results at the Site. During the October 2017 sampling round, a measurable thickness of Light NAPL of approximately 1 foot was measured in well MW-8.

PFAS were detected in all the Site wells sampled during the synoptic round. As shown and in Table 7, a range of PFAS were present in a majority of the wells sampled. Concentrations of PFOA and PFOS generally represent the greatest PFAS constituent concentrations, with the greatest concentrations in wells at the western portion of the Site (Figure 14). With the exception of wells MW-2 and MW-4R, all monitoring wells had at least one PFAS constituent concentration exceeding the USEPA Drinking Water Health Advisory level of 70 ng/L. PFOS concentrations were generally greater than those of other PFAS constituents, with concentrations ranging from 15 ng/L at well MW-2 to 1,800 ng/L (or, 1.8 μg/L) at well MW-11 (Figure 14a). Concentrations of PFOS and PFOA exceeding the USEPA Health Advisory level of 70 ng/L were present at upgradient Site boundary wells, with PFOA in MW-3 and MW-5R at 310 and 120 ng/L, respectively, suggesting the presence of an upgradient, off-site source for some PFAS (Figure 14a). PFAS concentrations in samples from MW-7 (PFOS at 150 ng/L) and MW-23S (PFOS at 94 ng/L) at the southern Site boundary were generally consistent with those from the July 2017 preliminary sampling in those wells (260 and 63 ng/L, respectively).

4.2.3 1,4-Dioxane screening

During April 2018, additional sampling was performed at the Site to screen for the presence of 1,4-Dioxane in groundwater. As shown on Figure 15, the screening included sampling groundwater from eight locations (MW-1D, MW-2, MW-3, MW-4, MW-7, MW-11, MW-14R and MW-18). To prevent possible interference from high concentrations of chlorinated VOCs in wells within the groundwater source area, wells outside of that area were selected for screening. The groundwater samples were analysed for low-level analysis of 1,4-Dioxane using USEPA Method 8270 SIM, which performs better in the presence of chlorinated VOCs. The samples were sent to TestAmerica in Buffalo, New York for analysis.

The analytical results are summarized on Figure 15. Well purge logs for the 1,4-Dioxane screening sampling event are provided in Appendix B; laboratory analytical reports are provided in Appendix E. The data for 1,4-Dioxane is preliminary, pending data validation by a third-party laboratory data validator. As shown on Figure 15, low-level detections of 1,4-Dioxane were present in samples from six of the eight wells, ranging from an estimated value of 0.13 µg/L in well MW-4R to 0.69 µg/L in well MW-1D.

4.2.4 Drainage System Sampling and Analysis

During the July 2017 Site visit to ass the on-Site drainage system (Section 4.1), two groundwater samples (Monitoring Wells MW-7 and MW-23S) and three drainage system effluent liquid samples were collected

for analysis of PFAS using USEPA Method 537 (Modified). The effluent samples were collected from the concrete sump, interior trench, and standing water in the concrete culvert near Herb Hill Road (Figure 12). The samples were sent to TestAmerica in Buffalo, New York for analysis. The analytical results are summarized on Table 4 and Figure 12. The laboratory analytical report for the drainage system sampling is provided in Appendix C.

The results of the sampling analysis for the on-Site drainage samples were generally inconclusive. As shown on Figure 12 and in Table 4, the results of the on-site drainage system indicated the presence of PFAS in all of the analytical samples, with only the groundwater samples from MW-7 yielding PFAS concentrations exceeding the USEPA 70 ng/L drinking water health advisory level (PFOA at 76 ng/L and PFOS at 260 ng/L). However, the presence of PFAS in a sampling equipment blank suggested that some PFAS results may be from potential cross-contamination of groundwater samples, despite rigorous decontamination procedures prior to, and between, each sample collection. In addition, the groundwater sampling results indicate that PFAS compounds are present in upgradient areas of the Site and at the property boundary, indicating an off-site source for the PFAS compounds. Therefore, no relationship between the Site drainage system and PFAS compounds in groundwater is discernible from the assessment; further investigation would be necessary to draw any conclusions.

4.3 Supplemental Radiological Assessment

As discussed in Section 2, the Site is adjacent to the former Li Tungsten Corporation facility, a Superfund Site which processed ore and scrap tungsten concentrates to produce metal tungsten. Historically, tailings from the Li Tungsten Corporation including ore residuals containing naturally occurring radioactive material (NORM) were deposited on the former Li Tungsten facility and on Captain's Cove- a local area on the Glen Cove Creek approximately 700 feet from Li Tungsten on Garvies' Point Road. Therefore, at the request of the NYSDEC, Arcadis preformed a subsurface gamma radiological screening at two temporary monitoring points (RAD-1 and RAD-2) located in the northern portion of the Site (Figure 2). The survey was completed in October 2017, in conjunction with on-going Site well installations and groundwater sampling activities as described in Section 4.2.

4.3.1 Methodology

Due to the small volume of soils generated during soil boring and sampling, it is likely that changes in gamma counts from background may not be detected by screening soil cuttings during monitoring well installations. Therefore, a down-hole gamma screening methodology was used to screen the subsurface, as summarized below. The down-hole method investigates a significantly larger volume of material than the screening of cuttings, by detecting gamma rays from a surrounding sphere of soil approximately 12 inches in diameter at each sample interval. Therefore, if there is a thin layer of NORM-contaminated soil, the count rate will increase as the probe "sphere" comes into proximity of the contaminated soils. The count rate increases to a maximum as the probe goes through the contaminated layer and slowly decreases as the detector moves deeper into the subsurface. This method provides greater confidence in the screening results.

The temporary monitoring points consisted of a one-inch diameter PVC tube installed in a direct-push soil boring to 20 feet bgs. Soil boring data from the Site indicate that material below this depth is consistent with naturally-emplaced sediments. The PVC extended from the surface to the bottom of the boring and

was capped on the bottom to prevent water intrusion. The borings were not logged when advanced; however, available data from adjacent soil borings and monitoring wells were reviewed to assist in the interpretation of the screening results.

At each monitoring point, a thin gamma scintillator probe (Ludlum model 44-62 gamma probe) coupled to a Ludlum model 2350 data logger, was lowered, and a 30 second count rate reading was recorded at sixinch intervals from surface to the total depth of 20 feet bgs. As a check, the probe was sometimes raised to a prior depth and a second log recorded. At the completion of the survey, the temporary PVC casing was pulled, and the borings were allowed to collapse. The field Gamma Logs are provided in Appendix F.

4.3.2 Gamma Screening Results

As shown in the data from monitoring point RAD-1 (Appendix F), the count rate varied between approximately 400 and 900 counts per 30 seconds. This reflects normal background variations and is due to natural variation in the sand, clay and soils layers of Long Island. Clay typically is slightly elevated in NORM compared to sand, and the soils at 8 to 10 feet bgs or 19 to 20 feet bgs likely contain more clay then other volumes.

Results for monitoring point RAD-2 (Appendix F) indicated a different condition. Results to a depth of 4 feet bgs are similar to the prior monitoring point. Then the count rate rapidly decreases to 7 feet and remains low to the bottom of the monitoring point at 20 feet bgs. Soil boring data indicates the presence of clayey silts and sands from a shallow depth (4-6 feet bgs) to approximately 30 feet bgs. In the vicinity of RAD-2, the subsurface deposits are more characteristically medium to coarse sands with some gravel and are more porous and saturated. The reduction in the count rate is likely due to saturated sandy soils, with fewer silts and clays present. The presence of a greater volume of water in the subsurface can also act as a shield, attenuating gamma rays from nearby volumes by a factor of three to four. During the investigation the probe, which was at approximately 10 feet bgs, was brought up to 3 feet bgs and a second survey point completed. The agreement of the readings with the first run indicated the probe was counting properly. Although the gamma counts per 30 seconds were low from approximately 7.5 to 20 feet bgs, there was little variation with the count rate between 150 and 230 counts per 30 seconds. This likely indicates no laminar volumes containing elevated NORM in the soil column below 7.5 feet bgs at RAD-2.

There were no records identified indicating that tailings were historically deposited on the Site by Li Tungsten, and previous Site radiological screening at the Site in 2007 (Malcolm Pirnie, 2009a) indicated that there was no elevated radiological activity in Site surface soils. While most soils contain NORM, due to the natural presence of radium-226, potassium-40 and other natural emitters, the tailings from the Li Tungsten were elevated in radium-226 and its gamma emitting daughter elements bismuth-214 and lead-214. Therefore, if Li Tungsten tailings were mixed with Site soil, the volume of soil containing the waste would have elevated gamma count rates in comparison to background.

The results of the subsurface radiological screening did not indicate the presence of elevated radioactivity in the areas of the Site property evaluated that might indicate the presence of NORM waste associated with Li Tungsten. These findings are consistent with the surficial radiological screening work performed in 2007 at the Site.

5 SITE CONCEPTUAL MODEL

5.1 Nature and Extent of Contamination

5.1.1 Distribution of Contaminants in Soil

Significant concentrations of PCE are present in the soil below the main building, within the area of the 2005 IRM excavation (Walden Associates, 2006). In addition to chlorinated VOCs, petroleum compounds, including ethylbenzene and xylenes, were present in soil samples from all four boring locations within the building. Soil samples from the well MW-27 boring, which was installed in the vicinity of the southwestern corner of the 2005 IRM excavation, yielded the greatest concentrations of PCE and TCE in soil at concentrations indicative of a separate phase PCE source within the soil in this area.

5.1.2 Distribution of Contaminants in Groundwater

Based on groundwater analytical data from the initial pre-design investigation at the Site (Arcadis, 2014), and subsequent groundwater monitoring in 2015 and 2017 as presented herein (Figures 7, 13, and 15), concentrations of PCE and its degradation products in groundwater at the Site are indicative of a NAPL PCE source within the southwestern footprint of the main building. As shown on Figures 13 and 15, concentrations of chlorinated VOCs continue to be greatest in wells within the building footprint at the southwestern corner of the building, with high concentrations of chlorinated VOCs persistent between 2014 and 2017 in wells just downgradient of this presumed source area.

In addition to chlorinated VOCs, petroleum compounds, including ethylbenzene and xylenes, were present in groundwater samples from wells within the source area (Figure 13). Concentrations of these petroleum-related compounds, and the presence of measurable LNAPL in MW-8 indicate a former petroleum release at the Site. The presence of petroleum in groundwater at the Site may be contributing to conditions favorable to the natural attenuation of chlorinated VOCs present in groundwater. Concentrations of PCE and TCE in groundwater have generally decreased over time, with Site conditions generally favoring cis-1,2-DCE, with some trans-1,2-DCE. However, degradation toward vinyl chloride appears to be limited.

The extent of chlorinated VOCs in groundwater has not been fully delineated to the south and west toward former Li Tungsten Parcels A and B, respectively. Groundwater analytical data from 2015 and 2016 in MP-20 on the former Li Tungsten Parcel A, GM-9 and MW-9 on the former Li Tungsten Parcel B (Figures 7 and 11), and anecdotal evidence from adjacent properties, suggest that PCE and related chlorinated VOCs in groundwater are moving to the west and southwest, across these parcels and toward Glen Cove Creek. Dewatering operations on the former Li Tungsten Parcel B during excavation and grading activities in 2006-2008 may have caused migration of groundwater contaminants from the southwestern area of the Site toward the former Li Tungsten Parcel B. Dewatering activities presently occurring on the Former Parcel B since 2017 are likely contributing to off-Site migration of a portion of the dissolved-phase plume toward the west.

Analytical data from the 2017 groundwater assessment indicated the presence of PFAS (primarily PFOS and PFOA) in groundwater at the Site. As discussed in Section 4.2, the greatest concentrations were

present in groundwater samples from wells along the western and southern portions of the Site (Figure 14). PFAS concentrations were also present in wells at the northernmost, upgradient monitoring well locations. Groundwater samples from all of the Site monitoring wells sampled in 2017, with the exception of MW-4R and MW-2 along the eastern portion of the Site, contained concentrations of PFAS concentrations at levels exceeding the 2016 USEPA Drinking Water Health Advisory level of 70 ng/L.

The distribution trend of groundwater data within Site monitoring wells and other sampling locations did not conclusively indicate the presence of a single point source for PFAS at the Site. The presence of significant PFAS concentrations in groundwater along the upgradient Site boundary, and in northern and western portions of the Site are indicative of an off-Site PFAS source.

In addition to PFAS, the screening results for 1,4-Dioxane (Figure 15) suggest that this compound is present in groundwater at the site at low concentrations. However, additional investigation beyond the screening level would be needed to further assess this contaminant.

5.1.3 LNAPL Distribution and Trends

LNAPL was historically present in monitoring wells in the southern portion of the main building (MW-6R, MW-8, MW-16R, and MW-17R) until circa July 2014, when there were no longer measurable thicknesses of LNAPL present in the monitoring wells. Previous LNAPL characterization of a sample from well MW-8 was consistent with gasoline (Malcolm Pirnie, 2009a). LNAPL was not detected in other monitoring wells sampled during the supplemental investigation.

5.2 Contaminant Fate and Transport

Data indicate that a dissolved-phase chlorinated VOC plume continues to emanate from a limited source area present beneath the southwestern corner of the main building. This area likely represents a limited, residual source area not fully excavated during the 2005 soil removal IRM (Walden Associates, 2006) in this portion of the main building. The dissolved-phase chlorinated VOC plume is co-mingled with petroleum-related constituents in areas where LNAPL was previously present, possibly resulting from past releases of fuel oil and/or gasoline at the Site. The presence of petroleum-related compounds in these areas has led to anaerobic conditions suited to degradation of PCE, while in other areas of the Site exhibiting more aerobic conditions, degradation is less advanced, with significant concentrations of PCE, TCE and cis-1,2-DCE persistent in groundwater.

The presence of a contaminant source area beneath the main building continues to provide contaminant mass to groundwater, making further dissolved-phase plume treatment less effective. Under present Site conditions, and in the absence of a remedial program, the natural groundwater gradient toward the south and southwest, coupled with construction dewatering on adjacent properties (especially on the adjacent Parcel B), result in continued dissolved-phase plume migration toward the south and west. Anticipated future construction planned for Herb Hill Road, or an increased dewatering rate on Parcel B, may further alter flow migration pathways and increase contaminant migration off-site.

6 CONCLUSIONS

Application of ISCO using sodium permanganate within the dissolved-phase plume during pilot studies implemented during 2012 through 2016 showed some temporary decreases in dissolved-phase concentrations in groundwater. However, the continued presence of a contaminant source area beneath the main building continues to provide contaminant mass to groundwater, making further use of ISCO alone to address the dissolved-phase plume ineffective, without additional source control and/or removal. The groundwater gradient toward the west and southwest, augmented by construction dewatering on adjacent properties (especially on the adjacent Parcel B), has resulted in continued dissolved-phase plume migration toward these properties. Anticipated future road and utility reconstruction planned for Herb Hill Road may further exacerbate off-Site contaminant migration, potentially resulting in additional human receptor exposure pathways during construction activities.

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TABLES

Table 1.
Site Hydraulic Parameters
Crown Dykman (Site #130054)
Supplemental Pre-Design Summary Report

Well ID	Drim on / Unit	Falling H	lead Test	Rising H	lead Test	<u> Average (Ri</u>	sing/Falling)
vveli 1D	Primary Unit	(ft/day)	(cm/sec)	(ft/day)	(cm/sec)	(ft/day)	(cm/sec)
MW-1S	med-coarse sand	28	1.00E-02	35	1.25E-02	32	1.12E-02
MW-1D	med-coarse sand	33	1.16E-02	20	7.12E-03	27	9.37E-03
MW-2	med-fine sand	7.5	2.63E-03	0.31	1.08E-04	3.9	1.37E-03
MW-3	med-fine sand	2.8	9.87E-04	1.7	6.17E-04	2.3	8.02E-04
MW-7	med-fine sand	3.0	1.05E-03	14	4.78E-03	8.3	2.91E-03
MW-9	fine silty sand	0.53	1.89E-04	0.29	1.04E-04	0.41	1.46E-04
GM-9	med-coarse sand	60	2.12E-02	104	3.67E-02	82	2.89E-02
MW-10S	med-coarse sand	19	6.80E-03	1.8	6.42E-04	11	3.72E-03
MW-10D	fine silty sand	0.34	1.20E-04	0.28	9.81E-05	0.31	1.09E-04
MP-20	fine silty sand	0.67	2.37E-04	1.2	4.16E-04	0.93	3.26E-04
Average K (me	ed-coarse sand):	47	1.65E-02	54	1.90E-02	50	1.78E-02
Average K (me	ed-fine sand):	4.4	1.56E-03	5.2	1.83E-03	4.8	1.69E-03
Average K (fine	e silty sand):	0.52	1.82E-04	0.58	2.06E-04	0.55	1.94E-04

NOTE: values based on Bouwer and Rice slug testing analysis in Site wells (Malcolm Pirnie, 2009a).

Table 2. 2015 Baseline Sampling Analytical Sampling Summary Crown Dykman (Site #1-30-054) Supplemental Pre-Design Summary Report

[a	10/00E0 01 04	211.2	nu 045	na/ 00	na/ 00		B8587.4	100/45	100/ 400	1010	10110	2004	1014 00	DIID 4 44404=8		1010	100	1814/ 40D	1004.40	1014 4 4 D	104/45D
Sample ID Depth or Screen Interval (feet)	NYSDEC Class GA Standard or	GM-9	IW-01D	IW-02	IW-03	MP-20	MW-1	MW-1D	MW-1DD	MW-2	MW-3	MW-4	MW-6R	DUP-1_111015 ^a	MW-7	MW-9	MW-10S	MW-10D	MW-13	MW-14R	MW-15R
Sampling Date	Guidance Value	11/11/2015	11/12/2015	11/10/2015	11/10/2015	11/11/2015	11/10/2015	11/11/2015	11/10/2015	11/11/2015	11/11/2015	11/11/2015	11/10/2015	11/10/2015	11/11/2015	11/11/2015	11/12/2015	11/12/2015	11/12/2015	11/11/2015	11/11/2015
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
VOCs	g	3		g- <u>-</u>		3 - =	g-=					9			g	g- <u>-</u>			3	g. =	9-
1.1.1-Trichloroethane	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	10 U	0.22 J	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane		10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,1,2-Trichloroethane	1	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,1-Dichloroethane	5	10 U	1.2	100 U	0.48 J	1.0 U	40 U	20 U	0.67 J	0.57 J	1.0 U	0.58 J	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,1-Dichloroethene	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,2,4-Trichlorobenzene	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,2-Dibromoethane	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,2-Dichlorobenzene	3	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,2-Dichloroethane	0.6	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,2-Dichloropropane	1	10 U	1.0 U	100 U	1.4	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,3-Dichlorobenzene	3	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
1,4-Dichlorobenzene	3	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5 U	5 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
2-Butanone	50	100 U	10 U	1000 U	10 U	10 U	400 U	200 U	10 U	10 U	10 U	10 U	50 U	50 U	100 U	100 U	1000 U	10000 U	5000 U	40 U	10 U
2-Hexanone	50*	50 U	5.0 U	500 U	5.0 U	5.0 U	200 U	100 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	50 U	50 U	500 U	5000 U	2500 U	20 U	5.0 U
4-Methyl-2-Pentanone		50 U	5.0 U	500 U	5.0 U	5.0 U	200 U	100 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	50 U	50 U	500 U	5000 U	2500 U	20 U	5.0 U
Acetone	50*	100 U	8.9 J	1000 U	10 U	10 U	400 U	200 U	10 U	10 U	10 U	10 U	50 U	50 U	100 U	100 U	1000 U	10000 U	5000 U	40 U	10 U
Benzene	1	10 U	1.0 U	100 U	3.8	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Bromodichloromethane	50*	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Bromoform	50*	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Bromomethane	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Carbon Disulfide		10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Carbon Tetrachloride	5	10 U	0.41 J	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Chlorobenzene	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Chloroethane	5	10 U	1.0 U	100 U	2.9	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.8 J	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Chloroform	7	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Chloromethane		10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
cis-1,2-Dichloroethene	5	390	120 D	11000 D	130 D	3.0	1700	960	43	4.6	1.0 U	1.0 U	190 F1	210	310	700	3600	1000 U	28000	260	0.99 J
cis-1,3-Dichloropropene	0.4**	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Cyclohexane		10 U	1.0 U	100 U	1.1	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	0.54 J
Dibromochloromethane	50	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Dichlorodifluoromethane	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Ethyl Benzene	5	10 U	1.0 U	100 U	25	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	25	25	10 U	10 U	100 U	1000 U	500 U	34	13
Isopropylbenzene	5	10 U	1.0 U	100 U	30	1.0 U	40 U	20 U	1.0 U 2.5 U	1.0 U	1.0 U 2.5 U	1.0 U	20	19 13 U	10 U	10 U	100 U	1000 U	500 U	17	15 2.5 U
Methyl Acetate	10*	25 U 1.9 J	2.5 U 1.0 U	250 U 100 U	2.5 U 75	2.5 U 1.0 U	100 U 40 U	50 U 20 U	2.5 U 1.0 U	2.5 U 1.0 U	2.5 U 1.0 U	2.5 U 1.0 U	13 U 9.9 F1	13 U	25 U 5.3 J	25 U 10 U	250 U 100 U	2500 U 1000 U	1300 U 500 U	10 U	2.5 U
Methylogologyapa	10"	1.9 J 10 U	1.0 U	100 U	3.9	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	9.9 F1 1.7 J	12 1.7 J	5.3 J 10 U	10 U	100 U	1000 U	500 U	1.3 J 1.2 J	3.2
Methylcyclohexane Methylene Chloride	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
•	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Styrene Tetrachloroethene	5	440	2300 D	13000 D	1.0 U	0.69 J	260	1900	28	58	1.0 U	1.0 U	5.0 U	5.0 U	210	10 U	2500	28000	630	4.0 U	1.5
Toluene	5	10 U	0.84 J	100 U	9.2	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	11	1.0 U
trans-1,2-Dichloroethene	5	10 U	0.64 J 1.1	100 U	2.3	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
trans-1,3-Dichloropropene	0.4**	10 U	1.1 1.0 U	100 U	2.3 1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Trichloroethene	5	110	1.0 0	2600	1.0 U	0.91 J	170	530	1.0 0	1.0 0	1.0 U	1.0 U	5.0 U	5.0 U	90	10 U	860	2500	410 J	4.0 U	1.0 U
Trichlorofluoromethane	5	10 U	1.0 U	100 U	1.0 U	1.0 U	40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10 U	10 U	100 U	1000 U	500 U	4.0 U	1.0 U
Vinyl Chloride	2	10 0	9.9	580	310 D	1.0 U	40 U	32	1.0 0	1.0 U	1.0 U	1.0 U	220	240	10 U	340	100 0	1000 U	730	4.0 D	1.0 U
Xylene (Total)	5	20 U	6.4	200 U	14	2.0 U	80 U	40 U	2.0 U	2.0 U	2.0 U	2.0 U	11	11	20 U	20 U	200 U	1000 U	1000 U	190	2.0 U
Notes		20 0	0.4	200 0	17	2.0 0	00 0	70 0	2.0 0	2.0 0	2.0 0	2.0 0		- ''	20 0	20 0	200 0	1000 0	1000 0	100	2.00

- Exceeds NYSDEC Class GA Standard or Guidance

Value

* Guidance Value

**Sum of these compounds can not exceed 0.4 ug/L.

D - Result of diluted sample shown.

F1 - MS and/or MSD Recovery is outside acceptance limits.

J - Estimated concentration.

U - Compound not detected.

Mn⁻⁴ - Permanganate present in well

NA - Not analyzed.

NS - Not sampled.

^a - Duplicate sample collected from MW-6R.

^b - Duplicate sample collected from MW-13.

^c - Duplicate sample collected from MW-23S.

1 of 2

Table 2. 2015 Baseline Sampling Analytical Sampling Summary Crown Dykman (Site #1-30-054) Supplemental Pre-Design Summary Report

OI- ID	NYSDEC Class GA	B894/40D	MM 47D	MW 40	MM 40	MM 000	MANAY COD	MM 00 (D) 0	MW-22 (R) D	MW-23S	MM 00D	BANA 04	MM/ 050	MANA OFF	MM 00	MANA 07	BANA/ 00	MW-29
Sample ID Depth or Screen Interval (feet)	Standard or	MW-16R	MW-17R	MW-18	MW-19	MW-22S	MW-22D	MW-22 (R) S	MIVV-22 (R) D	WW-235	MW-23D	MW-24	MW-25S	MW-25D	MW-26	MW-27	MW-28	WW-29
Sampling Date	Guidance Value	11/10/2015	11/10/2015	11/11/2015	11/10/2015	11/10/2015	11/11/2015	11/10/2015	11/11/2015	11/11/2015	11/11/2015	11/18/2015	11/12/2015	11/12/2015	11/10/2015	11/10/2015	11/10/2015	11/10/2015
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
VOCs	g	9	-9-	g. <u>-</u>	-9-	. g			-9-	g- <u>-</u>		-9-	-9-	9		-9-	9	-9-
1.1.1-Trichloroethane	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1.1.2.2-Tetrachloroethane	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane		1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	3.8 J
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,2-Dibromoethane	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,2-Dichloropropane	1	1.0 U	1.7	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
2-Butanone	50	10 U	10 U	400 U	10 U	NS	50 U	NS	800 U	100 U	200 U	100 U	NS	100 U	5000 U	20000 U	20000 U	40 U
2-Hexanone	50*	5.0 U	5.0 U	200 U	5.0 U	NS	25 U	NS	400 U	50 U	100 U	50 U	NS	50 U	2500 U	10000 U	10000 U	20 U
4-Methyl-2-Pentanone		5.0 U	5.0 U	200 U	5.0 U	NS	25 U	NS	400 U	50 U	100 U	50 U	NS	50 U	2500 U	10000 U	10000 U	20 U
Acetone	50*	10 U	10 U	400 U	10 U	NS	50 U	NS	800 U	100 U	200 U	100 U	NS	100 U	5000 U	20000 U	20000 U	40 U
Benzene	1	0.41 J	4.3	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	1.8 J
Bromodichloromethane	50*	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Bromoform	50*	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Bromomethane	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Carbon Disulfide		1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Carbon Tetrachloride	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Chlorobenzene	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Chloroethane	5	1.0 U	4.5	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Chloroform	7	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Chloromethane		1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
cis-1,2-Dichloroethene	5	16	55	3300 D	1.0 U	NS	380	NS	2400	750	1300 F1	620	NS	480	11000	140000	47000	1600 D
cis-1,3-Dichloropropene	0.4**	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Cyclohexane		1.0 U	0.50 J	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Dibromochloromethane	50	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Ethyl Benzene	5	34	8.6	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	14
Isopropylbenzene	5	15	26	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	12
Methyl Acetate		2.5 U	2.5 U	100 U	2.5 U	NS	13 U	NS	200 U	25 U	50 U	25 U	NS	25 U	1300 U	5000 U	5000 U	10 U
Methyl tert-butyl Ether	10*	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	12 J	10 U	NS	10 U	500 U	2000 U	2000 U	0.90 J
Methylcyclohexane		0.96 J	14	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	1.0 J
Methylene Chloride	5	1.0 U	1.7	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Styrene	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Tetrachloroethene	5	18	0.74 J	4300 D	0.53 J	NS	180	NS	36 J	780	1300 F1	110	NS	26	670	140000	26000	6.7
Toluene	5	1.0 U	0.61 J	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	2.0 J
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	7.1
trans-1,3-Dichloropropene	0.4**	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Trichloroethene	5	3.2	1.0 U	1500	1.0 U	NS	130	NS	80 U	270	500 F1	72	NS	17	800	18000	15000	5.0
Trichlorofluoromethane	5	1.0 U	1.0 U	40 U	1.0 U	NS	5.0 U	NS	80 U	10 U	20 U	10 U	NS	10 U	500 U	2000 U	2000 U	4.0 U
Vinyl Chloride	2	1.0	62	350	1.0 U	NS	23	NS	80 U	11	140	21	NS	150	630	7700	1800 J	600 D
Xylene (Total)	5	5.7	2.0 U	80 U	2.0 U	NS	10 U	NS	160 U	20 U	40 U	20 U	NS	20 U	1000 U	4000 U	4000 U	42
Notes																		

Notes

- Exceeds NYSDEC Class GA Standard or Guidance

Value

* Guidance Value

**Sum of these compounds can not exceed 0.4 ug/L.

D - Result of diluted sample shown.

F1 - MS and/or MSD Recovery is outside acceptance limits.

J - Estimated concentration.

U - Compound not detected.

Mn⁻⁴ - Permanganate present in well

NA - Not analyzed.

NS - Not sampled.

^a - Duplicate sample collected from MW-6R.

^b - Duplicate sample collected from MW-13.

^c - Duplicate sample collected from MW-23S.

Table 3a.
Source Area Injection Pilot Summary of Injection Volume - Injection Well IW-02
Crown Dykman (Site #130054)
Supplemental Pre-Design Summary Report

Date	Uptime (minutes)	Start Totalizer (gallons)	End Totalizer (gallons)	Volume (gallons)	Flow Rate (GPM)	Pressure (PSI)
12/3/2015	355	5,352.00	5,935.12	583.12	1.64	0.00
12/4/2015	525	5,935.12	6,726.60	791.48	1.51	0.00
12/7/2015	750	6,726.60	7,744.14	1,017.54	1.36	0.00
12/8/2015	780	7,744.14	8,761.89	1,017.75	1.30	0.00
12/9/2015	750	8,761.89	9,449.34	687.45	0.92	0.00
12/10/2015	750	9,449.34	10,167.14	717.80	0.96	0.00

Cumulative Total Injection Volume: 4,815.14 gallons

Table 3b.

Source Area Injection Pilot Summary of Injection Volume - Injection Well IW-03

Crown Dykman (Site #130054)

Supplemental Pre-Design Summary Report

Date	Uptime (minutes)	Start Totalizer (gallons)	End Totalizer (gallons)	Volume (gallons)	Flow Rate (GPM)	Pressure (PSI)
12/3/2015	355	5,713.36	6,197.64	484.28	1.36	0.00
12/4/2015	525	6,197.64	6,866.85	669.21	1.27	0.00
12/7/2015	750	6,866.85	7,669.06	802.21	1.07	0.00
12/8/2015	780	7,669.06	8,561.34	892.28	SO	0.00
12/9/2015	750	8,561.34	9,665.75	1,104.41	1.47	0.00
12/10/2015	750	9,665.75	10,237.71	571.96	0.76	0.00

Cumulative Total Injection Volume: 4,524.35 gallons

Table 4. Summary of Laundry Water Impoundment System PFAS Results Crown Dykman (Site #130054) Supplemental Pre-Design Summary Report

Sample ID	USEPA Health Advisory Level for Drinking Water	Concrete Structure	DUP-01 ^a	EQUIPMENT BLANK	Sump	Trench	MW-7	MW-23S
Sampling Date Units	 ng/l	7/6/2017 ng/L	7/6/2017 ng/L	7/6/2017 ng/L	7/6/2017 ng/L	7/6/2017 ng/L	7/6/2017 ng/L	7/6/2017 ng/L
Perfluorobutanoic acid (PFBA)		16	11.0	9.9	19.0	4.7	18.0	3.9
Perfluoropentanoic acid (PFPeA)		3	3.5	9.2	6.9	4.0	32.0	1.4 J
Perfluorohexanoic acid (PFHxA)		7	6.5	16	5.6	6.0	31.0	0.9 J
Perfluoroheptanoic acid (PFHpA)		4	4.5	15	2.2	2.9	24.0	2.9
Perfluorooctanoic acid (PFOA)	70	31	32.0	49	5.5	18.0	76.0	8.5
Perfluorononanoic acid (PFNA)		6	6.8	2.4	2.3	3.6	11.0	3.2
Perfluorodecanoic acid (PFDA)		9	9.6	1.9 U	1.9 J	5.7	11.0	1.5 J
Perfluoroundecanoic acid (PFUnA)		2 J	1.8 J	1.9 U	1.2 J	1.2 J	2.0 U	1.9 U
Perfluorododecanoic acid (PFDoA)		1 J	1.3 J	1.9 U	2.1	0.6 J	2.0 U	1.9 U
Perfluorotridecanoic Acid (PFTriA)		1 J	1.9 U	1.9 U	2.0 U	0.6 J	2.0 U	1.9 U
Perfluorotetradecanoic acid (PFTeA)		2 U	1.9 U	0.27 J B	0.6 J B	0.4 J B	2.0 U	1.9 U
Perfluorobutanesulfonic acid (PFBS)		2 J	1.8 J	4.7	1.4 J	1.6 J	47.0	2.9
Perfluorohexanesulfonic acid (PFHxS)		3	3.3	14	3.7	3.2	18.0	1.6 J
Perfluoroheptanesulfonic Acid (PFHpS)		2 U	1.9 U	1.4 J	2.0 U	1.9 U	4.7	1.9
Perfluorooctanesulfonic acid (PFOS)	70	4	3.3	18	5.0	2.8	260.0	63.0
Perfluorodecanesulfonic acid (PFDS)		1 J	1.3 J	1.9 U	2.0 U	1.9 U	2.0 U	1.9 U
Perfluorooctane Sulfonamide (FOSA)		40 U	38.0 U	38 U	41 U	38.0 U	1.2 J B	39.0 U

Notes

- Exceeds USEPA Health Advisory Level for Drinking Water

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

- U Compound not detected.
- B Compound was found in the blank and sample
- ^a Duplicate sample collected from 'Concrete Structure'

Table 5. Summary of Analytical Results - 2017 Synoptic Sampling Crown Dykman (Site #130054) Supplemental Pre-Design Summary Report

Sample ID	NYSDEC Class GA Standard or	MW-1	MW-1D	MW-1DD	MW-2	MW-3	MW-4R	DUP-01 ^a	MW-5R	MW-6R	MW-7	MW-8	MW-10S	MW-10D	MW-11	MW-13
Sampling Date	Guidance Value	11/2/2017	11/2/2017	11/2/2017	11/8/2017	11/7/2017	11/2/2017	11/2/2017	11/6/2017	11/7/2017	10/31/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/7/2017
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
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
1,1,2-Trichloro-1,2,2-trifluoroethane		1 U*	1 U*	1 U*	1 U	1 U	1 U*	1 U*	1 U*	1 U*	1 U	10 U*	5 U*	5 U*	5 U*	100 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
1,1-Dichloroethane	5	1 U	0.33 J	1 U	1 U	1 U	1 U	1 U	0.31 J	1 U	1 U	10 U	5 U	5 U	5 U	100 U
1,1-Dichloroethene	5	1 U	0.77 J	1 U	1 U	1 U	1 U	1 U	0.38 J	1.6	0.37 J	10 U	5 U	2.2 J	5 U	100 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
1,2-Dibromo-3-Chloropropane	0.04	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	50 U	50 U	50 U	1000 U
1,2-Dibromoethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.57 J	1 U	10 U	5 U	5 U	5 U	100 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.41 J	1 U	10 U	5 U	5 U	5 U	100 U
2-Butanone	50	50 U	50 U F1	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	500 U	250 U	250 U	250 U	5000 U
2-Hexanone	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	50 U	50 U	50 U	1000 U
4-Methyl-2-Pentanone		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	50 U	50 U	50 U	1000 U
Acetone	50*	25 U	25 U	25 U	25 U	6 J	25 U	25 U	25 U	25 U	25 U	250 U	130 U	130 U	130 U	2500 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.6	1 U	10 U	5 U	5 U	21	100 U
Bromodichloromethane	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
Bromoform	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
Bromomethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
Carbon Disulfide		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	1 U	10 U	5 U	5 U	5 U	100 U
Chloroform	7	1 U	0.27 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.54 J	10 U	5 U	5 U	5 U	100 U
Chloromethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
cis-1,2-Dichloroethene	5	45	350	140	1.1	1 U	0.94 J	0.69 J	1.1	740	210	86	550	830	650	14000
cis-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
Cyclohexane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	25 U	25 U	25 U	500 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U*	1 U	1 U	1 U	1 U	1 U	1 U	10 U*	5 U	5 U	5 U	100 U
Ethyl Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	26	1 U	120	5 U	5 U	47	100 U
Isopropylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	18	1 U	66	5 U	5 U	15	100 U
Methyl Acetate		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	50 U	50 U	50 U	1000 U
Methyl tert-butyl Ether	10*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	7.2	1 U	10 U	5 U	5 U	63	100 U
Methylcyclohexane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.2 J	5 U	9.8 J	25 U	25 U	25 U	500 U
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 J	25 U	25 U	25 U	160 J B
Styrene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	5 U	5 U	100 U
Tetrachloroethene	5	11	40	65	17	1 U	1 U	1 U	1 U	2.9	260	10 U	560	400	3.2 J	430
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.9 1 U	1 U	58	5 U	5 U	36	100 U
trans-1.2-Dichloroethene	5	0.3 J	3.6	1.3	1 U	1 U	1 U	1 U	1 U	3.3	4.3	10 U	2.9 J	5.1	9.6	140
trans-1,3-Dichloropropene	0.4**	1 U	1 U	1.3 1 U	1 U	1 U	1 U	1 U	1 U	3.3 1 U	4.5 1 U	10 U	2.9 J	5.1	5.U	100 U
Trichloroethene	5	11	65	38	3.5	1 U	1 U	1 U	0.26 J	9.7	130	10 U	210	420	5 U	480
Trichlorofluoromethane	5	1 U	1 U	30 1 U	3.5 1 U	1 U	1 U	1 U	0.26 J 1 U	9. <i>1</i> 1 U	1 U	10 U*	5 U	420 5 U	5 U	100 U
Vinyl Chloride	2	3.1	4.8	4.1	1 U	1 U	1 U	1 U	1 U	270	1 U	13	33	4.3 J	370	660
Xylene (Total)	5	3.1 3 U	4.8 3 U	4.1 3 U	3 U	3 U	3 U	3 U	3 U	6.6	3 U	1100	33 15 U	4.3 J 15 U	210	300 U
Notes	υ	3 U	3 U	3 0	3 0	3 U	ა 0	3 U	3 0	0.0	3 U	1100	10 U	10 U	210	300 0

- Exceeds NYSDEC Class GA Standard or Guidance Value

* Guidance Value

**Sum of these compounds can not exceed 0.4 ug/L.

F1 - MS and/or MSD Recovery is outside acceptance limits.

* 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

B - Compound was found in the blank and sample

U - Compound not detected.

a - Duplicate collected at MW-4R

b - Duplicate collected at MW-27

CI - The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias

Table 5. Summary of Analytical Results - 2017 Synoptic Sampling Crown Dykman (Site #130054) Supplemental Pre-Design Summary Report

Sample ID	NYSDEC Class GA Standard or	MW-14R	MW-15R	MW-16R	MW-17R	MW-18	MW-19	MW-21S	MW-21D	MW-22(R)S	MW-22(R)D	MW-23S	MW-23D	MW-25S	MW-25D	MW-26
Sampling Date Units	Guidance Value ug/L	11/8/2017 ug/L	11/8/2017 ug/L	11/1/2017 ug/L	11/1/2017 ug/L	11/6/2017 ug/L	11/1/2017 ug/L	11/3/2017 ug/L	11/7/2017 ug/L	11/2/2017 ug/L	11/3/2017 ug/L	10/31/2017 ug/L	10/31/2017 ug/L	11/7/2017 ug/L	11/7/2017 ug/L	11/7/2017 ug/L
1,1,1-Trichloroethane	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
1,1,2-Trichloro-1,2,2-trifluoroethane		5 U	1 U	1 U	1 U	5 U*	1 U	1 U	10 U	1 U*	20 U	10 U*	10 U	1 U*	1 U*	5 U*
1,1,2-Trichloroethane	1	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
1,1-Dichloroethane	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	0.36 J	20 U	1 U	10 U	1 U	0.97 J	5 U
1,1-Dichloroethene	5	1.5 J	1 U	1 U	1 U	5 U	1 U	1 U	2.7 J	0.32 J	20 U	0.79 J	10 U	1 U	0.46 J	5 U
1,2,4-Trichlorobenzene	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
1,2-Dibromo-3-Chloropropane	0.04	50 U	10 U	10 U	10 U	50 U	10 U	10 U	100 U	10 U	200 U	10 U	100 U	10 U	10 U	50 U
1,2-Dibromoethane	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
1,2-Dichlorobenzene	3	5 U	1 U	1 U	0.22 J	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
1,2-Dichloroethane	0.6	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	0.25 J	20 U	1 U	10 U	1 U	1.1	5 U
1,2-Dichloropropane	1	1.5 J	1 U	1 U	1.3	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
1,3-Dichlorobenzene	3	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
1,4-Dichlorobenzene	3	5 U	1 U	0.21 J	0.76 J	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
2-Butanone	50	250 U	50 U	50 U	50 U	250 U	50 U	50 U	500 U	50 U	1000 U	50 U	500 U	50 U	50 U	250 U
2-Hexanone	50*	50 U	10 U	10 U	10 U	50 U	10 U	10 U	100 U	10 U	200 U	10 U	100 U	10 U	10 U	50 U
4-Methyl-2-Pentanone		50 U	10 U	10 U	10 U	50 U	10 U	10 U	100 U	10 U	200 U	10 U	100 U	10 U	10 U	50 U
Acetone	50*	130 U	25 U	5.2 J	6.3 J	130 U	25 U	25 U	250 U	25 U	500 U	25 U	250 U	52	25 U	130 U
Benzene	1	5.1	1 U	1 U	3.8	5 U	1 U	1 U	10 U	0.47 J	20 U	1 U	10 U	1 U	0.98 J	1.3 J
Bromodichloromethane	50*	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Bromoform	50*	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1	1 U	5 U
Bromomethane	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Carbon Disulfide		5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Carbon Tetrachloride	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Chlorobenzene	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Chloroethane	5	5 U	1 U	1 U	14	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Chloroform	7	5 U	1 U	1 U	1 U	5 U	1 U	0.39 J	10 U	1 U	20 U	1 U	10 U	1.6	1 U	5 U
Chloromethane		5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
cis-1,2-Dichloroethene	5	1500	3.7	2.4	58	940	11	57	1800	260	2200	380	910	1 U	150	960
cis-1,3-Dichloropropene	0.4**	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Cyclohexane		0.83 J	0.66 J	0.2 J	0.71 J	25 U	5 U	5 U	50 U	5 U	4.7 J	5 U	50 U	5 U	5 U	25 U
Dibromochloromethane	50	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Dichlorodifluoromethane	5	5 U*	1 U*	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U*	1 U	10 U	1 U	1 U	5 U
Ethyl Benzene	5	65	4.6	11	3.6	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	85
Isopropylbenzene	5	34	12	12	27	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	43
Methyl Acetate		50 U	10 U	10 U	10 U	50 U	10 U	10 U	100 U	10 U	200 U	10 U	100 U	10 U	10 U	50 U
Methyl tert-butyl Ether	10*	1.4 J	1 U	1 U	12	5 U	1 U	1 U	10 U	1 U	20 U	1 U	3.3 J	1 U	1 U	5 U
Methylcyclohexane		2.7 J	4.4 J	0.59 J	2.4 J	25 U	5 U	5 U	50 U	0.29 J	100 U	5 U	50 U	5 U	1.4 J	4.4 J
Methylene Chloride	5	6.6 J B	5 U	5 U	5 U	25 U	5 U	5 U	50 U	5 U	33 J B	5 U	11 J B	5 U	5 U	25 U
Styrene	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Tetrachloroethene	5	5 U	0.38 J	1 U	1 U	78	1.2	58	10 U	17	20 U	320	480	1 U	3.2	2.1 J
Toluene	5	120	1 U	1 U	0.18 J	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	2.5 J
trans-1,2-Dichloroethene	5	43	0.34 J	0.6 J	1.8	5.6	0.53 J	0.32 J	28	5.5	33	2.5	5.1 J	1 U	2.3	8.7
trans-1,3-Dichloropropene	0.4**	5 U	1 U	1 U	1 U	5 U	1 U	1 U	10 U	1 U	20 U	1 U	10 U	1 U	1 U	5 U
Trichloroethene	5	5 U	0.2 J	0.43 J	1 U	520	0.94 J	22	10 U	23	20 U	140	230	1 U	3.8	17
Trichlorofluoromethane	5	5 U	1 U	1 U	1 U	5 U	1 U	1 U*	10 U*	2 U	20 U	1 U	10 U	1 U	1 U	5 U
Vinyl Chloride	2	700	5.3	0.47	73	40	0.39 J	8.3	50	61	66	3.6	11	1 U	330	88
Xylene (Total)	5	450	3 U	3 U	3 U	15 U	3 U	3 U	30 U	3 U	60 U	3 U	30 U	3 U	3 U	270
Notes														-	-	

- Exceeds NYSDEC Class GA Standard or Guidance Value

* Guidance Value

**Sum of these compounds can not exceed 0.4 ug/L.

F1 - MS and/or MSD Recovery is outside acceptance limits.

* 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

B - Compound was found in the blank and sample

U - Compound not detected.

a - Duplicate collected at MW-4R

b - Duplicate collected at MW-27

CI - The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias

Table 5. Summary of Analytical Results - 2017 Synoptic Sampling Crown Dykman (Site #130054) Supplemental Pre-Design Summary Report

Sample ID	NYSDEC Class GA	MW-27	DUP-02 ^b	MW-28	MW-29	IW-01S	IW-01D	IW-02	IW-03
Sampling Date	Standard or Guidance Value	11/7/2017	11/7/2017	11/7/2017	11/8/2017	11/7/2017	11/6/2017	11/7/2017	11/8/2017
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1,1,2,2-Tetrachloroethane	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane		1000 U*	1000 U*	200 U	10 U	1 U*	1 U	100 U*	10 U
1.1.2-Trichloroethane	1	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1.1-Dichloroethane	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1.1-Dichloroethene	5	1000 U	1000 U	200 U	2.7 J	1 U	1 U	100 U	2.6 J
1,2,4-Trichlorobenzene	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1,2-Dibromo-3-Chloropropane	0.04	10000 U	10000 U	2000 U	100 U	10 U	10 U	1000 U	100 U
1,2-Dibromoethane	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1.2-Dichlorobenzene	3	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1,2-Dichloroethane	0.6	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1,2-Dichloropropane	1	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1,3-Dichlorobenzene	3	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
1.4-Dichlorobenzene	3	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
2-Butanone	50	50000 U	50000 U	10000 U	500 U	50 U	50 U	5000 U	500 U
2-Hexanone	50*	10000 U	10000 U	2000 U	100 U	10 U	10 U	1000 U	100 U
4-Methyl-2-Pentanone		10000 U	10000 U	2000 U	100 U	10 U	10 U	1000 U	100 U
Acetone	50*	25000 U	25000 U	5000 U	250 U	25 U	29	2500 U	250 U
Benzene	1	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	3.3 J
Bromodichloromethane	50*	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
Bromoform	50*	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
Bromomethane	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
Carbon Disulfide	***************************************	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
Carbon Tetrachloride	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
Chlorobenzene	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
Chloroethane	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	8.2 J
Chloroform	7	1000 U	1000 U	200 U	10 U	0.45 J	1	100 U	10 U
Chloromethane		1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
cis-1,2-Dichloroethene	5	50000	50000	28000	900	1.6	39	14000	1400
cis-1,3-Dichloropropene	0.4**	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
Cyclohexane		5000 U	5000 U	1000 U	50 U	5 U	5 U	500 U	50 U
Dibromochloromethane	50	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
Dichlorodifluoromethane	5	1000 U	1000 U	200 U	10 U*	1 U	1 U	100 U*	10 U*
Ethyl Benzene	5	1000 U	1000 U	200 U	10	1 U	1 U	100 U	10 U
Isopropylbenzene	5	1000 U	1000 U	200 U	8 J	1 U	1 U	100 U	7.9 J
Methyl Acetate		10000 U	10000 U	2000 U	100 U	10 U	10 U	1000 U	100 U
Methyl tert-butyl Ether	10*	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	9.7 J
Methylcyclohexane		5000 U	5000 U	1000 U	50 U	5 U	5 U	500 U	1.5 J
Methylene Chloride	5	1100 J	1300 J	1000 U	14 J B	5 U	5 U	120 J	14 J B
Styrene	5	1000 U	1000 U	200 U	1 U	1 U	1 U	100 U	10 U
Tetrachloroethene	5	140000	150000	1500	25	17	25	3800	1.9 J
Toluene	5	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
trans-1,2-Dichloroethene	5	1000 U	1000 U	95 J	18	1 U	1 U	50 J	19
trans-1,3-Dichloropropene	0.4**	1000 U	1000 U	200 U	10 U	1 U	1 U	100 U	10 U
Trichloroethene	5	17000	18000	4200	52	1 U	3.3	5600	6.3 J
Trichlorofluoromethane	5	1000 U*	1000 U*	200 U*	10 U	1 U	1 U*	100 U*	10 U
Vinyl Chloride	2	2500	2500	1100	190	1 U	1 U	710	640
Xylene (Total)	5	3000 U	3000 U	600 U	30 U	3 U	3 U	300 U	30 U
Notes									

- Exceeds NYSDEC Class GA Standard or Guidance Value

* Guidance Value

**Sum of these compounds can not exceed 0.4 ug/L.

F1 - MS and/or MSD Recovery is outside acceptance limits.

* LCS or LCSD is outside acceptance limits.

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B - Compound was found in the blank and sample

U - Compound not detected.

a - Duplicate collected at MW-4R

b - Duplicate collected at MW-27

CI - The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias

Table 6. Summary of PFAS Analytical Results - 2017 Synoptic Sampling Crown Dykman (Site #130054) Supplemental Pre-Design Summary Report

Standard or			MW-1DD	MW-2	MW-3	MW-4R	DUP-01 ^a	MW-5R	MW-6R	MW-7	MW-8	MW-10S	MW-10D	MW-11	MW-13	MW-14R	MW-15R
Guidance Value ug/L	11/2/2017 ng/L	11/2/2017 ng/L	11/2/2017 ng/L	11/8/2017 ng/L	11/7/2017 ng/L	11/2/2017 ng/L	11/2/2017 ng/L	11/6/2017 ng/L	11/7/2017 ng/L	10/31/2017 ng/L	11/6/2017 ng/L	11/6/2017 ng/L	11/6/2017 ng/L	11/6/2017 ng/L	11/7/2017 ng/L	11/8/2017 ng/L	11/8/2017 ng/L
	17	15	8.4	2.5 CI	38	6.4	6.4	28	170 CI	14 B	190 CI	21	32 CI	450 CI	71 CI	410 CI	70 CI
	35	25	10	2.5	42	5	6.2	30	62	25	2.1 U	14	5.6	2 U	57	7.2	28
	36	24	12	2.2	43	6.3	5.9	41	61	23	13	15	11	18	61	25	29
	30	17	12	1.9 J	51	5.1	5.1	44	60	20	13	13	7.4	16	39	25	29
70	86	52	65	6.8	310	25	25	120	150	60	93	38	31	120	96	130	100
	14	7	2.7	1.1 J B	8.1	1.8 J	1.8 J	5.8	17 B	6.3	16	5	2.2	26	17	10 B	12 B
	13	4.7	1.5 J	2 U	1.1 J	0.73 J	0.69 J	0.55 J	15	6.5	6.7	9.5	1.2 J	6.9	28	3.5	26
	1.1 J	1.7 U	1.7 U	2 U	2 U	2 U	2 U	1.6 J	1.2 J	2 U	2.1	1.1 J	2 U	2 U	2.4	2 U	8
	0.65 J	1.7 U	1.7 U	2 U	2 U	2 U	2 U	2.1 U	1.9 U	2 U	2.1 U	2.1 U	2 U	2 U	1.8 J	2 U	5.5
	1.7 U	1.7 U	1.7 U	2 U	2 U	2 U	2 U	2.1 U	1.9 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
	1.7 U	1.7 U	1.7 U	0.6 J	2 U	2 U	2 U	2.1 U	1.9 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
	19	16	6.5	1.1 J	64	2.8	2.6	53	140	26	13	9.8	6.5	14	62	190	40
	11 B	7.7 B	7.3 B	1.4 J B	36 B	5.8 B	5.8 B	25 B	23 B	9.5 B	20 B	7.3 B	6.5 B	28 B	9.4 B	52 B	14 B
	3.7	1.4 J	1.6 J	2 U	11	0.95 J	0.86 J	2.1	6.9	2	13	1.2 J	0.92 J	13	2.3	15	4.6
70	230	100	94	15	310	56	53	52	510	150 B	1700	120	75	1800	230	1200	380
	1.7 U	1.7 U	1.7 U	2 U	2 U	2 U	2 U	2.1 U	0.31 J	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	3.9
	1.7	0.99 J	0.92 J	2 U	59 B	0.39 J	0.46 J	2.1 U	6.1	0.51 J B	3.9	1.1 J	0.66 J	1.2 J	3.3 B	0.89 J	12
	498.15	270.79	221.92	35.1	973.2	116.27	113.81	403.05	1222.51	342.81	2083.7	256	179.98	2493.1	680.2	2068.59	762
	70	17 35 36 30 70 86 14 13 1.1 J 0.65 J 1.7 U 11 B 3.7 70 230 1.7 U 1.7 U	17 15 35 25 36 24 30 17 86 52 14 7 13 4.7 1.1 J 1.7 U 0.65 J 1.7 U 1.7 U 1.7 U 19 16 11 B 7.7 B 3.7 1.4 J 3.7 1.4 J 1.7 U 1.7 U 1.7 U 0.99 J			17 15 8.4 2.5 Cl 38 35 25 10 2.5 42 36 24 12 2.2 43 30 17 12 1.9 J 51 70 86 52 65 6.8 310 14 7 2.7 1.1 J B 8.1 13 4.7 1.5 J 2 U 1.1 J 1.1 J 1.7 U 1.7 U 2 U 2 U 1.7 U 1.7 U 1.7 U 2 U 2 U 19 16 6.5 1.1 J 64 11 B 7.7 B 7.3 B 1.4 J B 36 B 3.7 1.4 J 1.6 J 2 U 11 70 230 100 94 15 310 1.7 U 1.7 U 1.7 U 2 U 2 U 1.7 U 1.7 U 1.7 U 2 U 2 U 1.7 U 1.7 U 1.7 U 2 U 2 U 1.7 U 1.7 U 1.7 U 2 U 2 U 1.7 U 1.7 U 1.7 U 2 U 2 U 1.7 U 1.7 U 1.7 U 2 U 2 U 1.7 U 1.7 U 1.7 U 2 U 2 U 1.7 U 1.7 U 1.7 U 2 U 3 E B			17 15 8.4 2.5 Cl 38 6.4 6.4 28 35 25 10 2.5 42 5 6.2 30 36 24 12 2.2 43 6.3 5.9 41 30 17 12 1.9 J 51 5.1 5.1 44 30 17 12 1.9 J 51 5.1 5.1 5.1 44 30 17 12 1.9 J 51 5.1 5.1 5.1 44 14 70 86 52 65 6.8 310 25 25 120 14 7 2.7 1.1 J B 8.1 1.8 J 1.8 J 5.8 13 4.7 1.5 J 2 U 1.1 J 0.73 J 0.69 J 0.55 J 1.1 J 1.7 U 1.7 U 2 U 2 U 2 U 2 U 2 U 1.6 J 0.65 J 1.7 U 1.7 U 2 U 2 U 2 U 2 U 2.1 U 1.7 U 1.7 U 1.7 U 2 U 2 U 2 U 2 U 2.1 U 1.7 U 1.7 U 1.7 U 0.6 J 2 U 2 U 2 U 2.1 U 1.7 U 1.7 U 1.7 U 0.6 J 2 U 2 U 2 U 2.1 U 1.8 J 6.8 19 16 6.5 1.1 J 64 2.8 2.6 53 11 B 7.7 B 7.3 B 1.4 J 36 B 5.8 B 5.8 B 5.8 B 25 B 3.7 1.4 J 1.6 J 2 U 11 0.95 J 0.86 J 2.1 1.7 U 1.7 U 1.7 U 2 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 2 U 1.7 U 2.1 U 2 U 2 U 2 U 2 U 2 U 2 U 2 U 2.1 U 1.7 U 1.7 U 1.7 U 2 U 2 U 2 U 2 U 2 U 2 U 2 U 2 U 2.1 U 1.7 U 1.7 U 1.7 U 2 U 2 U 2 U 2 U 2 U 2 U 2 U 2 U 2.1 U								

Notes

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Duplicate collected at MW-27
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Table 6. Summary of PFAS Analytical Results - 2017 Synoptic Sampling Crown Dykman (Site #130054) Supplemental Pre-Design Summary Report

Sample ID	NYSDEC Class GA	MW-16R	MW-17R	MW-18	MW-19	MW-21S	MW-21D	MW-22(R)2	MW-22(R)D	MW-23S	MW-23D	MW-25S	MW-25D	MW-26	MW-27	DUP-02 ^b	MW-28	MW-29
Sampling Date Units	Standard or Guidance Value ug/L	11/1/2017 ng/L	11/1/2017 ng/L	11/6/2017 ng/L	11/1/2017 ng/L	11/3/2017 ng/L	11/7/2017 ng/L	11/2/2017 ng/L	11/3/2017 ng/L	10/31/2017 ng/L	10/31/2017 ng/L	11/7/2017 ng/L	11/7/2017 ng/L	11/7/2017 ng/L	11/7/2017 ng/L	11/7/2017 ng/L	11/7/2017 ng/L	11/8/2017 ng/L
Perfluorobutanoic acid (PFBA)		17	72	20	4.1	26	29	18	20	14	20 B	91 CI	33 CI	150 CI	410 CI	430 CI	96 CI	490 CI
Perfluoropentanoic acid (PFPeA)		130	61	24	4.5	74	17	16	17	26	20	31	11	7.7	14	15	16	41
Perfluorohexanoic acid (PFHxA)		110	61	23	3.5	66	24	14	10	24	19	38	15	9.7	17	18	24	57
Perfluoroheptanoic acid (PFHpA)		96	51	17	3	48	18	9.5	8.2	16	17	29	11	8.8	20	20	20	55
Perfluorooctanoic acid (PFOA)	70	190	150	49	7	110	59	36	42	51	65	140	34	33	86	84	77	180
Perfluorononanoic acid (PFNA)		22	19	7.5	0.77 J	29	4.9	5.6	3	5.5	8.8	14	3.4 B	3.8	3.6	3.7	5.4	16 B
Perfluorodecanoic acid (PFDA)		23	13	12	0.76 J	87	1.9 J	2.7	1.2 J	4.7	7.7	3.7 J	2.4	2.7	2.2	2.1	4.7	17
Perfluoroundecanoic acid (PFUnA)		1.8 J	1.8 U	1.3 J	1.8 U	7.6	2 U	1.9 U	1.9 U	1.1 J	1.9 U	8 U	2 U	2 U	2 U	2 U	2 U	1.9 U
Perfluorododecanoic acid (PFDoA)		1.9 U	1.8 U	2 U	1.8 U	2.4	2 U	1.9 U	1.9 U	2 U	1.9 U	8 U	2 U	2 U	2 U	2 U	2 U	1.9 U
Perfluorotridecanoic Acid (PFTriA)		1.9 U	1.8 U	2 U	1.8 U	2.2 U	2 U	1.9 U	1.9 U	1.6 J	1.9 U	8 U	2 U	2 U	2 U	2 U	2 U	1.9 U
Perfluorotetradecanoic acid (PFTeA)		1.9 U	1.8 U	2 U	1.8 U	2.2 U	2 U	1.9 U	1.9 U	2 U	1.9 U	8 U	2 U	2 U	2 U	2 U	2 U	1.9 U
Perfluorobutanesulfonic acid (PFBS)		220	91 CI	15	11	35	5.8	5.7	7.4	22	19	14	9.7	28 CI	27	31 CI	59 CI	96
Perfluorohexanesulfonic acid (PFHxS)		19 B	20 B	6.8 B	3.6 B	8.8 B	8 B	6.8 B	6.1 B	11 B	8.4 B	20 B	6.3 B	8.4 B	21 B	23 B	31 B	28 B
Perfluoroheptanesulfonic Acid (PFHpS)		6.7	7.1	1.3 J	0.52 J	3.7	1.6 J	1.9	1 J	1.6 J	2	4.5 J	1.1 J	4.7	7.8	6.9	9	7
Perfluorooctanesulfonic acid (PFOS)	70	320	450	150	17	480	110	140	86	94	130 B	350	100	380	450	450	600	590
Perfluorodecanesulfonic acid (PFDS)		1.9 U	1.8 U	2 U	1.8 U	2.2 U	2 U	1.9 U	1.9 U	2 U	1.9 U	8 U	2 U	2 U	2 U	2 U	2 U	1.9 U
Perfluorooctane Sulfonamide (FOSA)		3	6.3	0.81 J	1.8 U	4.5 B	1.8 J E	0.83 J	1.1 J E	1.1 J E	1.2 J E	3.5 J B	2 U	1.6 J E	0.52 J B	0.55 J B	0.54 J B	6.8
Total PFAS		1158.5	1001.4	327.71	55.75	982	281	257.03	203	273.6	318.1	738.7	226.9	638.4	1059.12	1084.25	942.64	1583.8

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Table 6. Summary of PFAS Analytical Results - 2017 Synoptic Sampling Crown Dykman (Site #130054) Supplemental Pre-Design Summary Report

Sample ID Sampling Date Units	NYSDEC Class GA Standard or Guidance Value ug/L	IW-01S 11/7/2017 ng/L	IW-01D 11/6/2017 ng/L	IW-02 11/7/2017 ng/L	IW-03 11/8/2017 ng/L	EB-01 Equipment Blank 10/31/2017 ng/L	EB-02 Equipment Blank 10/31/2017 ng/L	EB-03 Equipment Blank 10/31/2017 ng/L	EB-04 Equipment Blank 11/8/2017 ng/L
Perfluorobutanoic acid (PFBA)		29 CI	37	75 CI	120 CI	0.54 J B	0.38 J B	0.59 J B	2 U
Perfluoropentanoic acid (PFPeA)		8	18	25	23	1.9 U	1.9 U	1.9 U	2 U
Perfluorohexanoic acid (PFHxA)		9	21	24	29	1.9 U	1.9 U	1.9 U	2 U
Perfluoroheptanoic acid (PFHpA)		8.7	15	18	24	1.9 U	1.9 U	1.9 U	2 U
Perfluorooctanoic acid (PFOA)	70	43	47	56	100	1.9 U	1.9 U	1.9 U	2 U
Perfluorononanoic acid (PFNA)		3.7	6.2	8.5	11 B	1.9 U	1.9 U	1.9 U	2 U
Perfluorodecanoic acid (PFDA)		2.4	13	10	7.1	1.9 U	1.9 U	1.9 U	2 U
Perfluoroundecanoic acid (PFUnA)		2 U	1.2 J	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Perfluorododecanoic acid (PFDoA)		2 U	0.67 J	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Perfluorotridecanoic Acid (PFTriA)		2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Perfluorotetradecanoic acid (PFTeA)		2 U	2 U	2 U	0.57 J	1.9 U	1.9 U	0.56 J	2 U
Perfluorobutanesulfonic acid (PFBS)		7	13	28	67	1.9 U	1.9 U	1.9 U	2 U
Perfluorohexanesulfonic acid (PFHxS)		8.3 B	6.8 B	7.2 B	21 B	0.34 JB	0.28 JB	0.3 JB	0.24 JB
Perfluoroheptanesulfonic Acid (PFHpS)		1.4 J	1.3 J	2.1	7.4	1.9 U	1.9 U	1.9 U	2 U
Perfluorooctanesulfonic acid (PFOS)	70	110	130	190	550	1.9 U	1.9 U	1.9 U	2 U
Perfluorodecanesulfonic acid (PFDS)		2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Perfluorooctane Sulfonamide (FOSA)		1.4 J B	1.7 J B	1 J B	2.3	1.9 U	1.9 U	1.9 U	2 U
Total PFAS		231.9	311.87	444.8	962.37	0.88	0.66	1.45	0.24

- Exceeds NYSDEC Class GA Standard or Guidance Value

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

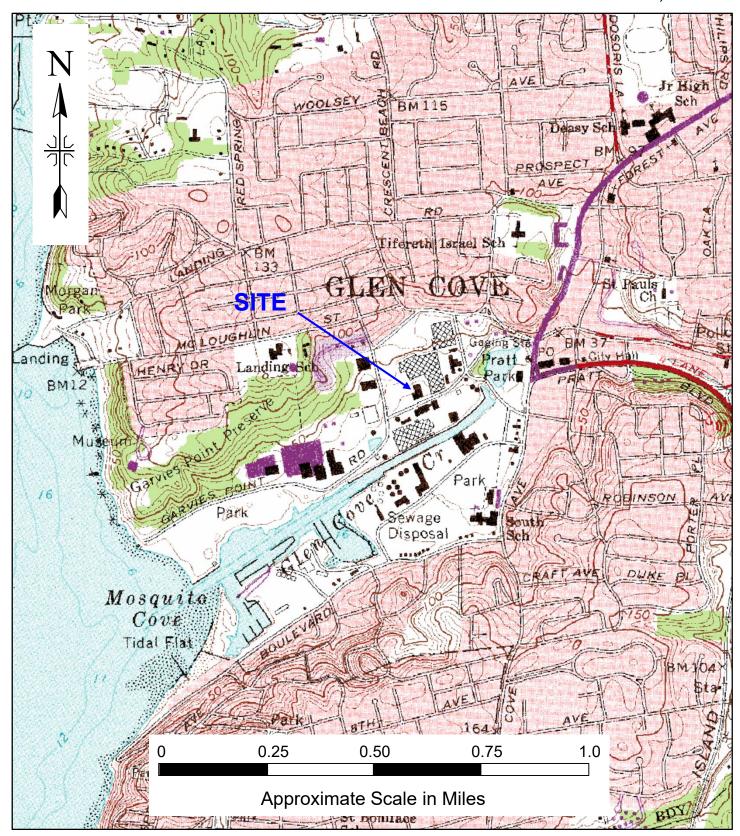
B - Compound was found in the blank and sample

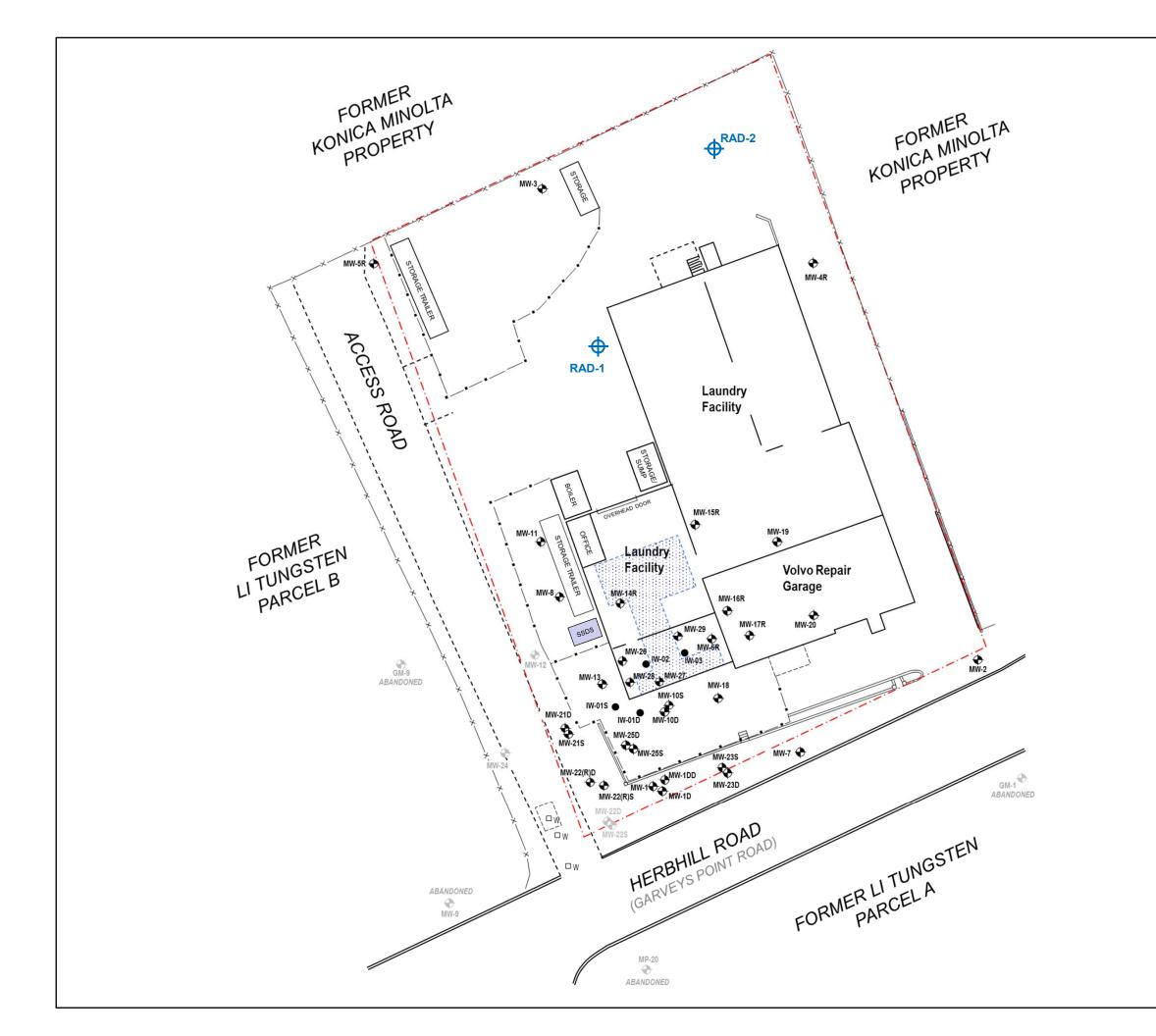
- U Compound not detected.
- a Duplicate collected at MW-4R
- Duplicate collected at MW-27
 To I The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias

FIGURES



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York







CHAIN-LINK FENCE



WOOD-PICKET FENCE

PROPERTY BOUNDARY

(SURVEY)



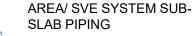
GROUNDWATER MONITORING WELL



MISSING/ DAMAGED

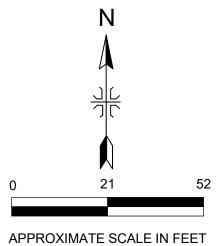


GROUNDWATER MONITORING WELL 2005 IRM EXCAVATION





TEMPORARY RADIOLOGICAL SCREENING POINT (Approximate)

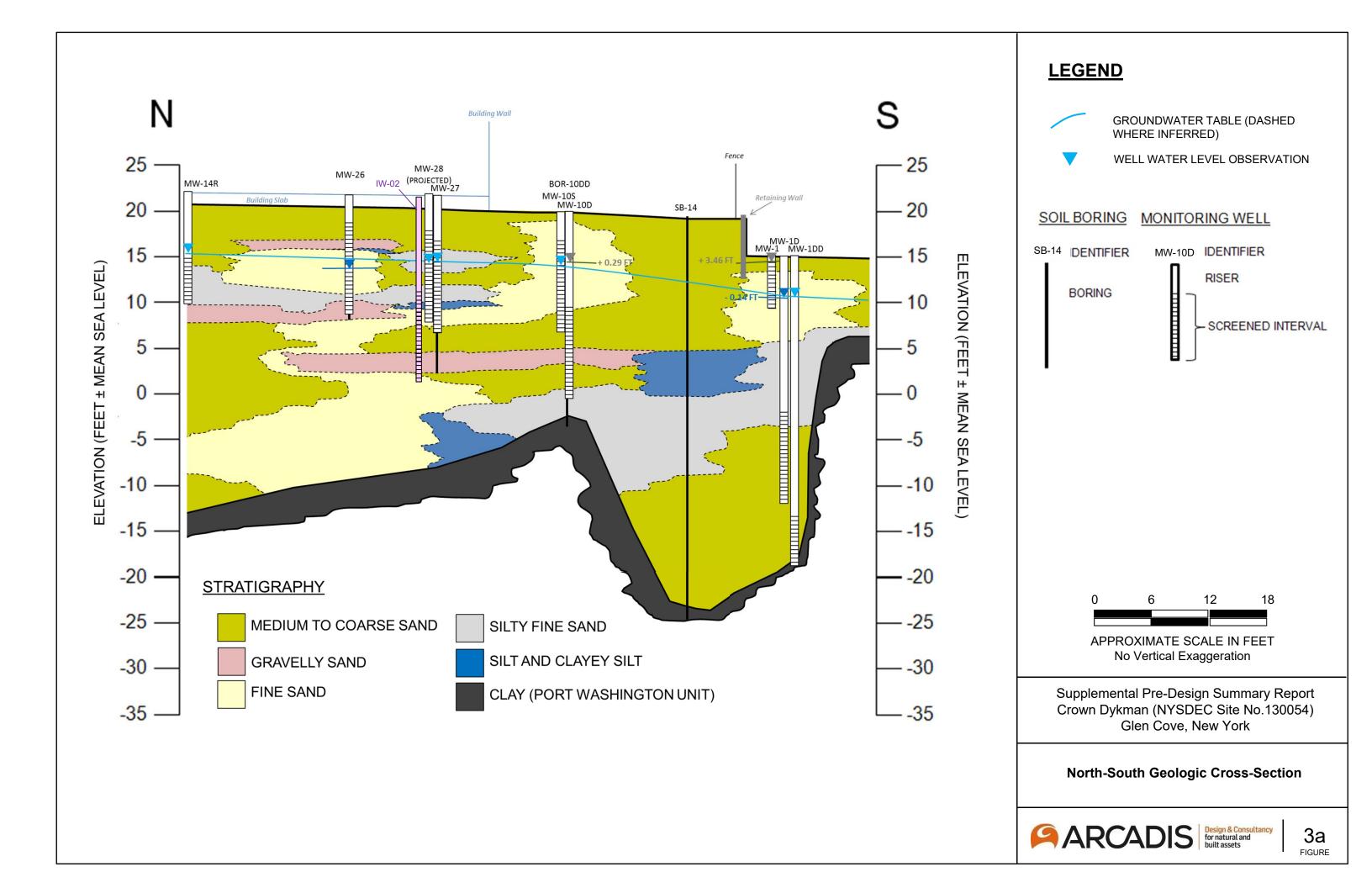


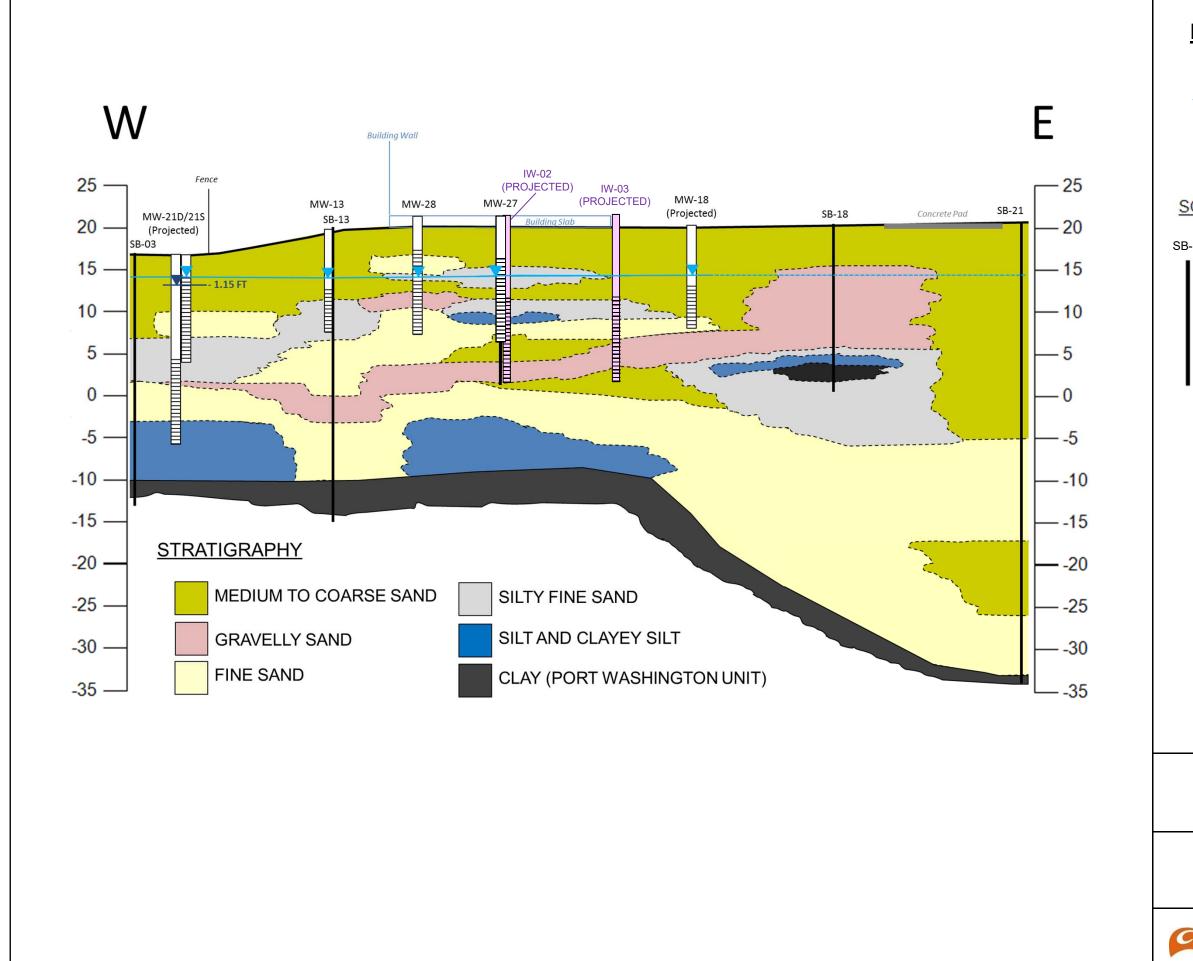
Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054)

Glen Cove, New York

Site Plan







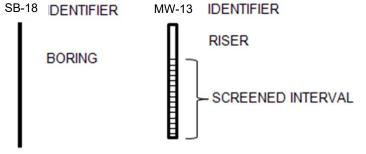


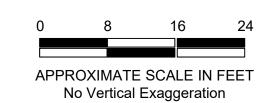
GROUNDWATER TABLE (DASHED WHERE INFERRED)



WELL WATER LEVEL OBSERVATION

SOIL BORING MONITORING WELL

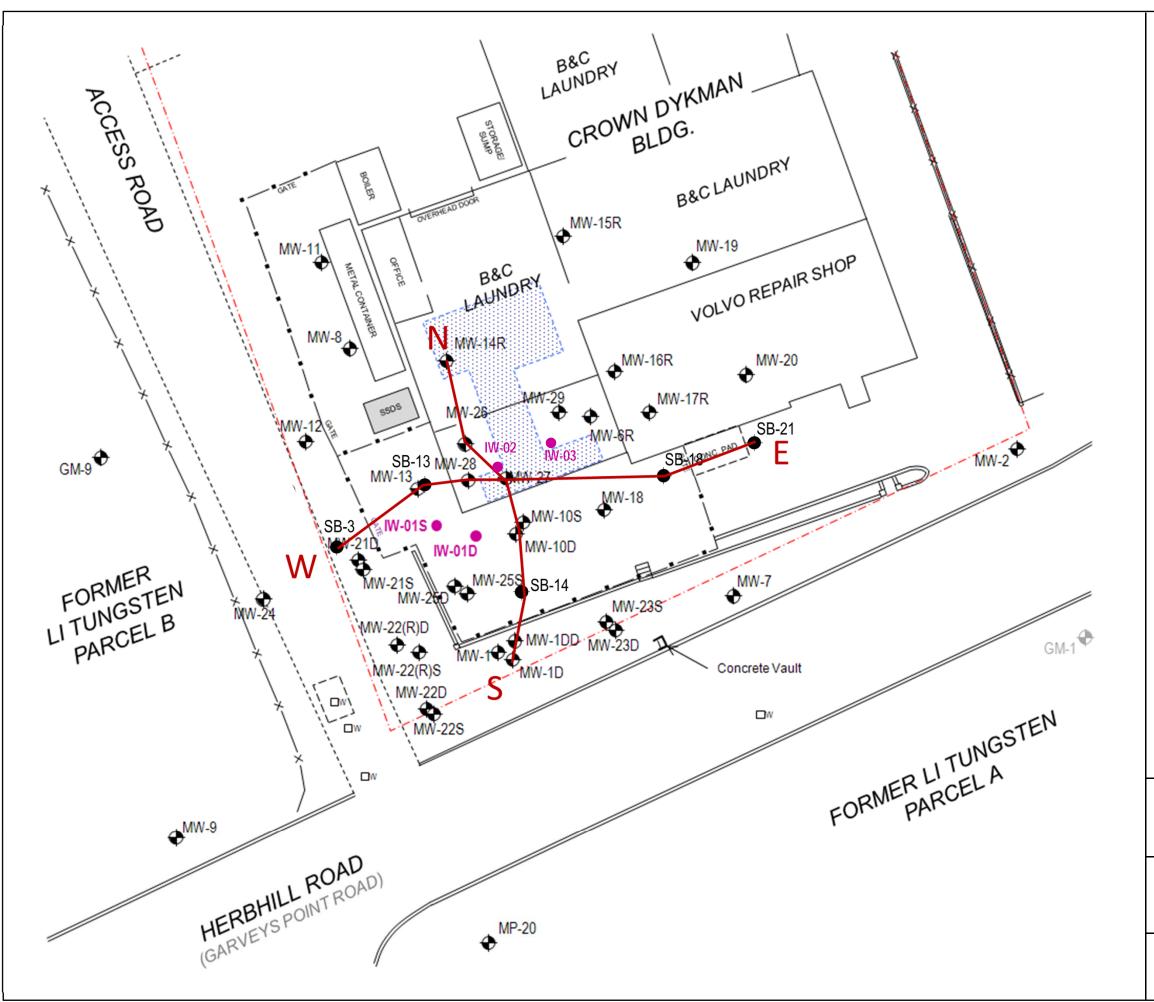




Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

East-West Geologic Cross-Section





GM-1

CHAIN-LINK FENCE

WOOD-PICKET FENCE

---- PROPER

PROPERTY BOUNDARY (SURVEY)

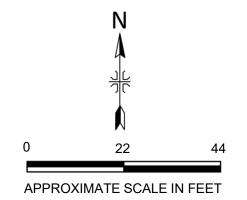
GROUNDWATER MONITORING WELL

DAMAGED/MISSING WELL LOCATION

SB-3 CROSS-SECTION SOIL BORING

APPROXIMATE 2005 IRM EXCAVATION AREA/ SVE PIPING

SODIUM PERMANGANATE INJECTION WELL



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

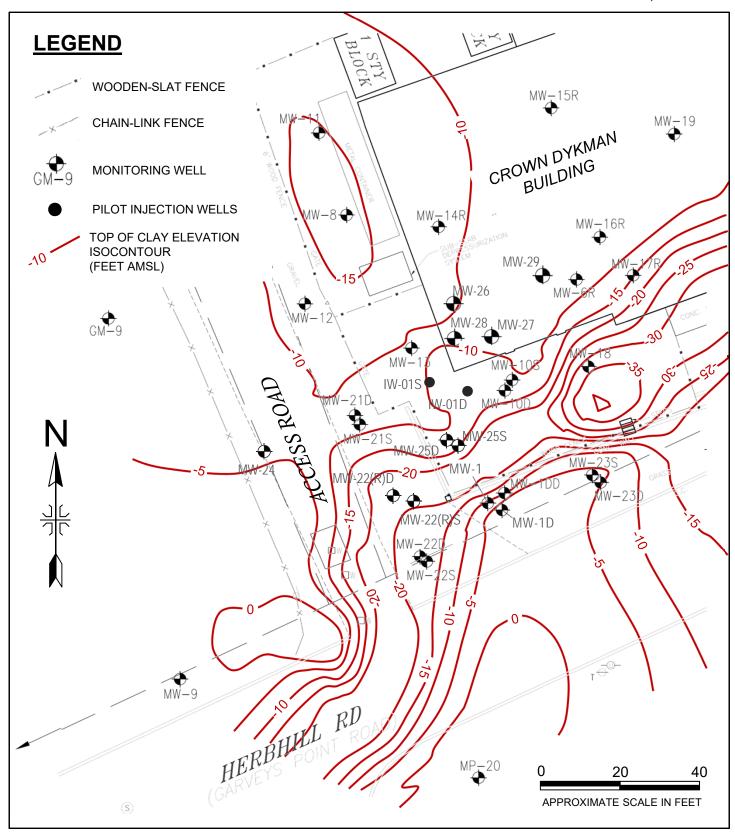
Vertical Extent of Chlorinated VOCs in Soil and Groundwater (July 2014);
Cross Section Locations

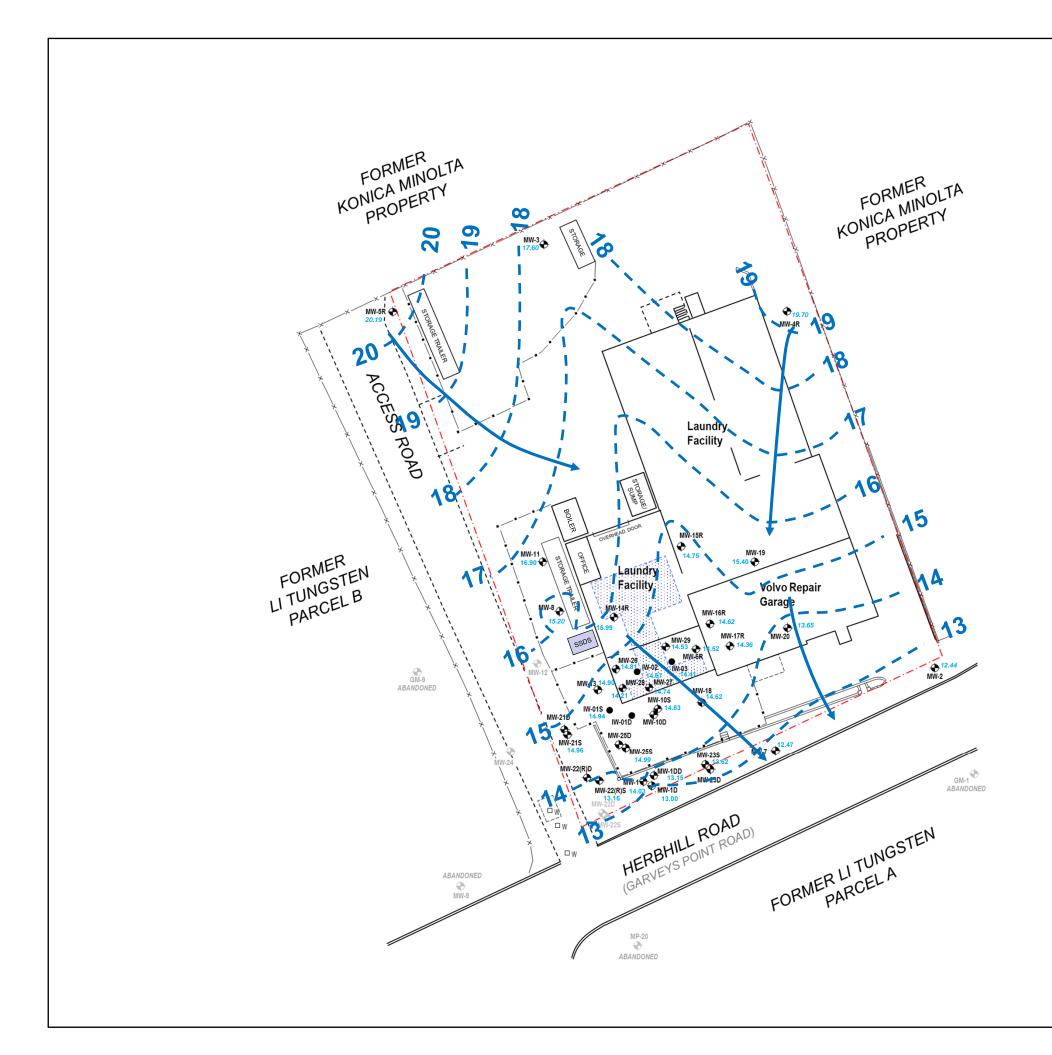


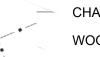


Figure 4 Elevation of Port Washington Clay Surface (Top of First Confining Unit)

Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York







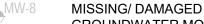
CHAIN-LINK FENCE

WOOD-PICKET FENCE
PROPERTY BOUNDARY

(SURVEY)

→MW-9

GROUNDWATER MONITORING WELL



GROUNDWATER MONITORING WELL



2005 IRM EXCAVATION
AREA/ SVE SYSTEM SUB-

SLAB PIPING



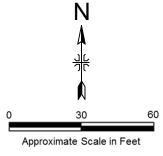
APPROXIMATE GROUNDWATER ELEVATION ISOCONTOUR (FEET

AMSL)

APPROXIMATE GROUNDWATER FLOW DIRECTION

Notes:

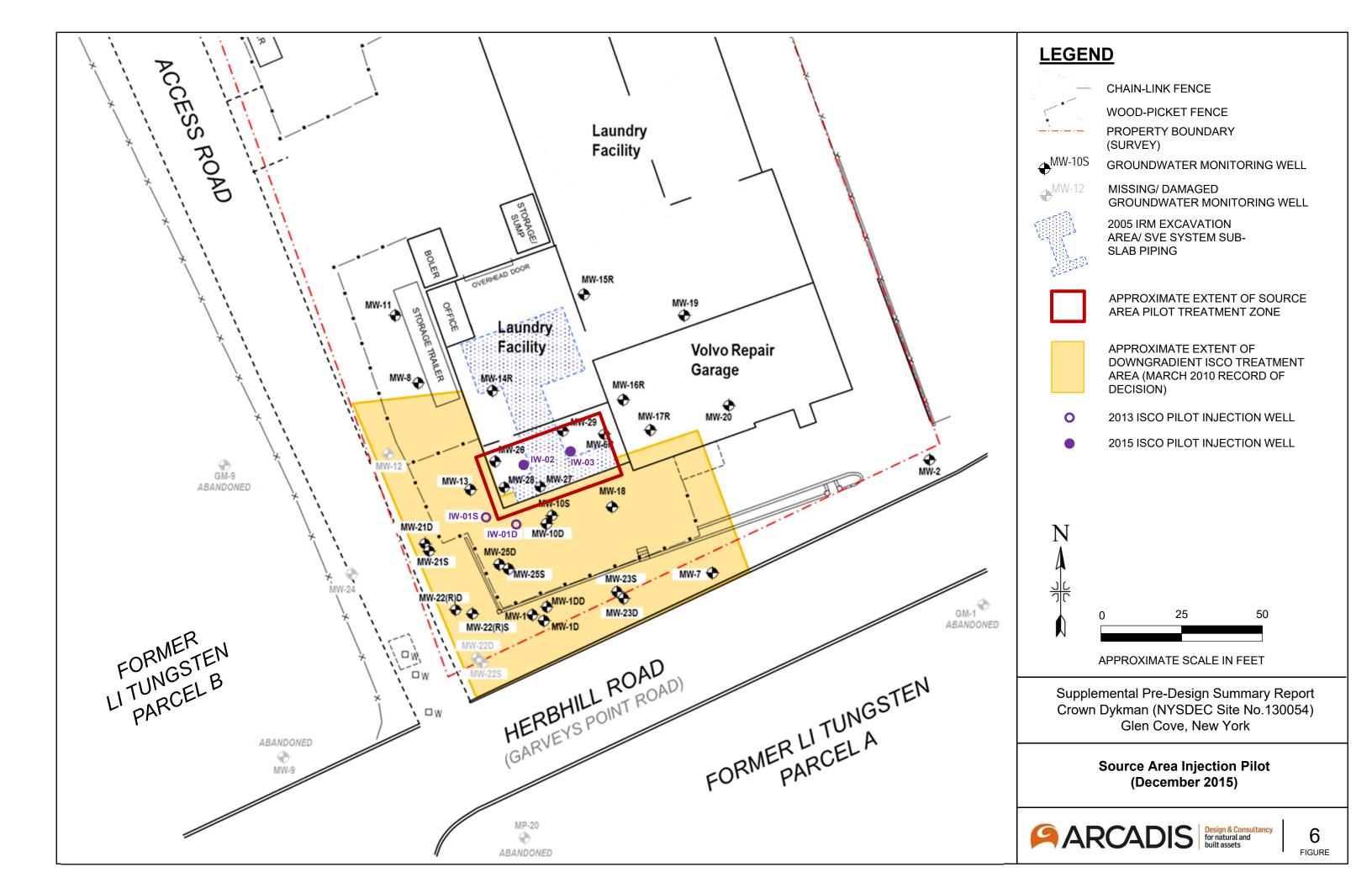
15.25 – Groundwater Elevation, in feet above mean sea level (MSL); NAVD 1988.

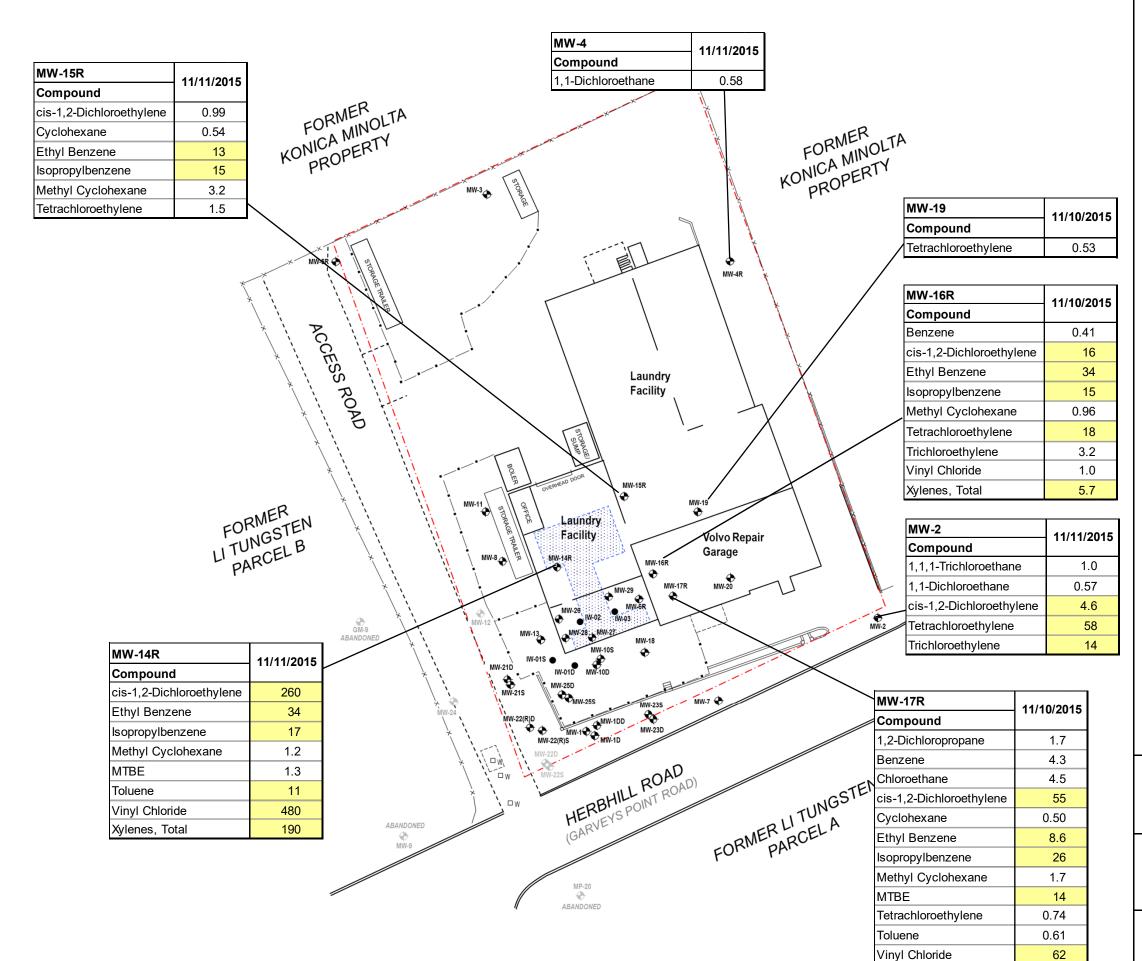


Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Shallow Groundwater Surface Contours (October-November 2017)









CHAIN-LINK FENCE



WOOD-PICKET FENCE

PROPERTY BOUNDARY (SURVEY)



GROUNDWATER MONITORING WELL



MISSING/ DAMAGED





2005 IRM EXCAVATION

AREA/ SVE SYSTEM SUB-

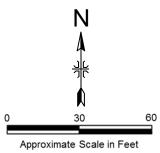
SLAB PIPING

Notes:

- 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 laboratory blank and sample (indicates potential laboratory contaminant)
- D Result is based on dilution of the sample.
- ug/L Micrograms per liter.



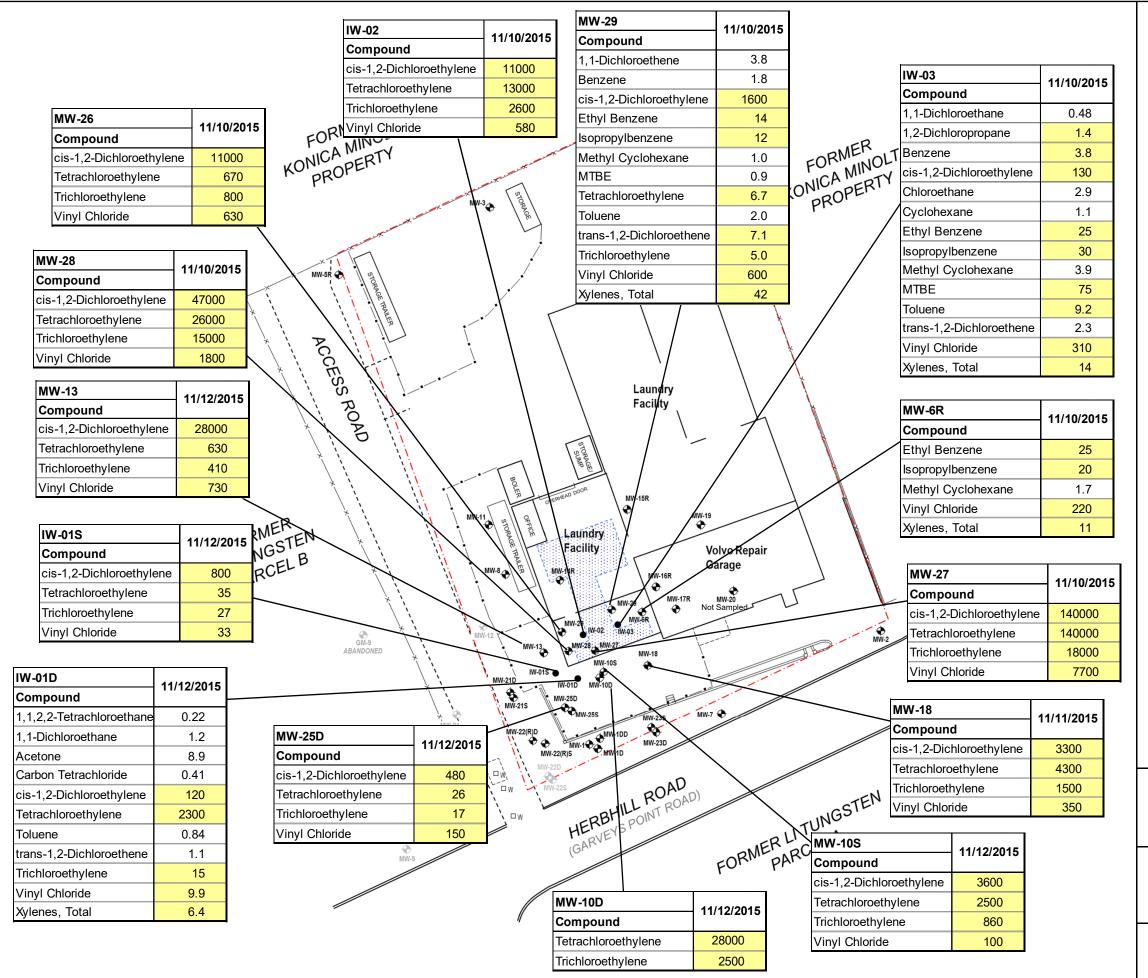
Exceeds respective NYS Class GA Standard or Guidance Value



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Summary of VOC Detections in Groundwater Samples – November 2015; **Upgradient Area Wells**







CHAIN-LINK FENCE

WOOD-PICKET FENCE
PROPERTY BOUNDARY

(SURVEY)

GROUNDWATER MONITORING WELL



⊕MW-9

MISSING/ DAMAGED



GROUNDWATER MONITORING WELL

2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-SLAB PIPING

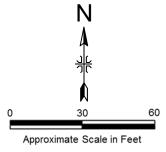
Notes:

- 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 laboratory blank and sample (indicates potential laboratory contaminant)
- D Result is based on dilution of the sample.

ug/L - Micrograms per liter.



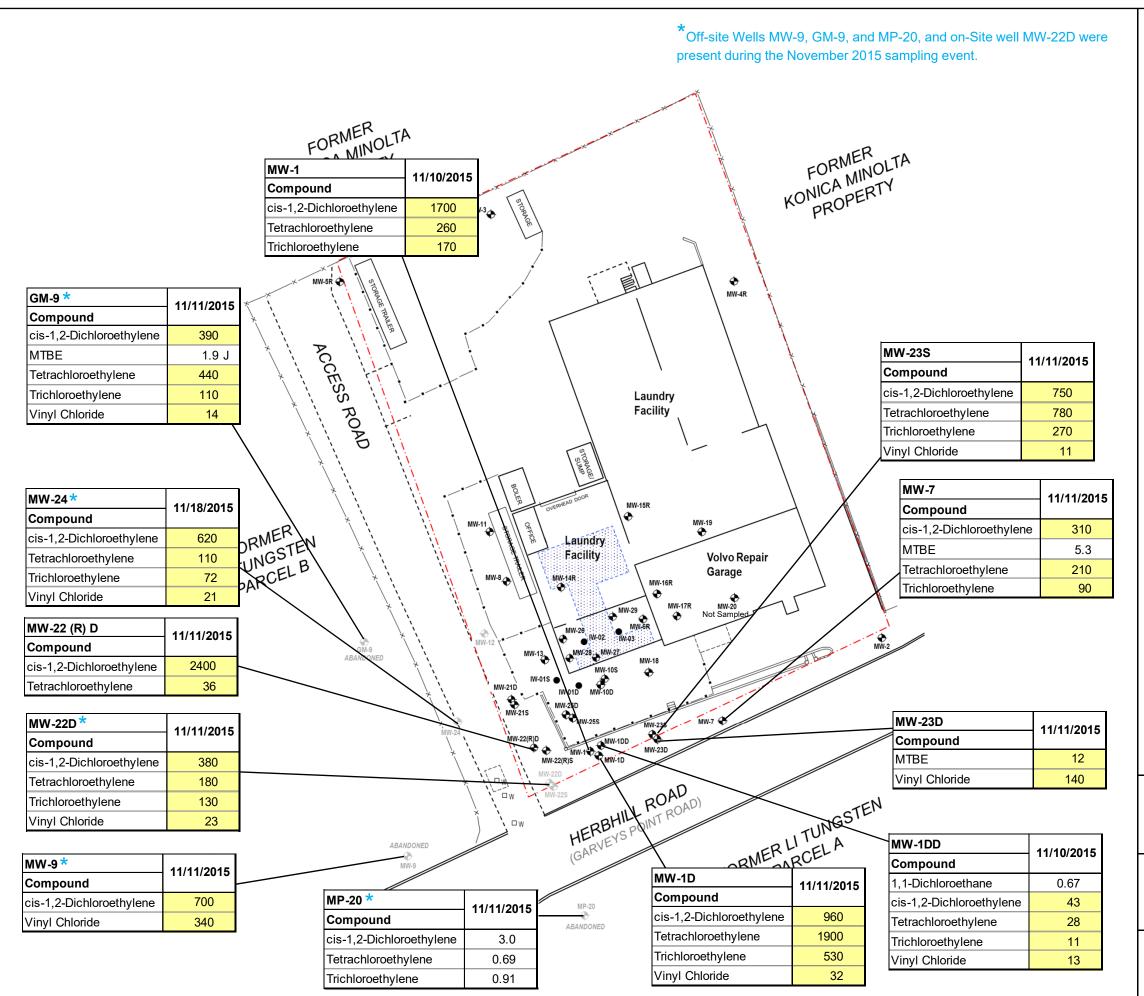
Exceeds respective NYS Class GA Standard or Guidance Value



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Summary of VOC Detections in Groundwater Samples – November 2015; Source Area Wells







CHAIN-LINK FENCE



WOOD-PICKET FENCE

PROPERTY BOUNDARY

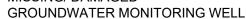
(SURVEY)



GROUNDWATER MONITORING WELL



MISSING/ DAMAGED



AREA/ SVE SYSTEM SUB-



2005 IRM EXCAVATION

SLAB PIPING

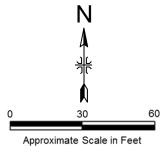
Notes:

- 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 laboratory blank and sample (indicates potential laboratory contaminant)
- D Result is based on dilution of the sample.

ug/L - Micrograms per liter.



Exceeds respective NYS Class GA Standard or Guidance Value



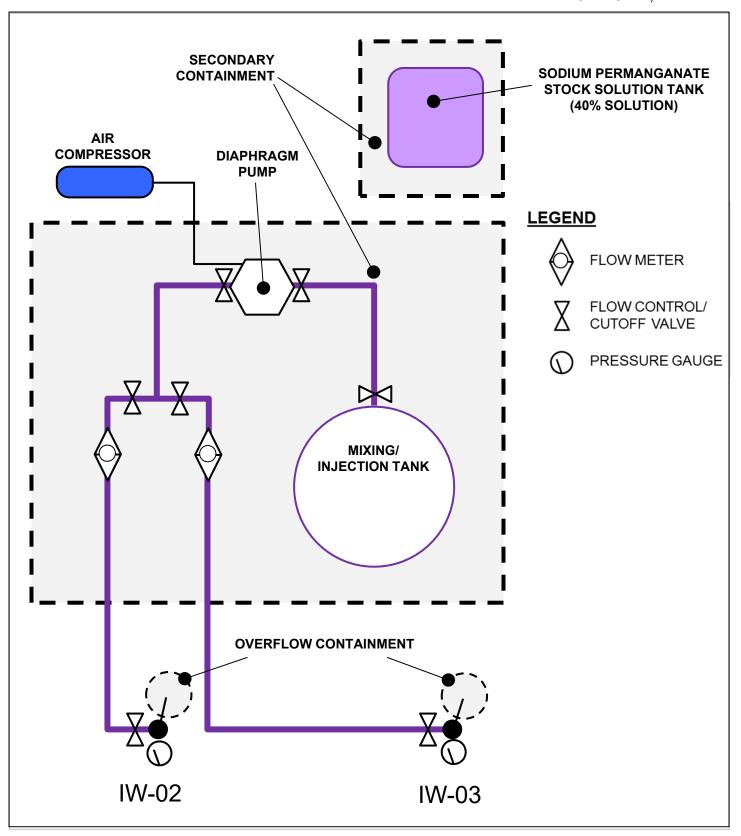
Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

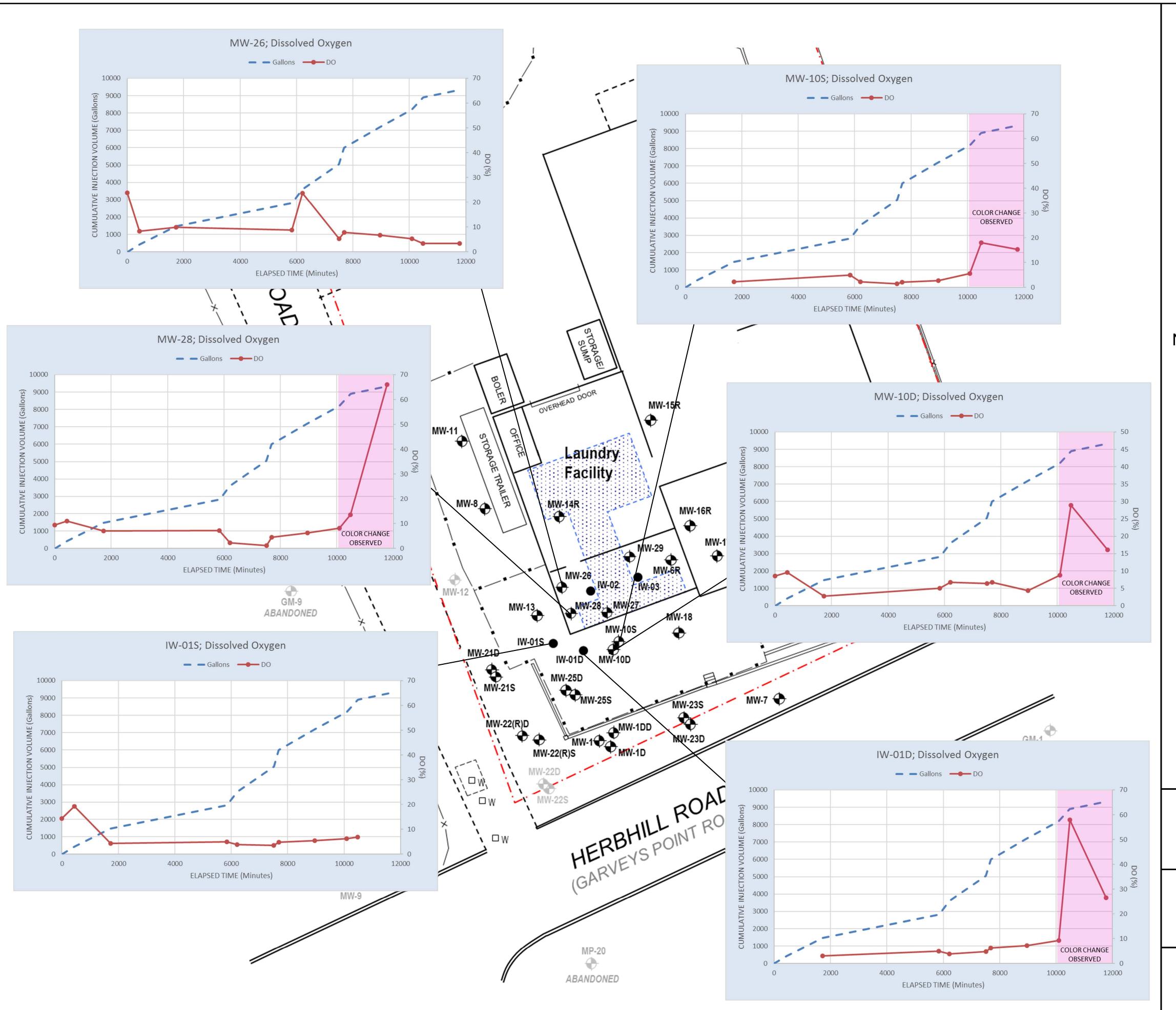
Summary of VOC Detections in Groundwater Samples – November 2015; **Down-Gradient Area Wells**

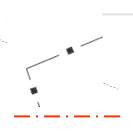




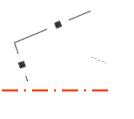
Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York







CHAIN-LINK FENCE



WOOD-PICKET FENCE

PROPERTY BOUNDARY (SURVEY)

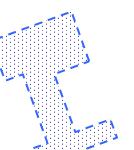
→MW-9

GROUNDWATER MONITORING WELL

GROUNDWATER MONITORING WELL



MISSING/ DAMAGED



2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-

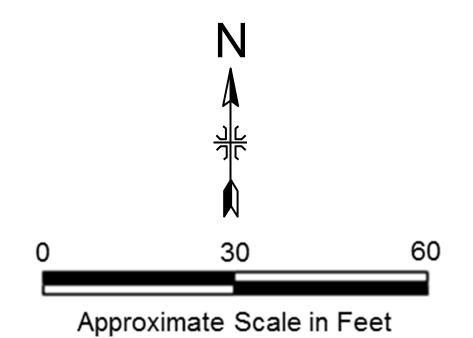
SLAB PIPING

Notes:

Water quality versus cumulative sodium permanganate injection volume.

Total injected volume of approximately 9,341 gallons of 4% sodium permanganate solution injected between two injection wells - IW-02 (4,816 gallons) and IW-03 (4,525 gallons).

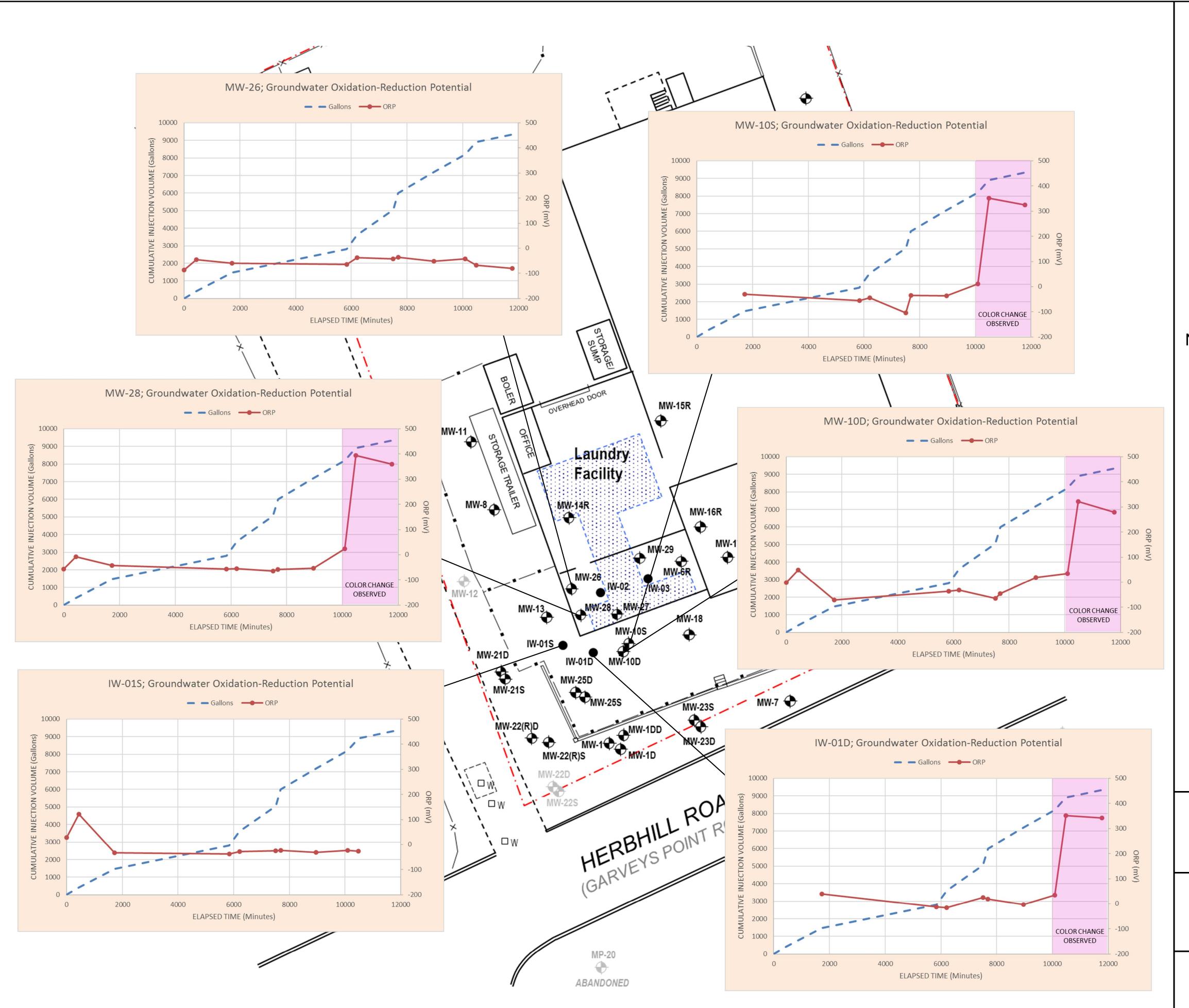
Zone highlighted in purple on charts indicates an observed color change in the well water (to purple, reddish, or brownish tint) when sampled with a disposable bailer or when pumped with peristaltic pump. Change in water color was not noted in wells without highlighted zone.

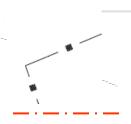


Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Injections Monitoring Data Summary – Dissolved Oxygen in Groundwater; December 2015







CHAIN-LINK FENCE

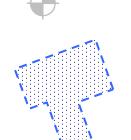
WOOD-PICKET FENCE PROPERTY BOUNDARY

(SURVEY)

MW-9

GROUNDWATER MONITORING WELL

GROUNDWATER MONITORING WELL



MISSING/ DAMAGED

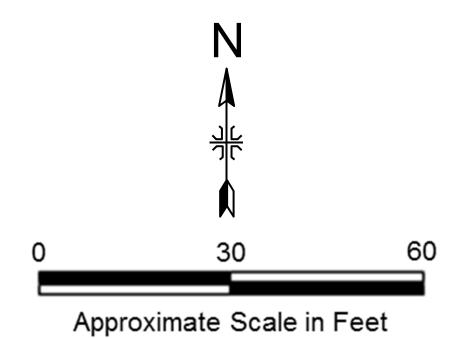
2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-**SLAB PIPING**

Notes:

Water quality versus cumulative sodium permanganate injection volume.

Total injected volume of approximately 9,341 gallons of 4% sodium permanganate solution injected between two injection wells - IW-02 (4,816 gallons) and IW-03 (4,525 gallons).

Zone highlighted in purple on charts indicates an observed color change in the well water (to purple, reddish, or brownish tint) when sampled with a disposable bailer or when pumped with peristaltic pump. Change in water color was not noted in wells without highlighted zone.



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Injections Monitoring Data Summary – Dissolved Oxygen in Groundwater; December 2015





Figure 10a First Post-Injection Sodium Permanganate Distribution – January 2016

Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

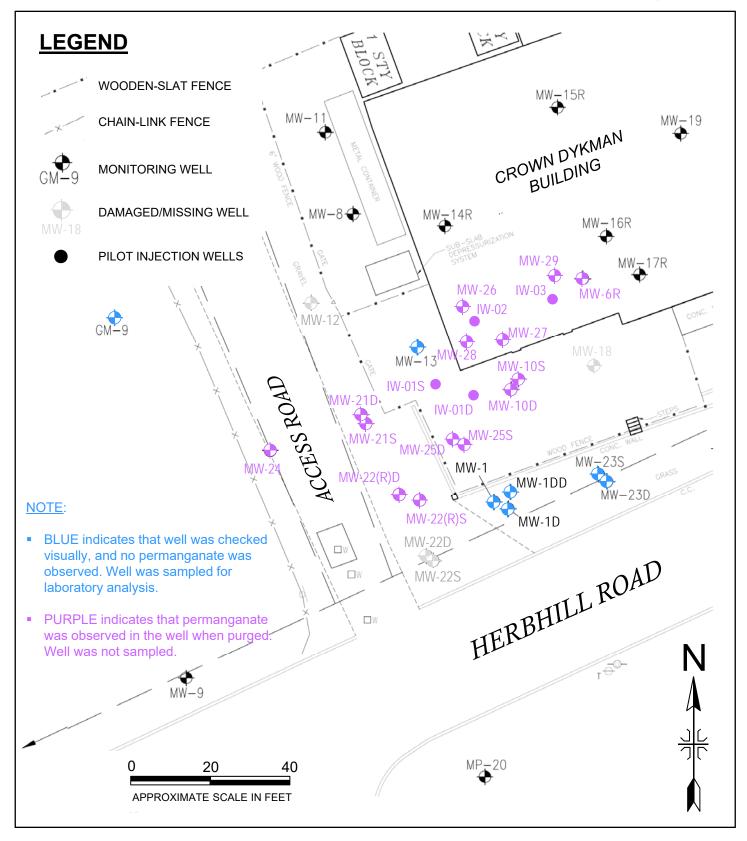
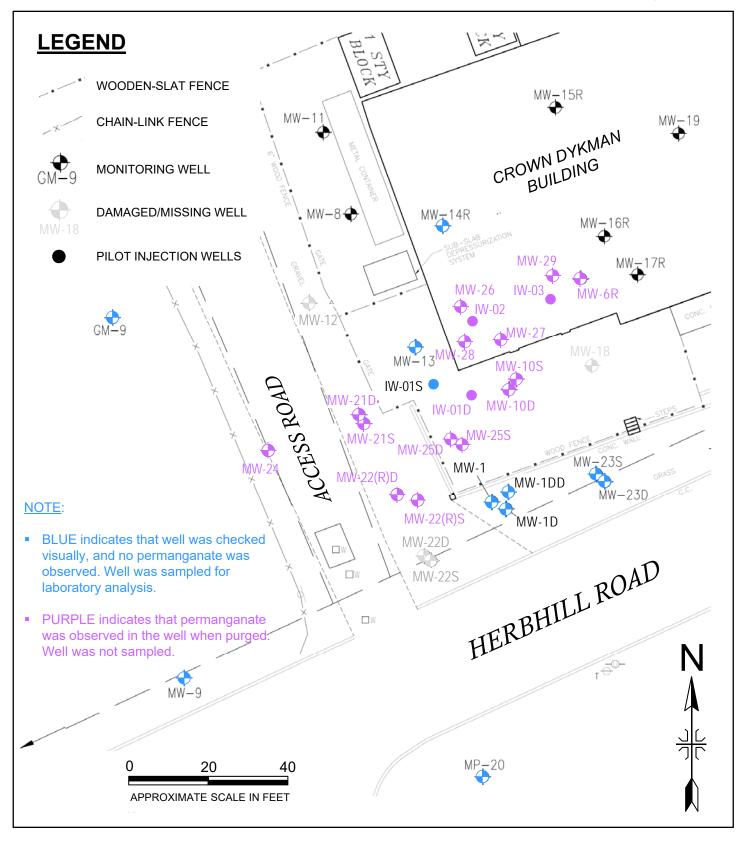
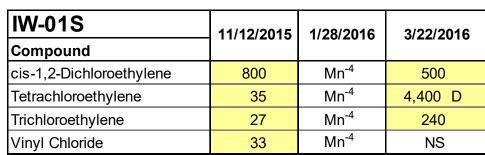




Figure 10b Second Post-Injection Sodium Permanganate Distribution – March 2016

Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York





IW-01S	11/12/2015	1/28/2016	3/22/2016	
Compound	11/12/2010	1/20/2010	0/22/2010	
cis-1,2-Dichloroethylene	800	Mn ⁻⁴	500	
Tetrachloroethylene	35	Mn ⁻⁴	4,400 D	
Trichloroethylene	27	Mn ⁻⁴	240	
Vinyl Chloride	33	Mn ⁻⁴	NS	

GM-9	11/11/2015	1/28/2016	3/22/2016	
Compound	11/11/2010	1/20/2010		
cis-1,2-Dichloroethene	390	89	91	
Tetrachloroethene	440	120	120	
Trichloroethene	110	26	24	
Vinyl Chloride	14	2.4	ND	
1,2-Dichloroethane	ND	0.42 J	ND	
MTBE	1.9 J	1.6 J	1.5 J	

MW-9	11/11/2015	1/28/2016	3/23/2016	
Compound	11/11/2010	1/20/2010		
cis-1,2-Dichloroethylene	700	NS	1,800 D	
Vinyl Chloride	340	NS	170	

WOODEN-SLAT FENCE

CHAIN-LINK FENCE

MONITORING WELL

DAMAGED/MISSING WELL

PILOT INJECTION WELLS

MW-13	11/12/2015	1/28/2016	3/22/2016	
Compound	11/12/2010	1/20/2010	0,22,2010	
cis-1,2-Dichloroethene	28,000	44,000	15,000	
Tetrachloroethene	630	4,100	3,500	
Trichloroethene	410	2,800	1,800	
Vinyl Chloride	730	1,200	ND	

MW-8

MW-14R	11/11/2015	1/28/2016	3/23/2016
Compound	11/11/2010	1/20/2010	0/20/2010
1,2-Dibromo-3-Chloropropane	ND	NS	2.3
Acetone	ND	NS	6.7 J
Benzene	ND	NS	1.8 J
cis-1,2-Dichloroethylene	260	NS	1,500 D
Ethyl Benzene	34	NS	29
Isopropylbenzene	17	NS	14
Methyl Cyclohexane	1.2	NS	1.4 J
МТВЕ	1.3	NS	1.7 J
Toluene	11	NS	25
trans-1,2-Dichloroethene	ND	NS	8.3
Vinyl Chloride	480	NS	1,100 D
Xylenes, Total	190	NS	200

MW-23S	11/11/2015	1/27/2016	3/22/2016	
Compound	11/11/2010	1/21/2010	0/22/2010	
cis-1,2-Dichloroethene	750	270	3,000 DF1	
Tetrachloroethene	780	210	2,000 DF1	
Trichloroethene	270	88	680	
trans-1,2-Dichloroethene	ND	ND	15	
Vinyl Chloride	11	ND	ND	

MW-23D	11/11/2015	1/27/2016	3/22/2016	
Compound	11/11/2010	1/21/2010		
cis-1,2-Dichloroethene	ND	500	1,200 D F1	
Tetrachloroethene	ND	560	820 D F1	
Trichloroethene	ND	220	300 F1	
Vinyl Chloride	140	ND	ND	
MTBE	12	ND	ND	

MW-1DD	11/10/2015	1/28/2016	3/22/2016	
Compound				
,1-Dichloroethane	0.67	ND	ND	
,1-Dichloroethene	ND	ND	1.4	
Benzene	ND	ND	0.49 J	
is-1,2-Dichloroethene	43	65	560 D	
etrachloroethene	28	46	290 D	
richloroethene	11	18	150 D	
rans-1,2-Dichloroethene	ND	ND	2.6	
/inyl Chloride	13	ND	31	
ИТВЕ	ND	0.39 J	9.9	

MW-1	11/10/2015	1/28/2016	3/22/2016
Compound	1.17.1372010	., 20, 2010	J. 22. 2010
cis-1,2-Dichloroethene	1,700	1,200	1,300
Tetrachloroethene	260	330	350
Trichloroethene	170	180	130

MW-1D	11/11/2015	1/28/2016	3/22/2016	
Compound	7 17/17/2010	1/20/2010		
cis-1,2-Dichloroethene	960	1,900	1,900	
Tetrachloroethene	1,900	1,700	3,500 D	
Trichloroethene	530	810	1,000	
Vinyl Chloride	32	46	31	

MP-20	11/11/2015	1/28/2016	3/23/2016		
Compound		1/20/2010	3,23,2010		
cis-1,2-Dichloroethylene	3.0	NS	4.1		
Tetrachloroethylene	0.69	NS	0.51 J		
Trichloroethylene	0.91	NS	0.98 J		
Vinyl Chloride	ND	NS	1.9		

BUILDING

MW-1DD

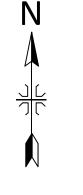
MW-1D

NOTE:

- BLUE indicates that well was checked visually, and no permanganate was observed. Well was sampled for laboratory analysis.
- PURPLE indicates that permanganate was observed in the well when purged. Well was not sampled.
- Sodium Permanganate injected in wells IW-02 and IW-03 in building.

Data Qualifiers:

- a) D Based on dilution of original sample.
- b) J Result is estimated value, as result is below reporting limit for respective compound.
- c) F1 MS and/or MSD Recovery is outside acceptance limits.
- d) Mn-4 Permanganate present in well.
- e) ND Not Detected
- f) NS Not sampled
- Indicates that compound exceeds the respective NYSDEC Class GA standard or guidance value.



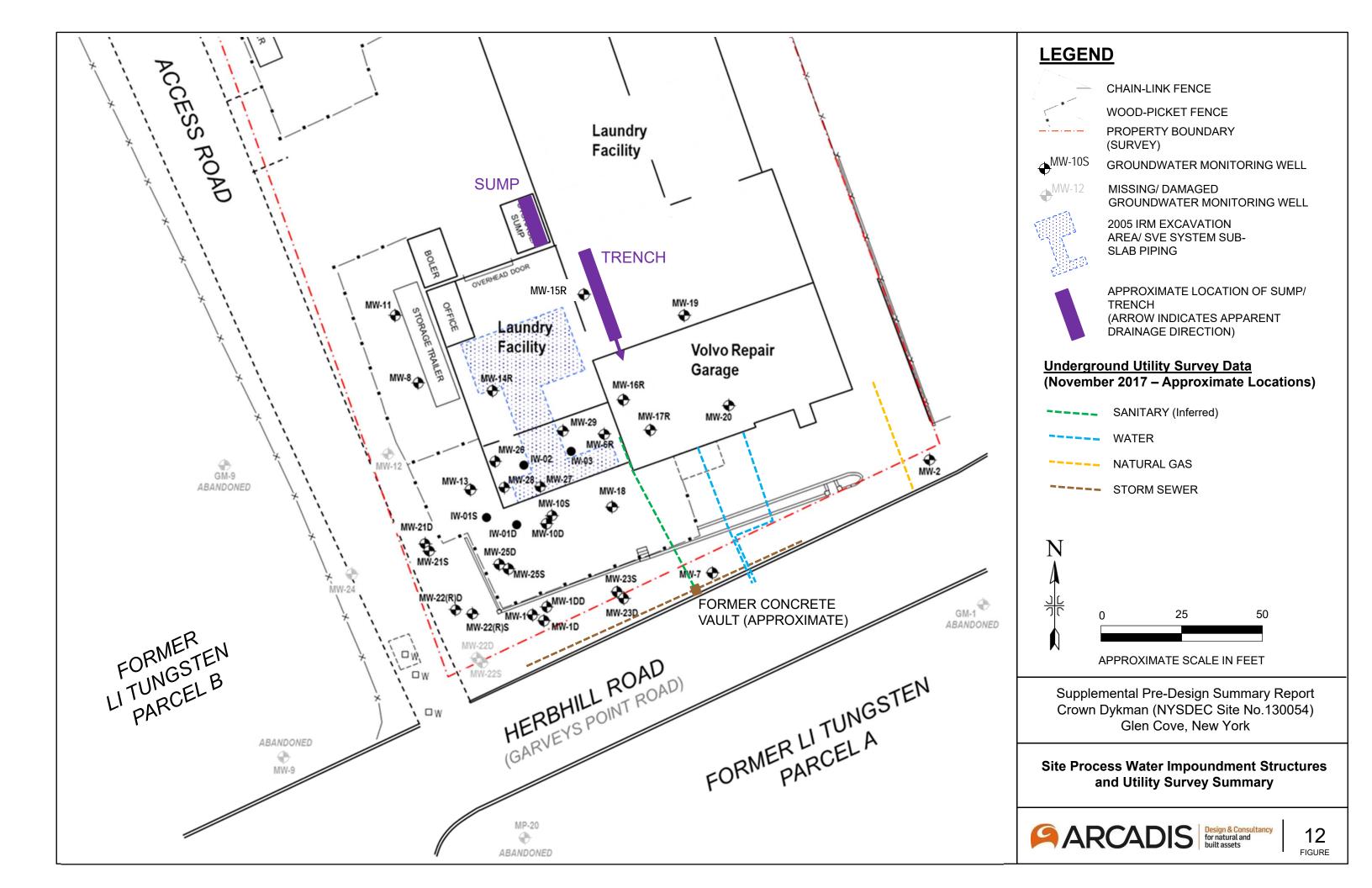
APPROXIMATE SCALE IN FEET

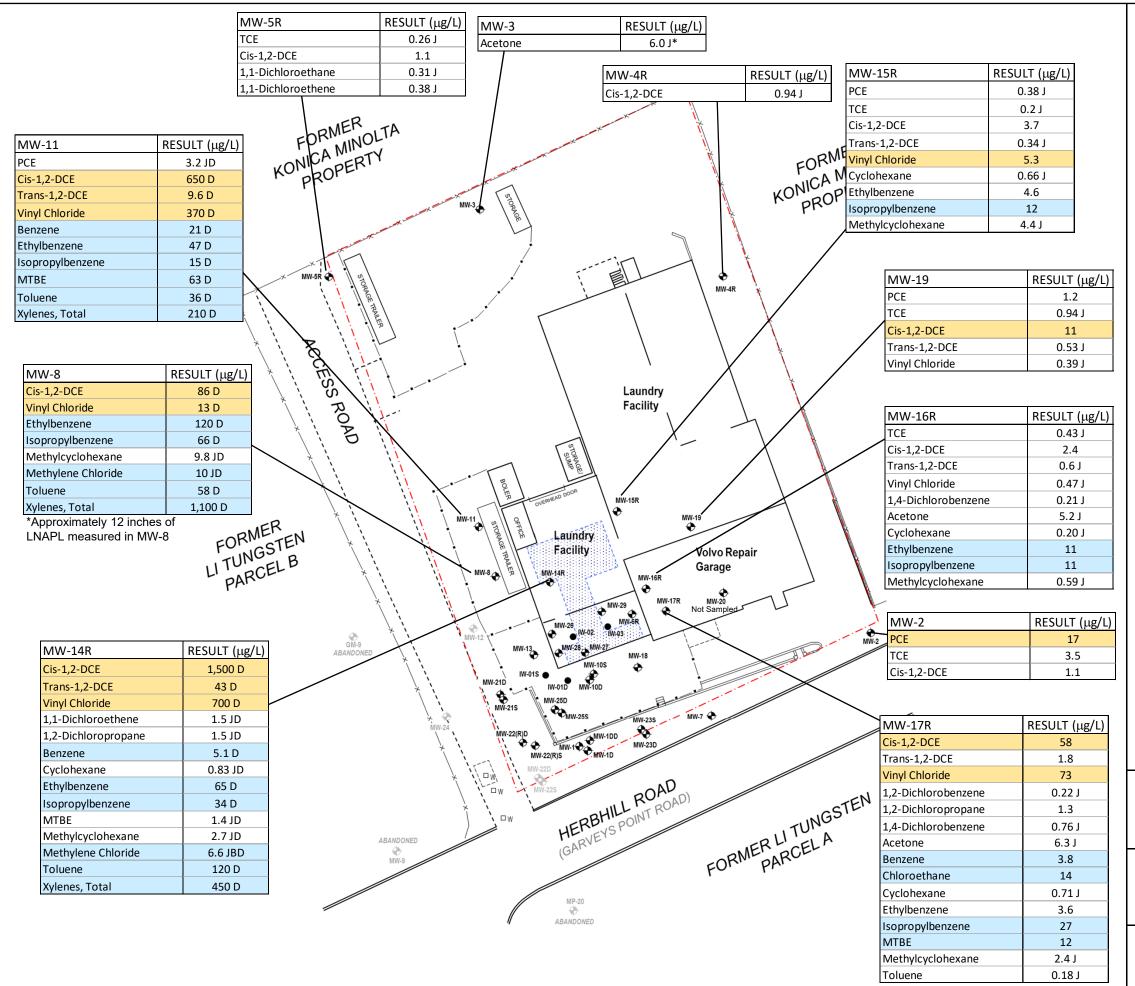
Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Source Area ISCO Pilot Injection Baseline and Post-Injection Analytical Sampling Summary; November 2015 (Baseline) - March 2016



FIGURE







CHAIN-LINK FENCE



WOOD-PICKET FENCE PROPERTY BOUNDARY

(SURVEY)

⊕MW-9

GROUNDWATER MONITORING WELL



MISSING/ DAMAGED



GROUNDWATER MONITORING WELL

2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-**SLAB PIPING**

Notes:

- 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 laboratory blank and sample (indicates potential laboratory contaminant)
- D Result is based on dilution of the sample.

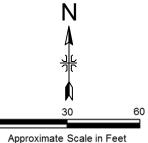
ug/L - Micrograms per liter.



Primary Contaminant/CVOC exceeding respective NYS Class GA Standard or Guidance



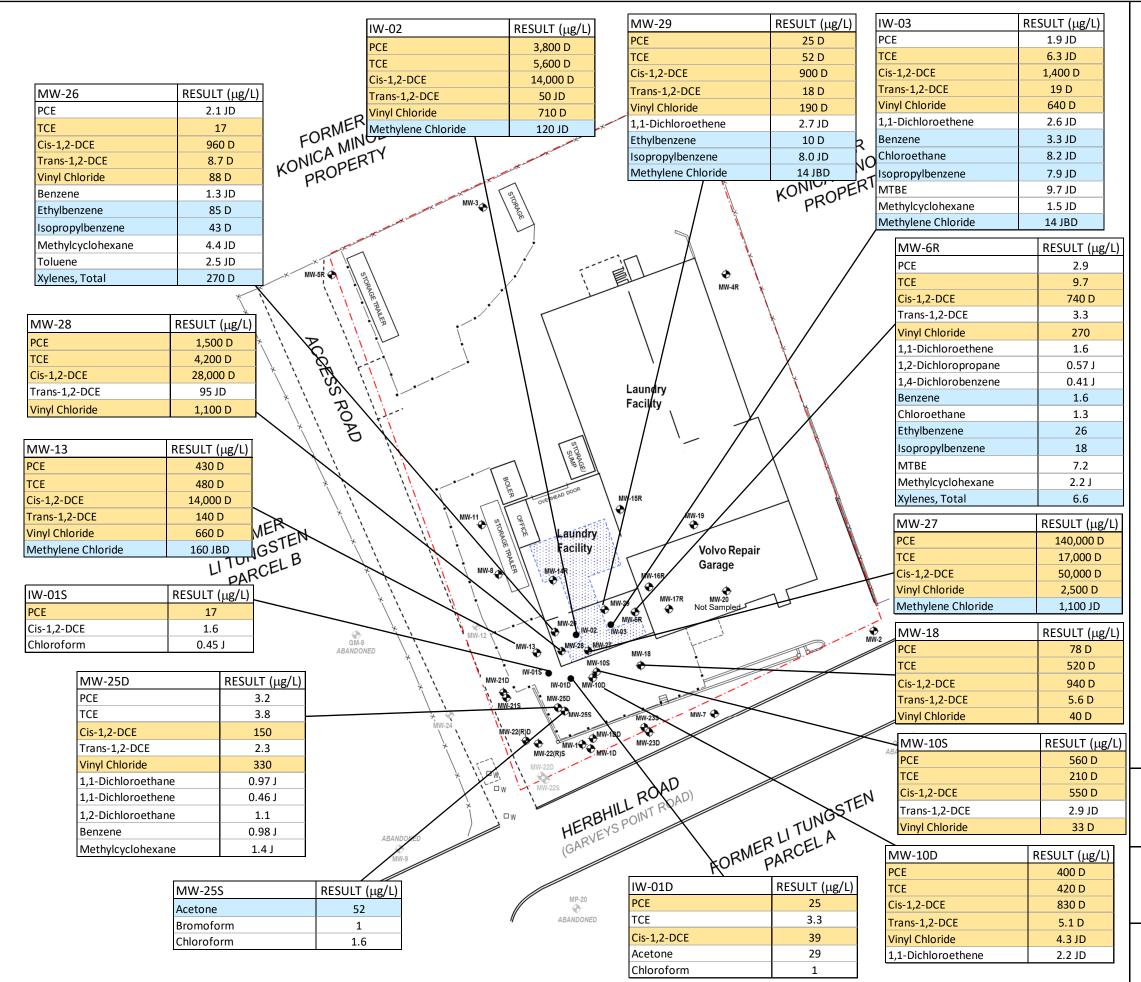
Other detected VOC exceeding respective NYS Class GA Standard or Guidance Value



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Summary of VOC Detections in Groundwater Samples – October-November 2017; **Upgradient Area Wells**





CHAIN-LINK FENCE

PROPERTY BOUNDARY

WOOD-PICKET FENCE

(SURVEY)

GROUNDWATER MONITORING WELL



⊕MW-9

MISSING/ DAMAGED



GROUNDWATER MONITORING WELL 2005 IRM EXCAVATION

AREA/ SVE SYSTEM SUB-**SLAB PIPING**

Notes:

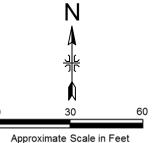
- J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
- B Compound was found in laboratory blank and sample (indicates potential laboratory contaminant)
- D Result is based on dilution of the sample.

ug/L - Micrograms per liter.

Primary Contaminant/CVOC exceeding respective NYS Class GA Standard or Guidance



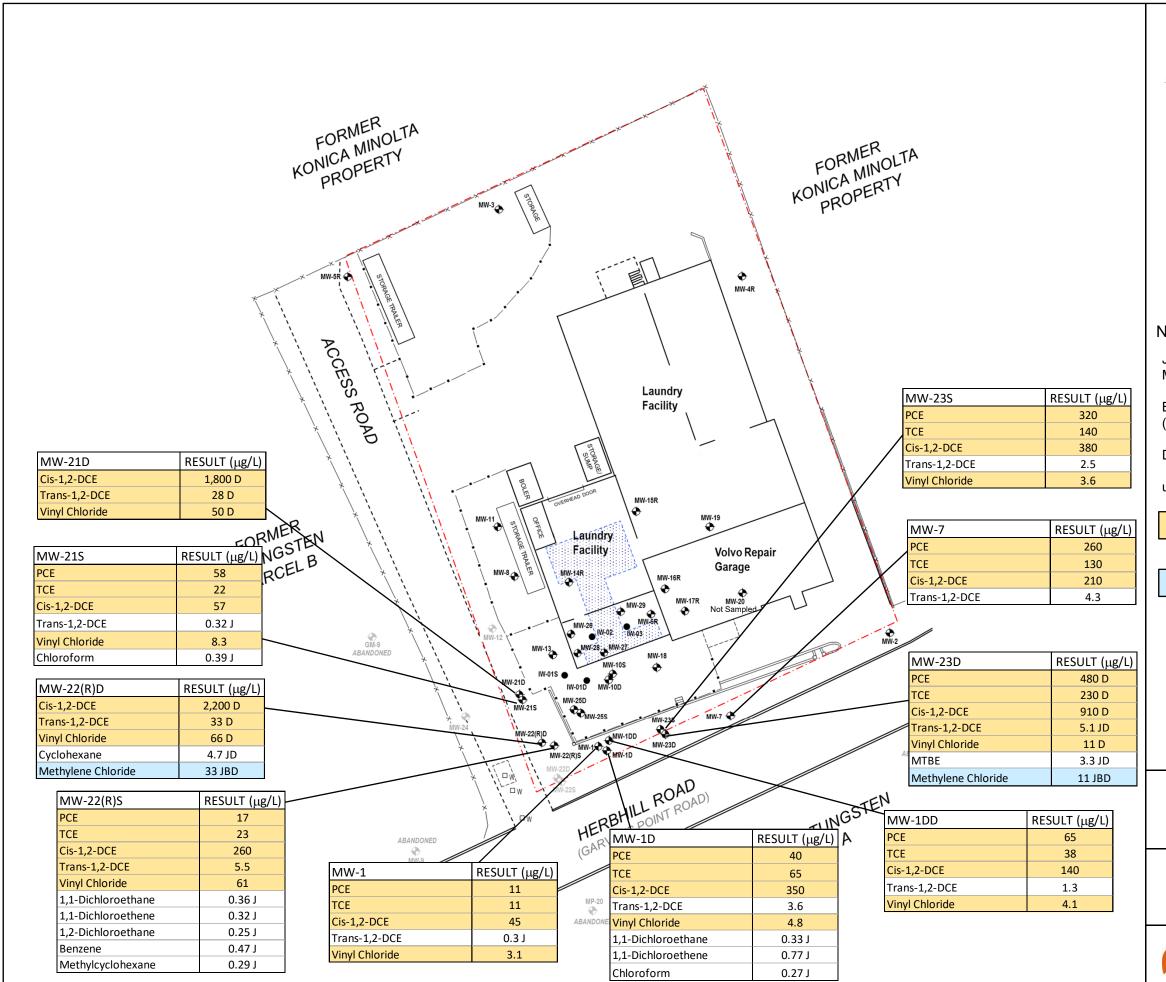
Other detected VOC exceeding respective NYS Class GA Standard or Guidance Value



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Summary of VOC Detections in Groundwater Samples – October-November 2017; Source Area Wells







CHAIN-LINK FENCE



WOOD-PICKET FENCE

PROPERTY BOUNDARY

(SURVEY)

→MW-9

GROUNDWATER MONITORING WELL



MISSING/ DAMAGED

GROUNDWATER MONITORING WELL



2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-

SLAB PIPING

Notes:

- 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 laboratory blank and sample (indicates potential laboratory contaminant)
- D Result is based on dilution of the sample.

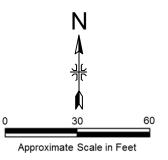
ug/L - Micrograms per liter.



Primary Contaminant/CVOC exceeding respective NYS Class GA Standard or Guidance



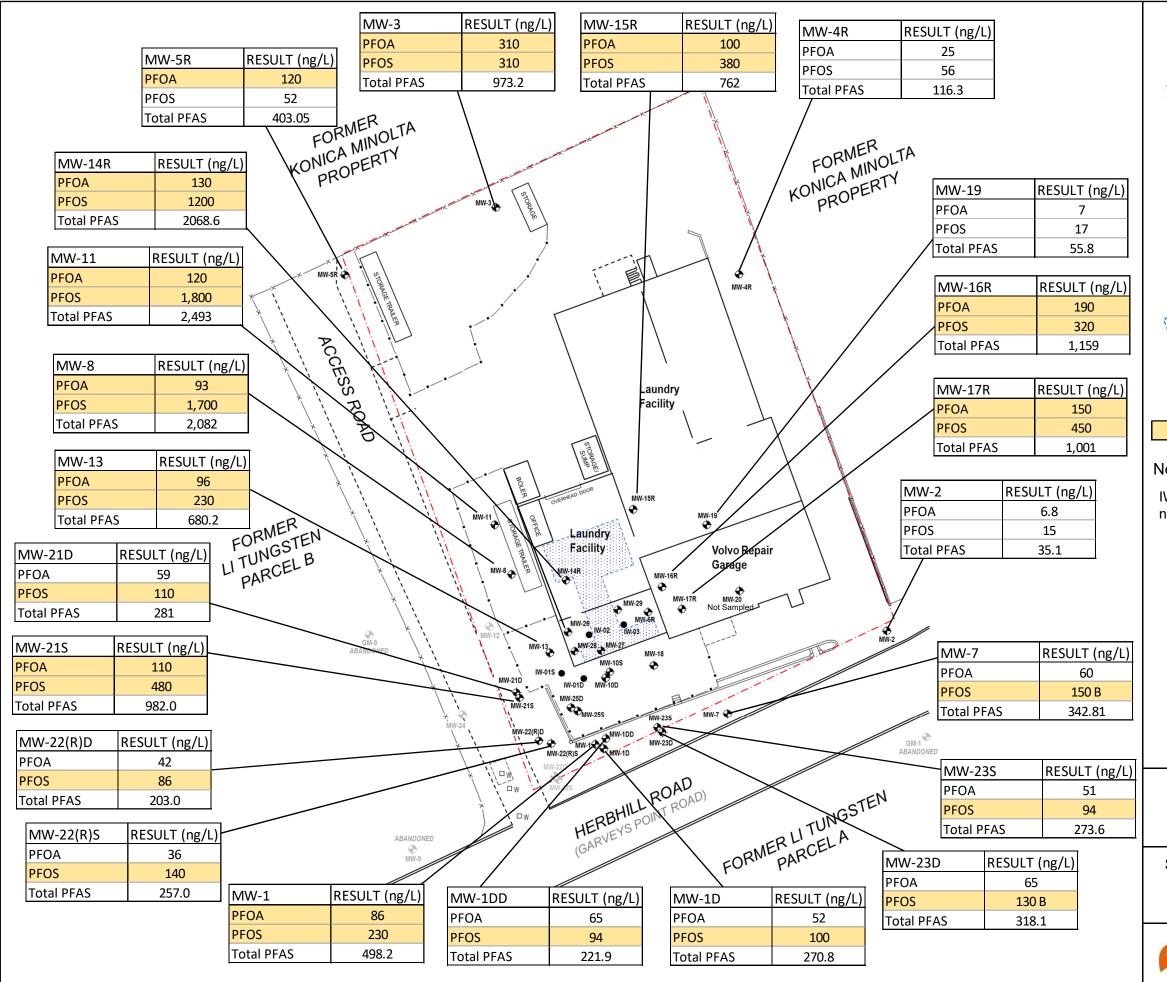
Other detected VOC exceeding respective NYS Class GA Standard or Guidance Value



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Summary of VOC Detections in Groundwater Samples – October-November 2017; **Down-Gradient Area Wells**





CHAIN-LINK FENCE

WOOD-PICKET FENCE

PROPERTY BOUNDARY (SURVEY)

→MW-9

GROUNDWATER MONITORING WELL



MISSING/ DAMAGED GROUNDWATER MONITORING WELL

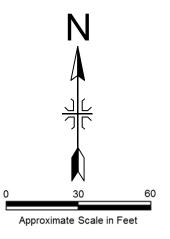


2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-**SLAB PIPING**

EXCEEDS USEPA HEALTH ADVISORY LEVEL FOR DRINKING WATER OF 70 ng/L FOR PFOA/PFOS

Notes:

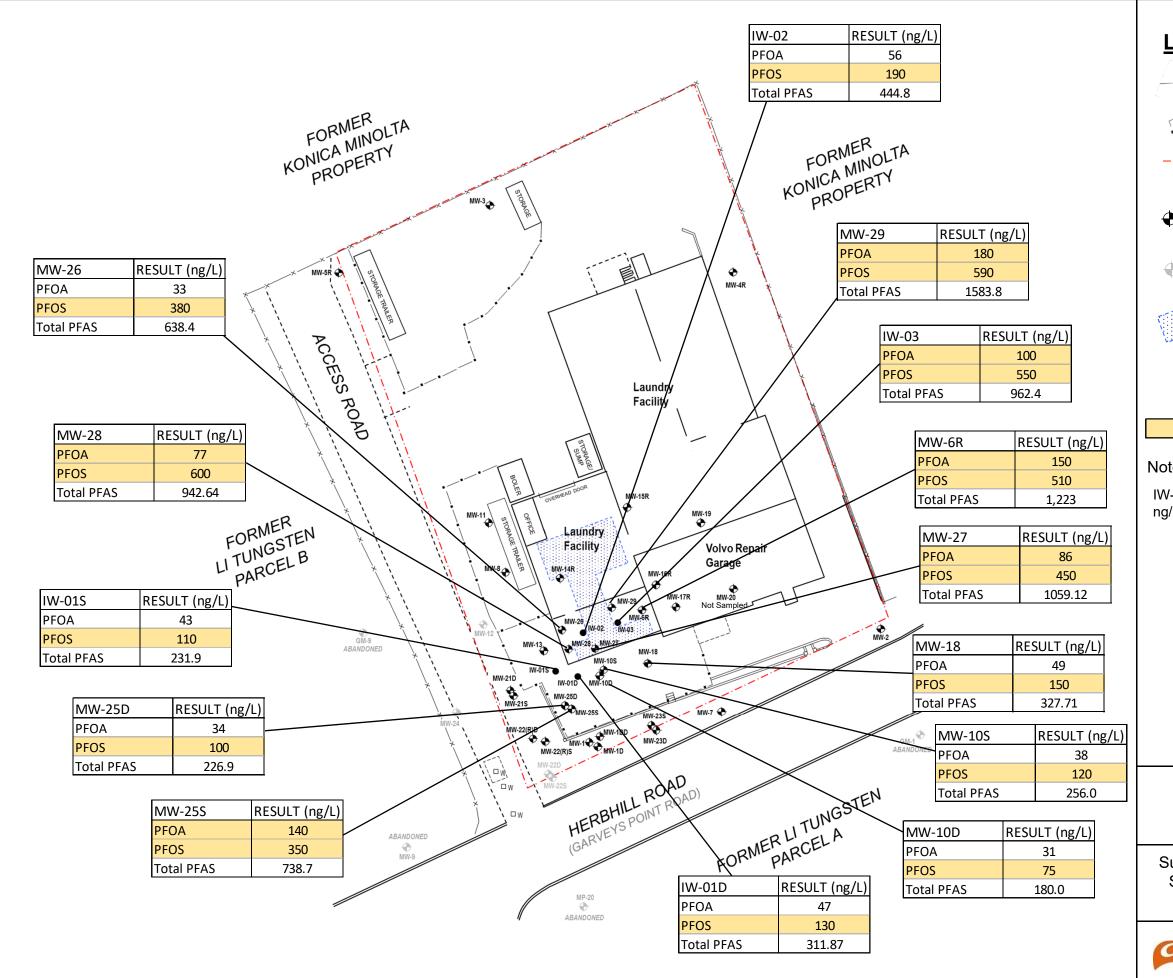
IW-03 reported as DW-03 within analytical reports ng/l – nanograms per liter



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Summary of PFOA, PFOS and total Perfluoroalkyl Substances (PFAS) in Groundwater Samples -November 2017





CHAIN-LINK FENCE



WOOD-PICKET FENCE



PROPERTY BOUNDARY (SURVEY)



GROUNDWATER MONITORING WELL



MISSING/ DAMAGED GROUNDWATER MONITORING WELL



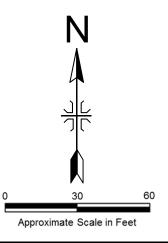
2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-**SLAB PIPING**



EXCEEDS USEPA HEALTH ADVISORY LEVEL FOR DRINKING WATER OF 70 ng/L FOR PFOA/PFOS

Notes:

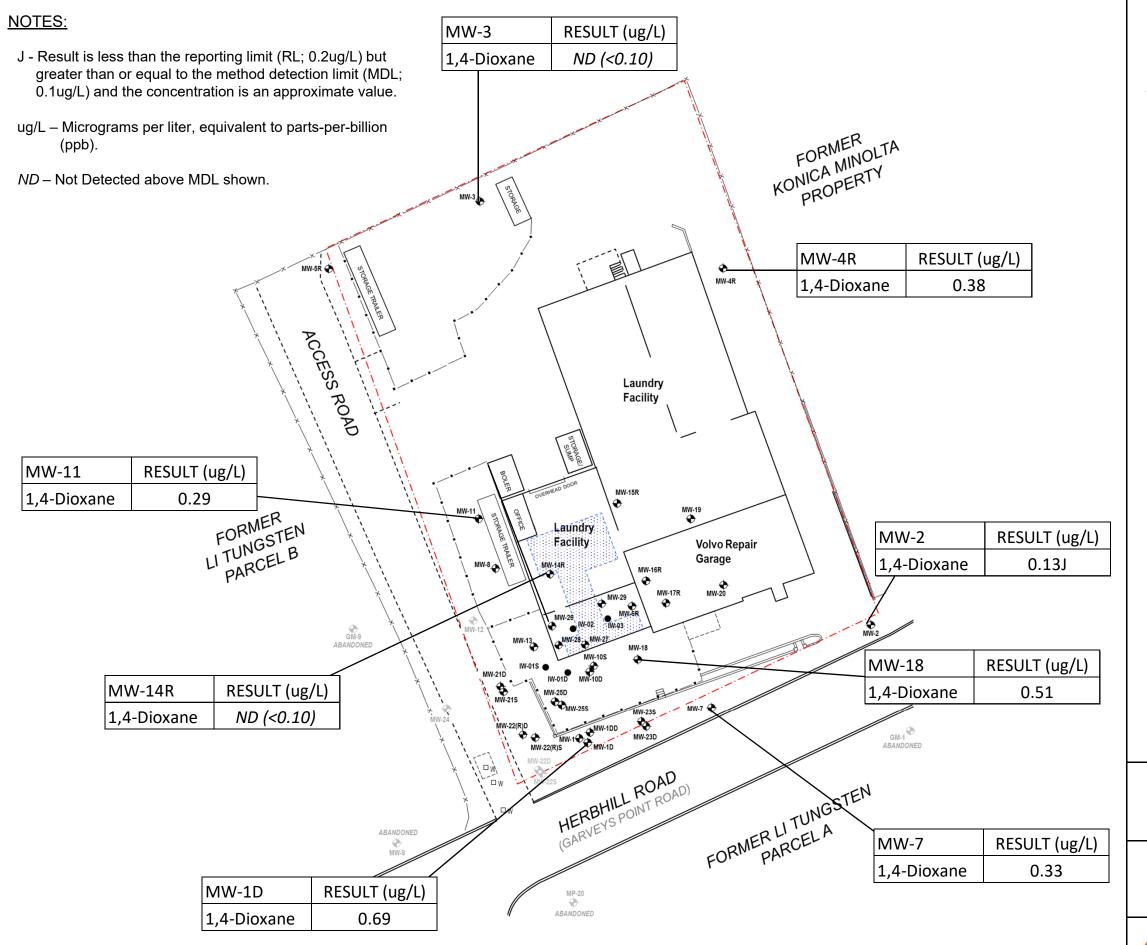
IW-03 reported as DW-03 within analytical reports ng/l – nanograms per liter



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Summary of PFOA, PFOS and total Perfluoroalkyl Substances (PFAS) in Groundwater Samples -November 2017





CHAIN-LINK FENCE

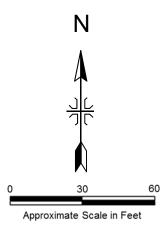
WOOD-PICKET FENCE

PROPERTY BOUNDARY (SURVEY)

△MW-9 GROUNDWATER MONITORING WELL

MISSING/ DAMAGED
GROUNDWATER MONITORING WELL

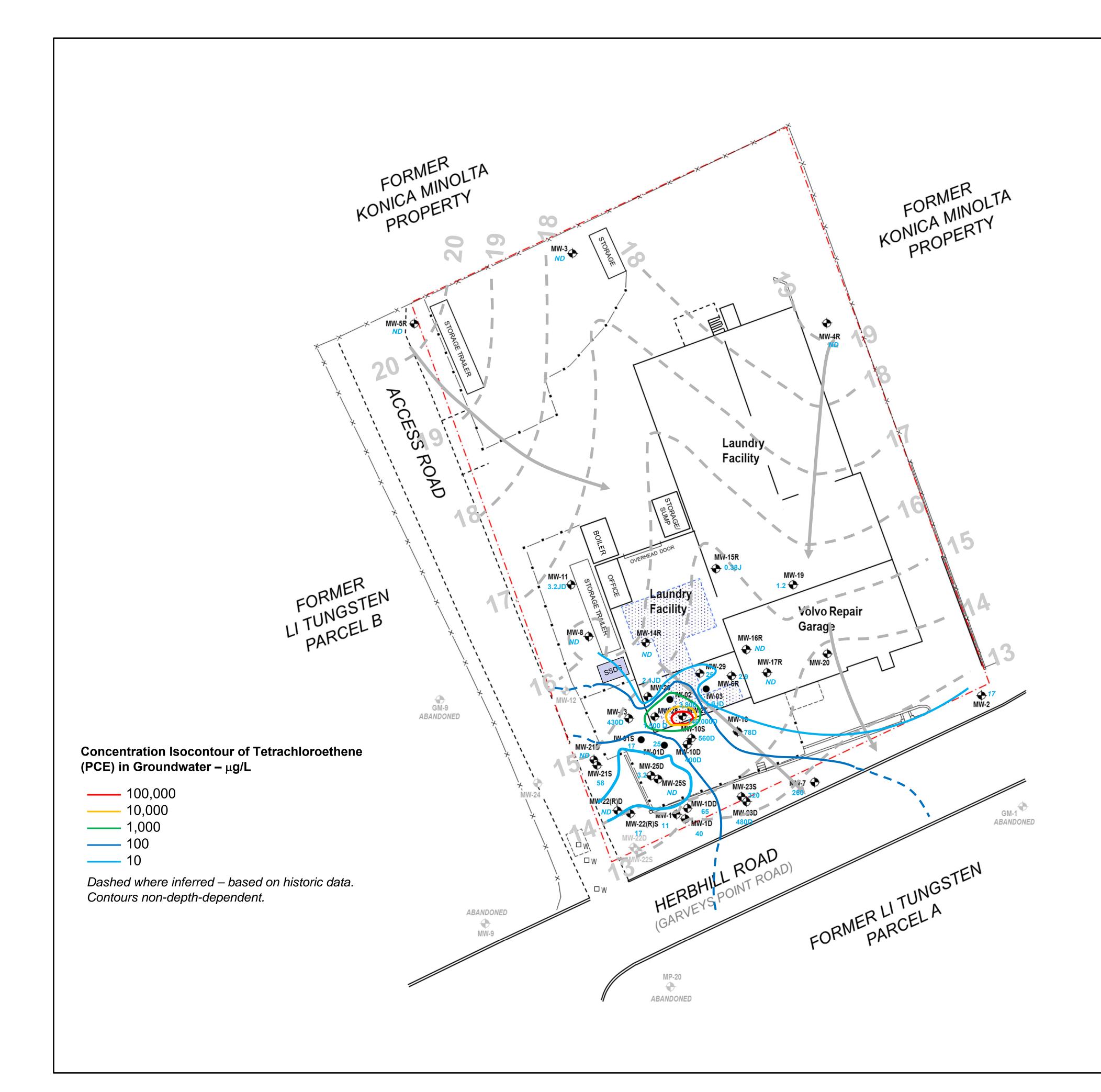
2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-SLAB PIPING

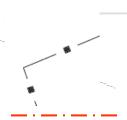


Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

1,4-Dioxane Analytical Summary (USEPA Method 8270D SIM Low-Level Analysis); March 2018 Preliminary Data – Pending Validation







MW-9

CHAIN-LINK FENCE

WOOD-PICKET FENCE PROPERTY BOUNDARY

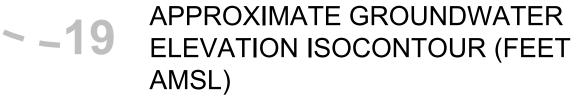
(SURVEY)

GROUNDWATER MONITORING WELL

MISSING/ DAMAGED **GROUNDWATER MONITORING WELL**

SLAB PIPING

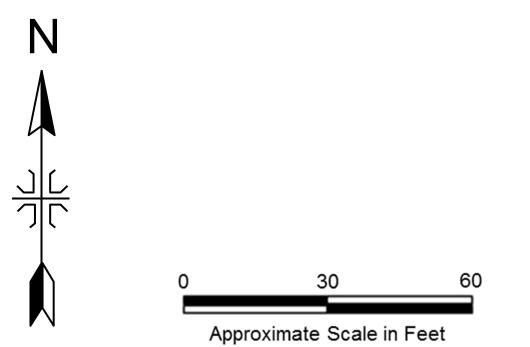
2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-



APPROXIMATE GROUNDWATER FLOW DIRECTION

Notes:

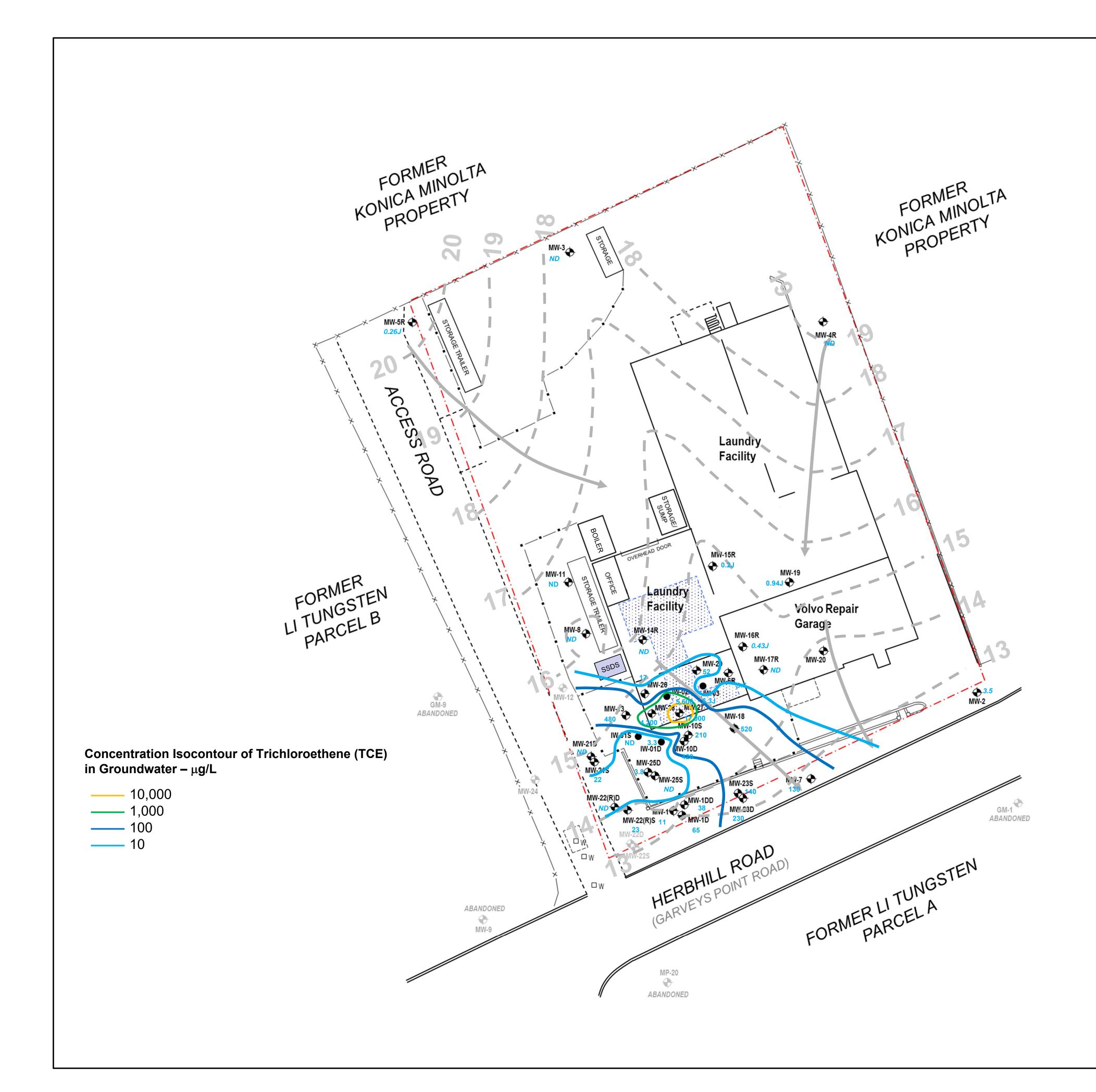
- J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
- B Compound was found in laboratory blank and sample (indicates potential laboratory contaminant)
- D Result is based on dilution of the sample.



Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Site Distribution of Groundwater Chlorinated VOCs (October-November 2017); **PCE**







CHAIN-LINK FENCE

WOOD-PICKET FENCE

PROPERTY BOUNDARY (SURVEY)

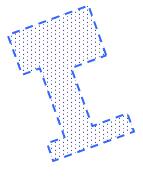
GROUNDWATER MONITORING WELL



MW-9

MISSING/ DAMAGED

GROUNDWATER MONITORING WELL



2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-SLAB PIPING

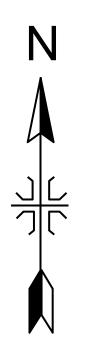


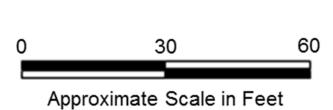
APPROXIMATE GROUNDWATER **ELEVATION ISOCONTOUR (FEET** AMSL)

APPROXIMATE GROUNDWATER FLOW DIRECTION

Notes:

- 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 laboratory blank and sample (indicates potential laboratory contaminant)
- D Result is based on dilution of the sample.

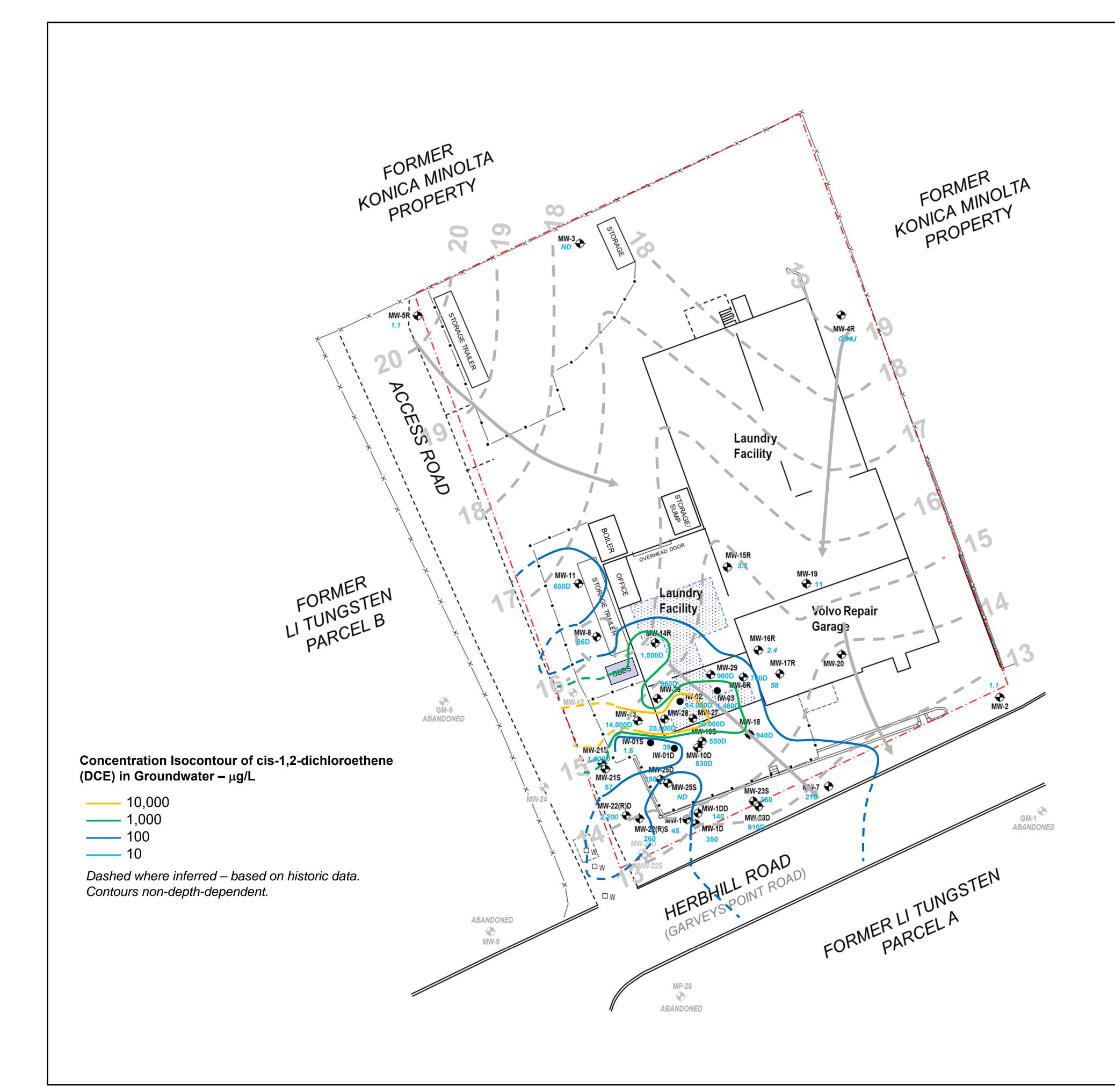




Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Site Distribution of Groundwater Chlorinated VOCs (October-November 2017); TCE





CHAIN-LINK FENCE WOOD-PICKET FENCE

PROPERTY BOUNDARY

(SURVEY)

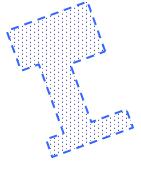
MW-9

GROUNDWATER MONITORING WELL



MISSING/ DAMAGED

GROUNDWATER MONITORING WELL



2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-SLAB PIPING



APPROXIMATE GROUNDWATER **ELEVATION ISOCONTOUR (FEET**

AMSL)

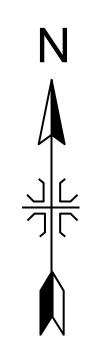
APPROXIMATE GROUNDWATER FLOW DIRECTION

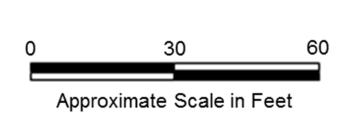
Notes:

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 laboratory blank and sample (indicates potential laboratory contaminant)

D – Result is based on dilution of the sample.

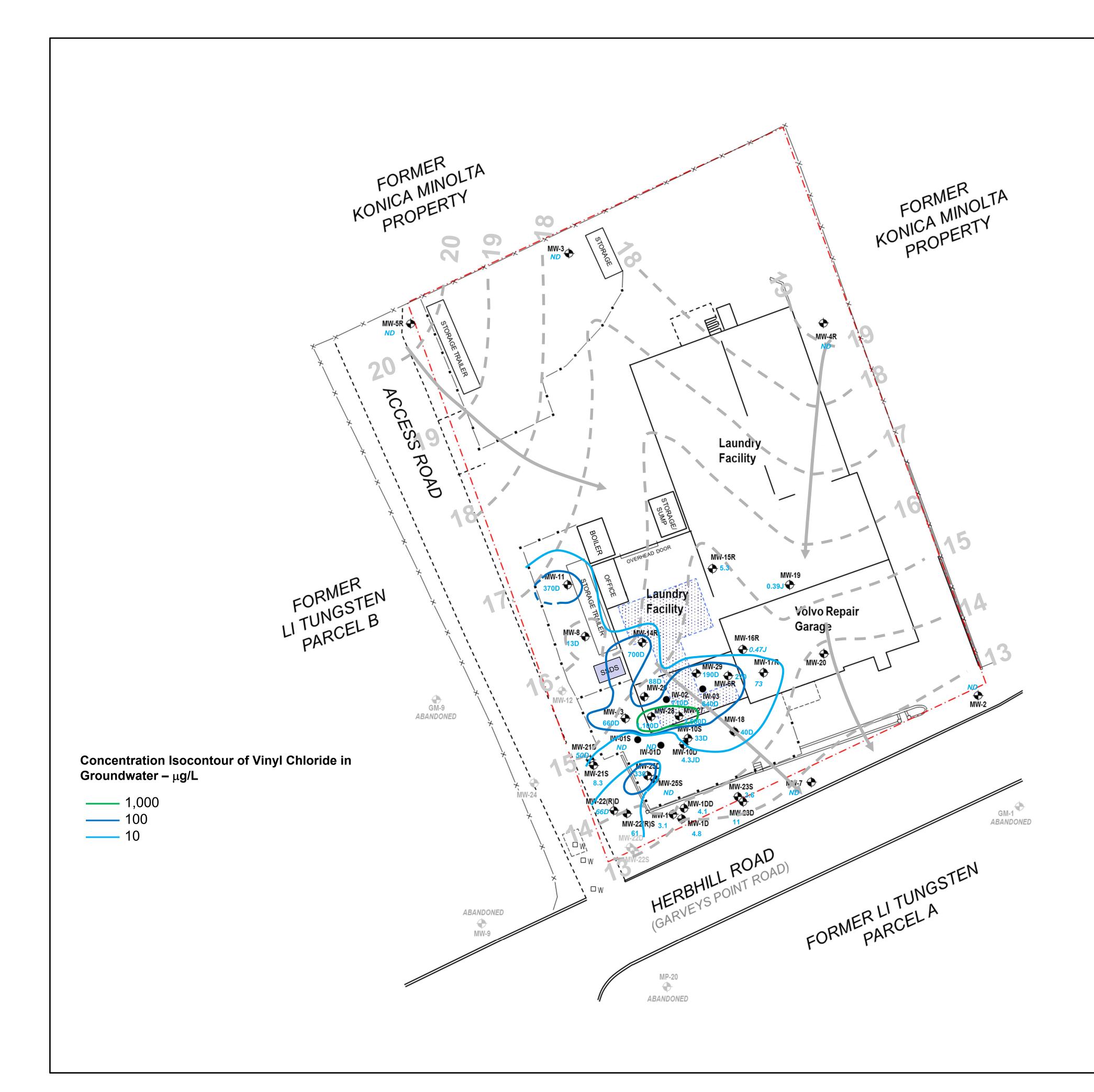




Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Site Distribution of Groundwater Chlorinated VOCs (October-November 2017); Cis-1,2-DCE







CHAIN-LINK FENCE



WOOD-PICKET FENCE

PROPERTY BOUNDARY (SURVEY)

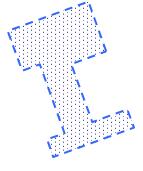
MW-9

GROUNDWATER MONITORING WELL



MISSING/ DAMAGED

GROUNDWATER MONITORING WELL



2005 IRM EXCAVATION AREA/ SVE SYSTEM SUB-

SLAB PIPING



APPROXIMATE GROUNDWATER **ELEVATION ISOCONTOUR (FEET**

AMSL)

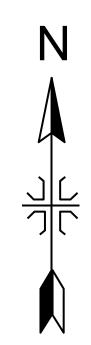
APPROXIMATE GROUNDWATER FLOW DIRECTION

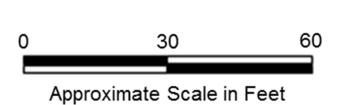
Notes:

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 laboratory blank and sample (indicates potential laboratory contaminant)

D – Result is based on dilution of the sample.





Supplemental Pre-Design Summary Report Crown Dykman (NYSDEC Site No.130054) Glen Cove, New York

Site Distribution of Groundwater Chlorinated VOCs (October-November 2017); **Vinyl Chloride**



APPENDIX A Boring, Well Construction, and Well Development Logs

		<u> </u>				ТЕСТ	PODIN/	GIO	G	BORING No.IW-02			
			70 0 00	へ[[]] ronment · Buildings		ILSI	BOKIN	RING LOG BORING No.IW-02					
PROJECT Crown Dykman LOCATION Glen Cove, NY										SHEET 1 OF 1			
CLIENT	NY	SDEC			PROJECT No. 00266417.0000								
DRILLING CONTRACTOR LAWES										MEAS. PT. ELEV.			
PURPO	SE		Injec	tion Wells						GROUND ELEV.			
WELL N	/ATERIA	L	Stair	less steel						DATUM			
DRILLIN	IG METH	HOD(S)	Direc	t push		SAMPLE	CORE	CASI	ING	DATE STARTED 10/19/15			
	RIG TYPI				TYPE					DATE FINISHED 10/19/15			
		R DEPTH	8.0'		DIA.					DRILLER Kevin			
	RING PO		_		WEIGHT	#							
		UREMEN	Γ		FALL	••				PIRNIE STAFF B. Quaglieri			
DEPTH FT.	TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	Ü	EY - Color Moistu	i IC DESCRI , Major, Mir ure, Etc.	ior	ELEV. DEPTH	WEI	LL REMARKS			
				King that is	-	g device was u -fine grained S		0.3					
2-4-4-				tra	ce pieces of b	orick, and trace	е						
	5		0	sul	b-rounded, hi	gh sphericity g	ravel. Dry.			Neat cement 0-6'			
				1 1 1 1 1 1 1 1 1	iht Brown, Fin Ior present.	ne grained SAN	ND. Moist.	5.0		6.0			
					ioi present.								
6	3.2		493.2	In the first of the A		nded, High sph race brown, m	- 1	7.0		Choke sand 6-8' 8.0 ▼			
8				Le entre la	ained sand. M		edidiff	7.2					
					own Medium (esent.	grained SAND	. Wet. Odor						
10						grained SAND	. Very wet.	10.0					
				Od	lor present.								
12	3.5		4427										
12				F - 1 - 1 - 1 - 1 - 1 - 1 - 1	ay Fine graine esent.	ed SAND. We	t. Odor /	12.6					
14						ne grained SA	ND. Wet.	13.1		Filter pack sand 8-20'			
				K-O-(1-11 —	lor present. ay, Medium-fi	ine grained SA	ND, with	14.5					
16				soı	me iron precip	pitation. Wet. 0		15.0					
16	3.2		42.5	$V \sim V \sim$	esent. nite, Sub-rour	nded, High sph	ericity	15.8					
18	3.2		0	GF		race gray med							
				12 T T T T T T T T T T T T T T T T T T T		brown, Sub-ro	ounded,	16.1					
20						GRAVEL. Wet		18.9		<u> </u>			
					nite, Sub-rour RAVEL. Wet.	nded, High sph	lencity	20.0					
				1 1 1	-	brown, Sub-ro	I I						
					gn sphericity of the sphericit	GRAVEL, with I sand. Wet.	uace gray						

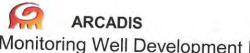
ARCADIS Infrastructure · Water · Environment · Buildings TEST BORING LOG									G E	BORING No.IW-03				
PROJECT Crown Dykman LOCATION Glen Cove, NY									SHEET 1 OF 1					
CLIENT NYSDEC											PROJECT No. 00266417.0000			
DRILLING CONTRACTOR LAWES											ME	AS. PT. ELEV.		
PURF	POSE	Ē		Injec	tion Wells						GR	OUND ELEV.		
WELL	_ MA	TERIA	L	Stain	less steel						DA ⁻	TUM		
DRILL	LING	METH	IOD(S)	Direc	t push	T	SAMPLE	CORE	CASII		DA	TE STARTED 10/19/15		
		TYPE				TYPE				⊢		TE FINISHED 10/19/15		
			R DEPTH	8.0'		DIA.						ILLER Kevin		
		NG PC				WEIGHT	#			F				
DATE			UREMEN ⁻	Γ		FALL					PIR	RNIE STAFF B. Quaglieri		
ОЕРТН FT.	SAMPLE	RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	Ü	EY - Color Moistı	i IC DESCRII , Major, Min ure, Etc.	or	ELEV. DEPTH			REMARKS		
2- - 4-		5		0	Bro trac	own, Medium ce pieces of I	g device was u -fine grained S orick, and trace gh sphericity g	AND with	0.3			Neat cement 0-5'		
2- 4- 6- 8- 10-		3.8		366.8	Mo Gra Od Wh	ist. Odor prea ay, Medium-for present. nite and brownericity GRAN	-fine grained S sent. ine grained SA n, Sub-rounder /EL with some	ND. Moist. d, High gray	6.1 6.9 7.4			5.0 Choke sand 5-7' ▼		
12- 12- - 14-		2.5		183.3	Gra Od Gra Od	esent. ay, medium-for present. ay, medium-for present.	ND. Wet.	10.0						
16- 18-		3.7		4.3	spr Me pre Rea sor	nericity GRA\ dium grained esent. d-brown Med	n, Sub-rounder /EL with Some I Sand. Wet. Community ium grained Sopitation. Very v	e Gray Odor AND with	14.3 15.0 16.3 17.3			Filter pack sand 7-19'		
					Receivable of the control of the con	h some iron pesent. d-brown Med h some iron por present. iite, Sub-rour RAVEL with set. Odor prese d-brown, Med	ium-fine graine precipitation. W ium-fine graine precipitation. V inded, High sph ome iron precipent. dium grained S pitation. Very v	Jed SAND ery wet. ericity pitation.	19.1 19.3 20.0					



Monitoring Well Development Log

Total Depth Water Leve	OCE (d Before 20.40	6417. After	Casing Diameter Well Volu	(inches)		IW-02	_ Date Purge	Page 10 20 Method Centrifug Submers	jal
Water Colu	mn 2, 2	9	Total Volu	ume Purged	~90			Other	Mansoon
Pump On	1245			Pump Off	1417		Devel	oped By	LAWES
gallon/foot		Well Casir 1-1/4" = 0.06 1-1/2" = 0.09	3	2" = 0. 2-½" =		3" = 0 3-½" =		4" = 0.65 6" = 1.47	
Time	Minutes Elapsed	Rate (gpm) (mL/min)	DTW (ft)	Gallons Purged	pH	Specific Conductance	Temp.	Turbidity (NTU)	REMARKS (PID readings, color,

Time	Minutes	Rate	DTW	Gallons	pH	Specific	Temp.	Turbidity	REM	IARKS
	Elapsed	(gpm)	(ft)	Purged		Conductance	(C)	(NTU)	(PID road	lings, color
6		(mL/min)				(mS/cm)	(F)		odor	, etc.)
1246	1	1.0	8.18	-	6.74	0.713	20,99	over	odor	, Shec
1256	10	1.0	8.17	10	6.65	0.626	20.57	over		
1306	10	1.0	8.19	10	6.37	0.614	20.27	over		
1316	10	1,0	8.18	10	6.59	0.595	20.10	803		
1326	10	1.0	8.17	10	6.14	0.601	19.86			
1336	10	1.0	8.18	10	5.84	0.597	19.71			
1346	10	1.0	8.17	10		0. 594	19.65			
1356	10	1.0	8.16	10	9	0.594	19,47			
1406	10	1.0	8.17	10	6.29	0.592	19,40			
1416	10	1.0	8.17	10	6.30	0.592		38.6	V	1
							1111	20.0		
		-								
			1 T							
	15.									
	7 - 7							1:1		
			-							
		-								



LUL	ARC								
Monitor	ring W	ell Dev	elopme	ent Log					
Project/No.	002 Before 19.39	(do41 After 19,44 8,95	7,000 Casing Diamete	on firm bot	2005	IW-0:		Page 10/2 Method Centrifug Submers Other	
gallon/foot		Well Casi 1-1/4" = 0.0 1-1/2" = 0.0				3" = 3-½" =		4" = 0.65 6" = 1.47	2/1000
Time	Minutes Elapsed	(gpm)	DTW (ft)	Gallons Purged	рН	Specific Conductance (mS/cm)	Temp.	Turbidity (NTU)	REMARKS (PID readings, color, odor, etc.)
1117	47	1.000	9.16	30	5.73	0,935	22,23	410	odor preser
1121	4	1,000	9,16	10	6.71	0.899	22.07		Cardi Press
1128	7	1,000	9.17	10	6.40	0.881	22,12		
1131	3	1,000	9.16	5	6.34	0.881	22.18	23,1	1

Well Construction Log (Unconsolidated)

4 " inch diameter	Permit NoState
	Land-Surface Elevation and Datum:
Well casing,	feet Surveyed
2" inch diameter,	Installation Date(s)
Backfill	Drilling Method Direct Push
Grout	Drilling Contractor LAWES
	Drilling Fluid
6 ft	Development Technique(s) and Date(s)
Bentonite slurry	Development reclinique(s) and Date(s)
8 ft Spellets	
	Fluid Loss During Drilling gallons
/6 ft	Water Removed During Development ~55 gallons
Well Screen.	Static Depth to Waterfeet below M.P.**
2 " Inch diameter,	Pumping Depth to Waterfeet below M.P.**
10 slot	Pumping Durationhours
	Yieldgpm Date
Filter Pack	Specific Capacitygpm/ft
Formation Collaspse	Well Purpose Monitoring Well
20 11	
2 5 m	Remarks
* Depth Below Land Surface	**Measuring Point is Top of Well Casing Unless Otherwise Noted.

Well Construction Log (Unconsolidated)

THE Z	SURFACE				00266417.00
N N	SOR ACE	Well MW.	-SR Tow	micity Glen	Cove
ИИ	- vi	County		tate NY	_6
4.	25 inch diameter	Permit No.			_
drilled	d hole	Land-Surface Elevati	on and Datum:		
ИМ			feet	Surveyed	
Wei	Il casing,			☐ Estimated	
1414	Z inch diameter,	Installation Date(s)	11/3/12		
ии =	The state of the s		4.25"		
Backf	riii	Drilling Method	7.22	HJA	
Grout		Drilling Contractor	LAWES	5	
ИИ		Drilling Fluid			
×1	2.0	Dinning Fluid			
44-	ft*				
Bentonit	te Slurry	Development Techni	que(s) and Date(s)		
		-		4 . 3	
10	ft* Pellets	Surge	and tre	ge 11/3	/17
				Y	
		Fluid Loss During Dr	illing		gailons
12	ft*			×30	-
		Water Removed Duri	ng Development	3. 70	gallons
- Wall 6	Screen.	Static Depth to Water	r		feet below M.P.**
2		Pumping Depth to W	ater		feet below M.P.**
1 4	1 Sand				
	10	Pumping Duration	1	hours	
 	slot	Yield	gi	om Date	
I-BI	er Pack	Specific Capacity		gpm/ft	
目 1	or Pack	Specific Capacity		gpitate	
■ ∏For	mation Collaspse	Well Purpose	Monitor	ing Well	
				,	
72.	55 from 1				
22,	ir gave	Remarks			
	H*				
	25.09 TOC				
	2 0.				
* Depth Below	Land Surface	**Measuring Point is	Top of Well Casin	g Unless Otherwise	Noted.
			ES		
		Prepared by	6)		

Well Construction Log (Unconsolidated)

inch dlameter	Permit No.	
	Land-Surface Elevation and Datum:	
	feet Surveyed	
Well casing,	Installation Date(s) 10/31/17 10/0	
/ /	Drilling Method Pirect Push	
Backfill		
Grout	Drilling Contractor LAW Env.	
ИИ ——	Drilling Fluid	
4 4f*		- :
Bentonite slurry	Development Technique(s) and Date(s)	
ft* pellets		
	,	
	Fluid Loss During Drilling	allons
H *	Water Removed During Developmentg	allons
IN	Static Depth to Waterfe	et below M.P.
Well Screen. inch diameter,	Pumping Depth to Waterfe	eet below M.P.
slot	E and a second	
slot	Pumping Duration hours Yield gpm Date	
H1 _	Yieldgpm Date Specific Capacity gpm/ft	
Filter Pack	Specific Capacity gpm/rt	
T _	202	
Formation Collaspse	Well Purpose RAO Sweet	
Formation Collaspse		
	Remarks TOC DTB : 23,46	
	TOC DT W: 23.45	
	from grade DTB: 20.39	
	I" riser to bottom of end	A
	**Measuring Point is Top of Well Casing Unless Otherwise Note	cy

Well Construction Log

(Unconsolidated)

	TH LAND SURFACE 34*	Project Name and No. 00266417, core
0	V CAN SURFACE	Well RAD-2 Town/City 6 len Care
	ИИ	County State NY
	2 inch diameter	Permit No.
	drilled hole	Land-Surface Elevation and Datum:
	ИИ	feet Surveyed
	Well casing,	Estimated
	/ Inch diameter,	Installation Date(s) 10/31/17 09/5
	ИИ =	0
	Backfill	Drilling Method Direct Kush
	Grout	Drilling Contractor Land A:r Under
	ИИ	Drilling Fluid N/A
	20 ft	
20	4 23 "	1.50.00 to 10.00 to 1
	Bentonite slurry	Development Technique(s) and Date(s)
	ft* pellets	
		Fluid Loss During Drillinggallons
		Water Removed During Development gallons
	IIN	Static Depth to Water feet below M.P.**
	Well Screen.	Static Depth to Water
	inch diameter,	Pumping Depth to Water feet below M.P.**
		And the second s
	slot	Pumping Duration hours
		Yield gpm Date
	Filter Pack	Specific Capacity gpm/ft
		740
	Formation Collaspse	Well Purpose RAP Survey
	目	
	Formation Collaspse	
	- " " " " " " " " " " " " " " " " " "	Remarks Solid riger 0-20' 1" PVC
	·	· Krie
	20.20 gande 7 box	DTW 23,32 TOC
	20.70 7	DT\$ 23.09 TOC
		~1"
	* Depth Below Land Surface	**Measuring Point is Top of Well Casing Unless Otherwise Noted.
		Prepared by £5

Sample Log (Cont.d)

Well/Boring	MW-	412	Projec	et Name and No. Lown Dy kman 00266417.0000	
Prepared By	ES			/1/17 1305 7827 DT 5' macro	
	a Depth land surface)	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 Inches	direct push Sample Description	PID (ppm)
0'	1'	(iest/	anches .	Asphalt w ?" / Concrete ~10"	0
1.	5'			Tan Coarse sand of small publics	0
5'	10'	2'		Tan Course Sand of small publics	0
10'	15'	3'		light Tank Course Sand of small publicy	0
		1		and some med pobles	1
15.	20'	4.5'		Same on Above	0
70'	23'	41		Same as Above	0
23'	25	1		Grey five sand of 1:41e 5:14	0
= 7					

Sample Log (Cont.d)

repared By	D	11/11	17 0855 LAWES - 7822DT	
	e Depth land surface)	Time Sample Pre	Sitydraulic 5 Macro core	
From	То		nches Sample Description	PID (ppm
0	3'	3	Dark brown silty send of	0
			some med gravel and small	
		1	pebbles	
3'	5'	z	Grey Silty Gray Sand	V
		1	and small gravel	1
5'	74	4.5	Grey Sity Sund wy small gravel and Me	ble C
E	*		Water to a 6' (parchda	
多7	3.		Grey Silt my mottling	0
8	10'		Dense Brown Sitt of some	0
		1	small gravel, mostling observed	0
10'	n.	4.5	Dense Brown Silt transitioning	0
E		1	to Med Brown Silty Sand	0
11'	13'		Dense Grey Silt w/ some	1
			Small pelobles	
13'	14"		Coarse Grey Sand of med grand	
			Water Table @ 113'	
14'	15		Off white/Ton finen Sand w/ some sand	
			Perties and	1
15	18'	3.5	Same as above	0
18	201	V	Brown fine Sand of silt	1

Sample Log (Cont.d)

Well/Boring	MW-	SR	Projec	t Name and No.	
Prepared By	ES				
Sample (feet below in	1	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
20'	25'	4.5		Med Sand w/ Small pebbles	0
		1		Med Sand of small pebbles and gravel throughout, Tan incolor	
		1		very saturated	7
25'	26'	2'		Very Saturated Tan fine Sand my small grave!	O
76'	30,	1		Grey Sitty Clay, Dense	4
: .					

APPENDIX B Analytical Sampling Well Purge Logs

Baseline Analytical Sampling; November 2015

Project No.	0020	0	.0000		Well ID	Mw.	-28	4.5		Date //	Page _/	
Project Name	/Location	(10	un Dy	kno	1	iloL f	Drigra.	n		Weather	60	Ra
Measuring Pt. Description	70	OC	Screen Setting (ft-bmp)	4-	14'	Casing Diameter (in.)	2			Well Mate	erial	_PVC
Static Water Level (ft-bmp)	7.	25	Total Depth (ft-bm	np) 19	1.07	Water Colum Gallons in W						
MP Elevation		4,	Pump Intake (ft-b	mp) /	3'	Purge Metho	d: 600	u-f10	w	Sample Method	Lou	
Pump On/Off	1055	1737	Volumes Purged	2.	0 gal		Submersible			Method	200	J- 4
Sample Time:	Label Start End	1735	Replicate/ Code No.	no	ne	-	Other			Sampled	by	DK
Time	Minutes Elapsed	Rate (mL/min)	Depth to Water	Gallons Purged	рН	Cond.	Turbidity (NTU)	Dissolved Oxygen	Temp.	Redox	Appea	arance
	> 30 min	200 mL/min	(ft) < 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	(mg/L) +/- 10 %	(°C) +/- 3%	(mV) +/- 10 mV	Color	Oc
1455	0	_	8.09			-		-			cloudy	-
1700	5	200	8-28	_	6.03	0.764	31.8	2.25	18.76	11.1	char	-
1705	10	=	8.31	_	6.01	0.721	53.7	1.26	18.76	-0-8	clear.	×-
710	15	200	8.40	_	6.02	0.717	14,1	0.89	18.70	-4.2	char	
1715	25	_	8.41	_	6.03	0.716	5.54	0.97	18.70	-4.4	Cleur	-
1725	30	_	8-33	_	6.03	0718	3.28	0.76	18.71	-6.4	clear	_
1730	35	_	8.33	2.0	6.02	0.721	3.38	0.68	18.68	-6.1	(lear	_
onstituents S	ampled				Container				Number		Preservativ	ve
TCL	Sa	nph	10 = M	U-22	8(1110	m(15)	VOA		3	-	HC	
# Bou	un s	topped	ed part		ite-	0 there well	ر سران	uar _		-		
Bon	n 1	Plocten	he sutte	d 0.	et in	buto	m of	fin	cell	during	y Pu	Gi.
	lumos			E" - 0.06	3.5	" = 0.50 6°	" = 1.47					
allons/Foot 1	" = 0.04 .25" = 0.06			.5" = 0.26 " = 0.37		= 0.65						
	" = 0.04 .25" = 0.06			" = 0.37		= 0.65	10	in frem	1 . 1	door		

Groundwa Project No.		16417-8		_	Well ID	MN -E	26	_		Date	Page 1	_
Project Name	Location	Coor	m Dyk	hren	Pilot	Prog	ramor			Weather	505,	Ram
Measuring Pt. Description	to	ı	Screen Setting (ft-bmp)	3.00-	13.00	Casing Diameter (in.)	2			Well Mate	erial	PVC SS
Static Water Level (ft-bmp)	600	95	Total Depth (ft-bn	np) (3	3.08	Water Colum Gallons in W						
MP Elevation	NA	7	Pump Intake (ft-b	mp) 11		Purge Metho	d: Low	Flow	/	Sample	7.5	
Pump On/Off	1630	1719	Volumes Purged	soft	tal AL	v1.2gal	Centrifugal Submersible			Method	low	Plo
Sample Time:	Label Start End	1715 1715 1719	Replicate/ Code No.	NA	\	-	Other			Sampled	by A	L
Time	Minutes	Rate	Depth to	Gallons	pH	Cond.	Turbidity	Dissolved	Temp.	Redox	Appea	arance
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odor
11 75	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	Shahty	
1625	0	200	8.59		6050	0.653	18.20	0.13	19004	-83.6		
1630	5		9.83	-	6050	0.681	15.00	0.60	19026	-86-6	- 11	- ((
1635	10	100	10.13		6.51	0.684	17.30	0.53	19000	-98.3		"
1640	15	100	10.63		6.51	0.684	15.00	0.83	19-20	-97.7		
1645	20	100	10094		6.51	0.1087	14.30	1113	19.23	-94.2	11	~
1650	25	160	10.98		6.51	0.689	114	1028	19.21	-9102	1	
1655	30	60	10.18		6.51	0.691	10070	1.36	19.13	-87.1	· ·	"
1700	35	60	10.28		6.51	0.694	11,30	1014	19.17	-86-3	11	"
1705	40	60	10.08	AL.	6.51	0.697	11.88	1009	19.12	-84.1		.,
1710	45	60	10.29	Moder	6-51	06676	11070	1.19	19.14	-77.8	u	
				11.70								
										La		
										- 6.7		
	- 1									1		
										4		
Constituents S	Sampled				Container			5.0	Number		Preservativ	ve
Volus					40ml	- VOA			3		Hel	
Sample 1	DS m	W-26/	111015)									
					**							
3.7		,	, ,									
Thuble	W/ S	how re	change			-						
Kan Pu	mpi	ntermi	Hently	-				-				
			U	-								
				1				1				

Well Locked at Arrival: No

GW Samp Form

Well Locked at Departure: No Key Number To Well: NA

Pront of Carrolramat

Well Location:

Condition of Well:

Condition of Well: (9100)
Well Completion: Flush

Groundwa	ARCA		rm									,
Project No.	-		,0000		Well ID	MW-1	7R			Date	Page	of_
Project Name		CROV		kma	2	10+	Pran	m		Weather	(00)	Ro
Measuring Pt Description	10	(Screen Setting (ft-bmp)	5.2	7-10.27	Casing Diameter (in.)	1			Well Mate	erial V	PVC
Static Water Level (ft-bmp)	7.4	0	Total Depth (ft-br	mp) 9	90	Water Colun Gallons in W		2.51	10.4	'aul		_
MP Elevation	21.0	10	Pump Intake (ft-	bmp)	. 9	Purge Metho	od: Lou	v-flu	~	Sample	1	
Pump On/Off	154	-/11020	Volumes Purgeo	1 1	1 gal		Centrifugal Submersible	- 1		Method	Low	+10
Sample Time:	: Label Start End	1417	Replicate/ Code No.	nov	ч		Other			Sampled	by	3K
Time	Minutes	Rate	Depth to	Gallons		Cond.	Turbidity	Dissolved	Temp.	Redox	Anne	arance
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odor
1545	> 30 min	200 mL/min	7.30	-	+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV		
1550	3	150	8.17	-	6.49	1.241	514	000	21.00	-83.3	Ollar	-
1555	10		8-42	-	6.52	1.242	3.78	1.77	21.01	-83.3	cleur	
1600	15	-	8.83	-	6.54	1-2410	4.55	0.660	21.04	-767	cher	
1605	20	120	9011	-	6,55	1.248	4.86	0,59	21-07	-72.9	cles	
ilelo	25	_	9,23	-	6.59	1.252	4.54	0.60	21.04	73-60	elew	
1615	30	_	9.37	-	10.59	1.240	4.47	0.56	21.03	-78-2	Ches	
constituents S	Sampled				Container 40 M	L VOA			Number 3		Preservativ	ve
	San	2/2 10	= MW-1	10/11	10.5			-				
	Joing		1 1 1 2 1 1	-(111	-11)			-	-	-		
	She.	non	purse	Ho	0			-		_	Min	
	Sligh.	t put	rol like	Odo				-		-		
	0	0						_		_		
ell Casing Vo	olumes											
lons/Foot 1	1" = 0.04 1.25" = 0.06			2.5" = 0.26			" = 1.47					
		2" =	0.16	3" = 0.37	4" =	0.65						
all last												
		Al Para	15 11 1				4-31.00			27.5		
ell Informati Well Locat Condition of	tion: 51	N Curn	good	relvo	Sh	P		Locked at A		VES		

Project No.	ater Sar		7,0000		******	MW-	11.0				Page	
		1)	Well ID	0-11		_		Date	(1-1	0.
Project Name/		(10	un 1	ykn	an	Pilot	Prog	ran		Weather	60	12
Measuring Pt. Description	To	(Screen Setting (ft-bmp)	5.18-	-10.18	Casing Diameter (in.	,_2	_		Well Mat	terial	_ F
Static Water Level (ft-bmp)	7.2	8	Total Depth (ft-l	bmp))	0,17	Water Colun Gallons in W		,89'	0.46	gal		
MP Elevation	21.		Pump Intake (ft	t-bmp) ~	9.5	Purge Metho		w-flo	w	Sample	,	,
Pump On/Off	1350	0/1525	Volumes Purge	ed /	gal		Centrifugal Submersible			Method	Low-	- 1
Sample Time:	Label Start End	1520	Replicate/ Code No.	10	ne		Other			Sampled	by	Dk
Time	Minutes Elapsed	Rate	Depth to Water	Gallons		Cond.	Turbidity	Dissolved	Temp.	Redox	Appe	earar
_	> 30 min	(mL/min) 200 mL/min	(ft)	- uiged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	T
1350	8	200 IIIL/IIIII	7.24	-	+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	Clear	Ŧ
1355	5	150	8,79		6.36	0.942	_	2.44	21-16	-93.8	char	+
1400	10	-	9.48	-	6.37	0.944	10.26	1.84	21.21	-92.4	clear	+
1405	15	1	9.81	-	6.36	0.938	6.23	1.66	21-22	-91-0	Clar	
1410	20		10.01		6.31	0.868	~	1082	_			T
> well		Bing	dry -									
1420	30	410	9.180	-								L
1425	35	NP	9.34									
1441)	50	NP	9.16	-	XIX	1	URCT	-	P	CHAS		-
1505	75	NP	473		140	1	, 9		Mel	HEN	-01	-
1510	80	NP	8-64									╁
1515	85	140	9.00		0.32	0.867	11.23	2.27	20.74	-61.1	clew	-
1520	90	1	9.57	-		0,897	10.20		21.15	-63.3		70
												**
Constituents Sa	ampled				Container				N			
	VOA	- VOC	S		11.	nh Va	OA		Number 3		Preservati	ve
	angl	1D=	- MW-1	GR (111015	-)					1101	
		4Bla	ch floo	uting	deb	is/sedi	mut is	sa	uple	39W		
Unable	to	Cont	ince po	igi ,	P 100	vest r	ate (150 mL	/min)		
Sheen o	low	purge	H20	thong	1-1	hin f	Tush li	me ?	Samo	u _		
NP- 1	10 6	ourge								-		
	umes = 0.04 25" = 0.06			2.5" = 0.26 3" = 0.37		' = 0.50 6'	" = 1.47					
Well Information				- 0.07	4 -	0.00						
		Vest w										

P

P

Destant No.	iter San	npling For	rm		1	A)					Page [of)
Project No.	000	66417	0000		Well ID	A I	W-02	2		Date	11-10	-15
Project Name/	Location	Croc	on Dy	KMO	un Pi	lot F	rogoca	m		Weather	505	Re
Measuring Pt. Description	TE	· C	Screen Setting (ft-bmp)	_N	A	Casing Diameter (in.	2			Well Mat	erial	PVC SS
Static Water Level (ft-bmp)	7.14	1	Total Depth (ft-b	mp) 20	0049	Water Colun Gallons in W						
MP Elevation	NA		Pump Intake (ft-		9'	Purge Metho		o flow	-/	Sample		
Pump On/Off		1558	Volumes Purge		1) Gal	, argo mouro	Centrifugal Submersible	-		Method	Low	Fle
	- 1	1555			<u> </u>		Other					
Sample Time:	Start End	1555 1558	Replicate/ Code No.	N	A	-1				Sampled	by A	1
Time	Minutes Elapsed	Rate	Depth to Water	Gallons	рН	Cond.	Turbidity	Dissolved	Temp.	Redox	Appea	arance
		(mL/min)	(ft)	Fulged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odor
1515	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV		Petr
	5	200	7.16		6.53	0.650	3.77	1.84	19.12	-39.6		117
1525	5	"	7.18		0.50	0.664	2.24	0.81	19.09	-47.1	11	
1530	15	· ·	7.19	1	6.51	0.662	3.86	0.86	19.05	-47.6	10	
1536	20	"	7.18		6.52	0-636		0.71	19.00		36ghtly	"
1540	25	ij	7.18		6-53	0.630	6.70	0.63	19.01	-39.3	Yellow.	11
1545	30	W	7018		6.54	0.000	6.40	0.00	18,95		alightly	
1550	35	10	7.18		6.54	0.61	6.18	0.59	18093	-37.0	Yellow	10
1555	40	*	7018	-2.0	6.55	0.609	6.08	0.58	18-92	-37.6	94	- 64
- 3									,			
				4								
-					1286							-
Constituents S	ampled				Container				Number		Preservativ	ve
Cumple	10	IW-0	2/11/015	-) -	40 m	nl vo	A		3		HU	
Jumpa			o (tiloto	/								
											- 3	
				-								
				- 1 -			-		_			
√ell Casing Vol	lumes					and a land						
allons/Foot 1"	lumes ' = 0.04 25" = 0.06			2.5" = 0.26 3" = 0.37		" = 0.50 6 = 0.65	5" = 1.47					
allons/Foot 1"	' = 0.04 25" = 0.06	2* =	0.16	3" = 0.37	4" :		5" = 1,47					
allons/Foot 1"	' = 0.04 25" = 0.06 on:	2* =		3" = 0.37	4" :			Locked at	Arrival:	+0	tes	

Groundwa Project No.			rm 7.0000	,	Well ID	MW-	19			Date	Page 1	
Project Name	Location	Com	on Dyt	liver	Pile						505	
Measuring Pt. Description			Screen Setting (fi-bmp)			Casing Diameter (in.				Well Mate	-	PVC SS
Static Water Level (ft-bmp)	5.4	6	Total Depth (ft-b		. 17	Water Colun Gallons in W						
MP Elevation	21.	61	Pump Intake (ft-	bmp)	1	Purge Metho		, Flo	N	Sample	1	11
Pump On/Off	1350	0/1438	Volumes Purge	d -2	5 Gal		Centrifugal Submersible			Method	low.	110
Sample Time:	Label Start End	1425 1425 1428	Replicate/ Code No.	NA	<u> </u>		Other	-		Sampled	by AL	
Time	Minutes	Rate	Depth to	Gallons	рН	Cond.	Turbidity	Dissolved	Temp.	Redox	Appea	arance
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odo
1355	> 30 min	200 mL/min	<0.3 5.52		+/-0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	21 10	
1400	5	71	5,56		6.90	0.376	3.20	2.57	21.37	36.6	istortess	non
1405	10		3.42		6.88	0,378	1.85	2.25	21.78	38.6	11	- 11
1410	15	180	5.66		686	0.380	1.35	2.05	21.82	40.9	"	11
1415	20	"	5068	1 = 1	6.84	0.382	1040	2.00	21.87	43.8	4	1.4
1430	25	1.6	5.70	1 1	6.83	0.383	1.33	2001	21.91	46.2		11
1425	30		3.72-	-2.5	6082	0.383		1.89	2196	48.7	11	*1
					_							
												1
	5											
								1				
									-			
												_
Constituents S	ampled			9	Container		24		Number		Preservativ	/e
VOCE		11.1.10/	lilois)		40 m	LVO	H		3		Hel	
Chaple !	Or M	1W-19(111015)							9		
	_			-			_					
										0		_
		*********		• •						-		
				-								_
				-								
				-						5-		

Gallons/Foot	1" = 0.04 1.25" = 0.06	1.5" = 0.09 2" = 0.16	2.5" = 0.26 3" = 0.37	3.5" = 0.50 4" = 0.65	6" = 1.47		
Well Inform	ation						
Well Lo	cation: Ve	Ivo Sho	P (Pear)		Well Locked at Arri	val: Y	
Condition	of Well:	ovel	,		Well Locked at Depart	ıre: Y	
Well Com	npletion: FU	ush			Key Number To W	ell: NA	GW Samp Form

Project No.	000	66417	0000		Well ID	MW-	29			Date	100	of
	- 10-0	-	Dykinen	PIL	et Pro	gram		_		Weather	500	_
Measuring Pt. Description	TE	00	Screen Setting (ft-bmp)		-14.0ò	Casina	2			Well Mate		PVC SS
Static Water Level (ft-bmp)	7.	37	Total Depth (ft-bm		1.18	Water Colun Gallons in W	nn/	-			-	
MP Elevation	NA		Pump Intake (ft-b		31	Purge Metho	1 . 1	Flow		Sample		/1
Pump On/Off	To company	11228	Volumes Purged		O Gal	, argo mouro	Centrifugal Submersible			Method	Low	How
Sample Time:	Label Start End	1225	Replicate/ Code No.	1/5	A		Other			Sampled	by A	L
Time	Minutes	Rate	Depth to	Gallons	pH	Cond.	Turbidity	Dissolved	Temp.	Redox	Appea	arance
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odor
	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV		
1145	0	200	8.26		6.75	1.186	10.41	1:12.	20.71	-98.0	grey, cloud	Petro
1150	5	43	8.20		6.75	1.069	9.46	0.83.	20.67	-105.1	11	",
1155	10	- 11	8.32		6.76	1.005	9.06	0.60	20,70	-108.4	11	4
טטען	15	()	8.35		6.75	0.861	6.15	0.38	20.70	-100.8	"	11
1205	20	10	8029		6.75	0.829	5.88	0.39	20.69		worless	13
1210	25	- (1)	8.27		6.75	0.808	5.05	0.34	2006		15	14
1715	30	1.	8.19		6.75	0.778	4.34	0.34	20,66	-101-8		-1
1220	35	- 55	8.16	- 6	6.75	0.766	4,29	0.31	20.65	-104.0	11	"
1925	40		8.14	3.0	6.75	0.764	4.38	0.32	20.67	-101,4		
Constituents S	ampled				Container	1 1400			Number 3		Preservati	ve
	D: 1	nw-29	(111015)		W m	LVOR					HCI	
										1 1 19		
Vell Casing Vo	lumos			4-								
	" = 0.04 .25" = 0.06			2.5" = 0.26 3" = 0.37		5" = 0.50 = 0.65	6" = 1.47					
1	.25 = 0.06	-	0.10	1000	100							

9	ARCADIS
ndwa	ter Sampli

Project No. Project Name	/Location	Cro		ena	Well ID	- Pro	-27			Date Weather		10- R
Measuring Pt. Description	To	ر ر	Screen Setting (ft-bmp)	3	15.00	Casing Diameter (in	., _ 2	_		Well Mat	erial X	_PV _SS
Static Water Level (ft-bmp)	7	.13	Total Depth (ft-b	mp) /5	5.33	Water Colur Gallons in W						
MP Elevation	N	A	Pump Intake (ft-	bmp) ~ 1	2'	Purge Metho	od: Lou	v-flo	W	Sample	,	
Pump On/Off	1130	11220	Volumes Purge	d 2.	5 gal		Centrifugal Submersible			Method	Lou	<u> </u>
Sample Time:	Label Start End	1217	Replicate/ Code No.	N	one		Other			Sampled	by	DK
Time	Minutes	Rate	Depth to	Gallons	pH	Cond.	Turbidity	Dissolved	Temp.	Redox	1 1	aranc
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	arano
1130	> 30 min	200 mL/min	< 0.3	_	+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV		Ė
1136	5	300	4.15		(11	1200		1111	-		Clear	-
1140	10	200	9.42	0.5	6011	1.328	4.56	1.47	19.26	-51.3	cur	-
1145	15		10,35	0,5	6.16	1.328	19.9	1.32	19.20	-52.8	cleve	-
1150	20	200	10.84	_	(0:05	1.320	17.3	1.10	19.23	-46,4	cur	-
1200	25	_	11015	1.5	6:03	1,334	15.1	1.14	19.14	-40.7	clear	-
1203	30	_	11.17	-	19:04	1.321	19,0	1.05	19,09	-38.3	.,	-
1210	35		11,24	2.0	6.01	1.303	9,37	114	19,09	-39.4	New	-
17.10	40	_	11.32	~	5.97	10300	8.89	1.00	19.09	-30,1	cleur	_
1215	45	200	11.43		5,97	1.289	8.42	1.07	19.08	-31.8	clear	_
TCL	VOC	S		-	Container	40	me vox		Number 3		Preservati 	ve
Sampl	(10)	= Mu	v-27(11)	1015)				=		-		
				-				-		-		
/ell Casing Vol	umes = 0.04	1.5"	= 0.09	2.5" = 0.26	3.5"	= 0.50 6	* = 1.47	-	_			

Project No.	002	66417	0000	=	Well ID	IW-		-			11-10	.0
Project Name/	Location	Cows	Dykn	ren 7		Progra	m			Weather	505/	Kei
Measuring Pt.	TOO		Screen Setting (ft-bmp)	7L)71	VA VO	Casing Diameter (in.)	2			Well Mater	rial	PVC
	100		Setting (it-brilp)	-1-	10	Water Colum		-				
Static Water Level (ft-bmp)	7.40		Total Depth (ft-b	mp) 19	.44	Gallons in We						
MP Elevation	NA		Pump Intake (ft-	bmp) 1	8'	Purge Method	: low	How		Sample	i	CI
Pump On/Off	1010/	1059	Volumes Purge	- 1	Gal		Centrifugal Submersible	Buren		Method	Low	110
	1				Jan		Other					,
Sample Time:	Start	1050	Replicate/ Code No.		1/11/01					Sampled b	y A	
	End	W58		MSD-	01(11101	s)						
ime	Minutes	Rate	Depth to	Gallons		Cond.	Turbidity	Dissolved	Temp.	Redox	Appea	rance
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odd
	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	a con ala I	tibe.
1015	0	200	7.54		6.85	0.883	17.6	0.57			grey,clady	jehn
W30	5	11	7.55		6.84	0.890	11.2	0.43	20.81	-100.2	10	
1025	10	11	7.55		6.83	0.891	9.34	2.47	20.7	-103.3		"
1030	15	u	7.55		680	0.890	7.50	0.38	30.84	-102.4		
1035	20	11	7.55	1	6.89	0.890	4.13	0.35	70. M	101.6	colorles	
1040	25	U	7155		6.81	0.891	3064	0.34	20.80		11	"
jo45	30	1/	7.55	#3	6.81	0.891	3.88	0.36	30.84		1-	
1050	35	11	7.56	MA	6.81	0.889	3.62	0.33	20.87	-107.3		-
											-	
					-						1	-
											-	
										-		
				-								
			_	(2)								
				-								
Constituents	Sampled				Container			AL	Number	2	Preservat	ive
VOCS					40 m	L- Ve	a	HL	-5	1	HCI	
ande 1	DITH	403/10										
		- 07	-							. 1		
Sample	10:	IW-0.	3/11/015) .								
	1											
										-		_
Vell Casing V lallons/Foot	olumes 1" = 0.04	1.5	5" = 0.09	2.5" = 0.26	3.	5" = 0.50	6" = 1.47					
	1.25" = 0.06		= 0.16	3" = 0.37		' = 0.65						
Vall lafaras	ion											
Vell Informat	lion											

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	0026		2000	_	Well ID	MW-E				Date	Page	_ of _
Project Name/	Location	Cherry	Dybinan	Piler	t Pro	var	_			Weather	505,	R
Measuring Pt. Description	TE		Screen Setting (ft-bmp)		-14.25	Casing Diameter (in.)				Well Mate		PV SS
Static Water Level (ft-bmp)	7,0	03	Total Depth (ft-bn	np) 1-1	.17	Water Colum Gallons in W						
MP Elevation	21.	47	Pump Intake (ft-b	mp) ~	12'	Purge Metho	d: Low	flore		Sample		a
Pump On/Off	1007		Volumes Purged	3,	5 gal		Centrifugal Submersible			Method	Lew-	flo
Sample Time:	Label Start End	1052	Replicate/ Code No.	Du		(111015)	Other			Sampled	by D	K
Time	Minutes Elapsed	Rate	Depth to Water	Gallons		Cond.	Turbidity	Dissolved	Temp.	Redox	Appea	aranc
-		(mL/min)	(ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	
1007	> 30 min	200 mL/min	7.07		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	1/	
1010	3	250			1. LIQ	1047	120	1 -1	71 17	900	black	-
1015	8	270	NA		6.49	1.011	15.0	0.56	21.12	-90,6	closay	-
1020	13	250	NA	_	6.45	1.011	5. ++	0.45	21.66	-48.8	clear	-
1025	18	-	NA	1.25	0.45	0.004	2 22	0.46	21.77	75,7	cleur	-
1030	23		NA	-	6,46	0.998	3.22	0.49	21.77	-77.4	clear	-
1035	20	_		2	0.48	1		0,50	21,82	-94.2	clar	
1040	23	250	NA	~	6.47	0.988	0	0.48	21.80	-94.1	char	-
1045	38	-	NA	3	6.49	0.987	2.75	0.48	21.79	-89.9	clear	-
1050	43	_	NA		6.48	0.986	2.57	0.47	21.78	-89.8 -89.5	cler	-
onstituents S	ampled				Container				Number		Preservativ	Ve
TCL	VOCS					at vo.	A		3		HC1	ve
San	ple	10= 1	MW-GR DUP-OI	(1110				-				
Slig	41	5 has	i on p	urge	H2C) - pe	tro-li	ki sm	e11,	ninus		
		4.5	= 0.09	2.5" = 0.26	3.5	" = 0.50 6	" = 1.47					
	' = 0.04 25" = 0.06			3" = 0.37	4" =	= 0.65						
allons/Foot 1"	25" = 0.06			8" = 0.37	4" =	= 0.65						
allons/Foot 1"	25" = 0.06 on		= 0.16	ndr.		6 Non	Well	Locked at	Arrival:	NO		

Project No.	00	36641	1,0000		Well ID	MW-	IDD			Date	11 =10	-15
Project Name	/Location	Coowy	Dykine	m. Pi	lot Pr	05 Cm					585,	
Measuring Pt			Screen			Casing	2		7	Well Mai		PVC
Description	TOC		Setting (ft-bmp)	27.88	32.88	Diameter (in.) de	4		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ss
Static Water Level (ft-bmp)	4.92		Total Depth (ft-	bmp) 3á	2000	Water Colum Gallons in W						
MP Elevation	1500	26	Pump Intake (fi		15		od: Low +	lone		Sample		
Pump On/Off		,	Volumes Purge		Gal	r digo Motific	Centrifugal Submersible	1/		Method	Low	flor
Sample Time					0.50		Other					
Campie Time.	Start End	910	Replicate/ Code No.	_N	A	-1				Sampled	by A	L
Time	Minutes	Rate	Depth to	Gallons	100	Cond.	Turbidity	Dissolved	Temp.	Redox	1	
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Appea	
8.10	> 30 min	200 mL/min	< 0.3	1	+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	Color	Odor
825	0	200	5.03		6.32	0.591	2.73	6.93	16.65	120.4	Colorless	none
835	5		3.00		6.32	0.588	1.92	6.68	16.66	132.6		14
840	10		500		6.33	0.588	1.64	6.46	16.63	12302		"
845	15	11	5.02		6.31	0.588	1.53	3.51	16.53	124.4	1.	11
850	25	"	5.02	1	6.31	0.587	1.38	5.19	16.58	194.3	110	"
855	30	11	5.01		6.30	0.586	1000	2,01	16.58	123.3		~~
900	35	11	5.01		6.30	0.585	1.19	1.87	16.59	122.5	C	10
905	40	Çi.	5.01	-5	6.31	0.583	1.15	1.22-	16.57	122.3	((
onstituents S			11/2		Container 40 m l	Voa			Number		Preservativ	re
Sample	ID :	mw-ID	D (Meis	-				-				
				- 5				÷		-		
				-				-		-		
				_						-		
ell Casing Vo	umes = 0.04	1.5"	= 0.09	2.5" = 0.26	3.5**	= 0.50 6"	= 1.47					
	25" = 0.06	2" =	0.16	3" = 0.37	4" =	0.65						

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Groundwa		mpling Fo									Page /	of
Project No.	002	6641	7.0000	_	Well ID	MW-	1	_		Date	11-10	
Project Name	/Location	Conun I	ykum Pil	ot Pro	gram					Weather	505, R	
Measuring Pt. Description	TOC	,	Screen Setting (ft-bmp)	1.15	5.78	Casing Diameter (in.	.) 2			Well Mat		PVC SS
Static Water Level (ft-bmp)	< 0.5	5'	Total Depth (ft-bn	np) 5	.85	Water Colur Gallons in W						
MP Elevation	14,10		Pump Intake (ft-b	mp)	-4'	Purge Metho	od: Lo a	- Plo	w	Sample	Low.	Phys
Pump On/Off		0913	Volumes Purged	1 4	5.1 gc	1	Submersible	pe		Method	Low	97010
Sample Time:	Label Start End	0910	Replicate/ Code No.	_11	on	_	Other			Sampled	by D	K
Time	Minutes Elapsed	Rate	Depth to Water	Gallons	1	Cond.	Turbidity	Dissolved	Temp.	Redox	Appe	arance
		(mL/min)	(ft)	1 diged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odor
0815	> 30 min	200 mL/min	<0.3		+/- 0.1 unit	0.740	+/- 10% 72.(a	+/- 10 %	+/- 3%	+/- 10 mV	1	
0820	a	300	40.5		6.47	0.734	57.3	0,02	16.66	226.0		
0825	14	300	60,5		(9,50	0.732	51.5	0.65	71-15	-29.1	cludy	-
0830	19		20,5		. 44	0770	43.9	0.60	16.70	-30.2	clouds	_
0835	24	-	40.5		6.46	0.729	771	0.51	16-1A	-36,7	Cloudy	
0840	29	300	40.5		6.47	0.731	28.5	0.33	16.63	79.66	cloudy	_
0845	34	300	20.5		6.40	0.733	26.9	0-34	16.64	-44.5	hazey	-
1850	39	_	20.5		6.45	0.732	16.2	0.33	1/2.67	-45.9	hazu	-
0855	44	-	40,5		6.40	0.729	11.0	0.35	16.66	-42.8	north	
0900	49	-	10.5		6.43	0.727	13.9	0,34	14.63	-47.6	hazn	-
0905	54	~	<0.5		6.44	6.727	12.8	0.32	16.66	-49,3	hurch	_
				-								
VOCS		CL			Container 40 m	L VOL	7	_	Number 3	-	Preservativ HC/	e
Samp	le 12	0= 1	7W-1(1)	1015)			-		-		
/				-				_		-		
				-				Ξ		-		
Vell Casing Vol	umes = 0.04	1.5"	= 0.09 2.	5" = 0.26	3.5"	-0.50	" - 4 47	_		-		
	25" = 0.06			= 0.37		= 0.50 6° 0.65	" = 1.47					
Vell Information	-											
Well Location		W con	w of f	orp	esty		Well L	ocked at A	rrival:	1/2	5	
Condition of \			OK	/	/			ed at Depa		VE		
Well Comple	tion:	Flu	sh mor	ed			Key I	Number To	Well:	MA	GW Samp Form	

Project No.		mpling Fo	.0000		Well ID	MP-	20			Date	Page	of _
Project Name	e/Location	Co	wa Dyka	ner	P. 1-		an	_		Weather	100	Clos
Measuring Popularies Properties P		OL	Screen Setting (ft-bmp)	4-		Casing Diameter (in	U			Well Mai		_PVC
Static Water		- N				Water Colur		_			_	_ss
Level (ft-bmp)	_	-70	Total Depth (ft-bi	-	4.11	Gallons in W	Vell					
MP Elevation		76	Pump Intake (ft-	-bmp) ~	12'	Purge Metho	od: Ce	- 110 V	w	Sample	17	
Pump On/Off	1430	1515	Volumes Purgeo	d_5	gal		Submersible			Method	Low	- 1/4
Sample Time	Start End	1512 1512 1515	Replicate/ Code No.	noi	re	-	Other			Sampled	by	DIE
Time	Minutes	Rate	Depth to	Gallons	pH	Cond.	Turbidity	Dissolved	Temp.	Redox	T	
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen	(°C)	(mV)	1.01	arance
11121	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	(mg/L) +/- 10 %	+/- 3%	+/- 10 mV	Color	Odo
1430	0	-	4.53	-	-		-	-		-	brown	
1435	5	300	4.66	-	7.02	0.380	701	1.94	16.71	43.3	elady	500
1445	15	250	4.68		6.97	0.377	46.0	1.72	1670	24.7	Cloudy	-
1450	20		4.60	12-	6.94	0.375	11.89	1.39	16.69	28.1	char	
1455	25		4.68	1.25	6.94	0.375	10.55	1.31	16:70	32.0	clear	_
1500	30	250	4.69	_	6.93	0.374	9.53	1.21	16-68	40.2	clear	_
1505	35	_	4.69	2.0	6.93	0.373	9.83	1.11	16.67	43.9	Char	
1510	40	_	4.49	-	6.93	0.371	10.74	1.08	16-63	51.8	(lea)	_
					0-15		701.5	1.00	16.63	54.0	Clew	
							7 4					
						-						
Constituents S		1322		(Container				Number		Preservativ	re .
		unple	10 = MP	-201	11115)	40 ml	VUA	-	3		HCI	
										-		
				-						1		
				-				-	_	-		
				-				_		1 1		
				-				-	_	_		
	lumes " = 0.04 .25" = 0.06	1.5" = 2" = 0		.5" = 0.26			'= 1.47	_				
ell Information		2 - 0).16	" = 0.37	4" =	0.65						
Well Locati		FUIN.	Li Tun	1	0	1 1	20.535					
Condition of	_	101.00	OK IM	gster	Para	(4		ocked at A		N		
Well Comple	_	5	fich p					ed at Depa		N		
AACH COULDIO	uon.		tickup				KovA	Number To	14/-11.	NA	GW Samp Form	

Project No. Project Nam Measuring F	ot.		Dy K	gun	Pilot	Prog.	youn	-	_	Date Weather •	11-11- 50s,	PVC
Description Static Wate evel (ft-bmp	2.3	0.	Screen Setting (ft-bmp)	mp) 13,	41	Diameter (in.) Water Colum Gallons in We	n/ ell					SS
MP Elevatio Pump On/O Sample Tim	1648	1650	Pump Intake (ft. Volumes Purge Replicate/ Code No.		M	Purge Method	Centrifugal Submersible Other	<u>flow</u>		Sample Method Sampled b	Lowell , Al	iu
ime	Minutes - Elapsed	Rate (mL/min) 200 mL/min	Depth to Water (ft) < 0.3	Gallons Purged	pH +/- 0.1 unit	Cond. (mS/cm) +/- 3%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/L) +/- 10 %	Temp. (°C) +/- 3%	Redox (mV) +/- 10 mV	Appear	Odor
SAV	WPLED	Fo	RI	Þ F	OF	PO.	SES	OK	114			
		8	165	0								
onstituents JOC	Sampled	Mw-2	4(11113))	Container 40 m	L VO	Ł		Number 3	F	Preservative	9
Hea	uct	the T	orghon DE	t + 6.4	he e	ntro	L W	ater	Co	lumi	L.	
ell Casing	Volumes 1" = 0.04	1.5	" = 0.09	2.5" = 0.26	3.5	" = 0.50 6	= 1.47					=
1011071 001	1.25" = 0.06		= 0.16	3" = 0.37		= 0.65	= 1.47			1		ل

_	Crow		nan	Pilot	GM-	g rain	-		Date Weather		of 1 1-15 Rain
70	<u></u>	Screen Setting (ft-bmp)	4.45	-14.45	Casing Diameter (in.	2	5		Well Mat	erial 1	_PVC SS
	10	Pump Intake (ft-I	mp) 17	43		'ell	+10	<u> </u>	Sample Method	Low:	Hou
Label Start End	1635	Replicate/ Code No.	NF	\					Sampled	by A	_
Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Gallons Purged	рН	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen	Temp.	Redox (mV)	Appea	100
> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	Color	Odor
	200		1 = 10	6.13	0.581	3.41	1.49	17.27		colorless	none
								17.27	-	- 11	~ 5
				24 - 2				17.27	5.2	· '	**
							-		1-1	**	"
						1 11		17.22	-4.4	11	- (1
					0.577	1.46		17.23	-5.8	35	11
0				6.01	0.576		0.78	17.22	-1100	110	11
				6.07	40.4		0.62	17.21			11
					0.010		0.47	17.24			
											"
			-	0				S-27 9 7		11	11
60				_			-		-32.6		11
mpled	1/-m-	9/111115			VO:	a.		Number 3		Preservativ	/e
	19. 1430 .abel Start End Minutes Elapsed >30 min 0 .5 .10 .15 .20 .35 .40 .45 .50 .55 .60	19. 2 1430 1538 1535	1430 1538 Volumes Purged 1430 1538 Volumes Purged 1535 Replicate 1535 Code No. 1536 Code No. 1538 Replicate 1538 Code No. 1539 Code No.	19.12 Pump Intake (th-bmp) 17 17 17 17 17 17 17 1	19.12 Pump Intake (ft-bmp) 7 1430 1538 Volumes Purged	19.12 Pump Intake (ft-bmp) 17 Purge Method 1430 1538 Volumes Purged	19.12 Pump Intake (N-bmp) 7 Purge Method: Centrifugal Submersible Other	19.13	19.12	Pump Intake (n-bmp) Pump Intake (n-bmp)	Pump Intake (h-bmp) Pump Intake (h-bmp)

Orounawa	ater Sar	npling Fo	rm								Page 1	of
Project No.	002	26641	7.0000	_	Well ID	MW-2	220	_		Date	11.11	-15
Project Name	/Location	_Co	un Dyla	inor		Pilot	Progra	n		Weather	60 %	Pain
Measuring Pt. Description	10	, (Screen Setting (ft-bmp)	14.7	5-24.7	Casing Diameter (in.	0			Well Mat	erial X	-PVC SS
Static Water Level (ft-bmp)	3	.52	Total Depth (ft-bn	np) 24	1.41	Water Colur Gallons in W						
MP Elevation	13.	66	Pump Intake (ft-b	mp)	221	Purge Metho	od: Lo	w- Alu	V	Sample	1	0
Pump On/Off	10401	113.5	Volumes Purged	8	2921		Centrifugal Submersible	V		Method	Low-	4100
Sample Time:	Label Start End	1302	Replicate/ Code No.		none	_	Other			Sampled	by)K
Time	Minutes Elapsed	Rate	Depth to Water	Gallons Purged	1000	Cond.	Turbidity	Dissolved Oxygen	Temp.	Redox	Appea	arance
	L. R. S. L. S. S. S.	(mL/min)	(ft)	- digod		(mS/cm)	(NTU)	(mg/L)	(°C)	(mV)	Color	Odo
1040	> 30 min	200 mL/min	3.81	-	+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	Drown	-
1045	5	250	3.70		_	_		8.81	15.99		Cloudy	_
1050	10	_	3.76	-	8.18	0.358	35.6	8.41	16.13	156.5	cloudy	
1055	15	_	3,77	-	8.15	0.362	32.4	7-83	16.12	157.1	aloudy	
1100	20		3,77	_	7.37	0.371	32.1	6.50	16.21	146.5	cloudy	_
1105	25	_	3,79	2.0	7.44	0.403	47.1	5.29	16.26	-29.5	cloudy	_
1110	30	-	3.79	_	6.98	0.492	7518	2-62	16.22	-22.0	Turbid	_
1115	35	250	3.78	-	6.67	0.569	A	1.35	16-16	2.3	Tubid	_
1120	40	200	3,70	-	19-56	0.588	#	0.97	16.15	6.0	Tubid	_
1130	50	-	3.69	-	6.53	0.590	A	1.39	16.06	12.2	Tubid	
1135	55	_	3.69	-	6.50	0.600	108,4	1.03	110.02	13.4	Tuisid	
140	40	-	3.69	4.0	6.46	0.616	65.4	0.61	16.07	13.2	Turbid	-
1150	70	-	3.68	J	6-45	0,627	56.5	6.41	16.00	12.3	Turbid	
1200	80	_	3.69)	6.43	0.632	65.1	0.39	16.08	11.3	Turbid	_
1210	90	_	3-66	-	6.40	0.633	37.9	0.38	16.03	11,9	Turbid	_
1220	160	_	3.07	6.0	6.40	0.035	29.2	0.35	15.98	11.9	Turbid	_
1230	110	200	3.67	-	6.39	0.637	23.1	0.36	16.03	13.2	Tursie	
onstituents S					Container				Number		Preservativ	/e
TCL	- 1	OCS			40	me Ve	04		3		HCI	
	Samp	Dh 10)= MW	-ZZD	(11his							
	0					No.				· · · · · · · · ·		
						1						
Vault	frood	cd - 1	sclow gra	ide						3.		
	MD 1	east 1	rain draw	ray	cont.	nuis to	fill ve	ult d	ring	purgi	19	
	10	50 - 6	rault bail	ic to	elin	unh.	filling of	will		10-	1	
										_	0.01	
#H20	Decar	u ven	1 furbid	black	(W/	sedine	+				10.00	
Vell Casing Vo	olumes 1" = 0.04 1.25" = 0.06			2.5" = 0.26 3" = 0.37		" = 0.50 = 0.65	6" = 1.47			_		
	ion											
		Button	of acu	S. T	Perul		Well	Locked at	Arrival:	No		_
Vell Informati	tion:	Button	of acu	ss To	Prod			Locked at		no		

6		
100	ARCADIS	

Groundwa Project No.			rm 2.0000		Well ID	MW.	22D Przna			Date	Page 2	
			in D			P.W.	Program	-			60	
Measuring Pt. Description		C	Screen Setting (ft-bmp)		- 24.75	Casing Diameter (in.	2			Well Mat	erial X	_PVC SS
Static Water Level (ft-bmp)	3.	.52	Total Depth (ft-b	mp) 2	1.41	Water Colun Gallons in W	nn/					
MP Elevation	13	-66	Pump Intake (ft-	bmp) PV	with	Purge Metho	od:	low-f	100	Sample	L-L	0
omp On/Off	/	4 - 4	Volumes Purge	d8	1941	Ch221	Centrifugal Submersible Other			Method	C-L	41=
	Label Start End	1302	Replicate/ Code No.		ore	-	Other			Sampled	by	DK
me	Minutes Elapsed	Rate (mL/min)	Depth to Water	Gallons Purged	1	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen	Temp.	Redox (mV)		arance
	> 30 min	200 mL/min	(ft) < 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	(mg/L) +/- 10 %	+/- 3%	+/- 10 mV	Color	Odor
240	120	200	3,67	-	6.38	0.637	28.3	0.37	16.10	14.7	clear	-
1250	130	_	3.68		6-33	0.639	27.8	0.35	16,12	14.8	Clear	_
255	135		3.68	7.5	6.37	0.640	18.9	0.29	16.16	15.4	eleur	_
300	140	_	3.48	1.0	6.37	0.642	24.7	0.27	16.15	14.8	clear	1
			7.0				*	0.27	16.10	14.0	Cler	
										(
-												
					-							
					14				-			
stituents Sa	ampled				Container				Number		Dana a museti	
					Container				Number		Preservativ	/e
								-		-		
* W	ell,	pla:	ly inf	loresc	ed 5.	1 Surt	Eace H-	on	no f			
	fo	n par	leing los	L _	/						AF AF	
-				-				_		_		
				-				1 1 1 3 4		1		
				-				_		-		
				-				_		_		
				-			-	_		, -		
II Casing Vol	umes = 0.04	1.5"	= 0.09	2.5" = 0.26	3.5	" = 0.50 6	" = 1.47					
1,2	25" = 0.06			3" = 0.37		= 0.65						
I Informatio		17	,									
Well Location	_	Bulto	mof	ucu	3) 7	seed	Well	Locked at A	Arrival:	10		
condition of V	Vell:		OK				Well Lock	ked at Depa	orturo:	no		
Vell Complet	_		flush-	be		1		Number To		MA		

Groundwa Project No.		66413	0000	_	Well ID	MW-23	I(R)D			Date		of [
Project Name/I	Location	Crow	n Pyh	man	Pilot	Pro41	4m			Weather	505,	Rain
Measuring Pt. Description	100		Screen Setting (ft-bmp)			Casing Diameter (in.		-		Well Mate	erial 🗾	PVC
Static Water Level (ft-bmp)	4.6	8	Total Depth (ft-	-		Water Colur Gallons in W						
MP Elevation	15.0	2	Pump Intake (fi			Purge Metho	1	Home		Sample	34770.50	11
Pump On/Off		1124			4	r digo Mound	Centrifugal			Method	Lew	tow
	/		Volumes Purge	000-	gar		Submersible Other					
	Label Start End	1120 1120 1123	Replicate/ Code No.	NA			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Sampled	by A	L
Time	Minutes	Rate	Depth to	Gallons	pH	Cond.	Turbidity	Dissolved	Temp.	Redox		Mari
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/l)	(°C)	(mV)	1	arance
	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	(mg/L) +/- 10 %	+/- 3%	+/- 10 mV	Color	Odor
1040	0	200	4.71		6.36	0.481	20.2	1.06	16.27	-5001	cloudy	Sligh
1045	5	4.1	4.72		6.39	0.537	4.22	0.45	16.39	-57.3	clear	slight
1050	10	11	4.73		6.38	0.553	3.52	0031	16.35	-53.5	1.	
1055	15	11	4.73		6.36	0.559	4.18	0.26	16.37	-47.4	45	"
1100	20	11	4.73	1	6.35	0.567	3.41	0.23	16.42	-44-8	14	
1105	25	11	4.73		6.35	0.571	3.36	0.21	16.46	- 43.9	11	
1110	30	15	4.73		6033	0.579	2.06	0.22	16.43	-41.9		
1115	35	·	4.73		6.33	0.580	2.18	0.30	16.39	-43.0	14	
	40	31	4.73	2.5	6.34	0.582	2.22	0.20	16.41	-43.7	15	"
	1700				77.1					1501		
										-		
				1 2	_							
	-											
	-											
Constituents Sa	ampled	M14/- 2	7/012		Container 40 pm	LVOF	4		Number 3		Preservati HC	ve
sample	10:1	1(M -)	J(P)D	ַנונונו <u>.</u>	>)					-		
								() () () () () () () () () ()		•		
				-) (j-		-		
										· · ·		
	umes = 0.04 25" = 0.06		' = 0.09 = 0.16	2.5" = 0.26 3" = 0.37		" = 0.50 6 = 0.65	5* = 1.47					

Measuring Pt. Description Static Water	70	<u> </u>	Screen Setting (ft-bmp)	17-6	27	Casing Diameter (in. Water Colum				Weather Well Mat		PVC SS
Level (ft-bmp) MP Elevation Pump On/Off	3,7 14.0 915/	1955	Total Depth (ft-br Pump Intake (ft-l Volumes Purged	omp) 24		Gallons in W Purge Metho	/ell	thou		Sample Method	Low	, flo
Sample Time:	Label Start End	950 959	Replicate/ Code No.	NA			Other			Sampled	by A	ト
Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Gallons Purged	рН	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp.	Redox (mV)	Color	arance Odor
920	> 30 min	200 mL/min	<0.3 3079		+/- 0.1 unit	0.560	12 4	+/- 10 %	+/- 3%	+/- 10 mV	7	
925	5	~	3.77		6.53	0.560	7.75	0.47	16.42	-13.2	cloudy	none
930	w	15	3,77		6.50	0.560	7.13	0.34	16.20	-16.7	Stribtly	
935	15		3.77		6.50	0.560	5.73	0.3	16.56	-18.5	Veilad	none
940	20	24	3.77		6.50	0.560	6.56	0.29	16.54	-18.9	1	
945	25	11	3,77		6.49	0.559	6.74	0.28	16.53	-18.5	14	11
950	30	- 11	3.77	2	6.49	0.558	6071	0.27	16:59	-19,2	10	11
						<u> </u>						
vo C		AA\a/- [1	June)		Container 40 m	L VOF	1		Number 3		Preservativ	re .
ar whic	10.	Valed II	stimits)	_				-				
				_						-		
				-				-		-		
				_				-		-		

*

Project No.	0026	6417.	0000		Well ID	MW-	7			Date	Page 1	
			n Dylzu	ein		t Prog		_			tos,	7.75
Measuring Pt. Description	To	c	Screen Setting (ft-bmp)	2.40)-12.40	Casina	_			Well Mat		PVC SS
Static Water Level (ft-bmp)	400	79	Total Depth (ft-bi	mp) 11.3	37	Water Colun Gallons in W						
MP Elevation	15.0	32	Pump Intake (ft-			Purge Metho	d: Low	Hon)	Sample	1	. 11
Pump On/Off	805	854	Volumes Purgeo		Sial		Centrifugal Submersible			Method	Low	1-71
Sample Time:	Label Start End	850 850 853	Replicate/ Code No.	NT	k		Other			Sampled	by A	L
Γime	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Gallons Purged	рН	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp.	Redox (mV)	Appea	arance Odo
210	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV		
810 815	0	200	5000		6.42	0.495	4.28	2.70	16.17	27.1	whitess	no
830	5	"	5.01		6.52	0.495	2.30	2.80	16.46	3.2	11	"
875	10	11	5.01		6.54	0.498	1:65	1069	16.50	-3.8	14	"
930	15		5.00	-	6.53	0.498	1,42	1=61	16.53	-5.2	(c	"
835	25	11	5.00		6.56	0.500	1.22	1.45	16.59	-6.6	11	**
840	30		5,00		6.54	0.501	1.04	1.48	16.64	-7.4	4.4	11
845		10	5.00		6.54	0.501	1.10	1.33	16.62	-7.5	15	11
850	35	Tr.	5.00	20	6.53	0.502	1.08	1.25	16.65	-7.9	15	11
000	70		3,00	-2.5	6.52	0.562	1.04	1.26	16.67	-9.6	1-	**
		1 - 1					- 50					
											L	
onstituents S	ampled			(Container				Number		Preservativ	/e
V 0 0 3	D: M	W-7(11)	1115)	-	40 ml	- VOA			3		HU	
) (4) (4				-				
				÷				11-				

Well Information

Well Location:
Front of Volvo Shap
Well Locked at Arrival:
Yes

Condition of Well:
Grown
Well Locked at Departure:
Yes

Well Completion:
Flush
Key Number To Well:
Nix.
GW Samp Form:

Mozorts
Mozorts

	ARCA	ADIS mpling Fo	rm								= 7	
Project No.			-0000		Well ID	MW-	235			Date	Page /	of /
Project Name			· Dykma		Pilot	_	nn			Weather		Zuin
Measuring Pt Description		TOC.	Screen Setting (ft-bmp)		12'	Casing Diameter (in.	2			Well Mate		_PVC SS
Static Water Level (ft-bmp)	2.	06	Total Depth (ft-bn	. 1	1.84	Water Colur					-	
MP Elevation		5.10	Pump Intake (ft-br		11'	Gallons in W		flow		0		
Pump On/Off	-	, .	Volumes Purged	-	.25 9	ruige Metric	Centrifugal Submersible	7770	V	Sample Method	lun	-flor
Sample Time:	/	0902	Replicate/		J	41	Other					
Cample Time.	Start End	0902	Code No.		m	-				Sampled	by	DIC
Time	Minutes	Rate	Depth to	Gallons	1000	Cond.	Turbidity	Dissolved	Temp.	Redox	Appe	arance
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odor
0805	> 30 min	200 mL/min	2.88		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	1.	
0810	5	200	3.03	_	6.50	0.631	14.2	E 99	1001	220.7	cloudy	-
0815	10	_	4.481	_	6.49	0.632	9.41	5.88	15.77	228.5	particul	1
0820	15	150	4.92	-	6.49	0.630	9.05	5.53	15.66	234.6	particul	ate -
0825	20	_	4.86	_	6.50	0.628		5-31	15.68	234.9	11.	
0830	25		4.93	1.5	6.49	0.627	6.94	4.70	15.85	243.9	cher	
0835	30	_	4.94	-	6.49	0.629	6.20	4.41		245.5	clear	
0840	35	_	5.02	-	6.49	0.631	6.73	4.07	14.03	243.7	cleur	
0845	40	-	5.02	_	6.50	0.636	3.39	3.57	16.11	247.3	cur	
0855	50		5.03	_	6.51	0.640	3.15	3,19	16.20	251-0	cleur	
0900	55	_	5.05	-	6.50	0.642	3.17	3.17	16.27	242.4	clear	
												-
Constituents S	ampled VOC				Container 40m				Number 3		Preservativ	/e
		Sample	10 = M	W-2	35(111)	15)						
# 5/0W	flow	rate		-				-		-		
				-				-	_			
				-						_		
	lumes ' = 0.04 25" = 0.06			.5" = 0.26 " = 0.37		" = 0.50 6 = 0.65	r" = 1.47					
Well Informati	on											
Well Locat	on:	Par	in front	6 V	8 ouls	hop	Well L	ocked at A	Arrival:	N		
Condition of	-	OV				1		ed at Dep		N		
Well Comple	tion:	41	Bh Moun	+			Key I	Number To	Well:	NA	GW Samp Form	

Project No.	00 2	26641	7.0000 - Dyka	_	Well ID	MW.	-23D	_		Date	Page	.15
Measuring Pt. Description		Crow	Screen Setting (ft-bmp)	9.38	-19.38	Casing Diameter (in.				Weather Well Mat	-	PVC
Static Water Level (ft-bmp)		1.62	Total Depth (ft-b	-	9.20	Water Colur	mn/	9			_	_SS
MP Elevation		.01	Pump Intake (ft-	,	18'	Gallons in W Purge Metho		w- fla	~	Sample		
Pump On/Off	0920	1000	Volumes Purge		. 25 9		Centrifugal Submersible			Method	Lun	-fi
Sample Time:	Label Start End	0958 0938 1000	Replicate/ Code No.		one	-	Other			Sampled	by <u></u>	K
Time	Minutes Elapsed	Rate	Depth to Water	Gallons	100	Cond.	Turbidity	Dissolved Oxygen	Temp.	Redox	Appea	arance
	> 30 min	(mL/min) 200 mL/min	(ft) < 0.3	- argou	+/- 0.1 unit	(mS/cm) +/- 3%	(NTU) +/- 10%	(mg/L)	(°C)	(mV)	Color	Odor
0920	0	~	4,49	-		- 17-376	77-1076	+/- 10 %	+/- 3%	+/- 10 mV	hazey	
0925	5	250	4.52	-	6.50	0.437	11.8	3.40	16.38	220.4	cleur	
0930	10		4.52	-	6.50	0,500	6,60	107	16.90	218.7	even	
0935	15	-	4.52	-	6.45	0.519	4.71	0.87	17.04	217.2	clear	
0940	20	~	4.52	-	0.43	0.531	1.66	0.73	17.10	214.4	clear	
0945	25	250	4.53	1.5	6.42	0.539	0.74	0.56	17.15	211.7	clear	
0950	30		4.53	-	6.42	0.543	0.82	0.53	17.17	210-1	clear	
0457	35	į	4.53	2.0	6.42	0.546	0.89	0.48	17.23	206.3	clear	
												_
Constituents S TCL	ampled		10 = MW.		Container 40	me ve	14		Number 3		Preservativ	re
		compa	(1) - 1-100-	030	11/1/17			-	_			_
										-		

Well Casing Sallons/Foot	1" = 0.04 1.25" = 0.06	1.5" = 0.09 2" = 0.16	2.5" = 0.26 3" = 0.37	3.5" = 0.50 4" = 0.65	6" = 1.47		
Vell Inform							
Well Lo	cation:	uster in for	1 - + Volu	10 ship	Well Locked at Arrival:	H	
Condition	of Well:	oh		-	Well Locked at Departure:	41	
Well Con	npletion:	flush	moset		Key Number To Well:	NA	GW Samp Form

	Too	Crown	Screen Setting (ft-bmp)		Well ID Pilot 15.60	Prog/ Casing Diameter (in.	2			Date Weather Well Mate	Page	15
Static Water Level (ft-bmp)	3.	98	Total Depth (ft-b	mp) /5	.69	Water Colun Gallons in W						
MP Elevation	15.	55	Pump Intake (ft-		2	Purge Metho		flow	,	Sample		
Pump On/Off	1535	-/1620	Volumes Purge	2.	5 941		Centrifugal Submersible			Method	Lou	1
Sample Time:	Label Start End	1617	Replicate/ Code No.	V	A	-	Other			Sampled	by <u></u>	0/
Time	Minutes	Rate	Depth to	Gallons	рН	Cond.	Turbidity	Dissolved	Temp.	Redox		
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen	(°C)	(mV)	Appe	ara
(DW)	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	(mg/L) +/- 10 %	+/- 3%	+/- 10 mV	Color	1
5.40	0	_	3.98		5-1	-	_	-	-	-	brown	
1540	5	250	5.12	-	6.75	0.747	38-8	4.07	15.27	-37.5	Cloudy	1
1545	10		6.06	-	6.70	0.759	31.4	0.86	15.22	-42.1	elen *	
1550	15	200	6.25	-	6.70	0.759	28.7	0-72	15.22	-43.0	clas	
1555	20		6.41	-		-	-	_	-	_	-	
1600	25		6.45	1.25	6.70	0.760	18.9	0.47	15.13	-47.4	Char	
1605	30	200	6653	-	6.70	0.741	15.8	0.42	15.14	-49.1	clear	
1010	35		6.58	2.0	6.70	0.762	16.6	0.39	15.15	-51-1	cher	
1415	40		Ce.62	_	6.70	0.743	15.7	0.36	15.17	-53.4	char	
onstituents S	ampled				Container	LVOA			Number	F	reservativ	/e

ARCADIS
Groundwater Sampling Form

Project Name		101.417	0600			111.	1-0					of_
		CD	b (1)	71	Well ID	101W -	ITR	-		Date	11-11-	
										Weather	60 0	ver
Measuring Pt Description	to to		Screen Setting (ft-bmp)	7-22	-12.22	Casing Diameter (in.	_ 2	_		Well Mat	erial 🔀	_PVC _SS
Static Water Level (ft-bmp)	+	.63	Total Depth (ft-b	mp) /	2.15	Water Colur Gallons in W	/all		10.87	4/		
MP Elevation			Pump Intake (ft-	bmp) ~ /	11'	Purge Metho	od: Low-	flow				0
Pump On/Off	2100		Pump Intake (ft- Volumes Purge	2.	75 ga	(Centrifugal Submersible Other			Method	Low.	fl
Sample Time	Start End	2248	Replicate/ Code No.	Nov	u_	_	ound.			Sampled	by	DK
Time	Minutes Elapsed	Rate (mL/min)	Depth to Water	Gallons Purged		Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen	Temp.	Redox (mV)	Appea	_
	> 30 min	200 mL/min	(ft) < 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	(mg/L) +/- 10 %	+/- 3%	+/- 10 mV	Color	00
2100	0		6.90	_	_	-	-	-	-	_	Clear	-
2105	5	200	7.93	-	6.43	0.543		0.67	22.34	-50.1	char	-
2110	10	-	8.52	-	6.44	0.537	5.90	0.62	22.55	-58.8	clear	_
2115	15	150	8.71	-	6.44	0.534	5.14	0.43	22.81	-59.0	clear	_
2125	25	75	9.00	-	6.43	0.541	4.14	0.60	22.76	-62.0	clear	-
2135	35	-	9.89	~	6.46	0.575	4.08	0.65	22,98	71.7	Mear	-
2145	45		9.79	1,25	6.46	0.584	3.66	0-69	22.58	.70.2	cuar	-
2155	55	75	9.68	-	6.47	0.589	4.54	1.21	22.49	-67.9	Clier	-
2205	65		9.69	-	6.47	0.594	5.50	1-35	27.53	-45.4	clear	-
2215	75	_	9-71	_	6.47	0.599	5.59	1-23	22.00	-64.3	clear	-
2225	85	-	9.75	2.0	6.46	0.601	4.34	1.21	22.46	-63.4	eliar	_
2235	95	-	9.76	-	6.44	0.598	4.60	1.29	22-36	-43.9	char	-
2245	105	-	9.79		6.45	0.403	4.38	1.38	22.40	-63.5	cuir	
onstituents:	Sampled Voc				Container	- 1 11			Number		Preservativ	
166	Sary) = MN-	15R (ml Vi	UA		3		HC.	
	/											
Black	fluc	/sedin	. /									
71000				-	,		1 00					
Fr	rech	arge -	had to	cyc	a po	mp o	njott					
Pour												_
ell Casing V	olumes 1" = 0.04 1.25" = 0.06			2.5" = 0.26 3" = 0.37		" = 0.50 = 0.65	6" = 1.47					
ell Casing V	1" = 0.04 1.25" = 0.06						6" = 1.47					
ell Casing Vollons/Foot	1" = 0.04 1.25" = 0.06							ا ممادما ء	Appined			
ell Casing V	1" = 0.04 1.25" = 0.06 tion						Well	Locked at				

70L 5.80 19.95 50/2000	Sorner Di	mp) //	Well ID (12.15) (12.15)	Casing Diameter (in.) Water Colum Gallons in W Purge Metho	Pryrum D L Onn/ dell					
TUL 5.80 19.95 50/2000	Screen Setting (ft-bmp) Total Depth (ft-br Pump Intake (ft-t	7_13_ mp) //	12.12	Casing Diameter (in.) Water Colun Gallons in W	nn/					PVC
5.00 19.95 50 /2000	Total Depth (ft-br	omp)	1	Water Colun Gallons in W	nn/ /ell				-	_00
50 /2000	Pump Intake (ft-t	omp)	10'							
	Volumes Purgeo	. //			od: Cou	v - 510	w	Sample	,	-
-		7	5 941	/	Centrifugal Submersible			Method	Low	- +10
1957 2000	Replicate/ Code No.	noi	u	-	Other			Sample Method Cow Sampled by Redox Appe (mV) Color +/-10 mV - cloudy 70.6 clear 95.6 clear 41.2 clear 41.2 clear 41.2 clear 31.9 clear 34.4 clear 32.5 clear 32.5 clear 33.6 clear 33.6 clear 33.6 clear	DIC	
utes Rate	Depth to	Gallons	pH	Cond.	Turbidity	Dissolved	Temp.	Redox		
psed (mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen	(°C)	0.00		
	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	Color	Odor
) -		-	,-	_	_		-	-	cloudy	-
	NA	-		0.607		1.19	18.51			-
5 -		-				1.04	18.60			
5 -		1.0		- 1					Char	
0 -		-						-		_
									cher	-
		2.0		0.575					clear	-
				0.574	1		18.75		the	-
			1				18.77	/ /		-
					- 12					
5 -		45								
>			,							
	NA	_	6.42	0.573	0.27	0.20	18.59			
led VOC 5			Container 40	ML U	714		Number			e
	Lites Rate (mL/min) min 200 mL/min 200 mL/mi	Alexard	Ates Rate Depth to Water (ft) Water (Ates Rate Depth to Water Purged Purged Mater Ma	Ates seed (mL/min) Water (ft) Water (ft) Purged (mS/cm) min 200 mL/min < 0.3 +/-0.1 unit +/-3%	Sed Rate Depth to Water (ft) (mS/cm) (mS/cm) (nTU)	See Rate Depth to Water Purged (mL/min) Water (ft) (ft) (mS/cm) (NTU) (MTU) (mg/L)	Container Cont	Seed Container Cond. Turbidity Dissolved Temp. Redox Cond. (mS/cm) (NTU) (NTU) (mg/L) (red) (mV) (mS/cm) (NTU) (ng/L) (red) (red	Seed Color Color

Project No.	002	06417.	. MONES		Well ID	MW-14	12			Data	11-11	
Project Name		1		- +	1		ro	-		Date	11-11	1
		0000	- Dykuma	2 41	196 7	10g rum					7 7 7 7 6	Clor
Measuring Pt Description	15		Screen Setting (ft-bmp)	7.26	-12.26	Casing Diameter (in.	, 2	200		Well Mate	erial	PVC
Static Water Level (ft-bmp)	Al 1	5.72	Total Depth (ft-br	mp) 12	021	Water Colur Gallons in W						
MP Elevation	21.6	6	Pump Intake (ft-	omp) 10)	Purge Metho	od: Lew	How		Sample	1	11
Pump On/Off	2100/	2214	Volumes Purgeo	d			Centrifugal Submersible			Method	Low	Tla
Sample Time	Start End	2210	Replicate/ Code No.	NH		-	Other	-		Sampled I	Sample Method Law Redox Appear (mV) Color +/- 10 mV -86-8 Color(s) -74-3 -74-	L
Time	Minutes	Rate	Depth to	Gallons	рН	Cond.	Turbidity	Dissolved	Temp.	Redox	Annes	rance
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)		Odor
	> 30 min	200 mL/min	< 0.3	1200	+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	50101	Cuul
205	0	200	7.35		6.57	0.307	3.08	0097	14.08	-86.8	colorless	Yes
2110	5	160	7.98		6.49	0.310	3.44	0092	19:10	-83.7		"
2115	10	11	7.87		60 44	0.327	3.75	0.87	19:14	-74.2	4.4	
2100	15	11	7.87		6.42	0.393	3.39	0.77	19.17	- 70.C	11	"
2125	20	34:	7.79		6,41	0.422	3,23	0.65	19016	~ 73,23	1.	1-
2130	25	n	7.86		6041	0.430	3.62	0.58	19.18		3.3	11
2135	30	11.	7.88		10-37	2.458	3.55	0.57	19.18	-67.0	The state of	11
2140	35	11	7.95	1	6.37	0.467	1.86	0.43	19.21			"
2145	40	11	7.97		6040	0.499	2.01	0.39	19.22	-63.0	**	15.
2150	45	N	7.95		6.40	0.504	2.58	0.30	19.00	-58.6	11	11
2155	50	"(7.99	-	6.41	0.538	1.24	0.32	19027		11	11
2700	55	"	8.03		6042	0.540	1032	0.25	19027			11
2205	100	180	8.05	A D	6.42	0.542	1.31	026	14.26			11
721.0	65	34	8.06		6.42	0.544	1.42	0.24	19.25	-54.7	**	· Cr
VOC5	Sampled				Container	1 3 00	ν		Number 3			re
	DEAN	v-14R	111115)		no pr	V VO	K	4			not	
				-				4		1		
				1 -				. 9		-		_
										_		
				e s						- L-		-
				-						_		
/ell Casing V	olumes 1" = 0.04	1.5	" = 0.09	2.5" = 0.26	3.5	5" = 0.50	6" = 1.47					
	1.25" = 0.06			3" = 0.37		= 0.65						
Vell Loca			- L 1. L	error			147-11	الماد الماد	A mely contr	2105		
AACII FOCG	doll.	Landra	uncet int	1100		-	vveil	Locked at	Arrivai:	yes		
Condition of	f Wall.	Tool					MAILL -	ked at Dep	a mely service	Yes		

Groundwa Project No. Project Name Measuring Pt Description	/Location	60417	n Dy/		Well ID n Pil.		grum			Date Weather Well Ma		of 1 -15 , clar
Description Static Water	100		Setting (ft-bmp)	0.76	10.76			-				ss
Static Water Level (ft-bmp)	60.5		Total Depth (ft-b	mp) 18	.86	Water Colun Gallons in W						
IP Elevation	-	_	Pump Intake (ft-		3		d: Low	flore	,	C1		
ump On/Off	4725/	1920	Volumes Purge		all	3-11-11-1	Centrifugal	1		Sample Method	Low	Ho
	7				Jane		Submersible Other				0	
ample Time:	Start	3010 3010	Replicate/ Code No.	NA	4					Sampled	00	+
me	Minutes	Rate	Depth to	Gallon		Cond.	Turbidity	Dissolved	Temp.	Redox		OF N
	Elapsed	(mL/min)	Water (ft)	Purgeo		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Appea	
16:2-	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	Slicht	Sustu
1925	0	200	< 0.5		6.78	0.306	2509	0.72	17:74	-11701	Jeller	
930	5	- M	40.5		6.71	0.363	7.62	0017	17.86	-101.7		11
935	10	",	CO.5		6.68	0.396	7019	0.40	17.95	-101:5	47	11
940	15	()	20.5		6.68	0.412	5.31	0.37	17.94	- 99.4	4.	**
945	20	11	C015		6.67	0.423	5024	0.28	17.96	- 95.6	R	15
950	25	Y	60.5		6.63	0.427	5019	0078	17.97	-94.5	- 18	11
155	30	- 45	<0.5		6.63	0.429	5.31	0,24	17.98	-93.6	11	11
000	35	18	20.5		6.64	0.435	2.74	0.20	19.00		Colorless	11
905	40	**	20.5		6.63	00436	2.63	0.19	18.02	-84.2	11	11
010	45	"	1005 V	13	6.63	00436	2.81	0.18	17.99	-815	1~	18
stituents S 0	ampled	9	,		Container YO #L	- Vol	Ł		Number 3		Preservativ HC	e
ample	10	, nw	-4(m)	5)	10 110	- VUI		-		-	HCI	Ξ
								-				
I Casing Vo	umes = 0.04		= 0.09	2.5" = 0.26				-				_

Description Static Water Level (ft-bmp) MP Elevation	10.00 16.00	1735.	Screen Setting (ft-bmp) Total Depth (ft-b	-bmp)	Pilo 1:23.61	Casing Diameter (in. Water Colur Gallons in W	nn/ /ell centrifugal		<i>y</i>	Date Weather Well Mar	terial	PVC SS
	Label Start		Replicate/ Code No.	<u>" 1</u>	A	4	Other			Sampled	by A	_
Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)			Cond. (mS/cm)	Turbidity (NTU)	Oxygen	Temp.	Redox (mV)		arance
(AL)	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV		Odo
1700				1 -		0.326	24.7	4:10	18.86	-30.4	cloudy	Non
1735						0-339		3-24	19.02	-31.3	11.3	10
						0.341	1901	2069	19011	-31.9	11	11
					6,50	0.343	1706	3.44	19-27	-31.2	14	"
10			7.60		6049	0.345	16.0	2.25	19.30	-30.5	~	
		160	7.85		6.48	0.344	14.4	2.03	19.28	-33.0	11	11
		1.1			6.47		13.9	1065	19:13	- 33.4	11	11
	35	"	7.75		6.43	0.346	12.22	1.31	14.19			- 11
	40	10	7072		6.41	0.346	8.01	1.10	19.19		14	11
	45		7072		6.39	0.347	6.94	0.90				11
	50	100	7.73		6.34	0.347		0.85	-	-31.7		11
1835	55	-4	7073		6.35	0.348		0.74		-340		14
840	(00)	XX	7.74	1= 1	6.34			0.63			14	14
	65	رت	7.76	100				1	1 0			~
1850	70	11	7077	44				0.57			11	
				1			2020	0.51		21.0		1
onstituents Sa	ampled					L Vo	M.		Number		1 - 1	/e
ample	10:	MW-Z	(11115)		70/19		K		<u> </u>		HC (
				-						-		
lons/Foot 1" 1.2	= 0.04 25" = 0.06						" = 1.47	•		-		
			-									
	Pump On/off Sample Time: Fime 1735 1750 1755 1800 1805 1815 1800 935 840 940 940 940 940 940 940 940 940 940 9	Pump On/off Sample Time: Label Start End Fime Minutes Elapsed AD > 30 min 1735 5 1750 66 1755 15 1800 30 1805 35 1810 30 1805 35 1810 30 1815 35 1830 50 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 55 840 60 835 65 840 60 835 65 840 60 835 65 840 60 835 65 840 60 835 65 840 60 835 65 840 60 835 65 840 60 835 65 840 60 835 65 840 60 835 65 840 60 841 Casing Volumes 641 Information	Pump On/off 1735 1850 1850 1850 1853 1850 18	Pump Onlon	Pump On/on 1951 Sample Time: Label 1950 Start 1950 End 1953 Replicate/ Code No. End 1953 Replicate/ Code No. Imme	Pump On on 1951 Sample Time: Label 1950 Replicate/ Code No.	Pump On Start 1954 Volumes Purged 1955 Replicate/ Start 1950 Replicate/ Code No. MA Sample Time: Label 1950 Replicate/ Code No. MA	Pump On	Pump On Control 1950 Sample Time: Label 1850 Replicate/ Start 1850 Replicate/ Code No. Red Replicate/ Code No. Red Replicate/ Code No. Red Replicate/ Code No. Red Replicate/ Code No. Replicate/ Replicate/ Code No. Replicate/ Replic	Pump On Continues 173 175	Pump Onlor 1851 Volumes Purged 1 20 Sentifugal Submersible Other Start 1950 Code No. Sampled Time: Label 1950 Code No. Start 1	Pump Onlone 1950 Volumes Purged 1 1 2 1 105 Containing Volumes Purged 1 1 2 1 105 Code No.

Project No. Project Name	008		,0000	nun.	Well ID	MW-	3 09100	_		Date Weathe	11-1	of_ 1-15 Over
Measuring Pt. Description	100		Screen Setting (ft-bmp)	9.90	-19.90	Casing Diameter (in.	2			Well Ma		PVC
Static Water Level (ff-bmp) MP Elevation Pump On/Off Sample Time:	27.	87	Total Depth (ft-b Pump Intake (ft- Volumes Purger Replicate/ Code No.	bmp)	90 217 gal	Water Colur Gallons in W Purge Metho	Vell	1	210/	Sample Method Sampled	Lou	fk
Time	Minutes Elapsed	Rate	Depth to Water	Gallons	рН	Cond.	Turbidity	Dissolved	Temp.	Redox	Anne	arance
		(mL/min)	(ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odo
1710	> 30 min	200 mL/min	9.87		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV		
1715		200	8.92		1.112	000	10.0	20-	_	-	Clear	
1720	10		8.90	-	6.43	0.802	12.2	3.80	15.44	78.1	Clear	
1725	15			-	6.91	0.808	8.30	3.87	15.53	81.2	char	
1730	20	200	8.91		6.37	0.793	6.93	3.49	15:74	91.3	Clear	
1735	25	200			0.30	0.738	6.70	2.15	15.89	100.1	cher	
1740	30	-	8-91	-	6.21	0.700	6.67	1.55	15.98	106-9	Clear	
- /	35	_	8.91	1.5	Ce-15	0.681	4.36	1.20	16.05	113.3	Cler	
1745	40		8-91	0.0	6.13	0-674	3.25	1.00	16.08	116-7	Clevr	
1750	45		8.92	2.0	6.12	0.671	1-22	0.88	16.07	119.1	Clur	
1800	50		8.92	_	6-12	0.660	0.37	0.72	16-10	155-1	cleus	
1805	55				6.11	0.665	0.63	0.57	16.12	124.5	Cleur	
1810			8.93	_	6.11	0.003	0.61	0.400	16.12	125.3	Cher	
1010	60		8.93		6-11	0.662	0.69	0.59	16.12	12001	Cleut	
									-			
VoC5	ampled			-	Container 40 m	LVO	A		Number 3		Preservativ	e/
ample	10:	MW-	3 (11115) _		10		-				
				-				-		-		
				-				-			79.00	
				_				-		-		
Well Casing Vol	umes = 0.04	1.5	= 0.09	0 5" - 0 00		0.50						
	25" = 0.06			2.5" = 0.26 3" = 0.37		= 0.50 6 0.65	6" = 1.47					
	on											

Project Name/Location Measuring Pt. Description Static Water Level (ft-bmp) MP Elevation Pump On/Off Sample Time: Labe Start End Time Minutes Elapsed > 30 min 1/55 1205 10 1210 15 1215 20 1220 25 1225 36 1230 35 1235 40 1240 45 1255 600 1360 65 1360 65 1305 70 1310 75 Constituents Sampled TCC VI	1315	Screen Setting (ft-bmp) Total Depth (ft-b Pump Intake (ft- Volumes Purge Replicate/ Code No. Depth to Water (ft) < 0.3	14- omp) 2 -bmp)	Well ID 124 3.04 20 1.0 ga		Pry r	-flow		Date Weather Well Mate	50	Pui PVC SS
Measuring Pt. Description Static Water Level (ft-bmp) MP Elevation Pump On/Off Fine Minutes Elapsed > 30 min 155	21 13)5 13)5 Rate (mL/min) 200 mL/min	Screen Setting (ft-bmp) Total Depth (ft-b Pump Intake (ft- Volumes Purge Replicate/ Code No. Depth to Water (ft) < 0.3	14- pomp) 2 pomp) dd 4 pomp Aun Gallons	1.04 20' 1.0 ga	Casing Diameter (in. Water Colur Gallons in W Purge Metho	nn/ /ell od: Centrifugal Submersible	em -flon		Well Mate	50 erial X	Pui PVC SS
Description Static Water Level (ft-bmp) MP Elevation Pump On/Off Fine Minutes Elapsed > 30 min 1155 1205 1205 1215 20 1225 30 1225 30 1230 35 1235 40 1240 1245 50 1255 600 1360 65 1305 70 1310 75 Constituents Sampled TCL VI	21 13)5 13)5 Rate (mL/min) 200 mL/min	Setting (ft-bmp) Total Depth (ft-bp) Pump Intake (ft-bp) Volumes Purge Replicate/ Code No. Depth to Water (ft) < 0.3	omp) 2 -bmp) d 4 Non Gallons	3.04 ~20' (.0 ga	Diameter (in. Water Colur Gallons in W Purge Metho	nn/ /ell od: Centrifugal Submersible	-flow		Sample Method		ss
Level (ft-bmp) 19. MP Elevation 19. Pump On/Off 1/55 Sample Time: Label 1/55 Sample Time: Label 1/55 Sample Time: Label 1/55 Sample Time: Label 1/55 Start 1/55 Sample Time: Label 1/55 Sample Time: Label 1/55 Sample Time: Label 1/55 Sample Time: Label 1/55 1/55	3 7 13)5 Rate (mL/min) 200 mL/min	Pump Intake (ft- Volumes Purge Replicate/ Code No. Depth to Water (ft) < 0.3	non Gallons	1.0 ga	Gallons in W Purge Metho	d: Centrifugal Submersible	-flow		Method	Low-	floor
MP Elevation	3 7 13)5 Rate (mL/min) 200 mL/min	Pump Intake (ft- Volumes Purge Replicate/ Code No. Depth to Water (ft) < 0.3	non Gallons	1.0 ga	Purge Metho	Centrifugal Submersible	-flow		Method	Low-	flan
Sample Time: Labe Star End Time Minutes Elapsed > 30 min 1155 — 1200 5 1205 10 1210 15 1215 20 1220 25 1225 30 1230 35 1235 40 1240 45 1255 60 1360 65 1360 65 1360 65 1310 75 Constituents Sampled 7CL VI	Rate (mL/min)	Replicate/ Code No. Depth to Water (ft) < 0.3	Non Gallons	L ga	-	Submersible			Method	Low-	flou
Sample Time: Labe Star End Time Minutes Elapsed > 30 min 1155 1200 5 1205 10 1210 15 1215 20 1220 25 1225 30 1230 35 1235 40 1240 45 1255 600 1360 65 1360 65 1310 76 Constituents Sampled 76 76 76 77 76 77 77 77 77 7	Rate (mL/min)	Replicate/ Code No. Depth to Water (ft) < 0.3	Non				de la				
Elapsed >30 min	(mL/min) 200 mL/min	Water (ft) < 0.3		рН					Sampled	by	DK
>30 min 1155 — 1200 5 1205 10 1210 15 1215 20 1220 25 1225 36 1230 35 1235 40 1240 45 1245 50 1250 55 1255 600 1360 65 1360 65 1310 75 Constituents Sampled TCL VI	200 mL/min	(ft) < 0.3	Purged		Cond.	Turbidity	Dissolved	Temp.	Redox	Appea	rones
1155 — 1200 5 1200 5 1205 10 1210 15 1215 20 1220 25 1225 30 1230 35 1235 40 1240 45 1245 50 1250 55 1255 60 1360 65 1360 65 1310 75 Constituents Sampled TCL VI					(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odor
1200 5 1205 10 1210 15 1215 20 1220 25 1225 36 1230 35 1235 40 1240 45 1245 50 1250 55 1255 600 1360 65 1360 65 1310 75 Constituents Sampled TCL VI	200			+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV		
1205 10 1210 15 1215 20 1220 25 1225 36 1230 35 1235 40 1240 45 1245 50 1250 55 1255 600 1360 65 1365 70 1310 75 Constituents Sampled TCL VI	-	5.64	-	1.10	0.662	over	1.2	1100	-11-	Duch -	- tub
1210 15 1215 20 1215 20 1220 25 1225 30 1230 35 1235 40 1240 45 1245 50 1250 55 1255 60 1360 65 1360 65 1310 75 Constituents Sampled TCL VI		5.60	-	6.63	0.662	21.7	0.95	10.54	-44.5	turbid	this
1215 20 1220 25 1225 30 1230 35 1235 40 1240 45 1245 50 1250 55 1255 60 1360 65 1305 70 1310 75 Constituents Sampled TCL VI	-	5.55	_	6.60	0.676	16.1	0.79	16.54	-45,2	brown	10-1
1225 36 1230 35 1235 40 1240 45 1245 50 1250 55 1255 660 1360 65 1365 70 1310 75 Constituents Sampled TCL VI	_	5.51	_	6.58	0.683	11.8	0.76	16.42	-47.3	brun	red
1230 35 1235 40 1240 45 1245 50 1250 55 1255 60 1360 65 1305 70 1310 75 Constituents Sampled TCL VI	-	5.57	-	6.58	0.704	14.3	0.69	16.48	-46.9	eloudy.	Ship hi
1235 40 1240 45 1240 45 1245 50 1250 55 1255 60 1360 65 1305 70 1310 75 Constituents Sampled TCL VI Samp	-	5,55	_	6.68	00740	13.4	0.53	16.57	16.00	Cher	707 016
1240 45 1245 50 1250 55 1255 60 1360 65 1365 70 1310 75 Constituents Sampled TCL VI	-	5.57	2.0	6.57	0.736	13.8	0.63	16.62	-49.9	clew	_
1245 50 1250 55 1255 60 1360 65 1365 70 1310 75 Constituents Sampled TCL VI	200	5.69	-	6.57	0.749	17.4	0.59	16.72	-49.7	clur	-
1250 55 1255 60 1360 65 1365 70 1310 75 Constituents Sampled TCL VI Samp	-	5.70	-	4.57	0.756	16.7	0.56	14.74	-49.9	cler	_
1255 (e0 1360 (65 1365 70 1310 75 Constituents Sampled TCL VI Simp		5.71	-	4.57	0.762	16.5	0.54	16.86	-51.6	cher	
1360 65 1365 70 1310 75 Constituents Sampled TCL VI		5.60		6.57	0.767	14.7	0.54	16.82	-52.1	clear	
Constituents Sampled TCL VI		5.57		4.50	0.782	14.7	0.68	16.35	-51.1 -53.3	clear	
Constituents Sampled TCL VI Sump		5.55	_	6.56	0.801	13-1	0.64	14.88	-52.8	Cler	
TCC VI Samp		5-57	-	6.56	0.310		0.63	16.86	-52.4	clier	_
Samp	bC:			Container		(0.0		Number 3		Preservativ	/e
Dua-		= IW-0	01D(1		one b	7024				HCI	
Due							-		-		3
1110-			. (-						-		= 5
Over = over ro	inge						_				
Vell Casing Volumes allons/Foot 1" = 0.04 1.25" = 0.06		" = 0.09 = 0.16	2.5" = 0.26 3" = 0.37		" = 0.50 6 = 0.65	5" = 1.47					
ell Information											
Well Location:		no of	bld.	1-m1	rolus yes	√ Well	Locked at	Arrival:	N		

Project Name/ Measuring Pt.			N Dy KII			Progr	_		_	Weather Well Mate		Rui PVC
Description	TU	<u></u>	Setting (ft-bmp)	8-1	0	Diameter (in.)		-			_	SS
Static Water Level (ft-bmp)	5.0	00	Total Depth (ft-bn	17	.46	Water Colum Gallons in W						
MP Elevation	19.	37	Pump Intake (ft-b	0.0	1	Purge Metho	4	flow		Sample	1-	1/0
Pump On/Off	- /	1314	Volumes Purged		,		Centrifugal Submersible	_	-	Method	Com	700
	1			-			Other					,
Sample Time:	Label Start End	1310	Replicate/ Code No.	N	A.	5				Sampled b		al.
Time	Minutes	Rate	Depth to	Gallons	pН	Cond.	Turbidity	Dissolved	Temp.	Redox	Appea	rance
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	Odo
	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	Clear	100
1215	0	200	5,20		6070	00701	3.74	1018	16,50	3.3	colorles	NO
1290	5	11	5.00		6.69	0.728	8.51	0.87	16047	8.8	4	"
1275	10	11	5.70		6068	0.779	6.72	0.59	16.57	13.B	11	1
1230	15	- 61	5,70		6.67	0.738	3.85	0.54	16.63	21.6	14	
1240	25		5,20		6.65	0.728	3.10	0.42	16.68	25.6		
1245	30	1.	5.20		6.64	0.723	2.99	0.37	16.79	29.7		~
1250	35	- 1	5,00		6002	0.120	3.17	0.38	16083	32,6	- X -	
1255	40	150	5,20		6.62	0.719	3.36	0.33	16.86	34.2	11	-
1300	45	1.	5,20		6,62	0.718	3.0.5	0.29	110.84	36.9	10	10
1305	50		5.70		6.61	0.717	3.30	p-31	16084	3800	18	12
1310	55	- 11	5.00		6.61	0.716	3.32	0.31	16.89	39,7	10	11
							19					
Constituents	Sampled				Container 40 ml	VO14			Number 3		Preservati HC1	ve
Sample	10:2	EW-OI	S(111215)			5						
Well Casing V Gallons/Foot	olumes 1" = 0.04 1.25" = 0.06		5" = 0.09 " = 0.16	2.5" = 0.26 3" = 0.37		5" = 0.50 '= 0.65	6" = 1.47					

. 7.

1

Depth to Water (ft) < 0.3	Gallons Purged	pH +/- 0.1 unit	Cond. (mS/cm) +/- 3%	Turbidity (NTU)	Dissolved Oxygen	Temp.			
		1	+/- 3%		(mg/L)	(°C)	Redox (mV)	Appea	arance
NA		1.71		+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	clear	Odo
		6.36	0.57!	24.5	5.84	16.63	=700	colorless	inone
		6.35	0.593	16.7	5.91	16.74	-1702	15	**
		6.36	0.613	5-23	5.38	16.84	-23.3		**
		6.30	0.621	3.82	4.89	16.76	-28.7	~ `	4.5
1		6.39	0.624	3.55	4.38	16.77	-30.6	***	"
	1	6.39	0.625	2.14	3077	16.69	-33.7	11	
		6.40	0.628	2.32	3.40	16.72	- 35.8	10	
		6.40	0.629	2029	3,23	16.81	-37.2	**	
1		6.40	0.629	2.31	3,10	16.79	-37.9	11	. 1
							* * * * * * * * * * * * * * * * * * *		
			V010			Number		Preservativ	ve
	3/41219	3(111215)	3(11215) Container 40 mL	3(11215) Container 40 ML VOR	3(11215) Container YOML VOR	3(11215) Container 40 ML VOR	Container 40 ML VOA 3 Number 3	Container 40 ML VOR 3 Container 3 Container 3 Container 3	Container 40 ML VOR Container 40 ML VOR Number 3 Preservative HC

Project N	No. <u>DOZ</u>	_	~	lena	Well ID	L Pryn	-10D	-		Date Weather	11-12	1
Measurir Descripti		OL	Screen Setting (ft-bmp)	0,45	-20.45	Casing Diameter (in	. 2			Well Ma	terial 🙏	/
Static W.	(2)	23	Total Depth (ft-br	no) 20	248	Water Colur Gallons in V						
MP Eleva	ation 19	1.34	Pump Intake (ft-b			Purge Metho		- Slow		Sample		
Pump Or	/Off 1010	/1125	Volumes Purged		75,90		Centrifugal Submersible	-		Method	Low	-
Sample 7	Fime: Label Start End	1122	Replicate/ Code No.		on	_	Other			Sampled	by	7
Time	Minutes	Rate	Depth to	Gallons		Cond.	Turbidity	Dissolved	Temp.	Redox	T	
	Elapsed	(mL/min)	Water (ft)	Purged		(mS/cm)	(NTU)	Oxygen (mg/L)	(°C)	(mV)	Color	ial
11.10	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10 %	+/- 3%	+/- 10 mV	Muzey	-
1010		150	5.06		1 1 -	A 010			-	_	brown	
1020		150	0.11		6.45	0.868	- 3	1.95	17.36	-34.7	eller	4
1025			6.65		6.44	0.879	20.3	0.80	17.34	-34.4	Clear	4
1030			6.84		6.45	0.877	14.6	0.75	17.36	-37.5	Cleur	+
103		150	6.97	1.0	6.48	0.873	1401	1.27	17.35	-37.7	cleur	+
1040		-	6.90	1.0	6.49	0.869	11.7	1.27	17.42	-39.6	char	+
1045		-	4.85	_	6.43	0,867	9.41	1.28	17.31	-38.0	clear	+
1050		-	6.83	-	6.49	0.359	7.48	1.23	17.34	-42.8	cler	$^{+}$
1056	5 45	_	6.84	_	6.49	0.852	4.30	1.22	17,42	-43-1	clear	†
1100	50		6.99	2.0	6,49	0.845	6.26	1.10	17.41	-43.9	chew	t
1105	55	-	6.95	-	6.49	0.843	6.78	0.95	17.40	-44.6	dur	t
1110	60	-	6,94	-	6.49	0.840	5.72	0,90	17.39	-44.5	clear	+
1115	65	-	6.94	-	6.50	0.837	6.24	097	17.40	-45.1	clur	t
1120	70	-	6.89	-	6.50	0.836	5.69	1.00	17.42	-44.2	clear	t
1125	75	-		_					_	_	Clear	I
												L
Constitue	nts Sampled TCL V	oc.			Container	0 4 1			Number		Preservati	V
_			D= MW	1 100	1000	me V	04		3		1401	_
	00	mples	D- 11100	-100	(111218)						_
-				-				-				-
				-				b 1-		-		_
				_				•	_			_
A 510	w flow	rute		-				-				_
								-				_

Gallons/Foot	1" = 0.04 1.25" = 0.06	1.5" = 0.09 2" = 0.16	2.5" = 0.26 3" = 0.37	3.5" = 0.50 4" = 0.65	6" = 1.47	7		
Well Inform	nation							
Well Lo	cation:	SW corn	al bidy -	involvo	nard	Well Locked at Arrival:	Y	
Condition	of Well:		OK		y v	Well Locked at Departure:	Y	
Well Con	npletion:	flush mu	ivnt			Key Number To Well:	MA	GW Samp Form
								4/6/2015

9	ARCADIS	
Levi	ARCADIS	

Groundwa Project No.			1.0000		Well ID	mw.	-105			Date	Page [_
Project Name	7	D		eman			Program				50	
Measuring Pt. Description			-		13.10	Casing Diameter (in				Well Mate		
Static Water Level (ft-bmp)	5.	47	Total Depth (ft-br	np) /3	3.11	Water Colur	mn/ Vell					
MP Elevation	19	1.65	Pump Intake (ft-b	omp) ~	12'	Purge Metho	od: /on ·	flow		Sample		
Pump On/Off	0905	11005	Volumes Purgeo		gol	•	Centrifugal Submersible			Method	low.	-1
Sample Time:	Label Start End	1002	Replicate/ Code No.	No	ne	-	Other			Sampled	by 3	X
Time	Minutes Elapsed	Rate (mL/min)	Depth to Water	Gallons Purged	pН	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen	Temp.	Redox (mV)	Appea	aran
	> 30 min	200 mL/min	(ft) < 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	(mg/L) +/- 10 %	+/- 3%	+/- 10 mV	Color	-
0905	0	_	5.29	-	_	1			_		CLEUT &	
0910	5	150	5.45	-	6.35	0.684	24.5	1.19	16.83	-59,7	deur	
(1915	10	-	5.44	-	6.35	0.665	12.8	0.50	17.59	-60.5		
0920	15	_	5.43	-	6.36	0.664	17.5	0.51	17.68	-56-0	chor	
0925	20	200	5.43	1.0	6.35	0.659	13.08	0.30	17.79	-52.5	clear	
0930	25	-	5.44	-	6.35	0.658	8-01	0.28	17.79	-52-9	char	
0435	30	_	5.43	-	6.31	0.653	5.67	0.32	17.94	-51.0	ches	
1940	35		5.43	2.0	6.32	0.653	3.99	0.29	17.91	-52.1	elecr	
0945	40		5.43	_	6.34	0.652	3.68	0.20	17.91	-53.1	cles	_
0950	50		5.43	_	6.35	0.652	2.94	0.17	17.90	-48.9	cleur	
1000	55	_	5.43	_	6.35	0.652	2.81	0-17	17.88	-52.5 -52.9	clear	_
			3-13		u >,	02031	2-71	0710	17.81	-92.4	(00	
												_
												-
Competitue												
Constituents S	L VO	Ci			Container	me u			Number 3		Preservativ	/e
1	mol	100	MW-103	8/11/2	15)	me V	OA		3		HCI	_
00	unpe		1100-103	(11.2	13)				-	n i G		-
-				-				- 1-		-		
				-				1-		-		-
				3				-		-		
				-				-		-		
Some s	uspen	and blue	a fluctor	1, mer	+ 0000	e intica	1 pura	-) -		
	1		-		- /		10	-				
/ell Casing Vo			* - 0.00	25" - 0.00			01 - 4.47			_		
	" = 0.04 .25" = 0.06			2.5" = 0.26 3" = 0.37		s" = 0.50 = 0.65	6" = 1.47					
Vell Information	on											
Well Locati	ion: 5	iw com	wot blog	in	Value	yard	Well	Locked at	Arrival:	Y		
Condition of		,	OK	,		1		ked at Dep		Y		
Well Comple	etion:	P	lush mou	int			Kev	Number To	Well.	NA	GW Samp Form	

-		
100	ARCAD	
	APCAD	IC
AT BUILDING	ANCAD	ıo

Al

Description Static Water	/Location	OC	7. Grand Dykhan Screen Setting (fi-bmp)	10-	20	Casing Diameter (in.) Water Colum	2	-	•	Date Weathe Well Ma		
Level (ft-bmp) MP Elevation Pump On/Off Sample Time:	18.8	6	Total Depth (ft-b Pump Intake (ft- Volumes Purger Replicate/ Code No.	bmp)) [5	Gallons in We		tow		Sample Method Sampled	lows.	_
Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen	Temp.	Redox (mV)		earance
	> 30 min	200 mL/min	< 0.3		+/- 0.1 unit	+/- 3%	+/- 10%	(mg/L) +/- 10 %	+/- 3%	+/- 10 mV	Color	Ode
											3	-
										H		
										-		
		4-5-1			N. I							
vol 5		1 356(H	1015)	-	Container	VOA		h 	Number	-	Preservati HCI	ve
Purple Not so	mple	r enco	intered.					-		-		
	= 0.04 25" = 0.06			2.5" = 0.26 " = 0.37	3.5" 4" =		= 1.47					
Well Location	on: _ <	A	er of Bl	dyo			Well L	ocked at A	rrival:	10.		_
Condition of V	_	Flush)			Well Lock	ed at Depa	rture:	No	-	



Groundwa Project No.		66417-8			Well ID	Mw-	25 D			Date	Page	of_
Project Name			n Dykn	en E				-0		Weather	Ca	
Measuring Pt. Description	10	0	Screen Setting (ft-bmp)	20-		Casing Diameter (in.				Well Mat		PVC
Static Water Level (ft-bmp)	to i	7.42	Total Depth (ft-br	mp) 30	2011	Water Colun Gallons in W	all					
MP Elevation	18.7	7	Pump Intake (ft-t	mp) 2	6	Purge Metho	d: Lew	flow		Sample		
Pump On/Off	900/	949	Volumes Purgeo	~2.	Saal		Centrifugal Submersible			Method	Low	fle
Sample Time:	Label Start End	945 945 948	Replicate/ Code No.	NX	t	_	Other			Sampled	by A	L
Time	Minutes Elapsed	Rate (ml./min)	Depth to Water	Gallons Purged	pН	Cond.	Turbidity	Dissolved Oxygen	Temp.	Redox	Appea	arance
	> 30 min	(mL/min) 200 mL/min	(ft)		./ 0.4	(mS/cm)	(NTU)	(mg/L)	(°C)	(mV)	Color	Odor
905	2 30 min	200 ML/MIN	-<0.3 		+/- 0.1 unit	+/-3%	+/- 10%	+/- 10 %	+/-3%	+/- 10 mV	colon less	
910	5	11	7.72		6.31	0.6642	9,14	1077	16.37	-19.6	cody	
9/5	10	1.1	7.72		6032	0,605	6.11	2.46	16.40	-41.9	,. 0	- 51
930	15	**	7.72		6.33			1.99	16.33		0	
935	20	11	7.69		6.34	0.668	4:53	10.79	16.31	-44.2		
930	75	11	7.68		6.34	0.669	4.79	0.77	16009	-45.2	10	"
9.35	30	11	7.66		6,36	0.669		0.71	16.25	-45.8	15	
940	35	16	7.65		6.36	77 7 7 7 7 7 7 7	3.34	1.11	16.39	-47.3	**	* 1
945	40	10	7066	v2.5	6.36	0.671	2073	1.07	16.42	-47.6	10	
- t-									10012	1100		
onstituents S	ampled			(Container				Number		Preservativ	re .
Sumple	D: m	w-75D	11215)	-	40 ml	LVOA		-	3_		HCI	
				-						-		
				-				-		-		
				-				-				
ell Casing Vol	umoe			-				_		_		
llons/Foot 1"	= 0.04 25" = 0.06			.5" = 0.26 " = 0.37		= 0.50 6° 0.65	= 1.47					
ell Information												
Well Location	-	Α	r of Bldg				Well	Locked at A	Arrival: A	70		
Condition of \	Well: _(oral	0					ked at Depa				
Well Comple	tion:	Flush						Number To		SAC	GW Samp Form	

First Post-Injection Analytical Sampling; January 2015



	WELL NUMBER: MW 13	DATE:	1/13/16	
	PROJECT NAME: Crown Dykman			
	PROJECT NUMBER: 00266417.0000			
	SAMPLERS: B. Quaglieri and E. Sousa	r _		
A:	Total Casing and Screen Length:		Well I.D.	Vol. Gal./ft. 0.04
B:	Casing Internal Diameter:		2"	0.17
C:	Water Level Below Top of Casing:)	3" 4" 5"	0.38 0.66 1.04
D:	Volume of Water in Casing:		6"	1.50
	$v = 0.0408 (B)^2 \times (A-C) = D$		8"	2.60
	v = 0.0408 () ² x (-)=		gal.

PARAMETER				ACC	CUMUL	ATED '	VOLUN	IE PUR	GED		
Time	0320	0875	5530	0835	0840	0345	0850	5355			
Gallons	0	0,25	0.5		1.0	1.25		1.75			
Well Volume											
Depth to Water (ft.)	518	5.25	5,27	5.3C	5.30	5.30	5.30	5.30	1		
Temperature (°C)	12.86	12.54	12.31	12.55	12.75		12.58	12.57	2		
рН	6.48	6.44	6.44	6.44	6.44	-	6.44	6.44			
REDOX (mV)	-110	-101	-103	-111	-114	-117	-119	-121			
Conductivity (mohm/cm)	0.654	0.615	Cd 15	0.677	0.680	0.682	0.686	0.691			
Turbidity	159	147	171	213	123	114	119	123		The second	
Dissolved Oxygen regit	0	0	0	0	0	0	0	0			
TDS											
Salinity											

s: Well Sampled @ 0900	



	WELL NUMBER: MW - 235 DATE:	1 27/16		
	PROJECT NAME: Crown Dykman			
	PROJECT NUMBER: 00266417.0000			
	SAMPLERS: B. Quaglieri and E. Sousa			
		-		
		- W Dr W	Vol.	
A:	Total Casing and Screen Length:	Well I.D.	Gal./ft.	
		1"	0.04	
B:	Casing Internal Diameter:	2"	0.17	
		3"	0.38	
C:	Water Level Below Top of Casing: 2.30	4"	0.66	
		5"	1.04	
D:	Volume of Water in Casing:	6"	1.50	
	$v = 0.0408 (B)^2 x (A-C) = D$	8"	2.60	
	v = 0.0408 () ² x (-) =		gal	

PARAMETER				ACC	CUMUL	ATED VOL	UME PUR	RGED	
Time	1520	1525	1530	1535	1540	1545			
Gallons	0	0.5	0.75	1.0	1.25				
Well Volume									
Depth to Water (ft.) 2.3	是当	2.50	2.64	2.67	2,72	2.75			
Temperature (°C)	10.4	10.0	9.8	9.4	9.0	8.9			
рН	7.75	6.98	6.77	6.73	6.73	6:76			
REDOX (mV)	193.7	215.9	220.8	214.0	212.7	211.0			
Conductivity (mohm/cm)	0.570	0.569	0.566	0.557	0.539	0.530			
Turbidity	26.6	20.8		20.1	18.9	18.3			
Dissolved Oxygen	8.17	7.76	7.82	7.79	8.55	8.26			
TDS									
Salinity									

-	Sumple		
1.5	gallons	porgla	
)	1 0	



	E: Crown Dykman		
PROJECT NUMBE	R: <u>00266417.0000</u>		
SAMPLER	S: B. Quaglieri and E. Sousa		
			Vol.
: Total Casing and S	creen Length:	Well I.D.	Gal./ft.
		1"	0.04
: Casing Internal Dia	meter: 2"	2"	0.17
		3"	0.38
: Water Level Below	Top of Casing: 4.06	4"	0.66
		5"	1.04
: Volume of Water in	Casing:	6"	1.50
v = 0.0408 (B) ² x	(A-C) = D	8"	2.60
v = 0.0408 () ² X (-) =	gal.

PARAMETER				ACC	UMULATED	VOLUME P	URGED	
Time	1525	1530	1535	1540	1545			
Gallons					~1.2			
Well Volume Rate ~ /m	N50	150	150	150	150			- R-
Depth to Water (ft.)								
Temperature (°C)	12.6	13.0	12.5	12.6	12.7			
рН	6.84	6.37	635	6.36	635			
REDOX (mV)	193,1	192.3	192.0	192.5	192.5			
Conductivity (mohm/cm)	0462	0.454	0.456	0.456	0.456			
Turbidity 38.9	7934	17.4	13.8	13.60	13.3			
Dissolved Oxygen				3.28				
TDS								
Salinity					Minglion -			

Suspended solids.



	WELL NUMBER: _ G / M -	4		DATE:	1/2	8/16	
	PROJECT NAME: Crown Dykma	an					
	PROJECT NUMBER: 00266417.00	00					
	SAMPLERS: B. Quaglieri a	ind E. So	ousa				
							Vol.
:	Total Casing and Screen Length:					Well I.D.	Gal./ft.
				_		1"	0.04
	Casing Internal Diameter:		? "		- 1	2"	0.17
		11	151			3"	0.38
	Water Level Below Top of Casing:	_ 4	.18			4"	0.66
						5"	1.04
	Volume of Water in Casing:			_		6"	1.50
	$v = 0.0408 (B)^2 x (A-C) = D$					8"	2.60
	v = 0.0408 () ²	x (4) =			gal.

PARAMETER				ACC	CUMUL	ATED V	OLUME P	JRGED	
Time	2750	0755	0800	0305	0310	0815		-	
Gallons	-	0.5	0.75		1.25				
Well Volume									
Depth to Water (ft.)	4.18								
Temperature (°C)	12.6	12.8	12.8	12.9	12.9	12.9			
рН	6.78	5.87	5.73	5,70	5.69		- 3		1 1
REDOX (mV)	217.2	231.3	2324	232,9	231.4	227.9			
Conductivity (mohm/cm)	0.96	0.94	0.93	0.93	0.93	0.93			
Turbidity	17.2	13.8	9.72	8.76	6.57				
Dissolved Oxygen	1.23	0.46	0.22	0.18	0.16	014			
TDS									
Salinity									

tes: Wall	Sampled	Ca 0820	
1.5	gallais	perged	
)		



PROJECT NAM								
PROJECT NUMBER	_			Sousa				
A: Total Casing and S							Well I.D.	Vol. Gal./ft.
3: Casing Internal Dia	meter:		2	i)			1" 2" 3"	0.04 0.17 0.38
C: Water Level Below	Top of C	asing:	4.	42			4" 5"	0.66 1.04
: Volume of Water in	Casing:						6"	1.50
v = 0.0408 (B) ² >	(A-C) =	D D					8"	2.60
v = 0.0408 ()2	x ((2)) = _			gal.
PARAMETER				ACCUM	IULATED V	OLUME P	URGED	
Гіте	0805	0810	0815	0820				
Gallons Well Volume Robert				150			4 14	

PARAMETER				ACC	CUMUL	ATED '	VOLUM	1E PUF	RGED		
Time	0805	0810	085	0820							
Gallons		17		11.0						1	
Well-Volume Rate (m1) min	150	150	150	150							
Depth to Water (ft.)											
Temperature (°C)	12.7	13.2	13.4	13.3							
рН	6.94	6.81	1.	6.80							
REDOX (mV)	185.0	187.4	189,5	192.4							
Conductivity (mohm/cm)	0.382	0,379	0.379	0,379							
Turbidity	5,35	6.28	2,35	3.02							
Dissolved Oxygen	8,35	7,16	7.16	7.18							
TDS									1		
Salinity											
	, ==1										

lotes: Joiti	al purge: Clear, no odor, no sheen.	
	1 3	
Samole	or for vocs @ 0825.	



	WELL NUMBER: _	MW-ID		DATE: 1/2	8/16	
	PROJECT NAME: C					
	PROJECT NUMBER: 0	0266417.0000				
	SAMPLERS: B	. Quaglieri and E. S	ousa			
A:	Total Casing and Scree	en Length:			Well I.D.	Vol. Gal./ft.
B:	Casing Internal Diamet	er: 2 ''	i -		1" 2"	0.04 0.17
C:	Water Level Below Top	of Casing: 3,2	.6	5.	3" 4"	0.38 0.66
D;	Volume of Water in Ca	sing:			5" 6"	1.04 1.50
	$v = 0.0408 (B)^2 x (A$	-C) = D			8"	2.60
	v = 0.0408 () ² x () =		gal.
	PARAMETER		ACCUMUL	ATED VOLUM	E PURGED	

PARAMETER				ACC	CUMUL	ATED VC	DLUME F	URGED		
Time	0830	0835	0840	0845	0850	0855				
Gallons						~1.7			1	
Well Volume Rate (M/Min)	175	175	175	175	175	175				
Depth to Water (ft.)									-	
Temperature (°C)	10.0	10.7	11.0	11.1	11.1	11.2				
рН	6.53	6,57	6,56	6.55	6.56	6,56	7.11			-
REDOX (mV)	8,2		-5.3		-5.0	-7,2		1		
Conductivity (mohm/cm)	0.73	0.73	0,72	0.72	0.72	0.72				
Turbidity	13.2	11.1	11.9	11.6	11.3	11.0				
Dissolved Oxygen	3,19	1,26	1.09	0.91	0.95	0,92				-
TDS	- 4									
Salinity										

otes: Initial	purge: Clear, modor, no sheen.	
	J	
	or VOC's @ 0900.	



	WELL NUMBER: DAT PROJECT NAME: Crown Dykman	E: 1/28/16	
	PROJECT NUMBER: 00266417.0000		
	SAMPLERS: B. Quaglieri and E. Sousa		
		Vol.	_
A:	Total Casing and Screen Length:	Well I.D. Gal./ft.	
		1" 0.04	
B:	Casing Internal Diameter:	2" 0.17	
	11 = 1	3" 0.38	
C:	Water Level Below Top of Casing: 4.51	4" 0.66	
		5" 1.04	
D:	Volume of Water in Casing:	6" 1.50	
	$v = 0.0408 (B)^2 x (A-C) = D$	8" 2.60	
	v = 0.0408 () ² x (-)	= gal.	

PARAMETER				ACC	CUMUL	ATED \	VOLUM	E PUR	GED		
Time	0330	0835	0840	0845	0850	0855	0900	0905	0910	0915	
Gallons		0.25	0.5	0.75	1.0	1.25	1.5	1.75	2.0	2.25	
Well Volume											
Depth to Water (ft.)	4.51										
Temperature (°C)	11.6	12.4	12.4	12.3	12.4	12.5	12.4	12.4	12.6	12.6	
рН	6.03	6.22	6:30	632	6.32	6.33	6.33	6.35	6.34		
REDOX (mV)	-68.1	-81.0	-43.7	-100.3	-1027	-105.4	-107.8	-111.0	-111.5	-111.6	
Conductivity (mohm/cm)	0.92	0.93	0.95	0.97	0.98	0.98	0.98	0.98	0.98	0.98	
Turbidity 36.4	村村	45.3	91.5	87.2	51.2	33.1	24.7	22.0	20.8	20.2	
Dissolved Oxygen	1.14	0.36	0.21	0.16	0.12	0.09	0.09	0.09	0.08	0.07	
TDS											
Salinity											

Notes: Well	Sampled @0920	* DUP-1-012816	collected	here
2.25 4	alloas purged			
)	1 3			
Odos	Present			



	PROJECT NAME: Crown					
Р	ROJECT NUMBER: 00266					
	SAMPLERS: B. Qu	aglieri and E. S	ousa			
						Vol.
1	otal Casing and Screen Le	ength:		2	Well I.D.	Gal./ft.
					1"	0.04
(Casing Internal Diameter:	2"		2	2"	0.17
		-			3"	0.38
١	Water Level Below Top of	Casing: +1000	led	_	4"	0.66
					5"	1.04
1	olume of Water in Casing				6"	1.50
		627			8"	2.60
٧	$= 0.0408 (B)^2 \times (A-C)$	= D				
V	= 0.0408 () ² x () =		gal.

PARAMETER				ACC	CUMULATI	ED VOLU	JME PUF	RGED		
Time	0905	0910	0915	0920	0925					
Gallons					~1.5					
Well-Volume Rate Minin	175	175	175	175	175					
Depth to Water (ft.)										
Temperature (°C)	7.5	7.6	7.6	7.5	7.9					
pH	6.79	6.69	6.68	6.66	6.66					
REDOX (mV)	27.9	5.1	2,0	-2.4	-3.9					
Conductivity (mohm/cm)	0,653	0.672	0.682	0.689	0.681					
Turbidity		9.95			6.55					
Dissolved Oxygen	1.61	1,02	0.85	0.67	0.51					
TDS										
Salinity										

tint.	J	dor, no sheen, trace light brown

Second Post-Injection Analytical Sampling; March 2015



	WELL NUMBER:	MW-2:	35		DATE: 3 2	2/16		
	PROJECT NAME: (Crown Dykn	nan					
	PROJECT NUMBER:	00266417.00	000					
	SAMPLERS:	M. Mail	hot					
							Vol.	
A:	Total Casing and Scre	en Length:			5	Well I.D.	Gal./ft.	
			0	1.		1"	0.04	
B:	Casing Internal Diame	ter:	2	1.1-		2"	0.17	
			0			3"	0.38	
C:	Water Level Below Top	p of Casing:	2.79			4"	0.66	
.5.						5"	1.04	
D:	Volume of Water in Ca	ising:				6"	1.50	
	$v = 0.0408 (B)^2 x (A)$	-C) = D				8"	2.60	
	v = 0.0408 ()2	x (4) =		gal.	

PARAMETER			ACC	CUMUL	ATED	VOLUM	IE PURGED	
Time	450	1455	1500	1505	1510	1515	1520	
Gallons			-					
Woll Volume Rate [m]m	4							
Depth to Water (ft.)	P							
Temperature (°C)	11.9	11.6	11.60	11.6	11.7	11.3	11.3	
рН	6.66	6.56	6.51	6.41	6.40	6.39	6.39	
REDOX (mV)	107.7	105.4	102.1			102.2		
Conductivity (mohm/cm)	量子589	580.2	5762	574.6	573 1	577.0		
Turbidity	15:4	10.34		3.99			5.10	
Dissolved Oxygen	1.47	1.31	1.28	1.71	1.70	100	1.66	
TDS-								
Salinity								

s: Sample	V UT 15:	23, Colle	cted Du	17-1	



WELL NUMBE	R:_MW-23D		DATE: 3/2	22/16	
PROJECT NAM	E: Crown Dykman				
PROJECT NUMBE	R: 00266417.0000				
SAMPLER	s: B, Ovaqlier	Ò			
)				
	Control Ann American				Vol.
: Total Casing and S	Screen Length:		<u></u>	Well I.D.	Gal./ft.
	-1)			1"	0.04
: Casing Internal Dia	ameter: 2"			2"	0.17
		_ 1		3"	0.38
: Water Level Below	Top of Casing: 4.2	1	_	4"	0.66
				5"	1.04
): Volume of Water in	n Casing:		_	6"	1.50
$v = 0.0408 (B)^2$	(A-C) = D			8"	2.60
v = 0.0408 () ² x (1.2) =		gal.

PARAMETER				ACC	CUMUL	ATED VO	LUME P	JRGED		
Time	1505	150	1515	1520	1525	1530	T			
Gallons						-2.0				
Well Volume Rate (mymin	180	180	180	180	180	180		- 1		
Depth to Water (ft.)										
Temperature (°C)	13.2	13.3	13.2	13.3	13.1	13,3				
рН			6.5)	6.50	6.48	6.46				
REDOX (mV)			251.8							
Conductivity (mohm/cm)			0,512		0,511					
Turbidity	27.5	16.4	13.8		10.5	10,4			1	
Dissolved Oxygen	4.50	4,20	4.07	4.06	4.03	4.07				
TDS									1 -	
Salinity									1	

	MS/IUSD.	collected	1535	Sampled at



	WELL NUMBER: MW-ID		DATE: 3	122/16	
	PROJECT NAME: Crown Dykman				
	PROJECT NUMBER: 00266417.0000				
	SAMPLERS: B. Quaglier.				
					Vol.
A :	Total Casing and Screen Length:		51 1/	Well I.D.	Gal./ft.
				1"	0.04
3:	Casing Internal Diameter: 21)	_	2"	0.17
				3"	0.38
:	Water Level Below Top of Casing: Floo	ded	_	4"	0.66
				5"	1.04
):	Volume of Water in Casing:		_	6"	1.50
	$v = 0.0408 (B)^2 x (A-C) = D$			8"	2.60
	v = 0.0408 () ² x (2) =		gal.

PARAMETER				ACC	CUMUL	ATED	VOLUME F	PURGED			
Time	1555	1600	1605	1610	1615	1620	1625			3	
Gallons											
Well Volume Rate (min	150	150	150	150	150	150	150				
Depth to Water (ft.)						114					
Temperature (°C)	13.3	13.4	13.3	13.4	13.4	13.4	13.4				
рН	6,54	6,52	6.51	6.50	6.49	6.49	6.49		1		
REDOX (mV)		45,5			38.4	45.1	43.1			1	
Conductivity (mohm/cm)	2550	0.730	0.732	0.731	0,73)	0.730	0,729			1 1	
Turbidity	44.7	77.2	45.5	142	165	13,6	14,2				
Dissolved Oxygen	0.53	0.28	0.20	0,14	0.18	0.17	0.20			1	
TDS-											
Salinity											

tes: Sampled at 1630:	



	WELL NUMBER:	-100		DATE:	3/22/14		
	PROJECT NAME: Crown D	ykman					
	PROJECT NUMBER: 0026641	7.0000					
	SAMPLERS: MIM						
						Vol.	
A:	Total Casing and Screen Leng	yth:			Well I.D.	Gal./ft.	
		- 1			1"	0.04	
B:	Casing Internal Diameter:	_2'	,	_	2"	0.17	
125					3"	0.38	
C:	Water Level Below Top of Cas	sing:		_	4"	0.66	
2					5"	1.04	
D:	Volume of Water in Casing:	-			6"	1.50	
	$v = 0.0408 (B)^2 x (A-C) = I$	D			8"	2.60	
	v = 0.0408 () ² x (1.25) =		gal.	

PARAMETER				ACC	CUMUL	ATED	VOLUME P	URGED			
Time	1550	1555	1600	1605	1610	1615	1620				
Gallons											
Well Volume											
Depth to Water (ft.)							1 1			0	
Temperature (°C)	13.9	13.7	13.9	139	13.9	14.5	14.3				
рН	6.36	6.28	6.27	6.25	6.24	6.23	6.22				
REDOX (mV)	14.7	111.6	107.2	99.8	948	90.1	89.4				
Conductivity (mohm/cm)	512.1	511.6	512.7	5F8.4	516.3	523.4					
Turbidity	4.63	2.16	1,23		0.80		0.93		1 1	1	
Dissolved Oxygen	21.2	6.82	0.67	0.62	0.56	6.48	0.48				
TDS											
Salinity											
	1 = 1	1									

:: Sampled at 1625.	



WELL NUMBER:	14W-1	_	DATE: 3/2	2/16	
PROJECT NAME:	Crown Dykman				
PROJECT NUMBER:	00266417.0000				
SAMPLERS:	B.Quaglieri				
					Vol.
: Total Casing and Scr	een Length:			Well I.D.	Gal./ft.
	- 1)			1"	0.04
: Casing Internal Diam	eter: 2"			2"	0.17
				3"	0.38
: Water Level Below T	op of Casing: Floode	d		4"	0.66
				5"	1.04
: Volume of Water in C	asing:			6"	1.50
$v = 0.0408 (B)^2 x ($	A-C) = D			8"	2.60
v = 0.0408 () ² x (-) =		gal.
PARAMETER	AC	CCUMULA	ATED VOLUM	E PURGED	

PARAMETER				ACC	CUMUL	ATED '	VOLUME	PURGE)		
Time	1645	1650	1655	1700	1705	17/0	1715				
Gallons			Tay I				12.7				
Well Volume Ratemin	1200	200	200	200	200	200	509				
Depth to Water (ft.)							= 1				
Temperature (°C)	10.9	10.9	10.9	11.0	11.0	10.9	10.9				
рН	6.84	6.68	6.64	6.61	6.58	656	6.55				
REDOX (mV)					134,4						
Conductivity (mohm/cm)	0.724		0.722		0.722						
Turbidity	42.6	46.3	46.5	44.1	31.1	30,8	29.7			1	
Dissolved Oxygen	2,15	1.21	1.02	0.93	55.0	0.59	6,42		1		
IDS-							-				
Salinity									7 7		

es: Sampled at 1720	



	WELL NUMBER: 1120-015	DATE: $3/3$	21/16	
	PROJECT NAME: Crown Dykman			
	PROJECT NUMBER: 00266417.0000			
	SAMPLERS:			
				Vol.
A :	Total Casing and Screen Length:		Well I.D.	Gal./ft.
			1"	0.04
3:	Casing Internal Diameter:		2"	0.17
			3"	0.38
:	Water Level Below Top of Casing:		4"	0.66
			5"	1.04
:	Volume of Water in Casing:	 7	6"	1.50
	$v = 0.0408 (B)^2 x (A-C) = D$		8"	2.60
	v = 0.0408 () ² x (-) =		gal.

PARAMETER				ACCI	JMULA	TED V	OLUMI	E PUR	GED		
Time	1650	1955	1700	1705	T						1
Gallons											
Well Volume										1	1
Depth to Water (ft.)	1										1
Temperature (°C)	12.9	12.9	13.1	13.2							_
рН	6.63	6.61	6.58	6.57							
REDOX (mV)	92.6		94.9	96.2							
Conductivity (mohm/cm)	742	744	744	742							
Turbidity	2.69	208	1.51	1.94							
Dissolved Oxygen	0.52	0.46	0.45						-		
TDS		- 2.2									
Salinity											
	1										
					- 1						

1715.	



PROJECT NAME									
PROJECT NUMBER									
SAMPLERS	B,Q	vagi	ieni						
A: Total Casing and Sc	reen Le	ength:						Well I.D.	Vol. Gal./ft.
B: Casing Internal Diam	neter:		ع	11				2"	0.04 0.17
C: Water Level Below 1	op of C	Casing:	4,30	5				3" 4"	0.38 0.66
D: Volume of Water in 0	Casing:							5" 6"	1.04 1.50
$v = 0.0408 (B)^2 x$	(4.0)	- D						8"	2.60
	(A-C) :		x () =	L		nal
v = 0.0408 (PARAMETER)2	x (· ACS	- CŲMULA) =	/OLUME	PURGED	gal.
v = 0.0408 (PARAMETER	1730) ²	1740				/OLUME	PURGED	gal.
v = 0.0408 (PARAMETER Time	1730) ²	1740	SAGE			/OLUME	PURGED	gal.
v = 0.0408 (PARAMETER Time Gallons	1730) ²	1740				/OLUME	PURGED	gal.
V = 0.0408 (PARAMETER Time Gallons Well Volume Rate (m/ min)	1730 1550)2 (7.35	1740	SAGE	10,500		/OLUME	PURGED	gal.
V = 0.0408 (PARAMETER Time Gallons Well Volume Retermina	1730 15561 200)2 1735 1585 200	1740	SAGE	200		/OLUME	PURGED	gal.
V = 0.0408 (PARAMETER Time Gallons Well Volume Rete (**/ min) Depth to Water (ft.) Temperature (°C)	1730 1850 200)2 1735 200 200	1740 200 200	200	200		/OLUME	PURGED	gal.
V = 0.0408 (PARAMETER Time Gallons Well Volume Rate (M) min Depth to Water (ft.) Temperature (°C) DH REDOX (mV)	1730 1850 200 12.3 5.97)2 1735 200 12,4 5.53	1740 200 12.3	200	200 12.2 5.74		/OLUME	PURGED	gal.
V = 0.0408 (PARAMETER Time Gallons Well Volume Rate (M) min Depth to Water (ft.) Temperature (°C) DH REDOX (mV)	1730 1200 12.3 5.97	17.35 1565 200 12,4 5.53 196.0	200 12.3 5.78 201.2	200 12.2 5.76	200 12.2 5.74 207.2		/OLUME	PURGED	gal.
V = 0.0408 (PARAMETER Time Gallons Well Volume Retermination Depth to Water (ft.) Temperature (°C) DH REDOX (mV) Conductivity (mohm/cm)	1730 1213 1213 5.97 1914 0.660	17.35 17.35 200 12.4 5.53 196.0 0.658 11.5	1740 200 12.3 5.78 201.2 0,653	200 12.2 5.76 241.3 0.652 5:42	200 12.2 5.74 207.2 0.651		/OLUME	PURGED	gal.
V = 0.0408 (PARAMETER Time Gallons Well Volume Rate (**/ mm) Depth to Water (ft.) Temperature (°C) DH REDOX (mV) Conductivity (mohm/cm) Furbidity Dissolved Oxygen	1730 1213 1213 5.97 1914 0.660	17.35 17.35 200 12.4 5.53 196.0 0.658 11.5	1740 200 12.3 5.78 201.2 0,653	200 12.2 5.76 201.3 0.652	200 12.2 5.74 207.2 0.651		/OLUME	PURGED	gal.
v = 0.0408 (PARAMETER Time Gallons Well Volume Rate (m/mm) Depth to Water (ft.) Temperature (°C) pH REDOX (mV) Conductivity (mohm/cm) Turbidity Dissolved Oxygen	1730 1213 1213 5.97 1914 0.660	17.35 17.35 200 12.4 5.53 196.0 0.658 11.5	1740 200 12.3 5.78 201.2 0,653	200 12.2 5.76 241.3 0.652 5:42	200 12.2 5.74 207.2 0.651		/OLUME	PURGED	gal.
v = 0.0408 (1730 1213 1213 5.97 1914 0.660	17.35 17.35 200 12.4 5.53 196.0 0.658 11.5	1740 200 12.3 5.78 201.2 0,653	200 12.2 5.76 241.3 0.652 5:42	200 12.2 5.74 207.2 0.651		/OLUME	PURGED	gal.



	WELL NUMBE	R: Mu	0-13)			DATE	: 3/2	116	
	PROJECT NAM	IE: Crowr	n Dykm	an						
	PROJECT NUMBE	-								
	SAMPLER	S:								
A:	Total Casing and S	Screen Le	ength:	_			4		Well I.D.	Vol. Gal./ft. 0.04
B:	Casing Internal Dia	ameter:							2"	0.17
							-		3"	0.38
C:	Water Level Below	Top of C	asing:						4"	0.66
									5"	1.04
D:	Volume of Water in	n Casing:					0		6"	1.50
	$v = 0.0408 (B)^2$	x (A-C)	= D						8"	2.60
	v = 0.0408 ()2	x () =			gal.
	PARAMETER				ACC	CUMUL	ATED	/OLUME	PURGED	
Tim	е	1725	1730	1735	1740	1745	1750	1755		- 3 [] [
Gall	ons									
We	II Volume									

PARAMETER				ACC	CUMUL	ATED '	VOLUM	E PUI	RGED		
Time	1725	1730	1735	1740	1745	1750	1755				1
Gallons											
Well Volume											
Depth to Water (ft.)							7				1
Temperature (°C)	12.9	130	12.9	12.8	12.6	12.2	12.4				
pH	6.61	6.55	6.54	6.53		6.54	6.53				
REDOX (mV)	-54.7	-67.4	-72.9	-75.7	-77.9	-78.4	-78.2				
Conductivity (mohm/cm)	659	658	656	656	657	662	657.2				
Turbidity	75.6	81.6	80.5	65.6	26.7	25.5	19.2			-	
Dissolved Oxygen	0.45	0.40	0.43		6.38	0.45	0.39				
TDS	l eest					1 1 1					
Salinity											
		T Y									

tes:	SAMPLED AT	1100	



	WELL NUMBER: /	1W-9		DATE: 3/2	23/16	
	PROJECT NAME: C	rown Dykman				
	PROJECT NUMBER: 00	0266417.0000				
	SAMPLERS:	MM+BQ				
						Vol.
١:	Total Casing and Scree	n Length:		_	Well I.D.	Gal./ft.
	4	er: 2	()		1"	0.04
:	Casing Internal Diameter	er:		_	2"	0.17
	The state of the s	11 -	~)		3"	0.38
:	Water Level Below Top	of Casing: 4,5	0	_	4"	0.66
					5"	1.04
	Volume of Water in Cas	sing:			6"	1.50
	$v = 0.0408 (B)^2 x (A-$	C) = D			8"	2.60
	v = 0.0408 () ² x () =		gal.

PARAMETER				ACC	CUMUL	ATED '	VOLUME P	URGED		
Time	0815	0820	0825	0530	0835	0840	0845			
Gallons										
Well Volume Rocte ()	200	200	200	200	200	200	200			
Depth to Water (ft.)							121			
Temperature (°C)	11.1	11.1	11.1	11.1	11.1	11.2	11.1			
рН	7.03	6.75	6.73	6.67	6 66	6.65	6.64			
REDOX (mV)	29,9	-38.4	403	-42.9			-48.7			
Conductivity (mohm/cm)		0,894		0.396	0.899	0.899	0.899			
Turbidity	29.6	37,0	35.9	37.1	29.0	28.0	31.5			
Dissolved Oxygen	2.08	0.92	0.80	0.67	0.62	6.57	0.56			
TDS →								111		
Salinity									1 1	
			(L.T.)		11-1					

s: Sampled at 0845.	



WELL NUMBER:	MP-20	DATE	= 3/23/16	3/23/16				
PROJECT NAME:	Crown Dykman							
PROJECT NUMBER:	00266417.0000							
SAMPLERS:								
				Vol.				
: Total Casing and Scr	een Length:		Well I.D.	Gal./ft.				
			1"	0.04				
: Casing Internal Diame	eter:		2"	0.17				
			3"	0.38				
: Water Level Below To	op of Casing:		4"	0.66				
			5"	1.04				
: Volume of Water in C	asing:		6"	1.50				
$v = 0.0408 (B)^2 x (A)$	A-C) = D		8"	2.60				
v = 0.0408 () ² × (-) =		gal.				
DADAMETED			VOLUME BURGES					

PARAMETER	ACCUMULATED VOLUME PURGED									
Time	09/5	0920	0925	0930	0935	0946				
Gallons		-	1000							
Well Volume Flow	200	200	200	200	200	200				
Depth to Water (ft.)										
Temperature (°C)	10.4	10.3	10.3	10.2	10.4	10.4				
рН	6.32		6.57	6.51	6.51	6.50				
REDOX (mV)	62.0	78.0	80.7	75.8	73.7	72.7				
Conductivity (mohm/cm)	0.934	0.951	6.973	0.911	0.910	0.910				
Turbidity	2.68	3.44	2.10	1.64	1.64	1.27				
Dissolved Oxygen	2.42	1.54	1.26	1.10	1.05	100				
TDS										
Salinity										
		1								
			1							

SAMPLED AT 0945	
	SAMPLED AT 0945



PROJECT NAME: PROJECT NUMBER:					
SAMPLERS:					
Total Casing and Scr	een Length:			Well I.D.	Vol. Gal./ft.
Casing Internal Diam	eter: 2"			1" 2"	0.04 0.17
Water Level Below T	op of Casing: 5.86		3" 4"	0.38 0.66	
Volume of Water in 0	casing:			5" 6"	1.04 1.50
$v = 0.0408 (B)^2 x ($	A-C) = D			8"	2.60
v = 0.0408 () ² x () =		gal.
PARAMETER	AC	CCUMULA	TED VOLUME	PURGED	

PARAMETER	ACCUMULATED VOLUME PURGED									
Time	0915	0920	0920	0930	093	0940				-11
Gallons										
Well-Volume Rote (m)	150	150	150	150	150	150				
Depth to Water (ft.)	1									
Temperature (°C)	14,0	14.1	14.1	14.1	14.)	14.1				
рН	6.51	6.49	6.47	6.46	6.46	6.46				
REDOX (mV)	-46.5		-75.4		-86.7					
Conductivity (mohm/cm)	0.497	0.516	0.546	0.626	0.627	6.629				
Turbidity	9.8	A 20 TO 1	5,31			5.02				
Dissolved Oxygen	0.87	0.46	0.35	0.24	0.22					
TDS-										
Salinity										

Synoptic Sampling Round; October-November 2017

5/31/2017 Groundwater Sampling Log Page 1

Page of

Crown	- '				200.00	710	- 015		*******		
ampling Personnel:	25	41	1921 - 2		Well ID:	-					_
Hient / Job Number:	1. 480	417.00	00		Date:	11/7	Time	Out: /	245		
reaction. C700	7				Time in	1103	rine	out.			
Well Information				_	Well Type:		Flush	nount [5	tick-Up	
Depth to Water:		1.50	(from MP)	Well Material:						-
Total Depth:		8.00	(from MP)			Stainless S	Steel [1	PVC	V
Length of Water Column:		3.50		_	Well Locked:			Yes []	No	V
Volume of Water in Well:		2.20			Measuring Poi	nt Marked:		Yes [3	No	
Intake depth for tubing:	(feet)	L 17.00		_	Well Diameter:		1"	(2")	Other:		
urging Information					/						
urging Method:	Bailer _	Bladder	☐ Per	ristaltic				1" ID	2° ID	4° ID	6* ID
ubing/Bailer Material:	Steel	Polyethyle	ne 🖂 Tef	flon	HDPE	M	gal / ft. of water				
Sampling Method:	B #	B 44 W			COLE	-		0.041			1.469
	Bailer	renstaltic	Bla	dder 🗆			1 gal = 3	5.785 L =3	785 ml = 0.1	33/ cubic	teet
	50							Un	it Stability		
Pump Stop Time: 12	40			Water-Quality N	Meter Type:	b. U-53	pH	DO/	Cond.	1 0	RP
Total Volume Removed:	(gal)	1.50		Did v	well go dry:	/	∀ 0.1	Turb ∀ 10%	/Temp ∀ 3.0%	V 1	0 mV
3.					//	0	V 0.1	V 1076	V 3.076	1 4 1	Omv
Parameter:	1	2	3	4	5	6	7		8	9	
Time	1200	1205	1210	1215	1220	1225	1236	9			
Volume Purged (Gal)	0	0.25	0.50	0.75	1.00	1.25	1.50				
Rate (mL/min)		0,23	0.00				7.2				
Depth to Water (ft.)	4.50	5.50	5.60	5.60	5.60	5.60	5.60	,			_
pH	6.68	6.68	6.67	6.66	6.66	6.65	6.6	_	-		_
Temp. (C)	17.84	17.87	17.96	17.93	17.93	17.89	17.8		-		
Conductivity (mS/cm)	0.669		0.670		0.672						
Dissolved Oxygen		0.670		0.671		0.671	0.66		-		
(mg/L)	2.33	Z.12	1.89	1.82	1.81	1.81	1.81				
ORP (mV)	208	510	514	519	520	524	52				
Turbidity (NTU)	566	467	265	125	132	119	121				
Notes:											
Sampling Informat					Proble	ms / Observ	ations				
Analyses	# n L	aboratory		1	,						
TCL VOCs				# He	Space	: 97.	3 100	n			
TCL SVOCs						0	10				
Total Cyanide	12	-		# 5.	adspace appled	for	Vocs	+	PEC	5	
	e / Brown	in 1 int		11 0 11	7					1	
Odor: Slight		_									
Appearance:		de Tierre 1 -	2/								
Sample ID: W -	□ No	Die Time: /2	35								
Duplicate: Yes	¬ No										
Duplicate ID		Time									
		Time:									
Chain of Custody Signe	u by.										

	0		GROUND	WATER SA	MPLING L	OG				= 10/N
Sampling Personnel:	AThom	OU)			Well ID	TW	12			
Client / Job Number:	NYSDEC	007	266417.	0000	Date:	11-7-	-17			
Veather: 50	S OVE	mast			Time Ir	: 1100	Time O	ut: 123	30	
Well Information					Well Type:		Flush mo	unt 🔯	Stick-Up	
	7627						3.55.57			
Total Depth: 26.3	(feet)		(from MF	<u>')</u>	Well Material:		Stainless St		PVC	
Length of Water Column	: (feet) \	3.81		_	Well Locked:		,	Yes 🖭	No	
Volume of Water in Well	: (gal)	2,25			Measuring Po	int Marked:		Yes D	No	
Intake depth for tubing:	(feet)	2		-	Well Diameter	ri .	1" (2"	Other:	
urging Information								Conversion	- Fastara	
urging Method:	Bailer	Bladder	□ Pe	ristaltic 🗸					ID 4" ID	6* ID
ubing/Bailer Material:	Steel	Polyethyle	ene 🖂 Te	fion	H	OPE	gal / ft. of water		163 0.653	1.469
ampling Method:	Bailer		Bla	ndder 🔲	1.1	UIC	1 gal = 3.7		nl = 0.1337 cubi	
ump Start Time:	1105									
ump Stop Time:	1220			Water-Quality N	Meter Type: +	tonba		Unit Sta		
Total Volume Removed:	Did			pН		Cond. Temp	RP			
	TEL 2.	S		Did	men go di y.	10	∀ 0.1	√ 10% ∀	′3.0% ∀ 1	I0 mV
Parameter:	1	2	3	4	5	6	7	8	9	1
Time	1110	1115	1120	117.5	1130	1135	1140	1145	1150	3 115
Volume Purged (Gal)	alegou	50,a	0.40	0.55	0,7	0.9	1.1	1.3	1.5	
Rate (mL/min)	180	180	180	180	180	180	180	180		18
Depth to Water (ft.)	6257	6.58	6,58	6.58	6158	6.58	6.58	6.58		
pH	6,71	6.81	1 65	6.89	(0,91	6.89	6.92	6.9		
Temp. (C)	18.41	19.70	19.74	19,73	19,69	19,69	19,60		-	
Conductivity (mS/cm)	0.778	6771	0.763	6.749	0.739		0.725	0.70		
Dissolved Oxygen		6.57	6. 47		0.47	6.50				, -
(mg/L)	0,50	1 10		6.45		-155	0.39	0.30		-
ORP (mV)	-191	A .	-141	-150	-153		-154	-155		1
Turbidity (NTU)	180	173	1166	122	145	IMI	139	120	1119	11
Notes:										
Sampling Informat		4 3 4 3			Proble	ms / Observ	ations			
Analyses TCL VOCs	# n L	aboratory	-2.4	11/01/10	N W	CIA	n ha	X. N	11A OU	nove
TOL SVOCS PEAS	1/1/	Test M	remza	00000	V M	COVI		11 14	ILA al	
Total Cyanide				well	cas	ine.				
Color:						J	1 (100		11/0	1 MINI
Odor:				INITIO	ul! Soy	newhet	1 (40	Vu	11111	11914
Appearance:				bruna	udyty 1 +	newhol-	some	SLOX	perior	
Sample ID: TW-0	2 Samp	ole Time:)	00	DIVALLES,	Odo	V, VIC	Shee	M :		
MS/MSD: Yes	□ No	B.							-\ 434	
Duplicate: Yes	No	B		Final !	, mos	My il	e avi	1100	5 truru	of our
Duplicate ID		Time: —			in she	en				J
Chain of Custody Signe	d By:		5	0	1/10 2					
		7		hID-	10713	5 ppm				
5/31/2017		U				Phil				
Groundwater Sampling L	og Page 1							Pa	age 1_ of	_1

Event

		GROUND	THE EN ON	THE PARTY OF THE							
	nov										
					(1) 70/		. 0	250		_	
1 CHEW 10	37			Time Ir	: 0 /30	Time O	ut: (0030			
			_ `	Well Type:		Flush m	ount 5	/ 5	Stick-Up		
(feet)		(from MF	2)	M. Materials							
(lect)	, 9	(from MF	<u>) </u>	Well Locked:		Otalilless 0	-				
			-	***************************************	CALLES AND A						
111	100		=		7.00.00.00	200	1		No		
(leet) 1			-	Well Diameter	:	1"	2)	Other	;	_	
	BC 11					-	Conver	sion Fact	ors		
Bailer	Bladde	Pe Pe	ristaltic 💟			gal / ft.	1" ID	2° ID	4" ID	6" ID	
Steel	Polyethyle	ene 🗆 Te	flon	HOF	正	of water	0.041	0.163	0.653	1.469	
Bailer	Peristalti	Bla	adder			1 gal = 3	.785 L =37	85 ml = 0.	1337 cut	bic feet	
145							44.4	CALLITY			
845			Water-Quality M	leter Type: +	5110G	-11	DO /	Cond.		OBS	
(nal)							Turb	/Temp		ORP	
, >					100	∀ 0.1	∀ 10%	∀ 3.0%	I A	10 mV	
1	2	3	4	5	6	7		8	9	9	
01156	6755	(800	0805	0810	0815	0820	08	25	5		
0.7	0.5		0	1.1	113	-	-	00 1.9	Å		
			200	206	200	200	20	00	M		
170		(0,80	12:80	0	6.80	10.80			P		
	1 0 -		10.94	6.94	. rac	6.95		CHT TO	L		
				19.47	19.68	19.82			6		
		1,99	1,73	1.57	1,46	1,43		11	0	083	
		0.72	0.67	6,63	0,56	0,50	1 6.	52			
77		-121	- 122		-125	-					
			76				-	1/1			
112	110	101	1.0			00 ,					
n				Proble	ms / Obser	vations					
# n L	aboratory		-	.00	ness.			14.	_	lise is	
3	on the	an co	Lnin	ap, mi	15119	clow	U	171	7	1141	
C 1.	0.7		112001	ha.	2 -	1 St	im	01	OV.	J	
			STIT	Dimi	1 111/	t, or)				
			NO V	3104	Shee	en.					
					0	-					
5 Samp	le Time: 6	830	T . n .	./// /	11 -1		Ch	er -			
	B	-00	thal	' ANTO	my co	lav.	211	11	LOU	(
No					()	10	and to	17/1	11411	+	
1			an	020	V	-	B1-	0	2	333	
No	g'		an	odo	V.	AUNA	10 10	SK	een	in	
	g'		Final an	040 23.3	V.	Purc	je bi	Shar	een	in	
	(feet) (f	(feet) (f	(feet) (from MF) (feet) (feet) (from MF) (feet) In (6 9) (gal) 2.0 (6 6 1) Bailer Bladder Peristaltic Palareta Pe	(feet) (from MP) (feet) (from MP) (feet) In 6 9 (gal) 3.00 (feet) IT Bailer Polyethylene Teflon Bailer Peristaltic Bladder 45 845 845 845 845 845 845 845 845 845		SO EC	Size	So C			

Event

			GROUND	WATER SA	MPLING L	OG					
Sampling Personnel:	AThon	ray			Well ID	. MW-1	_				
	VISOCC	60	266417.	0000	Date:	11-2-1	7				
Weather: (00'5	overlas	F	Side of the		Time I	1100	Time O	ut: 12	So		
Well Information					Well Type:		12.769		/		
Depth to Water: (*), C	O (feet)		(from MF	<u> </u>			Flush mo			Stick-Up	
Total Depth: 5.85	(feet) S	ediment a	1 bate (from MF	")	Well Material:		Stainless St	eel [)	PVC	B
Length of Water Column:	(feet) 5	.85_	_	Well Locked:			Yes []	No	0	
Volume of Water in Well:	(gal) 0	953		_	Measuring Po	oint Marked:		Yes [)	No	4
Intake depth for tubing:	(feet) d	5		_	Well Diamete	r:	1"	(2"	Othe	r:	
Purging Information						· ·		<u></u>	rsion Fac	tore	
Purging Method:	Bailer [Bladde	er 🗆 Pe	ristaltic 🔯			1/4	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Steel	Polyethyl	ene \Box Te	flon	HOPE		gal / ft. of water	0.041	0.163	0.653	1.469
Sampling Method:	Bailer			idder П	11010		1 gal = 3.	785 L =37	785 ml = 0	.1337 cut	oic feet
Pump Start Time:	- 4		LM	Ш						500000	
Pump Stop Time:	30			Water-Quality I	Meter Type:	4 6.00 1			t Stabilit		
	5				well go dry:	Honba	pH	DO / Turb	Cond.		ORP
Total Volume Removed:	BO (gal)			Did	well go di y.	NO	∀ 0.1	∀ 10%	∀ 3.0%	6 V	10 mV
			1-3	1	T	1		1			
Parameter:	1	2	3	4	5	6	7		8	9	9
Time	1910	12 15	1990	1225	1230	S					
Volume Purged (Gal)	0.5	0.8	111	1,4	1.7	A					14
Rate (mL/min)	750	256	250	250	250	M					
Depth to Water (ft.)	0.00	0.00	0,00	0.00	6.00	P					
pH	6.69	6.71	6.72	6.72	6:72	Ĺ					-
Temp. (C)	18.23	18:13	18.44	18.42	18.43	F					
Conductivity (mS/cm)	1,19	1,18	1.19	1.20	1,20	(2)					EX
Dissolved Oxygen (mg/L)	0.54	0.36	0.34	0.33	0.33	1235					
ORP (mV)	31	10	-6	-11	-13	1233					
Turbidity (NTU)	173	liua	97.1	86.4	88.9						
	113	11.141	1 1 1 1	10011	100.1						
Notes:											
Sampling Informati					Proble	ems / Observ	vations				
Analyses TCL VOCs	# n	Laboratory		TAK	of day	110	10 11	8	1.1.	0/101	
TCL'SVOCS DEAS	1 13			שלווווע	a, aur	- Joran	N (()	æ:	seem	Wit	•
Total Cyanide	-			MOM	dorda	and v	no w	MSDO	arel	las	-
Color:	Color:						MISN	lu d	INK	60 5	Ne
Odor:				Milli	, ,, ,,,,	VI VIII	VISIO	1	2000		
Appearance:				Unddin	led in	ton be	1 ha	NY	nny	na	U
Sample ID: MW - 1	Sam	ple Time: 🔯	35	Olice	and it	- m	(A) 1	2015	- /		
MS/MSD: Yes		N H		progr	year 17	and with them be	6. (1	704			
Duplicate: Yes	No No										
Duplicate ID		. Time:	/								
Chain of Custody Signer		with									
		X		P10-0	mago.						
		V		-	11/11						

and the same of the same of	Amome	A				MINIM	-10				
ampling Personnel:	MAZUE		66417.000	10	Well ID Date:	11-9	1				-
	overast		WW III.		Time Ir	0905	Time Ou	t: 11	5		
V * * [V							u	2		
Well Information				_	Well Type:		Flush mou	int 6	1	Stick-Up	
Depth to Water: 200			(from MP	_	Well Material:		Stainless Ste	el [PVC	N
Total Depth: 36 8	(feet)		(from MP)	Well Locked:		240000000000000000000000000000000000000	N- 73	1	No	TO TO
Length of Water Column	(feet)		-			10.00				No	
Volume of Water in Well:				-	Measuring Po			es		No	F 3
Intake depth for tubing:	(feet)			-	Well Diamete	r:	1"	2"	Othe		
Purging Information								Conver	sion Fac	tors	
Purging Method:	Bailer _	Bladder	□ Per	istaltic 🔽			gal / ft.	1" ID	2" ID	4" ID	6" ID
ubing/Bailer Material:	Steel _	Polyethyle	ne 🛮 Tef	lon 🗆	HC	DOE	of water	0.041	0.163	0.653	1.469
Sampling Method:	Bailer	Peristaltic	□ Bla	dder 🗆			1 gal = 3.7	85 L =37	85 ml = 0.	1337 cul	oic feet
Pump Start Time:	175										
Pump Stop Time: 11	(10)			Water-Quality I	Meter Type:	Lange		Uni	Cond.		
Total Volume Removed	(1 (201)			Did	well go dry:	tonba		Turb	/Temp		ORP
Total Volume Removed	(3 (gal)			Diu	wen go dry.	NU	∀ 0.1 ∀	10%	∀ 3.0%	A	10 mV
Parameter:	1	2	3	4	5	6	7	1	8		9
raidilletel.				018	1.0	1000	1625	10	35	1045	
	0930	6935	May S	10000	1001	11017				_	
Time	0930	0935	0945	0955	1005	1015			,5	14.	()
Time Volume Purged (Gal)	0.3	0.75	1,2	1,4	aic	2.4	3.0	3	,5	4.	0
Time Volume Purged (Gal) Rate (mL/min)	6.3	200	1,2	200	200	2.4	3.0	3	00	de	
Time Volume Purged (Gal) Rate (mL/min) Depth to Water (ft.)	0.3	200 200 204	1,2 200 2,04	204	200	2.4	3.0	3 a.	09	2.0	4
Time Volume Purged (Gal) Rate (mL/min) Depth to Water (ft.) pH	6.3	0.75 200 2.04 6.48	1,2 200 2,04 6,54	200	2.0 200 2.04 6.57	2.4	3.0	3	00	2.0	4
Time Volume Purged (Gal) Rate (mL/min) Depth to Water (ft.) pH Temp. (C)	6.3	200 200 204	1,2 200 2,04 6,54 17,63	2.04	2.0 200 2.04 6.57 17.74	2.4	3.0 200 2.04 6.59 17.80	3 2 2 . 6 . 17	00	2.0	4
Time Volume Purged (Gal) Rate (mL/min) Depth to Water (ft.) pH Temp. (C) Conductivity (mS/cm)	6.3	0.75 200 2.04 6.48 71.45 1.15	1, 2 200 2,04 6,54 17,63	2.04 6.56 17.71	2.0 2.04 6.57 17.74 11.3	2.4	3.0	3 2 . 6 . 11	00	2.6.50	4
Time Volume Purged (Gal) Rate (mL/min) Depth to Water (ft.) pH Temp. (C)	6.3	0.75 200 2.04 6.48 71.45 1.15 0.69	1,2 200 2,04 6,54 17,63	2.04 2.04 6.56 17.71 1.14	2.0 200 2.04 6.57 17.74	2.4	3.0 200 2.04 6.59 17.80 1.12 0.44	3 2	00	2.0 6.50 11.81	4 7 0 3
Time Volume Purged (Gal) Rate (mL/min) Depth to Water (ft.) pH Temp. (C) Conductivity (mS/cm) Dissolved Oxygen	6.3	0.75 200 2.04 6.48 71.45 1.15	1, 2 200 2,04 6,54 17,63	2.04 6.56 17.71	2.0 2.04 6.57 17.74 11.3	2.4 200 2.04 6.57 17.79	3.0	3 2 . 6 . 11	00	2.6.50	4 7 2 11

Sampling Information to Laboratory Analyses # n TCL VOCs TCL SYOGS PEAK Total Cyanide Color: Odor: Appearance: Sample ID: MW-IS 050 Sample Time: MS/MSD: No Yes Duplicate: No 12 Duplicate ID Dup. Time:

Horiba not mised

Problems / Observations

Notes: when opening the well cover, curb box filled with water. Some sheen present at removed water before opening, ping

Enitial: mostly cloudy particles inside. faint oder. No visible street

P10 = 0.0 ppm

Chain of Custody Signed By:

Notes:

GROUNDWATER SAMPLING LOG

Sampling Personnel:	Amor		S	name.	Well II						
Client / Job Number:	MAZDEC		266417	.0000	Date:	11-2-			20	12/17	7
Weather: 60 -7	0's, sun	* clouds			Time I	n: 1233	Time	Out:	past	710	
Well Information				<u> </u>	Well Type:		Flush n	nount D	Sti	ick-Up	
Depth to Water: 3,00	7		(from M	<u>P)</u>	Well Material		Stainless	Steel 🗆		PVC	
Total Depth: 32-61		1 (7	(from M	P)	Well Locked:	0	Ctamicss	_		77.	
Length of Water Column:	1.1							Yes 🗆		No	
Volume of Water in Well:	25	1.89		_	Measuring P			Yes		No	
Intake depth for tubing:	(feet)	2		-	Well Diamete	er:	1"	(2")	Other:		
Purging Information							- [Convers	ion Facto	ors	
Purging Method:	Bailer _	Bladder		eristaltic 🖸			gal / ft.	1" ID	2" ID -	4" ID	6" ID
Tubing/Bailer Material:	Steel	Polyethyle	ne 🗆 Te	eflon 🗆	HOPE		of water	0.041	0.163	0.653	1.469
Sampling Method:	Bailer	Peristaltic	BI	ladder 🗆			1 gal =	3.785 L =378	5 ml = 0.13	337 cubi	ic feet
Pump Start Time:	310							Unit :	Stability		
Pump Stop Time:	410			Water-Quality N	Meter Type:	Honba	рН	DO/	Cond.		ORP
Total Volume Removed:) (gal)	1		Did	well go dry:	No	∀ 0.1	Turb ∀ 10%	/Temp ∀ 3.0%		10 mV
,	d						V 0.1	V 1076	V 3.070	1 .	TO THE
Parameter:	1	2	3	4	5	6	7	1	3	9	
Time	1315	1320	1325	1330	1335	1340	1345	1350	2	5	
Volume Purged (Gal)	0.25	0.4	0.6	0.8	10	1,2	1.5				
Rate (mL/min)	3610	300	200	200	200	200	2080	20		M	
Depth to Water (ft.)	212	3,13	3,13	3.13	3.13	3113	3.12	3.1	3	P	
pH	1211	17 61	110			6,37	10:30	-	10	1	
	6.63		10'	6.40	6.36		1 .			-	-
Temp. (C)	19.62	1911	14.80	18.67	18,50	18.47	18,40	-	-	E	
Conductivity (mS/cm) Dissolved Oxygen	1,33	1,32	1.29	1126	1,24	1,23	1.23		-	_	-
(mg/L)	1,49	1,30	1,14	1.03	0.98	0.95	6.97		88	135	77
ORP (mV)	-35	-35	-34	-33	-33	-36	-39	-4	2	140	
Turbidity (NTU)	210	305	183	160	143	113	103	95	10		-
Notes:											
140103.											
Sampling Informat	ion				Probl	ems / Obser	vations				
Analyses	# n L	aboratory									
TCL VOCs	3	Xan b	momen	Initial	1: 50W	townort	do	1 188	11 4	MC	15/11
TCL-SVOCE PEAS	12	(O)1/1	1101:00	r(1.	0-1	0.00	0.00	V. A. C.		, , ,	^
Total Cyanide				Cloud	y, po	antiles	2 N	Speni	des	.]	16
Color:				chand	0. 49	The No	.03	hin s	NO1	NC	
Odor:				211010	000	24, 140	112	000	3,00		
Appearance:	100	20.000	-16			1					
Sample ID: MW MS/MSD: Yes		ple Time:	355	Final:	MOST	rewholt avticles ov. No ly cle	av,	no.	odo	1	OV
Duplicate: Yes	7 No	DV		1113111	le Si	reen	5				
Duplicate ID		Time:		11211)	~ 01						
Chain of Custody Signe		1	5								
, , ,	- 0			PID = 1.	Smaan						
		0		1111-11	- alder			-			
5/31/2017					A						1

5/31/2017 Groundwater Sampling Log Page 1

Page __l of __l

Crown D	y toman		GROUNDY	VATER SA	MPLING LO	OG					Event
Sampling Personnel:	ES				Well ID	· MW.	-2				
	02664	117.0000			Date:	11/8/1	7				
Veather: Clove	4 41	E			Time In		Time	Out:	0815		
Well Information		-	*	_ :	Well Type:		Flush	nount	V .	Stick-Up	
Depth to Water:		5.28	(from MP	<u>) </u>	Well Material:		Stainless			PVC	
Total Depth:		23.68	(from MP)	Well Locked:		Otaliless				-/
Length of Water Column:		8.40		=						No	9
Volume of Water in Well:		2.99 VZZ.	<	9 ,	Measuring Po		-			No	
Intake depth for tubing:	(feet)	22.		-	Well Diameter		1"	(2"	Othe	r:	
Purging Information Purging Method:		2,772.7		-	-			Conv	ersion Fac	tors	
	Bailer	Bladder	□ Per	ristaltic			gal / ft.	1" ID	2" ID	4" ID	6" ID
Fubing/Bailer Material:	Steel	Polyethyle	ne 🔲 Tef	ion 🗆	HOPE	- 17	of wate	0.041	0.163	0.653	1.469
Sampling Method:	Bailer _	Peristaltic	Bla	dder 🗆			1 gal =	3.785 L =	3785 ml = 0	.1337 cub	ic feet
Pump Start Time: 07	20							-			
	10			Water-Quality M	Meter Type:			DO /	Cond.		A. Ada
Total Volume Removed:				Didy	well an dry:	ribu U-53	рН	Turb	/Temp		ORP
Total volume Removed.	(gai)	1.75		Did v	veri go dry.	10	∀ 0.1	∀ 10%	∀ 3.0%	% ∀	10 mV
Parameter:	1	2	3	4	5	6	7		8	9	
Time	0725	0730	0735	8740	0745	0750	0753	- 0	800		
Volume Purged (Gal)	0	0.25	0.50	0.75	1.00	1.25	1.5		75		-
Rate (mL/min)											
Depth to Water (ft.)	5.28	5.90	6.10	6. 22	6.29	6.29	6.2	9	6.29		
pH	6.37	6.62	6.71	6.74	6.75	6.75	6.74	6	.25		
Temp. (C)	17.75	18.42	18.72	18.75	18.83	18.79	18.8	0 1	8.83		
Conductivity (mS/cm)	0.315	0.270	0.260	0.254	0.251	0.254	0.25	5 0.	255		
Dissolved Oxygen (mg/L)	7.30	3.44	3.12	2,95	2.80	2.60	2.5	5 2	. 48		
ORP (mV)	20	-16	-6	17	31	40	46		79	1	
Turbidity (NTU)	226	168	122	97	71.5	66.3	62.	1 5	19.8		
Notes:							4				
								:			
Sampling Informati	ion				Proble	ms / Observ	ations				
Analyses		aboratory									
TCL VOCs				ALA	tends o	ad O	.40	om			
TCL SVOCs				100	- P	for V	91		0		
Total Cyanide	1 1 3 1			A 5.	11	P. V	00-	+ P	FCS		
Color: None				2 20	MILL	101	003				
Odor: Non	7.0										
	1/201										
Sample ID: MW-3		ole Time: 08	05								
MS/MSD: Yes	□ No	Q'									
Duplicate: Yes	No	V									
Duplicate ID	Dup.	Time:	-								
Chain of Custody Signe	d By:										
Christian Programme and Christian Control of the Co											

Crown					AMPLING LO	7.00	40			
dinpining i diddinian	E3	117			Well ID:	MW-	7/5			
Veather: C/sul	00666	17.0000			Date: Time In:	1300	Time	Out: 1	315	
oution.	1 41.		4			1,500	111114	-	,	
Well Information				<	Well Type:		Flush	mount 🖺	Stic	ck-Up
Depth to Water:		1.00	(from MP)		Well Material:					PVC 🗹
Total Depth:	(feet)	9.45	(from MP)				Stainless		/	
Length of Water Column	: (feet)	18.45		-3	Well Locked:			Yes 🗹]	No 🗆
Volume of Water in Well:	: (gal)	3.00		-	Measuring Point	Marked:		Yes [No 🗹
Intake depth for tubing:	(feet)	18.45		-1	Well Diameter:		1"	(2"	Other:	
urging Information								Conver	sion Factor	re
Purging Method:	Bailer _	Bladder	☐ Peris	taltic 🗹			1/6	1815		1" ID 6" ID
ubing/Bailer Material:	Steel	Polyethylen	e Teflo	n 🗆	HOPE	d	gal / ft. of wate			.653 1.469
Sampling Method:				der 🗆	1,12,12		1 gal =		785 ml = 0.13	
Pump Start Time: 12		T Onotanio	<u> </u>	[]			- I gui	0.700 E -07	05 1111 - 0.10	or cubic loca
	300		W	/ater Quality	Meter Type			Uni	t Stability	
13	10		, vv		Meter Type: Hori	ba U-53	pH	DO / Turb	Cond. /Temp	ORP
Total Volume Removed:	(gal)	-55		Dio	well go dry:	10	∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 m\
V	_				1			1		
Parameter:	1	2	3	4	5	6	7		8	9
Time	1030	1300								
Volume Purged (Gal)	~55	~55								
Rate (mL/min)										
Depth to Water (ft.)						17.71				
pH		7.34								
Temp. (C)		20.51								
Conductivity (mS/cm)		0.520						7		
Dissolved Oxygen		9.96								
(mg/L)			7.00							
ORP (mV)			159							
Turbidity (NTU)	41.4	58.3								
Notes:										
1101001								3		
Sampling Informat	lan				Droblom	s / Observ	otions			
Analyses		Laboratory			Problem	S / Observ	rations			
TCL VOCs		Laboratory								
TCL SVOCs										
Total Cyanide										
Color: None	_									
Odor: None										
1-5	clear									
Sample ID: MW-		ple Time: / 3	300							
MS/MSD: Yes										
Duplicate: Yes										
		□ Time: 13 €	1							
Chain of Custody Signe		Time: 13								
I CHAIL OF CUSTORY SIGNE	DY.									

Site	D. Kma		GROUND	WATER SA	MPLING L	OG					Even
	ES					: Mu-	50				
Client / Job Number:	00261	6417.00	00		Date:	11/6/17	0				
Weather: Cloud	4 63	P			Time I		Time	Out: /	215		
Well Information			*		Well Type:		Fluck	nount [7 6	Cali IIIa	10
Depth to Water:	(feet)	8.71	(from MF		Well Material:		Flush			tick-Up	
Total Depth:	1,000	25.09	(from MF	TOC	Well Locked:		Stainless	7 7 7 7	/	PVC	
Length of Water Column Volume of Water in Well:		16.38 2.66		-	10.70.70.00			Yes 2		No	
Intake depth for tubing:		~ 24.0		_	Measuring Po		- 2	Yes		No	4
Purging Information	(icet)			_	Well Diamete	r:	1"	(2°)	Other:	-	_
Purging Method:	Bailer -	Bladder	- Pe	ristaltic M			-	Conver	sion Facto	ors	
Tubing/Bailer Material:	L						gal / ft.	1" ID	2" ID	4" ID	6" ID
	Steel			flon	HO	PE B	of water	0.041	0.163	0.653	1.469
Sampling Method:	Bailer [Peristaltion	Bla	adder 🔲			1 gal = :	3.785 L =37	785 ml = 0.13	337 cubi	c feet
	30				1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			Uni	t Stability		
Pump Stop Time: / 2				Water-Quality M	Meter Type:	riba U.5	pH	DO/	Cond.		RP
Total Volume Removed:	(gal) ~	-1		Did	wall as days	Vo	∀ 0.1	Turb ∀ 10%	/Temp ∀ 3.0%	1 2 2 7	0 mV
*		5				V 6	V 0.1	V 10%	V 3.0%	1 1	U mv
Parameter:	1	2	3	4	5	6	7		8	9	
Time	1130	1135	1140	1145	1150	1155	1200				
Volume Purged (Gal)	0	0.125	0.750	0.375	0.500	0.625	0.75	0			
Rate (mL/min)	10.55						1-11-				
Depth to Water (ft.)	8.71	9.43	9.67	9.92	10.20	10.30	10.35	8			
pH	5.74	6.10	6.15	6.21	6.23	6.21	6.22				
Temp. (C)	17.07	17.54	17.68	17.80	17.87	17.96	18.00	6			
Conductivity (mS/cm)	0.962	0.870	0.854	0.842	0.837	0.832	0.82	6			
Dissolved Oxygen (mg/L)	6.10	5.04	4.95	4.53	4,17	3.87	3.63				
ORP (mV)	100	28	20	16	16	15	10				
Turbidity (NTU)	38.0	37.8	38.0	39.7	36.8	36.1	36.0	5	-3		
Notes:							4				
Sampling Informati	on				Proble	ms / Observ	ations				
Analyses	# n 1	Laboratory		-4-							
TCL VOCs				He	ad spa	ce: for V	0.2	ppm			
TCL SVOCs				4 -		0			201		
Total Cyanide				8 2a	meled	tor V	OCS	+ 1	PCS		
Color: None											
Odor: None											
Appearance: C.											
Sample ID: MW-		ple Time: /2	05								
Duplicate: Yes											
		d									
Duplicate ID Chain of Custody Signer		Time:									
Chain of Custody Signed	з ву:										

Site ()			GROUNDY	VATER SAI	MPLING LO	OG			Even	nt
Sampling Personnel:	Amem				Well ID	Mari	-6R			_
Client / Job Number:	NYSDE		(VO)0) 6()(7.0000	Date:	11-7	-17			_
Weather: SU's, (Nemast		700001		Time In		Time Out	: 1635		
(142 H) 2 (152			1		16	June @1	515			
Well Information	1 4-0			-	Well Type:		Flush mou	nt 🗆	Stick-Up	
Depth to Water: V. V			(from MP)	=	Well Material:		Stainless Ste	el 🗆	PVC P	
Length of Water Column:	-	,42	(from MP)	- 1	Well Locked:		Y	es 🗆	No 12	
Volume of Water in Well:	C	.304		-	Measuring Poi	int Marked:				7
Intake depth for tubing:		-101			Well Diameter		1")	es 🔯 Othe		-
Purging Information										-
Purging Method:	Bailer	Bladder	□ Per	istaltic 🗹			-	Conversion Fa		
Tubing/Bailer Material:		Polyethyle		44		05	gal / ft. of water	1" ID 2" ID	4" ID 6" ID	
Sampling Method:		7.6.2.7.2.2		10	HO	PF	-	0.041 0.163	0.653 1.469	1.1
	Bailer	Peristaltic	Ø Blac	dder 🗆			1 gal = 3.78	35 L =3785 ml = (0.1337 cubic feet	
Pump Start Time:	515			Mater C - 111 - 12	latas Tim -: 1x			ty		
1.5	e 25			Water-Quality M	T.	Dupa		OO / Cond	()RP	
Total Volume Removed:	7 (gal)			Did w	vell go dry:	NU		10%		, 1
	L, 3					1				
Parameter:	1	2	3	4	5	6	7	8	9	10
Time	1520	1525	1530	1535	1540	1545	1550	1555	1600	1605
Volume Purged (Gal)	G. 2	0.4	0.6	0.7	0.00	1.2	1.4	1.7	1.9	2.1
Rate (mL/min)	150	180	180	180	180	180	180	180	180	180
Depth to Water (ft.)	6.85	6,88	6.88	10.84	6.88	10.88	6.08	6.88	10.88	6.88
pH	6.66	6.76	6.79	(0.86	6.88	6.89	6.89	6.90	6,90	
Temp. (C)	19.75	80,58	20.81	20.94	21.07	21,20	21.24	6.80 21.31	a1.33	21.4
Conductivity (mS/cm)	0,717	0.749	0.700	0,678	0,644	0.626	0.614	0.607	0,599	U.590
Dissolved Oxygen (mg/L)	1,63	0.93	0.00	0,51	0.43	0.38	0.37	0.31	0.33	0.32
ORP (mV)	-157	-168	-180	-184	-187	-189	-190	-190	-190	-191
Turbidity (NTU)	82.2	52.4	27.4	22.3	15 1	13.4	11.7	12.0	12.3	
Taratany (1170)	00.0	20,1			113/1		1 1111	110.0	11013	11.9
Notes:			S	ample	(A)	1610				
Sampling Informati					Proble	ms / Observ	vations			
Analyses TCL VOCs	# n L	aboratory		0.0				. 27		
TCL SVOCs PC/	1 3 1	est me	MZM	Initi	al; Sh	gntly	claro	14 10	int bu	un
Total Cyanide		1 1		1	1 1/0	Small	I BAA	Indo d	(, sach	de.
Color:				tut i	NITH	311000	6 2000	unce	. /	
Odor:				8 trug	adov	M	NIZIN	& SM	een	
Appearance:				01.0.0)				int bu pain	
Sample ID: MW- (a	R Samp	le Time:		Fral	: Clea	cv, S	hil 1	rous o	in	
MS/MSD: Yes	No	D'		11.	, ,		V	n la c		
Duplicate: Yes		G.			; clea	Odo	r. N	0 sne	en	
Duplicate ID	Dup. 1			12.3						
Chain of Custody Signer		~ T	5	610-	15	M.				
	- (X			OBB	, –				

GROUNDWATER	SAMPL	ING	LOC
-------------	-------	-----	-----

				GROUNDY	VATER SAI	ALL LING E	00				
Sampling Personnel: A Client / Job Number: Weather: 50 - 6	M.	SDE	ay con	210 10 4 17	.000 0	Well ID Date: Time In	10-		Out: i)	45	
W III Company	,		0,	8							
Well Information	-			A	-	Well Type:		Flush n	nount E	s s	tick-Up
Depth to Water: 3.25 Total Depth: 12.35		eet)		(from MP	_	Well Material:		Stainless S	Steel [PVC 🗹
	_	eet)		(from MP		Well Locked:			Yes [1	No 🖭
Length of Water Column: Volume of Water in Well:		eet)	44		-	Manageira Dai	int Markadi				_/
Intake depth for tubing:	M.	gal) \	. 10		-	Measuring Poi			Yes		No 🖻
	10(11	eet)			-	Well Diameter	:	1"	(2")	Other	
Purging Information								-	Conver	sion Fact	ors
Purging Method:	Ва	ailer _	Bladder	☐ Per	istaltic 🖫			gal / ft.	1" ID	2° ID	4" ID 6" ID
Tubing/Bailer Material:	Ste	eel _	Polyetty	Tef	ion		of water	0.041	0.163	0.653 1.469	
Sampling Method:	Ва	ailer _	Peristaltion	Bla	dder 🗆	HODE		1 gal = 3	3.785 L =37	785 ml = 0.	1337 cubic feet
Pump Start Time: 103	B										
	30				Water-Quality M	leter Type:	onba		DO /	t Stability Cond.	
Total Volume Removed:		(gal)			Did v	vell go dry:		pH	Turb	/Temp	ORP
2	5	guij			Did (on go on j.	No	∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV
Parameter:		1	2	3	4	5	6	7		8	9
Time	101	10	1045	1050	1055	1106	1105	1110	1.1	15	5
Volume Purged (Gal)	-	3	6.6	0.9	1,2	1.5	1.8	2,1	12.	4	A
Rate (mL/min)	_	00	200	200	200	200	200	200	3	00	М
Depth to Water (ft.)	1	27	3.27	3.27	3.27	3.27	3,27	3.27		27	ρ
pH	101	1			1 7		170	1 50	6.		
			6.60	6.69	0.15	6.76		61/8			E
Temp. (C)			16.99	17.31	17.59	17.64	17.73	11.1		.81	0
Conductivity (mS/cm)		-	0.019	0,601	0.596	0.594	0.582	6.57	-	566	(a) 1120
Dissolved Oxygen (mg/L)			3117	3.11	2.99	2.85	2.83	2.73	5 2	.68	
ORP (mV)			86	86	85	24883	83	82	(82	
Turbidity (NTU)						0.0	0,0	0.0	(0.6	
Notes:	How	voa of pluc unti	aged		0,0				0		
Sampling Informati	on		,			Proble	ms / Obser	vations			
Analyses	#	n 1	aboratory			0			a - 1		P. N. S.
TCL VOCs					Initia	f. clea	w, no	oda	/ n	OV	sibe
TOLONOCS PF(S											
Total Cyanide					Shee	M. N	0 W.A	CHUM	AU	1 Ki	131/20
Color:							1				" (
Odor:											
Appearance:	_	Name of the last	TV	20	- 0.	cloper	10.7				
Sample ID: MW -		-		30	HNOW.	(also	1/0	odor.	· no	NII	bie
MS/MSD: Yes Duplicate: Yes		No	EY .		Final: Sire	en. N	10 m	ection	AI	RI	13:110
	_		Time:		-		J		111	44.7	3.114
Duplicate ID — Chain of Custody Signed		Dup.	Time.		P10: 0						
		00	you			م المرادات					

Site Crown C) Kana		GROUNDW	ATED SA	MPLING LO	ng.					Event
	E 5		CICONDV	VAILN SA	Well ID:	1011	8				
	00266	417. 000	٥		Date:	11/61	117				
Weather: Clos &		·c			Time In	1325	Time Ou	t: /5	120		
Well Information					Well Type:		Flush mo	unt [5	/	tick-Up	
Depth to Water:		.64	(from MP)	L	Well Material:						
Total Depth:		1.62	(from MP)				Stainless Ste			PVC	
Length of Water Column:	•	98		- 1	Well Locked:			es 🖸	8	No	
Volume of Water in Well:	100	-13.5		-	Measuring Poi	nt Marked:		es [No	
Intake depth for tubing:	(feet)	13.0		Ψ.,	Well Diameter	*	1"	(2)	Other	:	
Purging Information Purging Method:								Conve	rsion Fact	ors	
	Bailer	Bladder		istaltic 🗹			gal / ft.	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Steel	Polyethyle	ne 🗆 Tefl	on 🗆	HOPE !	9	of water	0.041	0.163	0.653	1.469
Sampling Method:	Bailer	Peristaltic	Blac	dder 🗆			1 gal = 3.7	85 L =37	785 ml = 0.	1337 cub	oic feet
Pump Start Time: 13	35							11.0	01-1-1124		
D D T	15			Water-Quality M	leter Type: Ha	ribaU-53	-11	DO /	t Stability Cond.		ORP
Total Volume Removed:	(aal)	·-		Did v	vell go dry:	1/2		Turb	/Temp	-	
Ŷ.	1.	50			/	00	∀ 0.1 \	10%	∀ 3.0%	4	10 mV
Parameter:	1	2	3	4	5	6	7		8	9	•
Time	1335	1340	1345	1350	1355	1400	1405				
Volume Purged (Gal)	0	0.25	0.50	0.75	1.00	1.25	1.50				
Rate (mL/min)			E.T.Y		re Estati						
Depth to Water (ft.)	6.64	7.09	7.12	\$7.12	7.12	7.12	7.12		-= 7)		
pH	6.55	6.54	6.54	6.53	6.53	6.52	6.52		- 1		
Temp. (C)	18.86	18.75	18.70	18.70	18.72	18.71	18.71				
Conductivity (mS/cm)	0.656	0.650	0.648	0.646	0.644	0,642	0.642	2			
Dissolved Oxygen (mg/L)	3.53	3.55	3.45	3.51	3.47	3.41	3.39				
ORP (mV)	-184	-194	-199	-200	-201	-201	-201			1 8	
Turbidity (NTU)	13.8	15.0	15.6	14.7	17.3	18.8	18.8				
44.4											
Notes:											
Compline Informati					Dachla	ms / Observ	rotions				
Sampling Informati Analyses		aboratory									
TCL VOCs		•		A He	ad spac	6. 31:	5.7	opm			
TCL SVOCs						0	1.		acc.		
Total Cyanide				* S	angled	for V	OCS	+	PPC.	\$	
Color:	None				Y						
Odor: Pre se											
Appearance: <			nd prod	uct							
		le Time: 14	110								
MS/MSD: Yes	□ No	d/		D7	P:						
Duplicate: Yes] No	N		DT	- W:						
Duplicate ID	Dup.	Time:									
Chain of Custody Signer	d By:										

COCHLINIALATED	SAMPLING LOG	
GRUUNUWAIER	SAMPLING LUG	

ampling Personnel:	Amane	y	1.1.1112)	(2) ()	Well ID	: MW-1	OP			
lient / Job Number: /	VYSDEC eviast	000	66417.0	1000	Date:	11-0-1	Time (Out: 12	35	•
eather. 00 > 00	0.1431							1.0	203	
Well Information				-	Well Type:		Flush m	nount 1	Si	tick-Up
Depth to Water: 450	*		(from MP		Well Material:		Stainless S	Steel [3	PVC 🗹
Total Depth: 30 V	(feet)	5 84	(from MP	")	Well Locked:			Yes [1	No 🔽
Length of Water Column: Volume of Water in Well:	0	SV			Measuring Po	int Marked:				No E
Intake depth for tubing:	(feet)	50		_	Well Diameter		1"	2"	Other:	
urging Information					- Ton Blanding					
urging Method:	Bailer	Bladder	□ Pe	ristaltic 🙀				T	rsion Facto	
ubing/Bailer Material:	241	Delivathida		floo	.~.	HOPE	gal / ft. of water	1" ID	2° ID	4" ID 6" ID
ampling Method:		21.0000			Me	75	-	0.041	1 2 2 2 1	0.653 1.469
	Bailer	Peristaltio	Bla	adder			1 gal = 3	3.785 L =3	785 ml = 0.1	337 cubic feet
ump Start Time:	240			Water-Quality M	Astor Type:			Un	it Stability	
ump Stop Time:	13 LS				+	tonber	рН	DO / Turb	Cond. /Temp	ORP
Total Volume Removed:	3 (gal)			Did	well go dry:	No	∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV
Parameter:	1	2	3	4	5	6	7		8	9
			-		1200		-			
Time	1245	1250	1255	1300	0.9	1310)	-		
Volume Purged (Gal)	0.2	0.9	0.6	018	0.1	2 7 7 2 2 2	A			
Rate (mL/min)	3000	160	120	120	120	120	100	-		
Depth to Water (ft.)	5.28	6.35	6.38	6.38	6.38	6.38	P			
pΗ	6.56	6.54	6.59	6,54	6.53	6.55	<u>_</u>			
Temp. (C)	19.99	19,19	19.29	19.30	19,30	19.30	E	-	-	
Conductivity (mS/cm)	1,20	1.26	1.28	1.29	1.30	1.30	0			
Dissolved Oxygen (mg/L)	1.51	1116	0.69	0.00	0.65	0.62	1319	5		
ORP (mV)	-38	- 15	-29	-31	-34	-34	,			
Turbidity (NTU)	47.8	43.2	38.0	126.4	38.6	35.3				
Notes:			trived dun rate):		
Sampling Informat	ion				Proble	ems / Obser	vations			
Analyses		.aboratory		-	0.		Close			
TCL VOCs	3	Test Am	MEDI	Thing	u: m	ostiy o	Leov	in	5/14	nt cic
Total Cyanide	6	low Illi,		101	ul: Mu	0	Chan		001	. 4
Color:	4-4-4-			100	Owner	OV :	y week	1	LOTIL	d'
Odor:										
Appearance:				-1-1	MEST	4				
Sample ID: MW -	OD Samp	ole Time: 13	315	Final	mest	de, ne	sve	en	na	uda
MS/MSD: Yes		B							1	-00
Duplicate: Yes										
Duplicate ID		Time:								
Chain of Custody Signe		~ 70		Λ -						
		X		HO:	O.Oppn					

Cause	DINIMAN
CIAUY	Dykman

Site	0		GROUND	WATER SA	MPLING L	.og			t-y		Evei
Sampling Personnel:	tmana	U			Well II	n. MIN	105				
Client / Job Number:	MYSOE	-	901210104	17.0000	Date:	11-6-	17				
Weather: 00's	cludy	(Fee	little	run	Time I	1100	Time C	ut: 12	140		
Well Information	0				MARCHITTO				_		
Depth to Water: 4,87	(feet)		(from M	P)	Well Type:		Flush m	ount 🗔	S	tick-Up	
Total Depth: 12,9	5 (feet)		(from M	P)	Well Material	:	Stainless S	teel []	PVC	V
Length of Water Column	S (Reet)			_	Well Locked:			Yes []	No	9
Volume of Water in Well	13-17	52		_	Measuring Po	oint Marked:		Yes [No	
Intake depth for tubing:	(feet)	8,		-	Well Diamete	er:	1"	(2")	Other	:	
Purging Information							-	Canna	nian Fast		
Purging Method:	Bailer	Bladder	□ Pe	eristaltic 📦				1º ID	sion Fact	4° ID	6" ID
ubing/Bailer Material:	Steel _	Polyethyle	ene 🗆 Te	flon	HDP	E	gal / ft. of water	0.041	0.163	0.653	1.469
Sampling Method:	Bailer	Peristaltion	BI ₂	adder \square			1 gal = 3	785 L =37	85 ml = 0.1	1337 cub	
Pump Start Time:	1135										
Pump Stop Time:	1230			Water-Quality M	Meter Type:	to alvot			Stability	1	
Total Volume Removed:	(aal)			Did			pH	DO / Turb	Cond. /Temp	(DRP
1	8 (gai)					No	∀ 0.1	∀ 10%	∀ 3.0%	A	10 m\
Parameter:	1	2	3	4	5	6	7		8	9	
Time	1145	1150	1055	1300	1205	1310	5				
Volume Purged (Gal)	63	0.5	0.8	1.1	1,4	1.65	Á	+			
Rate (mL/min)	200	200	900	200	200	200	M			_	
Depth to Water (ft.)	4.95	4.96	4.96	4.96	4.96	4.96	0	+			-
pH	10,60	6.65	6.68	6,69	6.70	6.71	1			_	
Temp. (C)	18.52	15.72	18.85	18.94	19.00	19.05	F	+		-	
Conductivity (mS/cm)	119	1.19	1,19	lila	118	1,18		4		-	
Dissolved Oxygen	C. s. In	1111	1111	0	0.51	0.50	61512		-	_	_
(mg/L) ORP (mV)	0.60	0.61	0.57	6.54	-	-	-	-			
Turbidity (NTU)	44.7	-74	-73	-68	-64	-60	-	-			
Turbidity (NTO)	97.1	17.6	4.93	6.00	0.00	6.27					
Notes:							+				
Sampling Informati					Proble	ms / Obser	vations				
Analyses TCL VOCs	# n La	aboratory	CA A		0						
TOLSVOCS PFAS	7 1	OST AM	enla	Initio	al. Mi	ostly (Q DV	W	Sign	1+ 1	De
Total Cyanide	-	w		Inition that No o	and	SIMP	911700	noie	1 1	CALA	le
Color:				TIVIT	LA	301 -	20		P	-11	
Odor:				110 0	da	on gree	erla				
Appearance:				Find O.	cia a.	106	. 107	ia o	Clan		
Sample ID: MV - (Sample	e Time: 17	15	711100	CROW	or she	odov,	No	reg	en	
MS/MSD: Yes	No I	V IL									
Duplicate: Yes	No I	<i>y</i>									
Duplicate ID		ime: —							4		
Chain of Custody Signed		A									
		XI		Din.	1200	۸۸					

0	ES								-			_
Sampling Personnel: Client / Job Number:						Well II	: MW	-11				
	Clau	1.	417.000	0		Date:	11/6/	-				
1.7.1.1.11		1	001			Time I	n: /435	Time	Out: /	545		
Well Information						Well Type:				/	-	
Depth to Water:	(fe	et)	4.24	(from	MP)			Flush	mount		Stick-Up	
Total Depth:	(fe		7.18	(from I	MP)	Well Material:		Stainless	Steel		PVC	
Length of Water Column	-	et)	3.32			Well Locked:			Yes		No	
Volume of Water in Well	10		0.13			Measuring Po	int Marked:		Yes [No	50
Intake depth for tubing:	(fe	et)	n 8		_	Well Diamete	r:	(1")	2"	Other		rate
Purging Information												_
Purging Method:	Bai	ler [Bladde		Peristaltic P			-		rsion Fact	ors	
Tubing/Bailer Material:	Ste	el [Polyethyle	ene 🖂 T	eflon	4100-	row .	gal / ft.		2" ID	4" ID	6" ID
Sampling Method:	Bai		T-Control			HOPE	B	of water	0.041	0.163	0.653	1.469
Pump Start Time:		er [_ · cristalli		ladder			1 gal =	3.785 L =3	785 ml = 0.1	337 cubi	c feet
Pump Stop Time:	45				Water C. III				Hei	it Stability		
Total Volume Removed:	10				Water-Quality M	leter Type: H	ribuU-	53 pH	DO /	Cond.	1 0	RP
Total volume Removed:	(9	al) ~	0.90		Did v			∀ 0.1	Turb	/Temp	-	
						/	es	V 0.1	∀ 10%	∀ 3.0%	∀1	0 mV
Parameter:		1	2	3	4	5	6	7		8	9	
Time	14	50	1455	1500	1					0	9	
Volume Purged (Gal)		2	0,25		1505	1510						
Rate (mL/min)			0,25	0.50	0.75	0.90						
Depth to Water (ft.)	4 -	100	101									
pH	4. 2		5.26	5.75		6.	X		. 1			
W D Y J T Y	6.7		6.77	6.74	6.69	6.74						
Temp. (C)	18.		18.30	18.27	18.27	18.30						
Conductivity (mS/cm) Dissolved Oxygen	1.1	3	1.14	1.14	1.14	1.14						
(mg/L)	4.1	8	4.43	3.60	2.59	2.49						
ORP (mV)	-12	29	-173	-181	-199	-203				-		
Turbidity (NTU)	18	8	132	79.9	39.3	50.4						
5262				, , , ,	37.3	30,7						
Notes:												
ampling Information						Problen	ns / Observ	ations				
Analyses TCL VOCs	# 1	L	aboratory			1200						
TCL SVOCs					Head	50.	01					
Total Cyanide	-					space:	· 6					
Color: None					* Well	< 01	1 C.	VOC	. + 6	PFC.		
Odor:	P	~ <				Jan J	141					
Appearance: 6	-		CK		4							
Sample ID: MW-1		Samel	e Time: /5	2	A 1510	well	dry					
MS/MSD: Yes		No 1	- IIIIe. / 5	, 5	4 8	s allo	us tin	e to	rech	arse		
Duplicate: Yes		No										
		. 40		1	25157			3.				
Duplicate ID		Dup. T			A1535	ES	Samo	les 1	1111-	1.0		

ent / Job Number: 06266417.0000 Date: 11/7/17	ampling Personnel:	E5				Well ID:	MU-	-13				
Time In: 0730 Time Out: 0835 Time	arrivering , e.e.		17.0000				11/7/17					
Well Information			4						t:	08	35	
Depth to Water (feet)										/		
	To the second	(foot) Z	nx	/fram MD)		Well Type:		Flush mou	unt 🗵	1	Stick-Up	
Well Locked: Yes No Problems Okare Column: (feet) 7.19 Well Locked: Yes No Problems Okare Problems Okare No Problems Okare No Problems	10 to				_	Well Material:		Stainless Ste	el []	PVC	
Measuring Point Marked: Yes No No Problems No Pr				(non wii		Well Locked:		Y	es []	No	4
Well Diameter: 2' Other:						Measuring Poir	nt Marked:	·	es F	1	No	O
Peristaltic	ntake depth for tubing:	(feet)	~ 11.5			Well Diameter:	/	K				
Peristallic Polyethylene Teflon HDPE Polyethylene Teflon T	rging Information											
Ding/Bailer Material: Steel Polyethylene Teflon HDPE Ding/Bailer Material: Steel Polyethylene Teflon HDPE Ding/Bailer Material: Steel Polyethylene Teflon HDPE Ding/Bailer Ding/Ba	rging Method:	Bailer	Bladder	□ Per	istaltic 🙀		-				1	CF ID
Time	bing/Bailer Material:	A. 6. 7	Polvethyler	- + 6		HADE T	1					
Water-Quality Meter Type: Horik, U-53	mpling Method:					HDIE		an secul	1000			
Water-Quality Meter Type: Harix U-53 pH DD Cond Turb Cond Cond Turb Cond Con	mn Start Time:		renstatic	M Dia	odei 🛚			1 gal = 3.7	05 L =3/	00 mi = 0	.1337 CUD	oic reet
Did well go dry: Did well go	0/	40			Water Quality N	leter Type:				t Stability	y	
Parameter: 1 2 3 4 5 6 7 8 9 Fine 0745 0750 0755 0800 0805 0810 0815 0820 Foliume Purged (Gal) 0 0.25 0.50 0.75 1.0 1.28 1.50 1.75 Rate (mL/min) Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 6.68 6.74 6.76 6.78 6.77 6.78 Fine CO 17.26 17.63 13.01 18.21 18.30 18.43 18.43 18.55 Conductivity (mS/cm) 0.675 0.664 0.652 0.650 0.652 0.652 0.654 0.654 Dissolved Oxygen (mg/L) 2.13 1.91 1.86 1.71 1.66 1.60 1.58 1.56 DORP (mV) −155 −166 −173 −178 −180 −183 −184 −185 Turbidity (NTU) 125 120 113 105 88.8 113 108 103 Problems 1 Observations Analyses # n Laboratory TCL VOCs TCL SVOCs TCL SVOCs Total Cyanide ▼Well Sampled Ar VOCs + PfCs	08					Ho	ribe U-53				(ORP
Time 0745 0750 0757 0800 0805 0810 0815 0820 Volume Purged (Gal) 0 0.25 0.50 0.75 1.0 1.25 1.50 1.75 Rate (mL/min) Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 6.68 6.79 6.76 6.78 6.78 6.78 6.78 Temp. (C) 17.26 17.63 18.01 18.21 18.30 18.43 18.43 18.55 Conductivity (mS/cm) 0.675 0.664 0.652 0.650 0.652 0.652 0.654 0.654 Dissolved Oxygen (mgl.) 2.13 1.91 1.86 1.71 1.66 1.60 1.58 1.56 DRP (mV) -155 -166 -173 -178 -180 -183 -184 -185 Turbidity (NTU) 125 120 113 105 88.8 113 108 103 Notes: Analyses # n Laboratory TCL VOCs Total Cyanide Purged (Gal) 0.855 0.850 0.850 0.850 0.852 0.654 0.654 Total Cyanide Purged (Gal) 0.755 0.750 0.755 0	otal Volume Removed:	(gal)	1.75		Did v	vell go dry:				T. 77 . X . X	_	10 mV
Time 0745 0750 0757 0800 0805 0810 0815 0820 Volume Purged (Gal) 0 0.25 0.50 0.75 1.0 1.25 1.50 1.75 Rate (mL/min) Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 5.51 ph Graph 6.46 6.59 6.68 6.74 6.76 6.78 6.78 6.78 6.78 fram. (C) 17.26 17.63 18.01 18.21 18.30 18.43 18.43 18.55 Conductivity (mS/cm) 0.675 0.664 0.652 0.650 0.652 0.652 0.654 0.654 0.654 Dissolved Oxygen (mg/L) 2.13 1.91 1.86 1.71 1.66 1.60 1.58 1.56 ORP (mV) -155 -166 -173 -178 -180 -183 -184 -185 Turbidity (NTU) 125 120 113 105 88.8 113 108 103 Notes: Analyses		1			,							
Volume Purged (Gal) 0 0,25 0.50 0.75 1.0 1.25 1.50 1.75 Rate (mL/min) 0 0,25 0.50 0.75 1.0 1.25 1.50 1.75 Rate (mL/min) 0 0,25 0.50 0.75 1.0 1.25 1.50 1.75 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.29 5.48 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 Depth to Water (ft.) 5.08 5.51 5.51 Depth to Water (ft.) 6.78 5.51 Depth to Water (ft.) 6.8 5.51 Depth to Water (ft.) 6.78 5.51 Depth to Water (ft.) 6.7	Parameter:	1	2	3	4	5	6	7		8	9)
Tolume Purged (Gal)	ime	0795	1750	0755	0800	0805	0810	0815	02	820		
Tate (mL/min) Tate (olume Purged (Gal)					1						
Semple	Rate (mL/min)		0,20		0.70							
He 6.46 6.59 6.68 6.79 6.76 6.78 6.78 6.78 6.78 femp. (C) 17.26 17.63 18.01 18.21 18.30 18.43 18.43 18.55 Conductivity (mS/cm) 0.675 0.664 0.652 0.650 0.652 0.652 0.654 0.654 0.654 0.654 0.659 0.659 0.654 0.654 0.659	Depth to Water (ft.)	508	5.29	5.48	5.51	5.51	5.51	5.51	5	.51		
Temp. (C) 17.26 17.63 18.01 18.21 18.30 18.43 18.43 18.55 Conductivity (mS/cm) 0.675 D.664 0.652 0.650 0.652 0.652 0.654 0.654 0.654 0.654 0.654 0.654 0.654 0.654 0.654 0.654 0.654 0.654 0.655 0.656 0.655	н		-					6.78	6.	78		
Conductivity (mS/cm)	Temp. (C)								-			
Dissolved Oxygen 2.13 1.91 1.86 1.71 1.60 1.60 1.58 1.56 DRP (mV) -155 -166 -173 -178 -180 -183 -184 -185 Turbidity (NTU) 125 120 113 105 88.8 113 108 103 Notes: Analyses					100							
ORP (mV) -155 -166 -173 -178 -180 -183 -184 -185 Turbidity (NTU) 125 120 113 105 88.8 113 108 103 Notes: Analyses # n Laboratory TCL VOCs TCL SVOCs Total Cyanide Total Cyanide Total Cyanide					171							
Turbidity (NTU) 125 120 113 105 88.8 113 108 103 Notes: ampling Information									_			
Analyses # n Laboratory TCL VOCs TCL SVOCs Total Cyanide					-				_		-	
ampling Information Analyses # n Laboratory TCL VOCs TCL SVOCs Total Cyanide Problems / Observations A Head space: 0.3 ppm Well Sampled for VOCs + PFCs	ruibidity (1410)	120	120	113	103	00.8	113	100	10) >	Ļ	
Analyses # n Laboratory TCL VOCs TCL SVOCs Total Cyanide Total Cyanide TOTAL STATE OF THE ANALYSIS AND TOTAL STATE OF THE STATE OF	Notes:											
Analyses # n Laboratory TCL VOCs TCL SVOCs Total Cyanide Total Cyanide TOTAL STATE OF THE ANALYSIS AND TOTAL STATE OF THE STATE OF								1				
TCL VOCS TCL SVOCS Total Cyanide ##eadspace: 0.3 ppm #Well Sampled for VOCs + PFCs	ampling Informati	on				Probler	ns / Observ	ations				
TCL VOCS TCL SVOCS Total Cyanide TWELL Sampled For VOCs + PFCs		# n L	aboratory		4	1						
Total Cyanide # Well Sampled for VOCs + PFCs					# He	adspace.	0.3	ppm				
Total Cyanide Well Sampled for Voics + TPES							. 1	2 1/2	1		011	
	The second second				Dr We	11 Samp	led to	. , ,,	25	+ 1	PC	5
	11/0											
11/0			7	doudy								
Appearance: Gleat Sightly Cloudy	Sample ID: MW-	13 Samp	le Time: 108	25								
Appearance: Gleat Sightly Chooling	MS/MSD: Yes [] No										
Appearance: Glear Sightly Claudy Sample ID: MW-13 Sample Time: 0825	Duplicate: Yes] No	9									
Appearance: Glear Sightly Claudy Sample ID: MW-13 Sample Time: 0825 MS/MSD: Yes No												
Appearance: Glear Sightly Claudy Sample ID: MW-13 Sample Time: 0825 MS/MSD: Yes No Moderate No Modera	Duplicate ID	Dup.	Time:									

Crown P	ES.				ها بالنور	1111	1110				
Sampling Personnel:		417	20			: MW-					_
Client / Job Number: Veather: [(and)	42°F	717.000	0		Date: Time In	11/8/17	Time C	nut. 16	250	-	
realiner.					Time iii	. 0 700	Time C	/ut: / -	-		
Well Information				_	Well Type:		Flush m	ount 🗹	/	Stick-Up	
Depth to Water:	(feet) S	. 63	(from MP)_			riusti m				
Total Depth;	(feet) /	2.25	(from MP)	Well Material:		Stainless S	teel [PVC	9
Length of Water Column:	(feet)	6.90			Well Locked:			Yes 🗆	j .	No	V
Volume of Water in Well:	19-1	.12		_	Measuring Poi	nt Marked:		Yes []	No	<u></u>
Intake depth for tubing:	(feet)	11.25			Well Diameter		1"	(2")	Other	:	
urging Information											
urging Method:	Bailer	Bladder	□ Per	ristaltic					sion Fact		
ubing/Bailer Material:	01 1				107 AND 104 T	. /	gal / ft.	1" ID	2" ID	4" ID	6" ID
	Steel	Polyethyle			HOPE	a	of water	0.041	0.163	0.653	1.469
ampling Method:	Bailer	Peristaltic	Bla	dder 🗆			1 gal = 3	.785 L =37	'85 ml = 0.	1337 cub	ic feet
Pump Start Time:	910							11-1	01.11%		
CA- Ti	20			Water-Quality M	Meter Type:	1 110	1	DO /	Cond.		
Total Volume Removed:	(gal)			Did	well go dry:	bn U-53	pН	Turb	/Temp		ORP
Ť							∀ 0.1	∀ 10%	∀ 3.0%	A	10 m\
Parameter:	1	2	3	4	5	6	7		8	9	
Time	0910	0915	0920	0925	0930	0935	0940	09	45	095	-0
Volume Purged (Gal)	0	0.25	0.50	0.75	1.00	1.25	1.50		75	2.	
Rate (mL/min)		0,-0	0.00	0				1.	15		
Depth to Water (ft.)	5.63	110	6.80	7.00	7.21	7.31	7,31	7	31	27	_
pH		6.60				- 2		_	53	97.	
	6.45	6.47	6.47	6.47	6.49	6.50	6.51			6.5	-
Temp. (C)	18.46	18.67	19.07	19.37	19.54	19,61	19.63		60	19.	
Conductivity (mS/cm)	0.660	-	0,528	0.549	0.587	0.670	0.731	0.	775	0.8	15
Dissolved Oxygen (mg/L)	3.57	2.45	2.01	2.00	2.03	2.24	2.40	2.	52	2.6	4
ORP (mV)	-180	-190	-189	-189	-200	-208	-213	-2	17	-22	0
Turbidity (NTU)	193	139	58.1	13.1	2.93	0	0	_	6.47		5
		1.21	20.1	10000	1 1 -		1				
Notes:	1										
Sampling Informati	ion				Proble	ms / Observ	ations				
Analyses	# n La	aboratory									
TCL VOCs				* Head	space 1	00.3	on				
TCL SVOCs					1						
Total Cyanide				d , 1-1	Sumpl	C C	Voc		PG	-	
Color: None				well	Jangi	10/		J T	1	2	
	Presen										
Appearance: <			Preser	1							
Sample ID: MU- MS/MSD: Yes	14 R Sampi □ No	le Time: /C	7/5								
Duplicate: Yes	n No										
Duplicate ID	Dup. 1	Lime:									
Chain of Custody Signer	7	mile.									
Criairi or Gustouy Signet	u by.										

Crown I) y Kman		GROUNDW	VATER SA	MPLING LO	G					Even
ampling Personnel:	ES				Well ID:	MW-	14R				
lient / Job Number:	007664	17, 0000			Date:	11/8/11	7				
reather: Cloud	4 42°F				Time In:	0900	Time	Out: /	025	12	
Well Information			-		Well Type:		Flush	nount E		tick-Up	
Depth to Water:		.63	(from MP)		Well Material:						./
Total Depth:		2.25	(from MP)	<u></u>			Stainless			PVC	
Length of Water Column:		6.96		-	Well Locked:			Yes []	No	
Volume of Water in Well:	(gal)	1.12		-	Measuring Poin	t Marked:		Yes [No	8
Intake depth for tubing:	(feet)	-/1		_	Well Diameter:		1"	(2")	Other	1	
urging Information				,			-	Conve	rsion Fact	ors	_
urging Method:	Bailer	Bladder	☐ Peri	istaltic			gal / ft.	1" ID	2" ID	4" ID	6" ID
ubing/Bailer Material:	Steel _	Polyethyler	ne 🖂 Tefl	on	HDPE	四	of water		0.163	0.653	1.469
ampling Method:	Bailer	Peristaltic	Blac	dder 🖂		-	1 gal =	3.785 L =3	785 ml = 0.	1337 cub	oic feet
Pump Start Time: 09											
ump Stop Time:	20		-	Water-Quality M	Meter Type:	10 dr 10-2			t Stability		
Total Volume Removed:						bu 0-53	pН	DO / Turb	Cond. /Temp	(ORP
Total Volume Removed:	(gal)			Dia	vell go dry:	No	∀ 0.1	∀ 10%	∀ 3.0%	A	10 mV
Parameter:	1	2	3	4	5	6	7		8	9	,
Time	0955	1000	1005	1016							
Volume Purged (Gal)	2.25	2.50	2.75	3.00							
Rate (mL/min)											
Depth to Water (ft.)	7.31	7.31	7.31	7.31							
pH	6.53	6.54	6.54	6.54							
Temp. (C)	19,63	19.63	19,66	19.66							
Conductivity (mS/cm)	0.877	0.856	0.871	0.879							
Dissolved Oxygen (mg/L)	2.68	2.71	2.75	2.79							
ORP (mV)	-222	-223	-224	-225						-	
Turbidity (NTU)	0	0	0	0							
							4				
Notes:								_			
Sampling Informati	ion				Problem	ns / Observ	vations				
Analyses	# n L	aboratory		V42.2.3	1						
TCL VOCs				& He	ell Samp	- 100	0.3 -				
TCL SVOCs							PO	ora	00		
Total Cyanide				A W	11 5000	had for	VOC	5 +	PFC	>	
Color: None					or samp						
Odor: Ods/	Present		+								
Appearance:	lew -	Sheen	Present								
Sample ID: MW-	-14 R Samp	le Time: /C	15								
rather than 1995		Ø									
Duplicate: Yes	No										
Duplicate ID	Dup.										
Chain of Custody Signe		20194									

	C)		GROUNE	WATER SA	MPLING L	OG					Lvon	
Sampling Personnel:	A	Tho	mels			Well ID	· MW-	15R					
Client / Job Number:	N	4501	5 (000	166417,00	OO Date:	11-8	-17					
Weather: 505	Ne	Ma	Dt			Time Ir	n: 1 0 1 5	Time O	ut: 11 3	0			_
Well Information	,					Well Type:		Flush mo	ount IV	/	Stick-Up		ò.
Depth to Water:		feet)		(from !	MP)	Well Material:		Stainless St		/	PVC		-
Total Depth: 12,14		feet)	5,73	(from t	MP)	Well Locked:		10100 00 000	331	~			
Length of Water Column: Volume of Water in Well:		feet) 2 gal)	0-93		_	Measuring Po	int Markod				No	And I	in .
Intake depth for tubing:		feet)	V			Well Diameter	A 200 CT	1"	Yes 2"	Othe	No er:		
Purging Information													
Purging Method:	В	ailer [Bladder	D F	Peristaltic 🖳				1" ID	sion Fac	tors 4" ID	6" ID	#1
Tubing/Bailer Material:	S	In a second	Polyethyle	ene p T	eflon	14	105	gal / ft. of water	0.041	0.163	0.653	1,469	+
Sampling Method:	В		Peristaltion		Bladder D	11	DPE	1 gal = 3.	2000	Inc. start and		1.0	1
Pump Start Time:	13	2		№	- L								
Pump Stop Time:	4	0			Water-Quality M	leter Type: 11	e in h A	1	Unit	Cond.	24		
Total Volume Removed:	1	(gal)			Did v	vell go dry:	cnb a	pH	Turb	/Temp		ORP	
2	L	(37					No	∀ 0.1	√ 10%	∀ 3.0%	% Y	10 mV	
Parameter:		1	2	3	4	5	6	7		8	9	9	10
Time	10	35	1040	1045	1050	1055	1100	1105	111	0	111	5	112
Volume Purged (Gal)	-	1,2	0.9	0.6	0.8	1.0	112	1.4	1.		1.8	-	2.0
Rate (mL/min)	7	50	200	200	200	200	200	200		ورو	20		200
Depth to Water (ft.)	7	183	8.09	8.39	8.39	8.39	8.39	8.39	-	.39	-	39	8.3
рН	6		6.82	6.83	1	6.81	6,80	6,80			6,2		6.8
Temp. (C)	2	- 0	- 1	aa.7	- 60	22.96		22,66	_	.94	22		27.9
Conductivity (mS/cm)	1.	41	1,31	1.15	1.08	1.02	1.01	1.01	1.0	1	0.9	98	0,99
Dissolved Oxygen (mg/L)	1.	55	1,00	1.00	54 3.40	4.97	4.58	4,12	3.0	80	3,3	9	3.38
ORP (mV)	-1	60	-167	-169	- 168	-166	-167	-167	-10	27	-10		-16
Turbidity (NTU)	10	1,4	8.99	8,25	7.36	0.00	0.00	0.00		UU	0.0	00	0000
Notes:			vate		Sar	nple (2 117	25					
Sampling Information						Proble	ms / Observ	otions					
Analyses	#	n	Laboratory			Proble	ilis / Observ	valions					
TCL VOCs		3	Cash born	ma	Initial Suspen No si	· mas	14 CL	ear	wit	n	SOV	ne	
TCL SVOCs VENS	-	2	1021 Miles	VICOC.	21111000	- 1,	0	200	51	n, r	1	chl	10
Total Cyanide					Suspen	ded	pavin	2001	01	9	11	00	OV
Color:					NO 51	reen	4						
Appearance:													
Sample ID: MW - 15	17	Sam	ple Time: [[25	Final!	Cin	~ (111	14			1	
MS/MSD: Yes		No	D/		1	_ ce	ur J	TILL	was	ar	1 0	OLON	1
Duplicate: Yes		No			Final:	sneen	cv.						
Duplicate ID	~		. Time:										
Chain of Custody Signed	Ву:	240	1 1	2									
			Y		PIN =	149.0	nnn						
			V		110	1 1 , 10	111						

2017 GW Sampling

Crown	Dyskr	Ture (_						Event	1
	U		GROUNDW	ATER SAM	MPLING LO	G				_
Entrebella O	4 many	011			Well ID:	MW-	172			
mpling Personnel:	Y 10156	00210	0417.00	100	Date:	11-1-				5
	or ove	Mart			Time In:	0900	Time Ou	it: 1100		-
Vell Information			0		Well Type:		Flush mo	unt 🗹	Stick-Up	
Depth to Water: 7:12	(feet)		(from MP)	-	Well Material:		Stainless St	eel 🗆	PVC B	
otal Depth: 10.2	(feet)		(from MP)	÷	Well Locked:			_/	No A	
ength of Water Column3	(feet)			-	The second second	11.				-
/olume of Water in WelD	S ⁰ (gal)			-	Measuring Poir			Yes D	No D	3
ntake depth for tubing:	(feet)*-8)		.	Well Diameter:		1"	(2") Otl	ner:	4
urging Information							-	Conversion Fa	actors	1
rging Method:	Bailer	Bladder	□ Peri	staltic 🕒			gal / ft.	1" ID 2" ID	4" ID 6" ID	
bing/Bailer Material:	Steel	Polyethyle	ne 🖂 Tefl	on \square	HOPE	_	of water	0.041 0.163	0.653 1.469	
ampling Method:	Bailer	Peristaltic	Blac	dder 🗆	, in the second		1 gal = 3.	785 L =3785 ml =	0.1337 cubic feet	
ump Start Time: (50)								Illuia Canhii	lia.	
Cton Times				Water-Quality M	Meter Type:	tonba		Unit Stabi		-
(04	50			Did v	well go dry:	No	pH	Turb /Ter	np	-
otal Volume Removed:	(gal)					140	∀ 0.1	∀ 10% ∀ 3.	0%	
Parameter:	1	2	3	4	5	6	7	8	9	
Time	0935	0940	0945	0956	0455	1005	1010	1015	1020	10
	0.3	6.5	0.6	0.7	0.9	1.2	1,3	1.5	1.6	1
Volume Purged (Gal)	126	100	100	100	100	100	100	100	100	1
Rate (mL/min)	120	7.79	7,79	279	7.95	7.95	8.04	8.05	8.05	8
Depth to Water (ft.)	7:62	1			6.91	6,96	6.97	6.97	6,98	6
pH	6,83	6.86	6.87	6189	21.54	21.59	21.09	21.75		a
Temp. (C)	20,52	21,09	20.95	21:01	0.748	0.711	0.705			0
Conductivity (mS/cm)	0.931	01884	0.838	0.794	100			0.698		
Dissolved Oxygen (mg/L)	1.41	1117	lilele	1,60	0-17	1.24	0.96		0,54	0
ORP (mV)	-201	-206	-206	-207	-212	-216	-217	-218	- 250	-
Turbidity (NTU)	0.00	6.00	0.00	0.00	0.00	60	0.00	0.0	0.6	+
	0.55	lowered								1
Notes:		rute								
2	lan .				Proble	ems / Obse	rvations			1
Sampling Informat Analyses		aboratory			-	71.			1	
TCL VOCs	3 -	TO X1 4	D000.00	Inila	p- mostly	1 clock	, nas	avi a	dov.	70
TCL SVOCS PF-AD	2	12)+/	HIERED	· Aln	g- mostle shee)			1	1
Total Cyanide				140	Shee	n				1
Color:										8
Odor:				- · · · ·	Vindy	fain	+ Odo	V. N.	sheen	10
Appearance:				nvou.	(day)		0			19
Sample ID:	TR Sam	ple Time:	535							0
MS/MSD: Yes	□ No	D/		C	200	1 . /	75			_
Duplicate: Yes				Sam	The 6	0 10	5)			-
				200	0.9 pp					C
Duplicate ID Chain of Custody Signe		Time:		0						T

	n py	remoun	250111014		MBLINGIA	00					Even
			ROUNDW	ATERSA	MPLING LO	1		_			
mpling Personnel:	Amon		(0)	13	Well ID		8		-		
ent / Job Number:	overla		02664	11.000	O Date:	11-6-1	Time O	nt: 14	35		-
atrier.	1 000,00	-31				1-127					
Vell Information				-	Well Type:		Flush mo	unt 🛚	/	Stick-Up	
epth to Water: 5.15	(feet)		(from MP)		Well Material:		Stainless St	eel [1	PVC	D
otal Depth: Q		117	(from MP)	4	Well Locked:			Yes [No	
ength of Water Column	1	,,47		-	Measuring Poi	int Marked:					
olume of Water in Well	: (gal) \ (feet) ح	21			Well Diameter		1"	Yes [Othe	No	114
ntake depth for tubing:	(leet)	0		-	- VVeil Diameter	- 1)		Othe		=
rging Information	D-II	Dis dday	Posi	staltic D				Conve	sion Fac	tors	
5 15 14127	Bailer	Bladder		LLG	100		gal / ft.	1" ID	2° ID	4" ID	6" 10
bing/Bailer Material:	Steel	Polyethyler			HOP	<u>t</u>	of water	0.041	0.163	0.653	1.46
mpling Method:	Bailer	Peristaltic	Blac	dder 🗆			1 gal = 3.	785 L =3	785 ml = C	.1337 cut	oic fee
imp Start Time:	338							Uni	t Stabilit	v	
imp Stop Time:	425			Water-Quality I	Meter Type:	ndno	pH	DO /	Cond	7 L 6	ORP
otal Volume Removed:	3 (gal)			Did	well go dry:		∀ 0.1	Turb ∀ 10%	/Temp		10 m\
D		2	3	4	5	6	7		8	9)
Parameter:	1	2		111111111111111111111111111111111111111		1		_			
Time	1345	1350	1355	1400	1405	1410	5	4		-	
Volume Purged (Gal)	0.2	0.5	0.65	0.8	1.0	1,1	A	-		-	
	160	100	160	160	160	100			- 1	-	
Rate (mL/min)	500	5.93	5,23	5,22	5,22	2:39	P				
Rate (mL/min) Depth to Water (ft.)	DILL	2,00		J. 20		1 22				-	_
	6,71	6,77	677	6:77	6.76	6.77	L	-			
Depth to Water (ft.)	20,13			20.18	6.76	20,19	E				
Depth to Water (ft.)		6,77	20:18 1:15	6:77	6.76 30.17 1.13	20,19	Ea				
Depth to Water (ft.) pH Temp. (C) Conductivity (mS/cm) Dissolved Oxygen	20,13	20.16	6:77 20:18 1:15 0.51	6.77 20.18 1.14	6.76 30.17 1.13	20,19					
Depth to Water (ft.) pH Temp. (C) Conductivity (mS/cm)	0.67	6,77	6:77 20:18 1:15 0.51	20.18	6.76	20,19	(a)				
Depth to Water (ft.) pH Temp. (C) Conductivity (mS/cm) Dissolved Oxygen (mg/L)	20,13	6,77 20:16 1,17 6,60	20:18 1:15	6.77 30.18 1.14 6.45	6.76 30.17 1.13 0.43	20,19	(a)				

TCL VOCs TCL SVOES PEAS Total Cyanide Color: Odor: Appearance: Sample ID: MW-18 Sample Time: Yes MS/MSD: No 0 Yes Duplicate: 9

Dup. Time:

n

Laboratory

Initial: mostly clear with slight light brown the No string oder as she Final: mostly clear. No oder or sneen

PID= 0.0ppm

Chain of Custody Signed By:

Duplicate ID

Sampling Information

Analyses

(run	Dyrama	2UC						2017	GW S	ampling	-
Site	0		POLINDIA	ATER SAM	IPLING LO	G				Ever	nt
	0000010		ROUNDW	ATER SAN	IFLING LO		a				_
Sampling Personnel:	mome	4)	37.1011	11000	Well ID:	MULT	1				-
ment rode italia	MAZOEC			1.0000	Date:	1355	Time Out	. 15	20		_
Weather:	201	overloc	21	-	Time In:	1222	Time Out				
Well Information				- 7	Well Type:		Flush mou	nt 🖼	S	tick-Up	
Depth to Water: 0.00	(feet)		(from MP)	-	Well Material:		Stainless Ste	el 🗆		PVC 🖪	-
Total Depth: 2:11		H.	(from MP)	- 7	Well Locked:		Y	es 🗓	/	No 🗆	
Length of Water Column:		16		-	Measuring Poir	nt Marked:	Y	es□		No 🗆	
Volume of Water in Well: Intake depth for tubing:	(gal) \\ (feet) ~ \ (-	Well Diameter:	7	1"	(2)	Other:		
	(icci) i			-				0			_
Purging Information Purging Method:	Delles	Bladder	- Per	istaltic					sion Fact	4" ID 6" II	
	Bailer				unt	35	gal / ft. of water	1" ID	2" ID 0.163	0.653 1.46	
Tubing/Bailer Material:	Steel	Polyethylen		П.	thut	<u></u>		72-ST 20. H		1337 cubic fee	
Sampling Method:	Bailer	Peristaltic	Bla	dder 🗆			1 gai = 3.7	05 L -37	65 m = 0.	1337 60516 166	_
Pump Start Time:	10440	410			Otas Tomas	1. 10.6			t Stability		
Pump Stop Time:	1515			Water-Quality M	10000	tonba		DO / Turb	Cond. /Temp	ORP	4
Total Volume Removed:	3 (gal)			Did v	vell go dry:	NO	-	10%	∀ 3.0%	y 10 m	IV
7 .7	1			-		6	7	T	8	9	1
Parameter:	1	2	3	4	5	6				1	- 13
Time	1415	1420	1425	1430	1435	1440	1445	1	SO	1422	a
Volume Purged (Gal)	0.2	0.35	0.6	0.8	1.0	1.9	1,4	_	16	1,8	9
Rate (mL/min)	200	200	200	200	200	200	200		00	200	10
Depth to Water (ft.)	6.18	6.15	6.15	6.18	6118	6.18	6118		18	6118	-
pH	6.70	6.72	6,72	6:70	6.68	6.67	6.66	0.1	65	6.65	
Temp. (C)	22.53	22.57	2269	22.76	18/66	39.88	39.88	di	2.90	22.9	-
Conductivity (mS/cm)	0.766	0.762	0.757	0.758	0.758	0.757	0.757		758	0.759	0,
Dissolved Oxygen (mg/L)	1.23	1.39	1.02	0.67	0.49	0,40	0.33		.99	0.27	6
ORP (mV)	-60	-56	-47	-44	-41	-39	-37		34	- 33	
Turbidity (NTU)	256	233	170	147	99	66	41	3	5	197	
Notes:							_				
					Droble	ems / Obser	vations				
Sampling Informat		l abarotory	-								
Analyses TCL VOCs	# n 1	Laboratory		Thiba	o. hou	an hat	grantes	So	me	cloudin	240
TCL SVOCS PEAS				71110	E> 10.00	1021/01	o the	non			03
Total Cyanide	-			0901	i No	MOUNT	C 31.	~11			
Color:											
Odor:											
Appearance:				1	· MORYLU	(loav	no v	17 1	JY 5	neer	_
Sample ID: WW -	10 Sam	nple Time: \S(05	Mar	· mostlu	,					
7 TO 1 TO	1					/					

5/31/2017 Groundwater Sampling Log Page 1

Chain of Custody Signed By:

Yes

Yes

MS/MSD:

Duplicate:

Duplicate ID

No

No y

Dup. Time:

Sample @ 1505 PID: 1.2 ppm

Event

Well Information Depth to Water. DW (feet) 1,98 (from MP) Total Depth: (feet) 2,72 (from MP) Unlike depth for tubing: (feet) 8,3 (from MP) Unlike depth for tubing: (feet) 8,3 (from MP) Purging Information Purging Method: Bailer Bladder Peristallic Purple Gall Peristallic Purple Gall Peristallic Purple Gall Purple Gall Gall Gall Gall Gall Gall Gall Ga			
Well Information			
Depth to Water: Water (feet) 1.98 (from MP) Total Depth: (feet) (7.98 (from MP) Total Depth: (feet) (7.93 (from MP) Length of Water Column: (feet) (7.93 (from MP) Length of Water in Well: (gal) (7.15 (from MP) Volume of Water in Well: (gal) (7.15 (from MP) Using Method: (feet) (7.93 (from MP) Using Method: (feet) (feet) (feet) (from MP) Using Method: (feet) (from MP) Well Locked: Well Locked: Well Locked: Well Diameter: (1* Well Diameter: (1* Well Diameter: (1* Well Method: (feet) (from MP) Well Action (from Method) Well Locked: Well Action (from Method) Well Locked: Well Locked: Well Locked: Well Locked: Well Locked: Well Locked: Well Method: (feet) (from MP) Well Locked: Well Action (from Method) Well Locked: Well Locked: Well Method: (feet) (from MP) Well Locked: Well Method: (feet) (from Method) Well Locked: Well Locked: Well Colories Of Conductivity (from Method) Well Method: (from Method) Well Method: (from Method) Well Method: (from Method) We	Time Out:		
Depth to Water: (Meet) 1.9.8 (rom MP) Total Depth: (Meet) (1.1.2 (rom MP) Length of Water Column: (Keet) (1.1.2 (rom MP) Length of Water Marked: (Keet) (Rom MP) Length of Water Column: (Keet	lush mount	8	Stick-Up
Total Depth:	nless Steel		PVC I
Length of Water (Duthin: (eet) (1.3) Measuring Point Marked:	- and a series	-	
Intake depth for tubing: (feet) \$ 3 Purging Information Purging Method: Bailer Bladder Peristaltic Peristal	Yes		No [
Purgling Information Purgling Method: Bailer Blaider Peristalitic Peristal	Yes		No L
Peristaltic graphic material: Steel Polyethylene Teflon HOPE Sampling Method: Bailer Peristaltic graphic material: Steel Polyethylene Teflon HOPE Sampling Method: Bailer Peristaltic graphic material: Steel Polyethylene Teflon HOPE Sampling Method: Bailer Peristaltic graphic material: Steel Polyethylene Teflon HOPE Sampling Method: Bailer Peristaltic graphic material: Steel Polyethylene Teflon HOPE Sampling Method: Bailer Peristaltic graphic material: Steel Polyethylene Teflon HOPE Sampling Method: Bailer Peristaltic graphic material: Steel Polyethylene Teflon HOPE Sampling Method: Bailer Peristaltic graphic material: Steel Polyethylene Teflon Hope: How Well graphic material: Steel Polyethylene Pol	2	2" Othe	ir;
Steel	Cor	nversion Fac	tors
Sampling Method: Bailer Peristaltic Bladder	al / ft. 1"	ID 2° ID	4" ID 6" I
Pump Start Time: IL2S Pump Stop Time: Total Volume Removed: G(gal) Parameter: 1 2 3 4 5 6 Time IL40 IISO IA10 Volume Purged (Gal) G I DIL5 Rate (mL/min)	water 0.0	0.163	0.653 1.46
Parameter: 1 2 3 4 5 6 Parameter: 1 2 3 4 5 6 Time ILYO IISO DOLS Rate (mL/min) 1 60 860 Depth to Water (ft.) 8 3 3 8 7 2 pH Temp. (C) Conductivity (mS/cm) Dissolved Oxygen (mg/L) ORP (mV) Turbidity (NTU) Notes: No EX No EX No EX No EX Water-Quality Meter Type: HONNO (I) Phon No III Water (ft.) 9 13 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	gal = 3.785 L	L =3785 ml = 0	.1337 cubic fee
Pump Stop Time: Total Volume Removed: Gal) Parameter: 1 2 3 4 5 6 Time Volume Purged (Gal) Color: Conductivity (mS/cm) Dissolved Oxygen (mg/L) Notes: Sampling Information Analyses # n Laboratory TCL VOCS TCL VOCS TCL VOCS TCL VOCS Total Cyanide Color: Odor: Appearance: Sample ID: MW - 20 Sample Time: MS/MSD: Yes No Profilems / Oxerus Ab Oxerus My - 20 No Profilems Ab Oxerus Total Cyanide		Unit Stability	
Total Volume Removed: G. (Sgal) Parameter: 1 2 3 4 5 6 Time	DO		-
Parameter: 1 2 3 4 5 6 Time	Turk		
Time Volume Purged (Gal) Rate (mL/min) E(0) Depth to Water (ft.) PH Temp. (C) Conductivity (mS/cm) Dissolved Oxygen (mg/L) ORP (mV) Turbidity (NTU) Notes: Sampling Information Analyses # n Laboratory TCL VOCs TCL-SVOCs PRS Z Total Cyanide Color: Odor: Appearance: Sample ID: MW 30 Sample Time: MS/MSD: Yes No Dr	0.1 ∀ 10	0% ∀ 3.0%	% ∀ 10 m
Volume Purged (Gal) Rate (mL/min) Depth to Water (ft.) PH Temp. (C) Conductivity (mS/cm) Dissolved Oxygen (mg/L) ORP (my/L) Turbidity (NTU) Notes: Sampling Information Analyses # n Laboratory TCL VOCS 3 TCL-SVOCS PFNS Z Total Cyanide Color: Odor: Appearance: Sample ID: MW - 20 Sample Time: MS/MSD: Yes No P	7	8	9
Volume Purged (Gal) Rate (mL/min) Depth to Water (ft.) PH Temp. (C) Conductivity (mS/cm) Dissolved Oxygen (mg/L) ORP (my/L) Turbidity (NTU) Notes: Sampling Information Analyses # n Laboratory TCL VOCS 3 TCL-SVOCS PFNS Z Total Cyanide Color: Odor: Appearance: Sample ID: MW - 20 Sample Time: MS/MSD: Yes No P			
Rate (mL/min) Depth to Water (ft.) PH Temp. (C) Conductivity (mS/cm) Dissolved Oxygen (mg/L) ORP (mV) Turbidity (NTU) Notes: Sampling Information Analyses # n Laboratory TCL VOCs 7 TCL VOCs 7 TCL SUOCS PFR5 Z and Sample Fillowing retained to the period of		A-7	
Depth to Water (ft.) PH Temp. (C) Conductivity (mS/cm) Dissolved Oxygen (mg/L) ORP (mV) Turbidity (NTU) Notes:	1	X	
Temp. (C) Conductivity (mS/cm) Dissolved Oxygen (mg/L) ORP (mV) Turbidity (NTU) Notes: MW-20 nd Sampled due to garrey de Successfully Techage Successfully Analyses # n Laboratory TCL VOCS 3 TCL SVOCS PRS 2 Total Cyanide Color: Odor: Appearance: Sample ID: MW-20 Sample Time: MS/MSD: Yes No En Sumple Sample Time: Tnitfal: Clear, no no the Sumple Analysis Sample	1)11	
Temp. (C) Conductivity (mS/cm) Dissolved Oxygen (mg/L) ORP (mV) Turbidity (NTU) Notes: XNW-20 nd Sampled due to garrey de vechage Successfully to ve			
Dissolved Oxygen (mg/L) ORP (mV) Turbidity (NTU) Notes: Sampling Information Analyses # n Laboratory TCL VOCs 7 Total Cyanide Color: Odor: Appearance: Sample ID: MW 20 Sample Time: MS/MSD: Yes No Properties No Properties No Properties No Properties Thingal: Ciear, no no holds			
Dissolved Oxygen (mg/L) ORP (mV) Turbidity (NTU) Notes: **NW-DO NOT SUMPLED due to garrey due to recharge Successfully & Sampling Information Analyses # n Laboratory TCL VOCs 3 TCL SVOCS PFAC 2 Total Cyanide Color: Odor: Appearance: Sample ID: MW-DO Sample Time: MS/MSD: Yes No No Sample Time: MS/MSD: Yes No Sample Time: Total Cyanide Sample Time: Thirtal (clear, no no house) Tanal Sample Down or no house Tanal Sample Sample Time: Thirtal Clear, no no house			
ORP (mV) Turbidity (NTU) Notes: Notes: Notes			
Notes: Notes:			
Notes: Notes: No			
Sampling Information Analyses # n Laboratory TCL VOCS 3 MW-20 Went dry at and Sample Following retained to taken. Ship total Cyanide Color: Odor: Appearance: Sample ID: MW-20 Sample Time: MS/MSD: Yes No No Taken Sample Sa			
Analyses # n Laboratory TCL VOCS 3 TCL SVOCS PEAS 2 Total Cyanide Color: Odor: Appearance: Sample ID: MW 30 Sample Time: MS/MSD: Yes \(\) No \(\) No \(\) Tayle \(\) Sample \(\) Sample \(\) Tayle \(\) Sample \(\) Sample \(\) Tayle \(\) Sample \(\) Sample \(\) Tayle \(\) Sample \(\) Sample \(\) \(\) Sample \(\) Tayle \(\) Sample \(\) Sample \(\) \(\) \(\) Sample \(\) \(y a	nd no	it also
Odor: Appearance: Sample ID: MW - 20 Sample Time: MS/MSD: Yes No No No No No No No N		A town to all	
Odor: Appearance: Sample ID: MW - 20 Sample Time: MS/MSD: Yes No No No No No No No N	1150, 1	WIII CO	et recr
Odor: Appearance: Sample ID: MW - 20 Sample Time: MS/MSD: Yes No No Sample Time: Thind: (Leav. no worked) Sample ID: Yes No No No No No No No N	enan	ae, No	parel
Odor: Appearance: Sample ID: MW - 20 Sample Time: MS/MSD: Yes No No Sample Time: Thind: (Leav. no worked) Sample ID: Yes No No No No No No No N	0.100	n a G	Cat
Appearance: Sample ID: MW 30 Sample Time: MS/MSD: Yes No No Sample Time: Thind: (Leav. no works) Summar as above.	Poin	boil	1
Sample ID: MW -20 Sample Time: Initial (CLOW, no Nother MS/MSD: Yes No Sample Time: Sample Same as above			
Sample ID: MW 30 Sample Time: Initial (Coor, no Nother MS/MSD: Yes No De Sample Time: Some as above			
MS/MSD: Yes No P Same as above	we a	dovish	een
	e.	01	
Duplicate: Yes No Dup. Time: A Sel notes only	in	and.	in Dia
Duplicate ID Dup. Time:		or hose 1	vi riel
Chain of Custody Signed By:			300
DID = 0.0 pm			
5/31/2017 Groundwater Sampling Log Page 1 ON 11-7-17 CNECKED	[inten	V	3 12

ampling Personnel:	ES				Well ID:		-210				
lient / Job Number:		417.000	10		Date:	11/7/17	-				
Veather: Claud	9 4804	-			Time In	1010	Time O	ut: /	105		
Well Information			10		MAIN Towns		Same		/		
Depth to Water:	(feet) 2	2.87	(from MP)		Well Type:		Flush mo	ount 🖺] ;	Stick-Up	
Total Depth:	(feet) Z	2.60	(from MP)		Well Material:		Stainless S	teel []	PVC	
Length of Water Column:	(feet)	19.73		-1	Well Locked:			Yes []	No	
Volume of Water in Well:		3.21		_	Measuring Poi	nt Marked:		Yes []	No	M
Intake depth for tubing:	(feet)	w21.5		- 1	Well Diameter:		1"	(2")	Othe	r:	
Purging Information								Conver	sion Fac	tors	
Purging Method:	Bailer [Bladder	☐ Peri	staltic d			gal / ft.	1° ID	2" ID	4" ID	6" ID
ubing/Bailer Material:	Steel	Polyethyle	ne 🖂 Tefi	on \square	HDPE	d	of water	0.041	0.163	0.653	1.469
Sampling Method:	Bailer [Peristaltic	Blac	dder 🗆			1 gal = 3.	785 L =37	85 ml = 0	1337 cub	ic feet
Pump Start Time:	015										
Pump Stop Time:			Ŋ	Water-Quality M	leter Type: Har	h 11-13		Unit	Cond.	1	
Total Volume Removed:	4 11	117/	7		vell oo dry	1	pH	Turb	/Temp		ORP
¥		11.75			1	10	∀ 0.1	∀ 10%	∀ 3.0%	A	10 mV
Parameter:	1	2	3	4	5	6	7		8	9	
Time	1015	1020	1025	1030	1035	1040	1045	10	50		
Volume Purged (Gal)	0	0.25	0.50	0.75	1.00	1.25	1.50		75		
Rate (mL/min)											
Depth to Water (ft.)	2.87	5.06	5.79	6.52	7.43	8.00	8.57	8.	98		
pH	6.63	6.62	6.61	6. 61	6.62	6.63	6.63	6.	64	1	
Temp. (C)	17.48	17.56	17.71	17.70	17.79	17.81	17.82	17	7.79		
Conductivity (mS/cm)	0.903	0.892	0.884	0.892	0.904	0.906	0.910	0.	920		
Dissolved Oxygen (mg/L)	6.53	2.92	2.68	2.56	2.46	2.38	2.33	2.	25		
ORP (mV)	387	420	454	476	492	499	503	_	07	1	
Turbidity (NTU)	302	215	152	128	125	117	112		09		
	-		111	1						-	
Notes:											
Sampling Informati	T T	Laboratory			Proble	ns / Observ	ations				
Analyses TCL VOCs	# n	Laboratory		#11.							
TCL SVOCs				r Hend	space:	0,2	ppm				
Total Cyanide				4	, ,	1. 1/	10 +	PK	:05		
Color: Purple	Til			A Sum	oled 1	5/ 00	c) .				
	sh+ od	1									
	lightly	11.1									
Sample ID: MW - 2		ple Time: /p	55								
MS/MSD: Yes	1000	M 76	32								
Duplicate: Yes		100									
Duplicate: 105		. Time:									
	THIR	I Ima'									

Oum	oming
	Event

~ "				GROUNDY	VATER SA	MPLING L	OG					
ampling Personnel:	ATT	non	mey			Well ID	. MW	215				
lient / Job Number:	VYST	EC) Ualoco	417.000	Date:	11-3-1	1				
reather: (00)	SUM	nu	1			Time Ir	1000	Time O	ut:	10		
Well Information			,	-		Well Type:		P I	ount S	/	Calab 11a	
Depth to Water: [74	(feet)		(from MP	1	230 2 40 40 40 7		Flush mo	2		Stick-Up	
Total Depth: 12,53	(feet)		(from MP)	Well Material:		Stainless S	teel [PVC	
Length of Water Column:	(feet	10	14			Well Locked:			Yes []	No	
Volume of Water in Well:	(gal)		n a'			Measuring Po	int Marked:		Yes]	No	
Intake depth for tubing:	(feet) 40	4		-	Well Diameter	ri.	1"	(2")	Othe	er:	
urging Information								-	Conver	sion Fac	ctors	
urging Method:	Baile		Bladder	☐ Per	ristaltic 🖳		1977	gal / ft.	1" ID	2" ID	4" ID	6" ID
ubing/Bailer Material:	Steel		Polyethyle	ne 🔲 Tef	flon 🔲	HOP	E	of water	0.041	0.163	0.653	1.469
ampling Method:	Baile	r 🖸	Peristaltic	Bla	dder 🗆			1 gal = 3.	785 L =37	85 ml = 0).1337 cu	bic feet
ump Start Time:	010											
ump Stop Time:	155		-		Water-Quality N	Meter Type:	tenba	-	DO /	Stabilit Cond		OPP
Total Volume Removed:	(ga			1	Did	well go dry:		pH	Turb	/Temp)	ORP
1/5	,4 "	,					NO	∀ 0.1	∀ 10%	∀ 3.09	% V	10 mV
Parameter:	1		2	3	4	5	6	7		8		9
Time	103	5	1100	1105	1110	1115	11ac	1125	113	U	1135	
Volume Purged (Gal)	7,		3.0	3.3	3.6	4.0	4.3	4.6	4		5.	
Rate (mL/min)	20	0	200	200	300	200	200	200		00	201	0
Depth to Water (ft.)	-	18	1.78	1.78	178	1,78	1.78	1.78	_	78	1,7	-
pH		-0-	6,59	6.00	1074	6.75	6.74	6.73	_	73		14
Temp. (C)			21.47	2086	a1.a9	वा.पा	21.43	21.93			aı.	\rightarrow
Conductivity (mS/cm)			0.926	0,946	0.954	0.952	0.952	0.95		953	0.0	
Dissolved Oxygen (mg/L)			0,44	0.41	0.35	0.36	0.35	0.30	-	30	0.	
ORP (mV)			29	28	24	124	20	27	a		a-	
Turbidity (NTU)	+		960	862	639	586	488	422	_	rel	34	
Notes:	bracks Howk	DEL N d M	at-	100 2	1001		1 100				100	
Sampling Informati	1					Proble	ems / Observ	vations				
Analyses		n L	aboratory		Notes:							
TCL VOCs TCL SVOCs OF AS	-	3			Tall	5 (D) A 1	today	day	Inn	NU	(010	red
Total Cyanide	++	4			MITTEL	very	In Trail	LING.	1			1
Color:					1/21/2/1	NA W	ely to	crupate	Mt,	Suit	nde	d
Odor:							ist a	Na	· Mh	MI	1664	
Appearance:					particle		ut p	8	LL	M	0	
Sample ID: MW - 2	15	Samp	ple Time:	40	tredus	betwee	plugging	in	HOW	UK.	1 Y	
NATIONAL TOTAL	1	No			Honba	olinand	in (a	1100				
Duplicate: Yes		No			_ ^	1 Jagar	mbles d tin	00.00	901	ancet	10	Ruz
Duplicate ID		Dup.	Time:		tinal;	rese	MANUE	Der	Je		, —	
Chain of Custody Signed	d By:	1~	K	>	1(00	av. Res	d th	+				
			/									

Volume of Water column:	-Up 🗆
Well Information	
Mell Information	
Depth to Water: 2.4% (feet) (from MP) (feet) (from MP) (from MP) (feet) (from MP) (f	
Total Depth to Water Column: (feet) (from MP)	
Length of Water Column:	vc D
Volume of Water in Well: (gal) Yi, 30	
Intake depth for tubing: (feet) 3.5	No B
Purging Information Purging Method: Bailer Biadder Peristaltic	No 🗆
Purging Method: Bailer Bladder Peristaltic Steel Polyethylene Teflon HOPE Sampling Method: Bailer Peristaltic Bladder Peristaltic Bladder Hope Hope Material: 1	
Tubing/Bailer Material: Steel Polyethylene Teflon HOPE Sampling Method: Bailer Peristatic Bladder	
Sampling Method: Bailer Peristaltic Bladder HOPE Identify Horizon Hope Horizon Hope Horizon Hope Horizon Hor	
Pump Start Time: 0 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 6" ID
Pump Start Time: 0850 Pump Stop Time: 6945 Total Volume Removed: (gal) Parameter: 1 2 3 4 5 6 7 8 Time 0855 0900 0905 0910 0915 0930 0925 0930 5010 0915 0930 0925 0930 5010 0915 0930 0925 0930 5010 0915 0930 5010 0925 0930 5010	
Pump Stop Time:	cubic feet
Total Volume Removed:	
Parameter: 1 2 3 4 5 6 7 8 Time	ORP
Parameter: 1 2 3 4 5 6 7 8 Time 0855 0900 0905 0910 0915 0920 0925 0930 5 Volume Purged (Gal) 0.5 0.6 0.8 1.1 4.35 1.5 1.7 1.9 A Rate (mL/min) 3.00	
Time	∀ 10 mV
Time	9
Volume Purged (Gal) Rate (mL/min) 100 100 100 100 100 100 100 1	3
Rate (mL/min) 1.00 1.0)
Depth to Water (ft.) 3.63 3.03 3.03 3.03 3.02 3.02 3.02 3.02 ppH	
PH	
Temp. (C)	L 17
Conductivity (mS/cm) 0.786 0.779 0.773 0.777 0.774 0.773 0.770 0.7	
Dissolved Oxygen (mg/L) 1.05 1.07 1.04 1.01 0.96 0.93 0.86 0.89 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.	
ORP (mV) -117 -132 -138 -137 -143 -140 -140 -143	
Turbidity (NTU)	35
	0
15.0 16.0 as.1 ab.6 as.9 34.2 36.6	
Notes:	
	- 1
Sampling Information	
Analyses # n Laboratory Problems / Observations	
TCL VOCS 3 TON AMERICA TOLINGSHY CLEAN WITH Some	
CIATINADA (VICTOR)	-
Total Cyanide Sugar an odar.	
Color: VVV V3(N) & SVEEV	
Appearance:	
Appearance: hind! Mostly clar, hay on a	
Appearance: Sample ID: MW-2018) D Sample Time: 1200935 MS/MSD: Yes No No No No No No No N	dav
Duplicate: Yes No No	
Duplicate ID — Dup. Time:	
Dup. Time.	
Chain of Custody Signed By: PID = 1.9 ppm	
31/2017	

Sampling Information

Turbidity (NTU)

Notes:

Analyses	#	n	Laboratory
TCL VOCs		3	momon
TCL SVO Cs)	2	10x Arremon
Total Cyanide			
Color:			
Odor:			
Appearance:			
Sample ID: MW	- 3a(7	.)) Sa	ample Time: 1536
MS/MSD: Yes	S 🗆	No	
Duplicate: Yes	s 🗆	N	· 🕒
Duplicate ID	_	D	up. Time:
Chain of Custody Si	aned By:		1 9

18 3

171

161

Problems / Observations

130

41

164

Initial: Somewholf clear with orange timbed cloudiness. Suspended orange/light-bruin particles. No noticable steen or odos

112

109

Final: mostly clear, no odor, no sneen Sample @ 1530 PID = 1,6 ppm

(feet) (feet) (gal) 2.1 (feet) Bailer Bailer (gal)	ay 002 , unnd	(from MP) (from MP)	staltic 📈	Well ID: Date: Time In Well Type: Well Material: Well Locked: Measuring Poi Well Diameter	10-31- : 12 0 5	Flush mour Stainless Stee Ye Ye 1"	nt D	ctors 4" ID 6" ID
(feet) (feet) (gal) 2.1 (feet) Bailer Bailer Bailer 5	Bladder	(from MP) (from MP) Peris	staltic s	Date: Time In Well Type: Well Material: Well Locked: Measuring Poi Well Diameter	10-31- : 12 0 5	Time Out: Flush mour Stainless Stee Ye 1"	es 2" Othe	No Discourser:
(feet) (feet) (gal) 2 . ((feet) (feet) Steel Bailer Bailer 5	Bladder Polyethylen	(from MP) (from MP) Peris	staltic ·sat	Well Type: Well Material: Well Locked: Measuring Poi Well Diameter	nt Marked:	Flush mour Stainless Stee Ye Ye 1"	es 2" Othe	No Discourser:
C(feet) (gal) A.U (feet) Bailer Bailer Bailer 5 3.4	Bladder Polyethylen	(from MP)	staltic ·sat	Well Locked: Weasuring Poi Well Diameter		Stainless Stee	es 2" Other	No Discourser:
C(feet) (gal) A.U (feet) Bailer Bailer Bailer 5 3.4	Bladder Polyethylen	(from MP)	staltic ·sat	Well Locked: Weasuring Poi Well Diameter		Stainless Stee	es 2" Other	No Discourser:
(feet) (gal) 2 . (l) (feet)	Bladder Polyethylen	☐ Peris	staltic ·s	Well Locked: Measuring Poi Well Diameter		Ye Ye 1" C	2" Othe	No Derivative No
(gal) 2(feet) Bailer Bailer Bailer 5	Bladder Polyethylen	ne Teflo	on 🗆	Measuring Poi Well Diameter		1" Ye	2" Othe	No Directors
Bailer Bailer Bailer Bailer Bailer Bailer S	Bladder Polyethylen	ne Teflo	on 🗆	Well Diameter		1"	2" Othe	ctors 4" ID 6" ID
Bailer Steel Bailer 5	Polyethylen	ne Teflo	on 🗆				Conversion Fac	ctors 4" ID 6" ID
Steel Bailer 5	Polyethylen	ne Teflo	on 🗆	HD	0 =			4" ID 6" ID
Steel Bailer 5	Polyethylen	ne Teflo	on 🗆	HD	0 =			4" ID 6" ID
Bailer 5				HD	DE	gai / it.		The Court of the C
5	Peristaltic	Blad	der 🗆		4 [of water	0.041 0.163	0.653 1.469
5		K	-			1 gal = 3.78	5 L =3785 ml = 0	0.1337 cubic feet
20								
		1	Water-Quality M	leter Type: 山	viba	ID	Unit Stabilit	
			Did w	vell go dry:	NO	рн т	urb /Temp	p URP
				1	1.0	∀ 0.1 ∀	10%	%
1	2	3	4	5	6	7	8	9
बेक	1225	1236	1235	1246	1245	1250	1255	1305
2.1				1.5	1.7		2.25	2.5
				200	200		200	200
	<u> </u>						1 2	274
	10.102			6.58	(0,57			6.57
7,57								
.444								0.553
					•			0,51
131112				31	31			31
		-			-			6,0
0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				Droblo	ms / Obson	otions		-
n La	aboratory							a serial l
			Trut	ial: Cl	ear, n	0 ode	or, no	Min
			7.1.			مدملمه	PW	101
		1	Shee	en or	(A)	CENON,	1 00	101
					,			
	- 01			Λ. –				
		U	nnd	k; S	ame	as all	nove	
				J	201.			
		1	OW.	0.0				
. (luty	VON	11111	0.0	ppm			
	340 314 314 3157 3157 311 311 311 311 311 311 311 31	1235 1235 120 12	1	2235 21 0.8 240 1.25 200 200 200 200 2.74 2.74 2.74 2.74 2.03 6.62 6.60 6.59 7.57 17.67 17.86 17.95 1.11 1.07 0.91 0.78 29 36 32 31 0.0 0.0 0.0 0.0 Sample Time: 1310 Find No of Dup Time:	1 1 1 1 1 1 1 1 1 1	1235 1246 1245	125 125 1246 1245 1250 1240 1245 1250 1240 1245 1250 1240 1245 1250 1240 1245 1250 1240 1245 1250 1240 12	125 125

Crun agrenour

GROUNDW	ATER	SAMPI	ING	00
CITOCIADA		OMINIT L	-1140	-

.011	011	Sampling
		Event

			GROUND	WATER SA	MPLING L	OG			
Sampling Personnel:	Amer	new			Well ID	· MW -	233		
	NYSME		26641	7.0000		10-31			
Weather: (0 ()	SUNY				Time I	1: 1350	Time Out	:	
Well Information									
Depth to Water: 2.24	(feet)		(from M	P)	Well Type:		Flush mou	nt 🗵	Stick-Up
Total Depth: 12.0	(feet)		(from M	P)	Well Material:	<u> </u>	Stainless Stee		PVC 🖭
Length of Water Column:	a. 8 (feet)				Well Locked:		Ye	es 🗆	No 🗹
Volume of Water in Well:	1.5 (gal)				Measuring Po	int Marked:	Ye	s_ 🗆	No 🗗
Intake depth for tubing:	(feet)			_	Well Diameter	r:	1" (2" Oth	er:
Purging Information									
Purging Method:	Bailer	Bladde	er 🗆 Pe	eristaltic 🖳				1" ID 2" ID	4" ID 6" ID
Fubing/Bailer Material:	Steel	Polyethyle	ene 🖂 Te	eflon 🗆	HOP	F	gai/it.	0.041 0.163	0.653 1.469
Sampling Method:	Bailer	Peristalti	ic BI	adder _	1121	-			0.1337 cubic feet
Pump Start Time:	355							277.23.20.00	
Pump Stop Time:	101			Water-Quality M	Meter Type: 11	n. = 1 a =		Unit Stabilit	
Total Volume Removed:	(gal)			Did	well go dry:	SUPOL		O / Cond urb /Tem	ORP
,	(901)			Did	30 01 71		∀ 0.1 ∀	10% ∀ 3.09	%
Parameter:	1	2	3	4	5	6	7	8	9
Time	1405	1916-	1415	1420	1425	1430 .	1435	1446	1445
Volume Purged (Gal)	0.3	0.5	0.65	0.9	1.1	1.15	1.4	1,5	1,45
Rate (mL/min)	200	200	201	170	120	120	120	120	120
Depth to Water (ft.)	293	3.11	3.21	3.61	3,43	3.39	3.32	3,30	3.28
рН	6.42	4.51	6.52	6.55	1.55	6.55	6,55	6.56	6.55
Temp. (C)	17.31	17.78	17.31	17.75	15.03	18.07	18,21	18.36	18,50
Conductivity (mS/cm)	G.701	0.694	6,688	0.618	01678	0.677	0.673	6.669	0.661
Dissolved Oxygen	4.57	5.12	5.34	14.96	4.13	3.91	3.59	3.45	3.33
(mg/L) ORP (mV)	95	88	87	85	84	83	82	80	77
Turbidity (NTU)	6.6	6.0	6.0	0.6	0.0	0.0	0.0	0.0	0.0
· country (· · · · o)	# lane				10.0	6.0	0.0	0.0	10.0
Notes:	taking	ht rea	ding						
Sampling Informati	ion				Proble	ms / Observ	ations		
Analyses	# n	Laboratory							
TCL VOCs				Inity	al: 10	eav.	odow	200), R	e shee
TCL SVOCs Total Cyanide				1,114					
Color:									
Odor:									
Appearance:									
	-235 Sa	mple Time: 14	150						
MS/MSD: Yes			30	<u> </u>	0: 110	au 6 0	10.101-	7 1.0	hoom
Duplicate: Yes				Mrou	x (Q)	ON OC	weg	1, 110)	neen
Duplicate ID —		ıp. Time:							
Chain of Custody Signer	-	p. rine.	-						
		will			*				
		Y		Din	0.000				

Crown	Dykm	an	GROUND	VATER SA	MPLING L	OG					Even
	ES				Well ID	· MW-	250				
	002664	117.00	08		Date:	11/7/1	7				
eather: Closs	1 1 0	2'			Time Ir	1440	Time O	ut: /	550		
Well Information				_	Well Type:		Flush me	ount D	-	Stick-Up	
Depth to Water:	1	.32	(from MP	1_	Well Material:					PVC	
Total Depth:		0.0	(from MP	1_	Well Locked:		Stainless S				
Length of Water Column:	_	3.68		_	The Vallacian Co.			Yes [No	
Volume of Water in Well: Intake depth for tubing:	19-1	29		-	Measuring Po		1*	Yes [Other	No	
urging Information	(loct)				Well Diameter	*		(2)	Other	-	
urging Method:	Bailer 🖂	Bladder	r Per	ristaltic			16	Conver	sion Fac	ors	
ubing/Bailer Material:						d	gal / ft.	1" ID	2º ID	4" ID	6" ID
ampling Method:	Steel _	Polyethyle			HDPE	D	of water	0.041	0.163	0.653	1.469
TO PERSONAL DISTRICT	Bailer _	Peristaltic	Bla	dder 🗆			1 gal = 3	.785 L =37	85 ml = 0.	1337 cul	bic feet
ump Start Time:	450							Uni	t Stability		
ump Stop Time: / 5	545			Water-Quality N	Meter Type: H.	oriba u-5	рН	DO / Turb	Cond. /Temp	. Le	ORP
Total Volume Removed:	(gal)	2.0		Did	well go dry:	Vo	∀ 0.1	∀ 10%	∀ 3.0%	A	10 m\
*				T	,	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	1				
Parameter:	1	2	3	4	5	6	7		8	9	9
Time	1455	1500	1505	1510	1515	1520	1528	- 15	30	15	35
Volume Purged (Gal)	6.320	0.25	0.50	0.75	1.00	1.25	1.50	0 1.	75	2,0	00
Rate (mL/min)											
Depth to Water (ft.)	6.32	6.65	6.68	6.72	6.74	6.69	6.71		71	6.7	1
рН	6.09	6.30	6.40	6.45	6.48	6.51	6.53	6	54	6.5	5
Temp. (C)	17.12	17.34	17.43	17.40	17.44	17.41	17.43	17.	45	17.	43
Conductivity (mS/cm)	0.766	0.772	0.772	0.774	0.775	0.776	0.77	5 0.	775	0.7	74
Dissolved Oxygen (mg/L)	3.20	2.00	1.83	1.82	1.76	1.71	1.73	1.	71	1.7	0
ORP (mV)	250	-94	-138	-152	-158	-163	-167	-1	69	-1-	71
Turbidity (NTU)	108	84.9	53.0	30.0	26.6	22.6	13.0	12	2.4	12.	0
Materi							7				
Notes:											
Sampling Informati	ion			-	Proble	ms / Observ	ations				
Analyses		aboratory									
TCL VOCs	1 21 21 2			A The	Headsp mplad	ace:	7.9 0	· m			
TCL SVOCs					4		1				
Total Cyanide				A 5.	- alas	61 V	OCS 1	+ P	FC		
Color: None				1. 14	- Ap				- ,		
Odor: Sligi	h+ Odor										
Appearance: <	lear										
Sample ID: MW-		le Time; / S	540								
MS/MSD: Yes		8									
Duplicate: Yes	no No										
Duplicate ID	Dup.										
Card Colored Colored		Mark Section 1									

ampling Personnel:	ES				Well ID:	MW-	255				
ient / Job Number:	00266	417.000	00		Date:	11/7/17)				
eather: Cloudy					Time In		Time C	ut: /	405		
Well Information			A						/		
Depth to Water:	(feet) 4	1.05	(from MP	_	Well Type:		Flush m	ount 🖺	S	tick-Up	
Total Depth:		0.0	(from MP		Well Material:		Stainless S	teel []	PVC	4
Length of Water Column:	(feet) I	5.95			Well Locked:			Yes []	No	9
Volume of Water in Well:		2.59		_	Measuring Poi	nt Marked:		Yes []	No	
Intake depth for tubing:	(feet)	~ 19		_	Well Diameter:		1"	(2")	Other	:	
urging Information					,		1	•			
urging Method:	Bailer	Bladder	□ Per	istaltic 🕝				1" ID	sion Fact	4" ID	6" ID
ubing/Bailer Material:	Steel	Polyethyle	ne Tef	lon 🗆			gal / ft. of water	0.041	0.163	0.653	1.469
ampling Method:		Peristaltic		dder 🖂			1 gal = 3		85 ml = 0.		
ump Start Time:			<u> </u>								
120				Water-Quality N	Meter Type:	4 3 5 Y			Stability		
/70				7 70 - 70 - 70	Mod	iba U-57	pН	DO / Turb	Cond. /Temp		ORP
otal Volume Removed:	(gal)	2.0		Did	well go dry:	Jo	∀ 0.1	∀ 10%	∀ 3.0%	A	10 mV
	1			1							
Parameter:	1	2	3	4	5	6	7		8	9	9
Time	1310	1315	1320	13Z5	1330	1335	1340	13	45	13:	20
Volume Purged (Gal)	0	0.25	0.50	0.75	1.00	1.25	1.50	- 11	75	2.	
Rate (mL/min)											
Depth to Water (ft.)	4.05	4.12	4.12	4.12	4.12	4.12	4.12	4.	12	4.1	12
рН	6.67	6.63	6.63	6.62	6.63	6.63	6.63	6.	63	6.0	63
Temp. (C)	17.43	17.62	17.79	17.85	17.96	17.97	10.01	17	90		92
Conductivity (mS/cm)	0.872	\$ 0.8C	90.868	0.867	0.868	0.872	0.878	0.	385		885
Dissolved Oxygen (mg/L)	4.56	3.01	2.85	2.83	2.82	2.89	2.90		95	3.	
ORP (mV)	567	573	576	577	579	581	582		84		35
Turbidity (NTU)	191	127	87.2	65.9	50.8	30.2	19.0		. 8	15	_
	1 1		101	160.1	120.0						
Notes:											
Sampling Informati	on				Proble	ms / Observ	vations				
Analyses	# n L	aboratory			1						
TCL VOCs				* Head	dspace: .11 Sam	0.20	pm				
TCL SVOCs											
Total Cyanide				A We	11 Sam	alast f	or Ve	200	+P	FC	5
Color: Porple						pao .		_3			
Odor: Slight	Odor										
Appearance:	Slightly	Cloudy									
Sample ID: MW-2	55° Samp	le Time:	355								
MS/MSD: Yes	No	r r									
The state of the s											
Duplicate: Yes] No	2									

7311

Sampling Information

Turbidity (NTU)

Notes:

Analyses	#	n	Laboratory
TCL VOCs		3	TO I AMONZA
TCL SVOCS PFA	5	2	Jest Minerica
Total Cyanide			
Color:			
Odor:			
Appearance:			
Sample ID: MW	26	Sai	mple Time: 1400
MS/MSD: Yes	· 🗆	No	Ø
Duplicate: Yes	5 🗆	No	0
Duplicate ID	_	Du	p. Time;
Chain of Custody Sig	gned By:	(~ 70

Problems / Observations

1400

80.7

Sample

Initial: mostly clear. How an

Final: mostly clear, Has an etor.

Note: Product on UL meter, Oil sensor

PID: 1.8 mm

(21/3h)

73.8

Crun	DUKA	nen						2017	GW S	Sampling	
Site	0		GROUNDW	ATER SA	MPLING L	og				Event	f
Sampling Personnel: A Client / Job Number: Weather: 50'5	WARDE WARDE WARDE		00000		Well ID Date: Time Ir	: MW-	27 Time 0	out:	1510	7106	-
Well Information					Well Type:			-	/	or o	
Depth to Water: 6.5	1.55.7		(from MP)		Well Material:		Flush m		S	tick-Up	
Total Depth: \5.3	O (feet)	71	(from MP)				Stainless S		,	PVC □	-
Length of Water Column:	(feet) 8	117		-1	Well Locked:			Yes 🖸		No 🗓	
Volume of Water in Well:	(gal) \	,42		-	Measuring Po			Yes A		No D	
Intake depth for tubing:	(feet)			- 1	Well Diameter	r:	1"	(2"	Other		
Purging Information Purging Method:		20.12		-700 - E-53			-	Convers	ion Fact	ors	7
	Bailer	Bladder		staltic 🔽			gal / ft.	1" ID	2" ID	4" ID 6" ID	
Tubing/Bailer Material:	Steel	Polyethyle	ne Tefl	on \square			of water	0.041	0.163	0.653 1.469	
Sampling Method:	Bailer	Peristaltic	Blad	dder 🗆	MOP	19	1 gal = 3	.785 L =378	35 ml = 0.1	1337 cubic feet	
Pump Start Time:	125					-		Unit	Stability		
Pump Stop Time:	045			Water-Quality M	Meter Type:	TONDON	рН	DO/	Cond.	ORP	7
Total Volume Removed:	(gal)			Did v	well go dry:	10	∀ 0.1	Turb ∀ 10%	/Temp ∀ 3.0%	∀ 10 mV	
	310	r			1						
Parameter:	1	2	3	4	5	6	7		8	9	1
Time	0930	0935	0940	0945	0950	0955	4000	100	5	1010	101
Volume Purged (Gal)	0.2	0.3	0.5	0.7	0.9	l _t l	1.3	1.5	_	1.7	1.
Rate (mL/min)	150	150	150	150	150	150	150	150		156	15
Depth to Water (ft.)	7,163	7.90	8,29	8 44	8.60	8,93	8,99			8.99	8:
pH	6.43	6,41	6.42	6,44	6.43	6.43	6.44	_	-	6.44	6.46
Temp. (C)	19.09	19,19	19.37	19,44	19,52	19,53	19,54	19,	56	1958	19,0
Conductivity (mS/cm)	0.984	0,998	0.988	0.969	0,949	0.925	0.900		86	0.864	0,8
Dissolved Oxygen (mg/L)	0.90	0.68	0.64	0.58	0,85	1.85	1,33	1.	19	14 G. 98	0.
ORP (mV)	-199	-124	-131	-135	-135	-137	-137		36	-138	-13
Turbidity (NTU)	210	1910	181	145	156	109	92.6		16	70.5	59
Notes:											
Sampling Informati	on				Proble	ms / Obser	vations				-
Analyses		aboratory		7	mast	u rlam	(1.0)	th .	5/17/1	OF MAN	-liw
TCL VOCs	3	TOSY M	mento	mitted:	VICOSI	ly clean	W	111	0119	11 (1000	All E
Total Cyanide	1 9	103 11		and	SUSPENd	tel pa	Azles.		,		
Color:					1	Í					
Odor:											
Appearance:				T10.0	01-	0.1	21 4	Loui	10	mondo	

Final: (lear, Still oder, No sheen

PD: 135,1 ppm

Chain of Custody Signed By:

Sample ID: MW-37

MS/MSD:

Duplicate:

Duplicate ID

Yes

Yes 📦

DN6-03

Sample Time:

9

Dup. Time:

No

No

run Byrman NW-27 con7. Event **GROUNDWATER SAMPLING LOG** MW-7 Anemel Sampling Personnel: Well ID: Client / Job Number: 11-7-1 Date: Time Out: Weather: overast 0920 1100 505 Time In: Well Information Well Type: V Flush mount Stick-Up 6,59 W11330 Depth to Water: (feet) Well Material: 15.30 Stainless Steel PVC 4 Total Depth: (feet) (from MP) Well Locked: 9 No Length of Water Column: (feet) Yes 1,42 Volume of Water in Well: (gal) Measuring Point Marked: 0 No Intake depth for tubing: (feet) Well Diameter: 1" 2" Other: **Purging Information Conversion Factors** Purging Method: Bailer Bladder Peristaltic 14 1" ID 2° ID 6° ID gal / ft. Tubing/Bailer Material: Steel Polyethylene _ Teflon HOPE of water 0.041 0.163 0.653 1.469 Sampling Method: Bailer Peristaltic Bladder 1 gal = 3.785 L =3785 ml = 0.1337 cubic feet N Pump Start Time: **Unit Stability** Pump Stop Time: Water-Quality Meter Type: Cond. Honba DO / pH ORP /Temp Turb Total Volume Removed: Did well go dry: (gal) ∀ 0.1 V 10% ∀ 3.0% ∀ 10 mV 3.0 Parameter: 11 2 3 4 5 6 7 8 9 1025 Time (O) 20 A Volume Purged (Gal) Rate (mL/min) 50 156 M 90 99 Depth to Water (ft.) pH 6,48 19,61 F Temp. (C) 8 24 Conductivity (mS/cm) 6.817 0 Dissolved Oxygen 0.35 1030 (mg/L) ORP (mV) Turbidity (NTU) 48.10 41, Notes: Sampling Information Problems / Observations Analyses n Laboratory TCL VOCs 3 TCL SVOCS OF AS Total Cyanide Color: Odor: Appearance: Sample ID: MW-9-Sample Time: MS/MSD: Yes No 9 Yes P No Duplicate: 10-02 Duplicate ID Dup. Time:

Chain of Custody Signed By:

Date:				GROUNDW	ATER SA	MPLING LO						
Mel Information	Sampling Personnel	Mana	4			Well ID	MW -	38				
Well Information	Client / Job Number:	11000	-				11-7-	17				
Depth to Water Depth To Operation Depth De	- A 100	SWINY	t bre	ery		Time In	: 0730	Time C	Out: (06.16		
Depth to Water Depth To Operation Depth De	Well Information	0		O		No.				-	_	
Total Depth M O Dees Dees	to Lat	(feet)		(from MP)	-0	Well Type:		Flush m	ount [9	Stick-Up	
Leagth of Water Column:	Doptii to Traton	(,,,,,			_	Well Material:		Stainless S	iteel []	PVC	
No No No No No No No No	No. 10 Carlo Maria Landon T	1	36	(nom with)	_	Well Locked:			Yes 🛚	1	No	
Intake depth for tubing: (feet ()		1	^			Measuring Poi	int Marked:		Yes - F	/	No	П
Depth to Water (nt.) T. 29 T. 33 T. 33	Intake depth for tubing:				3	Well Diameter	:	1"	1	1		
Depth to Water (nt.) T. 29 T. 33 T. 33	Purging Information											
Description	Purging Method:	Bailer _	Bladder	☐ Peri	staltic N							6° ID
Total Volume Removed: Gal	Tubing/Bailer Material:		- 1 4 1		34.	HOOT	-					
Time	Sampling Method:					TIUPE					IND GARD	
Water-Quality Meter Type: Hon On Fremp ORD Order ORD		Baller	Peristantic	Biad	oder 🗆			1 gal = 3	.785 L =3.	785 mi = 0	.1337 Cul	nc reet
Parameter: 1		1120			Motor Quality I	Actor Type: 11	- In M		Uni	it Stabilit	у	
Parameter: 1	Pump Stop Time:)915				-(1	OUDOL	рН				ORP
Parameter:	Total Volume Removed:				Did	well go dry:	NO	∀ 0.1				10 mV
Time	1	2.0		T			-				1	-
Time	Parameter:	1	2	3	4	5	6	7		8	085	30
Volume Purged (Gal) 0.3 0.5 0.5 0.6 0.7 (1.9 1.4 1.5 1.16 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2	Time	0800	0805	0810	0815	0820	0825	U8 40	08	45		-1
Rate (mL/min) 120	Volume Purged (Gal)	32	- V				. 0	1.4	1	5	1.6	1
Depth to Water (ft.) 7,29 7,33 7,33 7,33 7,33 7,33 7,33 7,33 7,3		130	0.0	-			-	120	1	20	12	0
PH		7.79		7 37				-	3 7	-	-	-
Temp. (C)				1100		1110		-	1 6		1	-
Conductivity (mS/cm) 0.665 0.689 0.671 0.668 0.671 0.660 0.649 0.631 0.622 6.6 Dissolved Oxygen (mg/L) 0.75 0.81 0.87 0.74 0.70 0.61 0.58 0.55 0.5 ORP (mV) 17 -17 -43 -54 -63 -70 -83 -89 -93 -9 Turbidity (NTU) (0.35 71.3 09.5 0.316 51.2 4116 0.35.9 19.7 16.5 15. Notes: Sampling Information Analyses # n Laboratory TCL VOCs		101 21	-	1	-		-	1 10			_	
Dissolved Oxygen (mgt) 0.99 0.75 0.81 0.87 0.74 0.76 0.61 0.58 0.55 0.9 (mgt) (mgt) 17 -17 -43 -54 -63 -70 -83 -89 -92 -9 -9 -9 Turbidity (NTU) (\$3.5 71.3 69.5 63.6 51.2 411.6 35.9 19.7 16.5 15. Notes: Sampling Information Analyses # n Laboratory TCL VOCS 75 75 76 76 76 76 76 76 76 76 76 76 76 76 76		A A X		1 - 1				_			-	
ORP (mV)		0.0	070			- 1	_				1	
Turbidity (NTU) Problems / Observations Problems / Observations	(mg/L)	0,99	0.15	0.81		1 2	1000					
Sampling Information Analyses # n Laboratory TCL VOCS 7 TOST AMOUNTA TOST SYNCE PLAS 7 TOST AMOUNTA TOTAL Cyanide 7 TOTAL Cyanide 7 TOTAL CHARLES AND SUSPENDED TOTAL CHARLES AND SUSPENDED TOTAL CHARLES AND STATELES	ORP (mV)	1/2/	1					1	-	-	30.0	
Sampling Information Analyses # n Laboratory TCL VOCS 3 TOST AMOUNTA TOLE SYOCS PLAS 7 TOST AMOUNTA TOTAL Cyanide Color: Odor: Appearance: Sample ID: MN 38 Sample Time: 0900 MS/MSD: Yes No No No Steen Duplicate: Yes No No No Steen Chain of Custody Signed By:	Turbidity (NTU)	4315	1113	69.5	6516	51,0	14110	192	1 19	1 /	16,	7
Sampling Information Analyses # n Laboratory TCL VOCS 3 TOST AMOUNTA TOLE SYOCS PLAS 7 TOST AMOUNTA TOTAL Cyanide Color: Odor: Appearance: Sample ID: MN 38 Sample Time: 0900 MS/MSD: Yes No No No Steen Duplicate: Yes No No No Steen Chain of Custody Signed By:	Notes:				QUI	mole	(a) 1	Tann				
Analyses # n Laboratory TCL VOCS TOL SYDCS PLAS TOTAL Cyanide Color: Odor: Appearance: Sample ID: MW-28 Sample Time: 0900 MS/MSD: Yes No No Style Duplicate: Yes No Dup. Time: - Chain of Custody Signed By:					ou	who	(,)	1-100	-			
Analyses # n Laboratory TCL VOCS TOL SYDCS PLAS TOTAL Cyanide Color: Odor: Appearance: Sample ID: MW-28 Sample Time: 0900 MS/MSD: Yes No No Style Duplicate: Yes No Dup. Time: - Chain of Custody Signed By:	Sampling Informat	ion				Proble	ms / Obser	vations				
Duplicate ID Dup. Time: Chain of Custody Signed By:						- 1		И	6	, 14	11/	1 5/14
Duplicate ID Dup. Time: Chain of Custody Signed By:	The Colonia Colonia	3	Tool Ann	prince	TOP	1 Inine	al in	35714	clear	/ W	17 1	311
Duplicate ID Dup. Time: Chain of Custody Signed By:	- 111	L	1001/11		Clarkin	DOS ONL	nd Six	nold	led	00	(MY	es,
Duplicate ID Dup. Time: Chain of Custody Signed By:	- Switch Colonia Colonia				Shara	× 1 0	. No	NIN	ole :	shee	en	
Duplicate ID Dup. Time: Chain of Custody Signed By:					MANG	d Oolor	, 140					
Duplicate ID Dup. Time: Chain of Custody Signed By:					()		.0	n			
Duplicate ID Dup. Time: Chain of Custody Signed By:		78 00-	nlo Time: A	00	Fmal;	MOST	y cleo	Ch 11	0 51	reev	1	
Duplicate ID Dup. Time: Chain of Custody Signed By:		**	/	.00	Shill	1000	0 000	adm				
Duplicate ID Dup. Time: Chain of Custody Signed By:			-,		Juli	MAS	DCV (Octo V	L			
Chain of Custody Signed By:	Duplicate: Yes											
Chain of Custody Signed By:			Time: -									
	Chain of Custody Signe	ed By:	1	~	DIO- 1	12						

Site	0		GROUNDY	VATER SAI	MPLING LO	OG			Event		
Sampling Personnel:	Agni	mes			Well ID:	MW-	29				
Client / Job Number:	Miles de la Constantina				Date: 1 - 8 - 17						
Veather: 50) Werrast					Time In: 0855 Time Out: 1015						
Well Information			Ť		Well Type:		Flush mou	nt 🖭 s	Stick-Up		
Depth to Water: 6.69 (feet) (from MP)											
Total Depth: 14(18 (feet) (from MP)					Well Material:		Stainless Steel PVC D				
Length of Water Column:	(feet)	,49		- ,	Well Locked:		Y	es 🖳	No 🗆		
Volume of Water in Well: (gal) 1.d d					Measuring Poi		Yes No 🗆				
Intake depth for tubing:	(feet)	J		7	Well Diameter	:	1" (2" Other			
Purging Information		W. W.	-	istaltic 🔟				Conversion Fact	tors		
							gal / ft.	1" ID 2" ID	4" ID 6" ID		
	ubing/Bailer Material: Steel Polyethylene Teflon					E	of water	0.653 1.469			
Sampling Method:	Bailer	Peristaltic	Bla	dder 🗆			1 gal = 3.78	35 L =3785 ml = 0.	1337 cubic feet		
Pump Start Time:	910							Unit Stability			
Pump Stop Time:	005			Water-Quality M	er-Quality Meter Type:			nH DO / Cond.			
Total Volume Removed: \(\(\q \) (gal)				Did well go dry:				Turb /Temp 10% ∀ 3.0%			
Parameter:	1	2	3	4	5	6	7	8	9		
Time	0920	MIZS	0930	0935	0940	0945	0950	5			
Volume Purged (Gal)	0,9	0.55	07	6.9	1,2	1.4	116	Á			
Rate (mL/min)	140	140	140	146	140	140	140	M			
Depth to Water (ft.)	7,97	8.22	8,27	8.27	8.27	8.27	8.27	P			
pH	6.70	6.74	678	6.83	6.85	6,870	6187				
Temp. (C)	19.95	20.43	20.46	20144	20.51	20,69	20,61	E			
Conductivity (mS/cm)	1,55	440	1.32	1,25	1.22	1119	1118	0			
Dissolved Oxygen (mg/L)	0.75	0.58	0.50	0,46	6.44	6.44	0.45	0955			
ORP (mV)	-174	-181	-187	-191	-192	-193	-192		7-7-1-2		
Turbidity (NTU)	5,44	9.70	6.65	91,45	8.23	10.0	10.7				
Notes:											
Sampling Informat Analyses		aboratory			Proble	ons / Obser	vations	Shave	in ALCV		
TCL VOCs	3	- An	pomza	Thin	al'. V	1021109	CRON	, Diron	9 000		
TOLSHOOS PICS	1 7	1631 19	Terror (Sumo	SUSGEM	led o	a Mille	D. NA	notronial		
-Total Gyanide				Initial: Mostly clear, Strong odor Some suspended particles No notrouble Sheen							
Color:				Sie	N						
Odor:											
Appearance:	7.0						×				
Sample ID: MV		ple Time: 09	55	hnow!	mos	My rea	ear, t	# Stron	ey odov.		
MS/MSD: Yes		9			-	0			J		
Duplicate: Yes	□ No						de				
Duplicate ID	1	Time:									
Chain of Custody Signe	ed By:	~/	\sim	PIN							
		0		1111	0.6000	N					

1,4-Dioxane Screening; April 2018

Crown Dymman											
Site			GROUND	WATER SA	MPLING L	OG			Eve	nt	
Sampling Personnel:	AThoma	D			Well I	. MINI-1	0				
Client / Job Number:		Well ID: MW-1D Date: 4-5-18									
Weather: 40'5		Date: 4-5-18 Time In: 13.10 Time Out: 13.3.3.									
Well Information										_	
Depth to Water: 2.5	P)	Well Type:		Flushmo	ount 🗹	Stick-Up [
Total Depth: 25 6	P)	Well Materia	al:	Stainless Steel		PVC [3				
Length of Water Column	Length of Water Column: (feet) 23 (1)							Yes 🗆	No 🖭		
Volume of Water in Well:		.76		_	Measuring F	oint Marked:		Yes 🗆	No [7	
Intake depth for tubing:	(feet)	~225		_	Well Diameter:			1" (2") Other:			
Purging Information								onversion Fact	ore		
Purging Method:	Bailer	Peristal	tic 🖂 N	Monsoon	Other:		Conversion Factors				
Tubing/Bailer Material:	Steel	Polyethyl	ene 🔲 📑	Teflon	Other:	TOPE /	-64	0.163	0.653 1.469		
Sampling Method:	Bailer	Peristalt	ic 🗗 N	Monsoon	Other:		1 gal = 3.785	5 L =3785 ml = 0.	1337 cubic feet		
Pump Start Time:	225							Unit Stability		_	
Pump Stop Time:	330		Water-Qua	lity Meter Type:	Honb o	1		O / Cond.	ORP	=	
Total Volume Removed:	: 4,4 (gal)			Did well go dry:	Yes	No 🗹		10% ∀ 3.0%	∀ 10 mV	=	
Parameter:	1	2	3	4	5	6	7	8	9	10	
Time	1230	1235	1240	1245	1250	1255	1300	1305	1310	1315	
Volume Purged (Gal)	0,6	1.0	1,5	118	2.2	dile	3.0	3.4	3.8	4.2	
Rate (mL/min)	300	300	300	300	300	300	300	300	300	300	
Depth to Water (ft.)	2.53	2.53	2.53	2.53	2,53	a.53	2.53	2.53	2.53	2.53	
pH	6.76	6.75	10.75	6,72	6.70	6.71	6.74	6.75	6.74	6.71	
Temp. (C)	12.33	12.60	12.94	13,17	13,40	13,60	13.75	13,83	13.94	13.9	
Conductivity (mS/cm)	0.882	0.898	0.901	0.899	0.901	0,902	0.903	0.907	6.901	0.896	
Dissolved Oxygen (mg/L)	6.49	0,45	0.43	0.43	0.41	0.41	0.39	0.39	0.39	4.38	
ORP (mV)	-51	-60	-64	-65	-66	-67	-73	-72	-72	-78	
Turbidity (NTU)	376	340	299	283	260	338	319	203	191	186	
Notes:	A Se	e note	e bel	ion							
Sampling Informatio	n				Problen	ns / Observa	tions			_	
Analyses	# n	n Laboratory									
1,4 Dioxane		TestAmerica	^	Trital: Turbid, Suspended parties orange tint/rustyon cloud, No oda, no							
		5270 511		average that hastern cloud No also							
Calani		2 Amber 1	item			10319011	CIOON	,40 (Jaco, M	U	
Color:				sheet							

Dup. Time:

Final: Partly cloudy with sirght orange fint. No odor. No sheen.

Note: When opened, entire curbbox was filed with water (notylorange Glov). Removed water to below

PVC casing(2.0 gol). As purging venton, Page I of I water level in cubbux vose, AT Page I of I continued to remove water to always be maker continued to remove water to always be maker

4/4/2018 Groundwater Sampling Log

Chain of Custody Signed By:

Duplicate ID

Site Coun	Dykm	949	GROUNDY	VATER SAI	MPLING L	OG				Ever
ampling Personnel:	23				Well ID	111	2			
lient / Job Number:	002664	17.0000			Date:	4/5/18				
leather: Sunn	17 305				Time In	: 1245	Time Out	: 1345		
Well Information			*		Well Type:		Flush mou	nt M	Stick-Up	
Depth to Water:		.84	(from MP		Well Material:		Stainless Stee		PVC	
Total Depth:		3.25	(from MP)				/		
Length of Water Column		8.41		7	Well Locked:		Ye	es 🖫	No	
Volume of Water in Well: Intake depth for tubing:		v 12.5'			Measuring Poi		Ye	-	No	
	(leet)			-	Well Diameter	:	1"	Oth	er:	_
urging Information urging Method:	Poilor	Bladder	Por	inteltie			(Conversion Fa	ctors	
ubing/Bailer Material:	Bailer			istaltic		-	gal / ft.	1" ID 2" ID	4" ID	6" IE
The factor of the state of	Steel _	Polyethyle			CH	DPE	of water	0.041 0.163	0.653	1.469
ampling Method:	Bailer	Peristaltion	Blad	dder 🗆			1 gal = 3.78	35 L =3785 ml =	0.1337 cul	bic feet
ump Start Time:	250							Unit Stabili	h.,	
ump Stop Time: / 3	340			Water-Quality M	eter Type:	ile U-53	pH C	OO / Cond		ORP
otal Volume Removed:	(gal)	V1.7	_	Did w	fell an dry:			urb /Tem	p	and to
		1./	۵		1	Vo	∀ 0.1 ∀	10%	% V	10 m\
Parameter:	1	2	3	4	5	6	7	8	9	9
Time	1255	1300	1305	1310	1315	1320	1325	1330		
Volume Purged (Gal)	0	0.25	0.50	0.75	1.0	1.25	1.58	1.75		
Rate (mL/min)				72.00						
Depth to Water (ft.)	5.31	5.62	5.96	6.33	6,58	6.91	7.15	7.20		
рН	7.26	7.15	7,10	7.08	7.05	6.99	6.97	6.96		
Temp. (C)	14.22	13.94	13,73	13.63	13,51	13.47	13.49	13.52		
Conductivity (mS/cm)	0.253	0.251	0.254	0.259	0.260	0.277	0.283	0.286		
Dissolved Oxygen (mg/L)	6.12	456	4.37	4,09	3.94	3.47	3.29	3.19		
ORP (mV)	-43	-12	3	17	26	38	42	45		
Turbidity (NTU)	399	537	444	337	254	151	155	160		
Notes:										
Sampling Informati					Proble	ms / Observ	ations			
Analyses	# n L	aboratory		V		0	1.4	7		
TCL VOCs				# Ju	uphed	for	1-1	rioxa	ne	
TCL SVOCs										
Total Cyanide	R.									
	Brown									
Odor: //• Appearance: <	loude									
Sample ID: Mw-2-0		le Time 15	335							
MS/MSD: Yes		e time.	3							
Duplicate: Yes] No							4		
Duplicate ID	Dup.	Time: —								
Chain of Custody Signed	d By:									

Site Crown C	y K	may		GROUND	WATER SA	MPLING L	.OG					Ever
	53					Well I	o: MW-	3				
Client / Job Number:	00	266	417.0005)		Date:	4/5/18	7				
Weather: Sunny	3	20				Time	1	Time	Out:	1115		
Well Information												
Depth to Water:		(feet)	8.88	(from MP	<u> </u>	Well Type:		Flush	nount [9 9	Stick-Up	
Total Depth:		(feet)	19.89	(from MP		Well Material		Stainless S	Steel []	PVC	19
Length of Water Column		(feet)	11.01	An on the		Well Locked:			Yes [4	No	
Volume of Water in Well:		(gal)	1.76		_	Measuring Po	oint Marked			/		
Intake depth for tubing:		(feet)	N18,			Well Diamete	20 January 2004	1"	Yes [9	No	
Purging Information					3	Well blamete		Oliver -	2	Other		
Purging Method:	Е	Bailer r	Bladder	□ Per	ristaltic				Conve	rsion Fact	ors	
Tubing/Bailer Material:	-	Na - 1	5.1.11.1		L1		2	gal / ft. of water	1" ID	2" ID	4" ID	6" ID
Sampling Method:		L	Polyethyle	ne D Tef	ion 🗆	CH	DPE	ofwater	0.041	0.163	0.653	1.469
according to	В	Bailer [Peristaltio	Bla	dder 🗆			1 gal = 3	3.785 L =3	785 ml = 0.1	1337 cubi	c feet
Pump Start Time: 10	20											
Pump Stop Time: ///	0				Water-Quality M	leter Type:	· L 11-53			t Stability		
Total Volume Removed:	U	(gal)			Did v	vell go dry:	1 34 0 73	pH	DO / Turb	Cond. /Temp	0	RP
			21.75		5,6 .	ion go di y.	10	∀ 0.1	∀ 10%	∀ 3.0%	∀ 1	I0 mV
Parameter:		1	2	3	4	5	6	7				
7 2 3 2 4 5 4 4 6 7 3 4 4 1	11							7		8	9	
Time	10	025		1035	1040	1045	1050	1055	- 11	60		
Volume Purged (Gal)		0	0.25	0.20	0.75	1.00	1.25	1.50	1.	75		
Rate (mL/min)	_	- 04 -							11.73			
Depth to Water (ft.)		.92	8.92	8.92	8.92	8.92	8.92	8.92		97		
рН		.24	6.14	6.14	6.16	6.15	6.14	6,13	6.	13		
Temp. (C)	-	.93		10,06	10.02	10.01	10.04	10.03		.06		
Conductivity (mS/cm)		665	0.644	0.639	0.643	0.642	0.641	0.640	0.	640		
Dissolved Oxygen (mg/L)	6	,32	5.24	5.08	4.98	4.89	4.80	4.72	4.	65		
ORP (mV)		71	126	138	146	153	161	164		9		
Turbidity (NTU)	3	2.9	31.9	31.9	16.2	14.9	10.1	4.72		98		
27.5									16.			
Notes:												
Sampling Information	1					Proble	ms / Observ	ations				
Analyses	#	n L	.aboratory									
TCL VOCs				4	* Same	led to	1-4	Dios	rane	×		
TCL SVOCs				- 44				4		- "		
Total Cyanide	<u> </u>											
Color: No C	olo	/										
Odor: No 0	de	-										
Appearance: ∠	lea	m										
Sample ID: MU-3-0	1051	§ Samp	le Time: // C	5								
MS/MSD: Yes]	No										
Duplicate: Yes		No	M									
Duplicate ID		Dup.	Time:	3								
Chain of Custody Signed	Bv:											

Crown Py 6	may	- 4	GROUND	WATER SA							Ever
ampling Personnel:	ES				Well	D: MW-	4R				
lient / Job Number:	0026	6417.000	30.		Date:	4/5/18					
Veather: Johny	305				Time	In: 0900	Time	Out:	005		
Well Information				_	Well Type:		Flush r	nount [Stick-Up	
Depth to Water:	(feet)	0.46	(from MF	2)	Well Material	į.					
Total Depth:	(feet)	19.50	(from MF	2)			Stainless		/	PVC	
Length of Water Column		19.04		-	Well Locked:			Yes 🛚 🗹		No	
Volume of Water in Well:		3.04 ~18.50		-	Measuring P	177.00		Yes D		No	
Intake depth for tubing:	(feet)	10.50		-	Well Diamete	er:	1"	2"	Othe	r:	
Purging Information Purging Method:	6.93	Di- Ide		2-1-10-			-[Conve	rsion Fac	tors	
27.20.10.10.1	Bailer			ristaltic 🔽			gal / ft.	1" ID	2" ID	4" ID	6" IE
ubing/Bailer Material:	Steel	Polyethyle		flon	CH	DPEV	of water	0.041	0.163	0.653	1.469
Sampling Method:	Bailer [Peristaltic	Bla Bla	ndder 🖂			1 gal =	3.785 L =3	785 ml = 0	.1337 cub	ic feet
oump Start Time: 09/	0							He	t Stabilit		
Pump Stop Time: /oc	00			Water-Quality N	Meter Type: Ha	oriba U-53	рН	DO /	Cond.		ORP
Total Volume Removed:	(gal)	21.50		Did	uall an days	V.	∀ 0.1	Turb ∀ 10%	/Temp		10 m\
. *		1,50				V &	V 0.1	V 10%	V 3.07	0 J V	10 111
Parameter:	1	2	3	4	5	6	7		8	9	ľ
Time	0915	0920	0925	0930	0935	0940	0945	-			
Volume Purged (Gal)	0	0.25	0.50	0.75	1.0	1.28	1.50				
Rate (mL/min)											
Depth to Water (ft.)	0.46	0.46	0.46	0.46	0.46	0.46	0.46				
рН	6.18	6.47	6.53	6.60	6.64	6.65	6.63				
Temp. (C)	9.78	10.07	10.18	10.20	10.17	10.20	10.21				
Conductivity (mS/cm)	0.485	0,477	0.477	0.480	0.483	0.485	0.48				
Dissolved Oxygen (mg/L)	5.97	2.02	1.79	1.65	1.52	1.44	1.40				
ORP (mV)	134	32	12	-4	-14	-19	-20				
Turbidity (NTU)	184	162	125	96.7	67.0	65.4	62.2				
Notes:								1			
Sampling Informati			,		Proble	ems / Obser	vations				
Analyses	# n	Laboratory				0					
TCL VOCs				* San	yled	For Deall	老山/	-4	Biox	ane.	*
TCL SVOCs											
Total Cyanide	1-			* M	5/M51	D call	erter	6	2	*	
Odor: No Col Odor: No Odo Appearance: Col Sample ID: Mu-48-	ondy/so		nded sol								
MS/MSD: Yes	No	Π,									
Duplicate: Yes	No										
Duplicate ID	Dup.	. Time:									
Chain of Custody Signer	d By:										

				GROUNDY	VATER SAI	MPLING L	OG					
Sampling Personnel:	41	hem	Q1)			Well ID	· MW-	7				
Client / Job Number:	002	66417.				Date:	4-5-1	8				
Weather: 405	SU	nny				Time Ir	: 1334	Time	Out:	1430)	
Well Information					_	- Mall Town				-/	600	
Depth to Water: 3, 67	_ (1	feet)		(from MP)	Well Type:		Flus	shmount		Stick-	Up 🗆
Total Depth: 12.35	(1	feet)		(from MP		Well Materia	il:	Stainles	ss Steel		P	vc ☑
Length of Water Column:	(1		63			Well Locked	:		Yes			No 🖸
Volume of Water in Well:	(9	2-1	4		_	Measuring F	Point Marked:		Yes			No 🖸
Intake depth for tubing:	(1	feet) '	-10'		_	Well Diamet	er:	1"	(2'	Oth	her:	
Purging Information									Conve	rsion Fact	ors	
Purging Method:		Bailer [Perista	Itic M	lonsoon	Other:		gal / ft.	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	- 1	Steel [Polyethy	lene 🔲 T	eflon	Other:	MPEV	of water	0.041	0.163	0.653	1.469
Sampling Method:	1	Bailer [Peristal	tic M	lonsoon	Other:	1141	1 gal = 3	3.785 L =37	785 ml = 0.1	1337 cut	oic feet
Pump Start Time:	22	7							Uni	it Stability		
Pump Stop Time:	42	15		Water-Qual	ity Meter Type:	Hovibo	(рН	DO /	Cond.	T	ORP
Total Volume Removed:	2:	Z ^(gal)			Did well go dry:	Yes 🗆	No 🕝	∀ 0.1	Turb ∀ 10%	/Temp ∀ 3.0%	\forall	10 mV
Parameter:		1	2	3	4	5	6	7		8		9
Time	13	42	1347	1352	1357	1402	1407	1412				
Volume Purged (Gal)	C		0.8	1,2	1.5	1,8	ail	5				
Rate (mL/min)	2	50	250	250	250	250	350	A				
Depth to Water (ft.)	× 20	3.67	3,67	3,67	3167	3.67	3,67	M				
рН	1	96	6.91	6.97	6.99	7,02	7,01	0				
Temp. (C)	10	88	12,73	12.61	1256	12.45	12,43	L				
Conductivity (mS/cm)		,853		0,865	0.869	0.869	0.867	E				
Dissolved Oxygen (mg/L)	11	,63	4,02	3,97	3.90	3,83	3.77					
ORP (mV)	-	16	57	62	65	68	7					
Turbidity (NTU)		19	133	130	119	100	107					
Notes:	-	USC	Clerk	₩ M								
Sampling Information	n					Problem	ns / Observa	ations				
Analyses	#	n L	aboratory									
14 Dioxare		-	estAmerica		Init	ral! (1	OOLV	Som	e 51	SORV	rde.	1
		1 8	27USIM	1.4.4	Dart	War A	leer,	001	01	Sho	0.0	
Coloni			Amber	11 tem	Port		10 00	LOV,	110	3100	QV \	_
Color: Odor:	_											
Appearance:	1/0 \ 5	C	de Tieres 112									
Sample ID: MW-7-0-		No Samp		19	Fina	RICU	ear, 1	10	ada	W N	10	
	_	No					1 '	(
Duplicate: Yes		Dun	Time: -						314	en	_	

Chain of Custody Signed By:

Site Cown	Oykma	2	GROUND	NATER SA	MPLING I	.OG			Event
Sampling Personnel:	ES					D: MW-	//		
Client / Job Number:	00266	417.00	00		Date:	4/5/18	*		
Weather: 5-00	305				Time	and the second s	Time Ou	it: 1230	
Well Information				3	Well Type:			_/	
Depth to Water:	(feet)	3.17	(from MF	2)	vveii Type:		Flush mor	unt 🗹	Stick-Up
Total Depth:	(feet)	7.13	(from MF		Well Materia	:	Stainless Ste	eel 🗆	PVC
Length of Water Column		5.96			Well Locked:		Y	es 🗹	No 🗆
Volume of Water in Wel		0.95	0.24	_	Measuring P	oint Marked:	Y	es 🗹	No 🗆
Intake depth for tubing:	(feet)	~8'		_	Well Diamete	er:	(1)	2" Oth	
Purging Information									
Purging Method:	Bailer _	Bladder	□ Per	ristaltic				Conversion Fa	
ubing/Bailer Material:	Steel	Polyethyle	ne Tef			HOPED	gal / ft, of water	1" ID 2" ID 0.041 0.163	4" ID 6" ID 0.653 1.469
Sampling Method:	Bailer			44			1 gal = 3.7	85 L =3785 ml = (
Pump Start Time:	2.5		LT 216	oder 🗆			- 1 gai = 3.7	00 L -3/00 MI = (o, roor cubic feet
Dump Ctan Times				Water-Ouglity	Meter Type:			Unit Stabilit	ty
12	25					1ina U-53		DO / Cond Turb /Tem	
Total Volume Removed:	(gal)	v Z.25		Did	well go dry:	No		10% ∀ 3.09	
Parameter:	1	2	3	4	5	6	7	8	9
Time	1130	1135	1140	1145	1150	1155	1200	1205	1210
Volume Purged (Gal)	0	0.25	0,50	0.75	1.0	1.25	1.50	1.75	2.0
Rate (mL/min)								1	
Depth to Water (ft.)	4.68	4.72	4.86	5.04	5.24	5.54	5.71	5,81	5.92
рН	6.95	6.92	6.89	6.87	6.86	6.85	6.86	6.87	6.88
Temp. (C)	10.60	10.30	10.10	9,97	10.03	10.29	10.33	18.40	10.47
Conductivity (mS/cm)	0.813	1.01	1.05	1.08	1.09	1.09	1.08	1.10	1. 11
Dissolved Oxygen (mg/L)	4.29	1.75	1.46	1.46	1.50	1.59	1.55	1.46	1.46
ORP (mV)	-43	-68	-81	-87	-89	-92	-94	-96	-99
Turbidity (NTU)	687	184	122	85.9	59,9	30.3	19.0	11.0	10.2
Notes:					1.5, 3,				70,2
Sampling Informati		distance of			Proble	ms / Observ	ations		
Analyses TCL VOCs	# n La	aboratory		w c	-1.8 /	6/ 1-4	, 17	×	
TCL SVOCs				AT Dam	Prad F	0/ 1-	Viox.	ane m	
Total Cyanide									
Color: Tan /	Brown								
Odor: Oda		المراد							
Appearance:									
Sample ID: MW-11-0		a Time: 12	2-						
MS/MSD: Yes		e Time: 12	20						
Duplicate: Yes									
Duplicate ID	Dup. T	ime:							
Chain of Custody Signed									

5/31/2017 Groundwater Sampling Log Page 1

Page ___ of ___

Continued ->

Site Crown	Dy Kmar	1	GROUNDY	VATER SA	AMPLING LO	og				Event
Sampling Personnel:	ES				Well ID	Mu.	11			
Client / Job Number:	00266	117. 500	Ð		Date:	4/5/19	8			
Weather: Sunm	y 301				Time In	: /120	Time	Out: /	230	
Well Information									1	
Depth to Water:	(feet) 3	.17	(from MP)	_	Well Type:		Flush	mount [₫ St	ick-Up
Total Depth:		113	(from MP)		Well Material:		Stainless	Steel [PVC 🗹
Length of Water Column		.96	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	Well Locked:			Yes E	6/	No 🗆
Volume of Water in Wel	l: (gal) (3,24		_	Measuring Poi	nt Marked:		Yes L	1	No 🗆
Intake depth for tubing:	(feet)	~8'			Well Diameter		12)	2"	Other:	110.
Purging Information										
Purging Method:	Bailer	Bladde	r Peri	staltic -				Conve	rsion Facto	rs
ubing/Bailer Material:	0:-1					->	gal / ft	1" ID	2" ID -	4" ID 6" ID
	Steel	Polyethyle			C HO	PEN	of water	0.041	0.163	0.653 1.469
ampling Method:	Bailer _	Peristalti	C Blac	ider			1 gal =	3.785 L =3	785 ml = 0.13	337 cubic feet
Pump Start Time: 112	5							1000	0. 1.111	
Pump Stop Time: 12 2	28		1	Water-Quality	Meter Type:	iba U-53		DO /	t Stability Cond.	000
Total Volume Removed:	(nal)		_	Did	well go dry:	100	pH	Turb	/Temp	ORP
	N	2.25			/	0	∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV
Parameter:	1	2	3	4	5	6	7		8	9
Time	1215									
Volume Purged (Gal)	2.25									
Rate (mL/min)										
Depth to Water (ft.)	5.99									
pH	6.88									
Temp. (C)	10.42									
Conductivity (mS/cm)	1.11								-	
Dissolved Oxygen								-		
(mg/L)	1.42									
ORP (mV)	-100									0
Turbidity (NTU)	10.9		9							
Notes:										
sampling Informat					Problem	ns / Observa	ations			
Analyses	# n La	boratory								
TCL VOCs TCL SVOCs				40	mphed	Rr	1-4	Dio	xane	e e
Total Cyanide				WI Da	whose.	700				
	17									
A 4	Boun									
	Present									
Appearance: C	lovery	Time: 1 3	70							
MS/MSD: Yes		/								
Duplicate: Yes										
Duplicate ID	Dup. Ti	me:								
Chain of Custody Signer										

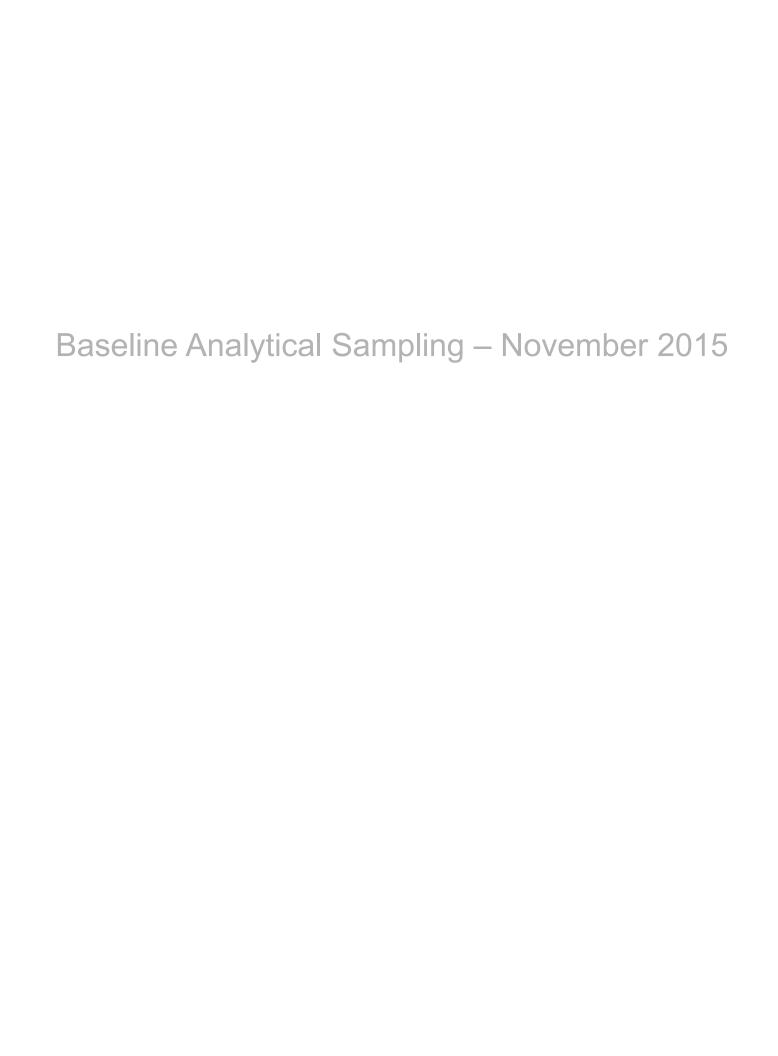
4/4/2018 Groundwater Sampling Log

Chain of Custody Signed By:

Dup. Time:

Duplicate ID

APPENDIX C Laboratory Analytical Reports – 2015 ISCO Source Area Pilot Program





THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-91057-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

Authorized for release by: 11/27/2015 1:06:16 PM

Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I (716)504-9874 melissa.deyo@testamericainc.com

Total Access

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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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier	Descript	ior
Qualifier	Quaimer	Descript	10

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.

Relative error ratio

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Glossary

RER

RPD

TEF

TEQ

RL

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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

Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Job ID: 480-91057-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-91057-1

Receipt

The samples were received on 11/13/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

Receipt Exceptions

COC requested MS/MSD and listed container count of 9. However, lab was only provided 3 40ml voa vials for this point. No additional volume with the corresponding sample ID, date and time of collection was received. Ms/msd was not assigned to sample point: IW-03 (111015) (480-91057-2).

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-29 (111015) (480-91057-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-14R (111115) (480-91057-13). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: IW-03 (111015) (480-91057-2), IW-02 (111015) (480-91057-5), MW-1D (111115) (480-91057-8), MW-25D (111215) (480-91057-14), MW-13 (111215) (480-91057-15), (480-91057-B-2 MS) and (480-91057-B-2 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-29 (111015) (480-91057-3), IW-02 (111015) (480-91057-5), MW-26 (111015) (480-91057-6), MW-7 (111115) (480-91057-7), GM-9 (111115) (480-91057-10), MW-14R (111115) (480-91057-13) and IW-01S (111215) (480-91057-16). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-22 (R) D (111115) (480-91057-9). 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.

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Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-1DD (111015)

Lab Sample ID: 480-91057-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.67	J	1.0	0.38	ug/L	1	_	8260C	Total/NA
cis-1,2-Dichloroethene	43		1.0	0.81	ug/L	1		8260C	Total/NA
Tetrachloroethene	28		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	11		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	13		1.0	0.90	ug/L	1		8260C	Total/NA

Lab Cample ID: 490 04057 2 nt Sample ID: IW-03 (111015)

ment Sample ib: iw-c)3 (TTTUT9)			Lab Sample ID:	400-91057-2
-					
Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
1,1-Dichloroethane	0.48	J	1.0	0.38	ug/L		8260C	Total/NA
1,2-Dichloropropane	1.4		1.0	0.72	ug/L	1	8260C	Total/NA
Benzene	3.8		1.0	0.41	ug/L	1	8260C	Total/NA
Chloroethane	2.9		1.0	0.32	ug/L	1	8260C	Total/NA
cis-1,2-Dichloroethene	130	E	1.0	0.81	ug/L	1	8260C	Total/NA
Cyclohexane	1.1		1.0	0.18	ug/L	1	8260C	Total/NA
Ethylbenzene	25		1.0	0.74	ug/L	1	8260C	Total/NA
Isopropylbenzene	30		1.0	0.79	ug/L	1	8260C	Total/NA
Methyl tert-butyl ether	75		1.0	0.16	ug/L	1	8260C	Total/NA
Methylcyclohexane	3.9		1.0	0.16	ug/L	1	8260C	Total/NA
Toluene	9.2		1.0	0.51	ug/L	1	8260C	Total/NA
trans-1,2-Dichloroethene	2.3		1.0	0.90	ug/L	1	8260C	Total/NA
Vinyl chloride	290	E	1.0	0.90	ug/L	1	8260C	Total/NA
Xylenes, Total	14		2.0	0.66	ug/L	1	8260C	Total/NA
cis-1,2-Dichloroethene - DL	130		10	8.1	ug/L	10	8260C	Total/NA
Ethylbenzene - DL	25		10	7.4	ug/L	10	8260C	Total/NA
Isopropylbenzene - DL	32		10	7.9	ug/L	10	8260C	Total/NA
Methyl tert-butyl ether - DL	76		10	1.6	ug/L	10	8260C	Total/NA
Methylcyclohexane - DL	4.3	J	10	1.6	ug/L	10	8260C	Total/NA
Toluene - DL	9.0	J	10	5.1	ug/L	10	8260C	Total/NA
Vinyl chloride - DL	310		10	9.0	ug/L	10	8260C	Total/NA
Xylenes, Total - DL	7.3	J	20	6.6	ug/L	10	8260C	Total/NA

Client Sample ID: MW-29 (111015)

Trichloroethene

Vinyl chloride

Xylenes, Total

Vinyl chloride - DL

cis-1,2-Dichloroethene - DL

Analyte Result Qualifier RL **MDL** Unit Dil Fac D Method **Prep Type** 1,1-Dichloroethene 8260C 3.8 J 4.0 1.2 ug/L 4 Total/NA Benzene 1.8 J 4.0 1.6 ug/L 4 8260C Total/NA cis-1,2-Dichloroethene 1500 E 4.0 3.2 ug/L 4 8260C Total/NA Ethylbenzene 14 4.0 3.0 ug/L 8260C Total/NA Isopropylbenzene 12 8260C Total/NA 4.0 3.2 ug/L Methyl tert-butyl ether 0.90 J 4.0 0.64 ug/L 8260C Total/NA 8260C Methylcyclohexane 1.0 J 4.0 0.64 ug/L Total/NA Tetrachloroethene 4.0 8260C Total/NA 6.7 1.4 ug/L Toluene 2.0 J 4.0 2.0 ug/L 8260C Total/NA trans-1,2-Dichloroethene 7.1 4.0 3.6 ug/L 4 8260C Total/NA

4.0

4.0

8.0

25

25

1.8 ug/L

3.6 ug/L

2.6 ug/L

20 ug/L

23 ug/L

4

4

4

25

25

8260C

8260C

8260C

8260C

8260C

This Detection Summary does not include radiochemical test results.

5.0

42

1600

600

610 E

TestAmerica Buffalo

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Lab Sample ID: 480-91057-3

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

TestAmerica Job ID: 480-91057-1

Lab Sample ID: 480-91057-7

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-29 (111015) (Continued) Lab Sample ID: 480-91057-3

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
Xylenes, Total - DL	48 J	50	17 ug/L	25 8260C	Total/NA

Lab Sample ID: 480-91057-4 **Client Sample ID: MW-19 (111015)**

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
Tetrachloroethene	0.53 J	1.0	0.36 ug/L	1 8260C	Total/NA

Client Sample ID: IW-02 (111015) Lab Sample ID: 480-91057-5

Analyte	Result Qual	ifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	11000 E	100	81	ug/L	100	_	8260C	Total/NA
Tetrachloroethene	12000 E	100	36	ug/L	100		8260C	Total/NA
Trichloroethene	2600	100	46	ug/L	100		8260C	Total/NA
Vinyl chloride	580	100	90	ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene - DL	11000	200	160	ug/L	200		8260C	Total/NA
Tetrachloroethene - DL	13000	200	72	ug/L	200		8260C	Total/NA
Trichloroethene - DL	2600	200	92	ug/L	200		8260C	Total/NA
Vinyl chloride - DL	630	200	180	ug/L	200		8260C	Total/NA

Lab Sample ID: 480-91057-6 **Client Sample ID: MW-26 (111015)**

Analyte	Result Qualif	ier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	11000	500	410	ug/L	500	_	8260C	Total/NA
Tetrachloroethene	670	500	180	ug/L	500		8260C	Total/NA
Trichloroethene	800	500	230	ug/L	500		8260C	Total/NA
Vinyl chloride	630	500	450	ug/L	500		8260C	Total/NA

Client Sample ID: MW-7 (1111115)

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	310	10	8.1	ug/L	10	_	8260C	Total/NA
Methyl tert-butyl ether	5.3 J	10	1.6	ug/L	10		8260C	Total/NA
Tetrachloroethene	210	10	3.6	ug/L	10		8260C	Total/NA
Trichloroethene	90	10	4.6	ug/L	10		8260C	Total/NA

Client Sample ID: MW-1D (111115) Lab Sample ID: 480-91057-8

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Met	hod	Prep Type
cis-1,2-Dichloroethene	960	20	16	ug/L	20	826	0C	Total/NA
Tetrachloroethene	1900	20	7.2	ug/L	20	826	0C	Total/NA
Trichloroethene	530	20	9.2	ug/L	20	826	0C	Total/NA
Vinyl chloride	32	20	18	ug/L	20	826	0C	Total/NA

Client Sample ID: MW-22 (R) D (111115) Lab Sample ID: 480-91057-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type	
cis-1,2-Dichloroethene	2400		80	65	ug/L	80	_	8260C	Total/NA	
Tetrachloroethene	36	J	80	29	ug/L	80		8260C	Total/NA	

Client Sample ID: GM-9 (1111115) Lab Sample ID: 480-91057-10

This Detection Summary does not include radiochemical test results.

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Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: GM-9 (111115) (Continued)

TestAmerica Job ID: 480-91057-1

Lab Sample ID: 480-91057-10

Lab Sample ID: 480-91057-11

Lab Sample ID: 480-91057-12

Lab Sample ID: 480-91057-14

Lab Sample ID: 480-91057-15

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	390	10	8.1	ug/L	10	_	8260C	Total/NA
Methyl tert-butyl ether	1.9 J	10	1.6	ug/L	10		8260C	Total/NA
Tetrachloroethene	440	10	3.6	ug/L	10		8260C	Total/NA
Trichloroethene	110	10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	14	10	9.0	ug/L	10		8260C	Total/NA

Client Sample ID: MW-2 (111115)

Analyte	Result Qua	alifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.0	1.0	0.82	ug/L		_	8260C	Total/NA

1, 1, 1-111011010001110110	1.0	1.0	0.02 ug/L		02000	I Otal/INA
1,1-Dichloroethane	0.57 J	1.0	0.38 ug/L	1	8260C	Total/NA
cis-1,2-Dichloroethene	4.6	1.0	0.81 ug/L	1	8260C	Total/NA
Tetrachloroethene	58	1.0	0.36 ug/L	1	8260C	Total/NA
Trichloroethene	14	1.0	0.46 ug/L	1	8260C	Total/NA

Client Sample ID: MW-4 (111115)

ſ	_					
	Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
	1,1-Dichloroethane	0.58 J	1.0	0.38 ug/L	1 8260C	Total/NA

Client Sample ID: MW-14R (111115)

Client Sample ID: MW-1	4R (111115)					Lab San	nple ID: 4	80-91057-13
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	260		4.0	3.2	ug/L		8260C	Total/NA
Ethylbenzene	34		4.0	3.0	ug/L	4	8260C	Total/NA
Isopropylbenzene	17		4.0	3.2	ug/L	4	8260C	Total/NA
Methyl tert-butyl ether	1.3	J	4.0	0.64	ug/L	4	8260C	Total/NA
Methylcyclohexane	1.2	J	4.0	0.64	ug/L	4	8260C	Total/NA
Toluene	11		4.0	2.0	ug/L	4	8260C	Total/NA
Vinyl chloride	460	E	4.0	3.6	ug/L	4	8260C	Total/NA
Xylenes, Total	190		8.0	2.6	ug/L	4	8260C	Total/NA
cis-1,2-Dichloroethene - DL	250		8.0	6.5	ug/L	8	8260C	Total/NA
Ethylbenzene - DL	35		8.0	5.9	ug/L	8	8260C	Total/NA
Isopropylbenzene - DL	16		8.0	6.3	ug/L	8	8260C	Total/NA
Methyl tert-butyl ether - DL	1.4	J	8.0	1.3	ug/L	8	8260C	Total/NA
Methylcyclohexane - DL	1.3	J	8.0	1.3	ug/L	8	8260C	Total/NA
Toluene - DL	10		8.0	4.1	ug/L	8	8260C	Total/NA
Vinyl chloride - DL	480		8.0	7.2	ug/L	8	8260C	Total/NA
Xylenes, Total - DL	190		16	5.3	ug/L	8	8260C	Total/NA

Client Sample ID: MW-25D (111215)

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	480	10	8.1	ug/L		8260C	Total/NA
Tetrachloroethene	26	10	3.6	ug/L	10	8260C	Total/NA
Trichloroethene	17	10	4.6	ug/L	10	8260C	Total/NA
Vinyl chloride	150	10	9.0	ug/L	10	8260C	Total/NA

Client Sample ID: MW-13 (111215)

This Detection Summary does not include radiochemical test results.

Detection Summary

RL

500

500

500

500

MDL Unit

410 ug/L

180 ug/L

230 ug/L

450 ug/L

Client: ARCADIS U.S. Inc

cis-1,2-Dichloroethene

Tetrachloroethene

Trichloroethene

Vinyl chloride

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: MW-13 (111215) (Continued)

Result Qualifier

28000

630

730

410 J

Lab San	nple ID:	480-91057-15
Dil Fac D	Method	Prep Type
 500	8260C	Total/NA
500	82600	Total/NA

8260C

8260C

500

500

Client Sample ID: IW-01S (111215)

Lab Sample	ID: 480-91057-16

Analyte	Result C	Qualifier	RL	MDL	Unit	Di	l Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	800		20	16	ug/L		20	_	8260C	Total/NA
Tetrachloroethene	35		20	7.2	ug/L		20		8260C	Total/NA
Trichloroethene	27		20	9.2	ug/L		20		8260C	Total/NA
Vinyl chloride	33		20	18	ug/L		20		8260C	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-91057-17

No Detections.

Analyte

This Detection Summary does not include radiochemical test results.

Total/NA

Total/NA

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: MW-1DD (111015)

Lab Sample ID: 480-91057-1

Date Collected: 11/10/15 09:10 Matrix: Water Date Received: 11/13/15 09:30

Analyte	Result Q	ualifier RL		Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			11/23/15 13:06	
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			11/23/15 13:06	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			11/23/15 13:06	
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			11/23/15 13:06	
1,1-Dichloroethane	0.67 J	1.0	0.38	ug/L			11/23/15 13:06	
1,1-Dichloroethene	ND	1.0	0.29	ug/L			11/23/15 13:06	
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			11/23/15 13:06	
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			11/23/15 13:06	
1,2-Dibromoethane	ND	1.0	0.73	ug/L			11/23/15 13:06	
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			11/23/15 13:06	
1,2-Dichloroethane	ND	1.0	0.21	ug/L			11/23/15 13:06	
1,2-Dichloropropane	ND	1.0	0.72	ug/L			11/23/15 13:06	
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			11/23/15 13:06	
1,4-Dichlorobenzene	ND	1.0		ug/L			11/23/15 13:06	
2-Butanone (MEK)	ND	10		ug/L			11/23/15 13:06	
2-Hexanone	ND	5.0		ug/L			11/23/15 13:06	
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			11/23/15 13:06	
Acetone	ND	10		ug/L			11/23/15 13:06	
Benzene	ND	1.0	0.41	ug/L			11/23/15 13:06	
Bromodichloromethane	ND	1.0	0.39	ug/L			11/23/15 13:06	
Bromoform	ND	1.0		ug/L			11/23/15 13:06	
Bromomethane	ND	1.0	0.69	ug/L			11/23/15 13:06	
Carbon disulfide	ND	1.0		ug/L			11/23/15 13:06	
Carbon tetrachloride	ND	1.0		ug/L			11/23/15 13:06	
Chlorobenzene	ND	1.0		ug/L			11/23/15 13:06	
Chloroethane	ND	1.0		ug/L			11/23/15 13:06	
Chloroform	ND	1.0		ug/L			11/23/15 13:06	
Chloromethane	ND	1.0		ug/L			11/23/15 13:06	
cis-1,2-Dichloroethene	43	1.0		ug/L			11/23/15 13:06	
cis-1,3-Dichloropropene	ND	1.0		ug/L			11/23/15 13:06	
Cyclohexane	ND	1.0		ug/L			11/23/15 13:06	
Dibromochloromethane	ND	1.0		ug/L			11/23/15 13:06	
Dichlorodifluoromethane	ND	1.0		ug/L			11/23/15 13:06	
Ethylbenzene	ND	1.0		ug/L			11/23/15 13:06	
Isopropylbenzene	ND	1.0		ug/L			11/23/15 13:06	
Methyl acetate	ND	2.5		ug/L			11/23/15 13:06	
Methyl tert-butyl ether	ND	1.0		ug/L			11/23/15 13:06	
Methylcyclohexane	ND	1.0		ug/L			11/23/15 13:06	
Methylene Chloride	ND	1.0		ug/L			11/23/15 13:06	
Styrene	ND	1.0		ug/L			11/23/15 13:06	
Tetrachloroethene	28	1.0		ug/L			11/23/15 13:06	
Toluene	ND	1.0		ug/L			11/23/15 13:06	
trans-1,2-Dichloroethene	ND	1.0		ug/L			11/23/15 13:06	
trans-1,3-Dichloropropene	ND	1.0		ug/L			11/23/15 13:06	
Trichloroethene	11	1.0		ug/L			11/23/15 13:06	
Trichlorofluoromethane	ND	1.0		ug/L			11/23/15 13:06	
Vinyl chloride	13	1.0		ug/L			11/23/15 13:06	
Xylenes, Total	ND	2.0	0.66	ug/L			11/23/15 13:06	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: MW-1DD (111015)

Date Collected: 11/10/15 09:10 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91057-1

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102	66 - 137		11/23/15 13:06	1
4-Bromofluorobenzene (Surr)	100	73 - 120		11/23/15 13:06	1
Toluene-d8 (Surr)	95	71 - 126		11/23/15 13:06	1
Dibromofluoromethane (Surr)	91	60 - 140		11/23/15 13:06	1

Client Sample ID: IW-03 (111015)

Lab Sample ID: 480-91057-2

Date Collected: 11/10/15 10:50

Matrix: Water

Date	Received:	11/13/15 09:30	

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			11/23/15 02:48	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			11/23/15 02:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			11/23/15 02:48	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			11/23/15 02:48	1
1,1-Dichloroethane	0.48 J	1.0	0.38	ug/L			11/23/15 02:48	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			11/23/15 02:48	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			11/23/15 02:48	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			11/23/15 02:48	1
1,2-Dibromoethane	ND	1.0	0.73	ug/L			11/23/15 02:48	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			11/23/15 02:48	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			11/23/15 02:48	1
1,2-Dichloropropane	1.4	1.0	0.72	ug/L			11/23/15 02:48	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			11/23/15 02:48	1
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			11/23/15 02:48	1
2-Butanone (MEK)	ND	10	1.3	ug/L			11/23/15 02:48	1
2-Hexanone	ND	5.0	1.2	ug/L			11/23/15 02:48	1
4-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			11/23/15 02:48	1
Acetone	ND	10		ug/L			11/23/15 02:48	1
Benzene	3.8	1.0	0.41	ug/L			11/23/15 02:48	1
Bromodichloromethane	ND	1.0	0.39	ug/L			11/23/15 02:48	1
Bromoform	ND	1.0		ug/L			11/23/15 02:48	1
Bromomethane	ND	1.0	0.69	ug/L			11/23/15 02:48	1
Carbon disulfide	ND	1.0		ug/L			11/23/15 02:48	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			11/23/15 02:48	1
Chlorobenzene	ND	1.0	0.75	ug/L			11/23/15 02:48	1
Chloroethane	2.9	1.0	0.32	ug/L			11/23/15 02:48	1
Chloroform	ND	1.0	0.34	ug/L			11/23/15 02:48	1
Chloromethane	ND	1.0	0.35	ug/L			11/23/15 02:48	1
cis-1,2-Dichloroethene	130 E	1.0	0.81	ug/L			11/23/15 02:48	1
cis-1,3-Dichloropropene	ND	1.0		ug/L			11/23/15 02:48	1
Cyclohexane	1.1	1.0	0.18	ug/L			11/23/15 02:48	1
Dibromochloromethane	ND	1.0		ug/L			11/23/15 02:48	1
Dichlorodifluoromethane	ND	1.0	0.68	ug/L			11/23/15 02:48	1
Ethylbenzene	25	1.0		ug/L			11/23/15 02:48	1
Isopropylbenzene	30	1.0		ug/L			11/23/15 02:48	1
Methyl acetate	ND	2.5		ug/L			11/23/15 02:48	1
Methyl tert-butyl ether		1.0		ug/L			11/23/15 02:48	· · · · · · · · 1
Methylcyclohexane	3.9	1.0		ug/L			11/23/15 02:48	1
Methylene Chloride	ND	1.0		ug/L			11/23/15 02:48	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: IW-03 (111015)

Date Collected: 11/10/15 10:50 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91057-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			11/23/15 02:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/23/15 02:48	1
Toluene	9.2		1.0	0.51	ug/L			11/23/15 02:48	1
trans-1,2-Dichloroethene	2.3		1.0	0.90	ug/L			11/23/15 02:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/23/15 02:48	1
Trichloroethene	ND		1.0	0.46	ug/L			11/23/15 02:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/23/15 02:48	1
Vinyl chloride	290	E	1.0	0.90	ug/L			11/23/15 02:48	1
Xylenes, Total	14		2.0	0.66	ug/L			11/23/15 02:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			-		11/23/15 02:48	1
4-Bromofluorobenzene (Surr)	104		73 - 120					11/23/15 02:48	1
Toluene-d8 (Surr)	98		71 - 126					11/23/15 02:48	1
Dibromofluoromethane (Surr)	93		60 - 140					11/23/15 02:48	1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	10	8.2	ug/L			11/23/15 13:29	10
1,1,2,2-Tetrachloroethane	ND	10	2.1	ug/L			11/23/15 13:29	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	3.1	ug/L			11/23/15 13:29	10
1,1,2-Trichloroethane	ND	10	2.3	ug/L			11/23/15 13:29	10
1,1-Dichloroethane	ND	10	3.8	ug/L			11/23/15 13:29	10
1,1-Dichloroethene	ND	10	2.9	ug/L			11/23/15 13:29	10
1,2,4-Trichlorobenzene	ND	10	4.1	ug/L			11/23/15 13:29	10
1,2-Dibromo-3-Chloropropane	ND	10	3.9	ug/L			11/23/15 13:29	10
1,2-Dibromoethane	ND	10	7.3	ug/L			11/23/15 13:29	10
1,2-Dichlorobenzene	ND	10	7.9	ug/L			11/23/15 13:29	10
1,2-Dichloroethane	ND	10	2.1	ug/L			11/23/15 13:29	10
1,2-Dichloropropane	ND	10	7.2	ug/L			11/23/15 13:29	10
1,3-Dichlorobenzene	ND	10	7.8	ug/L			11/23/15 13:29	10
1,4-Dichlorobenzene	ND	10	8.4	ug/L			11/23/15 13:29	10
2-Butanone (MEK)	ND	100	13	ug/L			11/23/15 13:29	10
2-Hexanone	ND	50	12	ug/L			11/23/15 13:29	10
4-Methyl-2-pentanone (MIBK)	ND	50	21	ug/L			11/23/15 13:29	10
Acetone	ND	100	30	ug/L			11/23/15 13:29	10
Benzene	ND	10	4.1	ug/L			11/23/15 13:29	10
Bromodichloromethane	ND	10	3.9	ug/L			11/23/15 13:29	10
Bromoform	ND	10	2.6	ug/L			11/23/15 13:29	10
Bromomethane	ND	10	6.9	ug/L			11/23/15 13:29	10
Carbon disulfide	ND	10	1.9	ug/L			11/23/15 13:29	10
Carbon tetrachloride	ND	10	2.7	ug/L			11/23/15 13:29	10
Chlorobenzene	ND	10	7.5	ug/L			11/23/15 13:29	10
Chloroethane	ND	10	3.2	ug/L			11/23/15 13:29	10
Chloroform	ND	10	3.4	ug/L			11/23/15 13:29	10
Chloromethane	ND	10	3.5	ug/L			11/23/15 13:29	10
cis-1,2-Dichloroethene	130	10	8.1	ug/L			11/23/15 13:29	10
cis-1,3-Dichloropropene	ND	10	3.6	ug/L			11/23/15 13:29	10
Cyclohexane	ND	10	1.8	ug/L			11/23/15 13:29	10
Dibromochloromethane	ND	10	3.2	ug/L			11/23/15 13:29	10

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Lab Sample ID: 480-91057-2

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: IW-03 (111015)

Date Collected: 11/10/15 10:50

Matrix: Water Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		10	6.8	ug/L			11/23/15 13:29	10
Ethylbenzene	25		10	7.4	ug/L			11/23/15 13:29	10
Isopropylbenzene	32		10	7.9	ug/L			11/23/15 13:29	10
Methyl acetate	ND		25	13	ug/L			11/23/15 13:29	10
Methyl tert-butyl ether	76		10	1.6	ug/L			11/23/15 13:29	10
Methylcyclohexane	4.3	J	10	1.6	ug/L			11/23/15 13:29	10
Methylene Chloride	ND		10	4.4	ug/L			11/23/15 13:29	10
Styrene	ND		10	7.3	ug/L			11/23/15 13:29	10
Tetrachloroethene	ND		10	3.6	ug/L			11/23/15 13:29	10
Toluene	9.0	J	10	5.1	ug/L			11/23/15 13:29	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			11/23/15 13:29	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			11/23/15 13:29	10
Trichloroethene	ND		10	4.6	ug/L			11/23/15 13:29	10
Trichlorofluoromethane	ND		10	8.8	ug/L			11/23/15 13:29	10
Vinyl chloride	310		10	9.0	ug/L			11/23/15 13:29	10
Xylenes, Total	7.3	J	20	6.6	ug/L			11/23/15 13:29	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137					11/23/15 13:29	10
4-Bromofluorobenzene (Surr)	98		73 - 120					11/23/15 13:29	10
Toluene-d8 (Surr)	96		71 - 126					11/23/15 13:29	10
Dibromofluoromethane (Surr)	92		60 - 140					11/23/15 13:29	10

Client Sample ID: MW-29 (111015)

Lab Sample ID: 480-91057-3 Date Collected: 11/10/15 12:25 **Matrix: Water**

Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			11/23/15 03:12	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			11/23/15 03:12	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			11/23/15 03:12	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			11/23/15 03:12	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			11/23/15 03:12	4
1,1-Dichloroethene	3.8	J	4.0	1.2	ug/L			11/23/15 03:12	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			11/23/15 03:12	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			11/23/15 03:12	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			11/23/15 03:12	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			11/23/15 03:12	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			11/23/15 03:12	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			11/23/15 03:12	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			11/23/15 03:12	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			11/23/15 03:12	4
2-Butanone (MEK)	ND		40	5.3	ug/L			11/23/15 03:12	4
2-Hexanone	ND		20	5.0	ug/L			11/23/15 03:12	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			11/23/15 03:12	4
Acetone	ND		40	12	ug/L			11/23/15 03:12	4
Benzene	1.8	J	4.0	1.6	ug/L			11/23/15 03:12	4
Bromodichloromethane	ND		4.0	1.6	ug/L			11/23/15 03:12	4
Bromoform	ND		4.0	1.0	ug/L			11/23/15 03:12	4

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Client: ARCADIS U.S. Inc

Dibromofluoromethane (Surr)

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: MW-29 (111015)

Lab Sample ID: 480-91057-3

Date Collected: 11/10/15 12:25
Date Received: 11/13/15 09:30

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		4.0	2.8	ug/L			11/23/15 03:12	4
Carbon disulfide	ND		4.0	0.76	ug/L			11/23/15 03:12	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			11/23/15 03:12	4
Chlorobenzene	ND		4.0	3.0	ug/L			11/23/15 03:12	4
Chloroethane	ND		4.0	1.3	ug/L			11/23/15 03:12	4
Chloroform	ND		4.0	1.4	ug/L			11/23/15 03:12	4
Chloromethane	ND		4.0	1.4	ug/L			11/23/15 03:12	4
cis-1,2-Dichloroethene	1500	E	4.0	3.2	ug/L			11/23/15 03:12	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			11/23/15 03:12	4
Cyclohexane	ND		4.0	0.72	ug/L			11/23/15 03:12	4
Dibromochloromethane	ND		4.0	1.3	ug/L			11/23/15 03:12	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			11/23/15 03:12	4
Ethylbenzene	14		4.0	3.0	ug/L			11/23/15 03:12	4
Isopropylbenzene	12		4.0	3.2	ug/L			11/23/15 03:12	4
Methyl acetate	ND		10	5.2	ug/L			11/23/15 03:12	4
Methyl tert-butyl ether	0.90	J	4.0	0.64	ug/L			11/23/15 03:12	4
Methylcyclohexane	1.0	J	4.0	0.64	ug/L			11/23/15 03:12	4
Methylene Chloride	ND		4.0	1.8	ug/L			11/23/15 03:12	4
Styrene	ND		4.0	2.9	ug/L			11/23/15 03:12	4
Tetrachloroethene	6.7		4.0	1.4	ug/L			11/23/15 03:12	4
Toluene	2.0	J	4.0	2.0	ug/L			11/23/15 03:12	4
trans-1,2-Dichloroethene	7.1		4.0	3.6	ug/L			11/23/15 03:12	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			11/23/15 03:12	4
Trichloroethene	5.0		4.0	1.8	ug/L			11/23/15 03:12	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			11/23/15 03:12	4
Vinyl chloride	610	E	4.0	3.6	ug/L			11/23/15 03:12	4
Xylenes, Total	42		8.0	2.6	ug/L			11/23/15 03:12	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137			=		11/23/15 03:12	4
4-Bromofluorobenzene (Surr)	101		73 - 120					11/23/15 03:12	4
Toluene-d8 (Surr)	97		71 - 126					11/23/15 03:12	4

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	25	21	ug/L			11/23/15 23:54	25
1,1,2,2-Tetrachloroethane	ND	25	5.3	ug/L			11/23/15 23:54	25
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	25	7.8	ug/L			11/23/15 23:54	25
1,1,2-Trichloroethane	ND	25	5.8	ug/L			11/23/15 23:54	25
1,1-Dichloroethane	ND	25	9.5	ug/L			11/23/15 23:54	25
1,1-Dichloroethene	ND	25	7.3	ug/L			11/23/15 23:54	25
1,2,4-Trichlorobenzene	ND	25	10	ug/L			11/23/15 23:54	25
1,2-Dibromo-3-Chloropropane	ND	25	9.8	ug/L			11/23/15 23:54	25
1,2-Dibromoethane	ND	25	18	ug/L			11/23/15 23:54	25
1,2-Dichlorobenzene	ND	25	20	ug/L			11/23/15 23:54	25
1,2-Dichloroethane	ND	25	5.3	ug/L			11/23/15 23:54	25
1,2-Dichloropropane	ND	25	18	ug/L			11/23/15 23:54	25
1,3-Dichlorobenzene	ND	25	20	ug/L			11/23/15 23:54	25
1,4-Dichlorobenzene	ND	25	21	ug/L			11/23/15 23:54	25

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Lab Sample ID: 480-91057-3

TestAmerica Job ID: 480-91057-1

Client Sample ID: MW-29 (111015) Date Collected: 11/10/15 12:25 Date Received: 11/13/15 09:30

Matrix: Water

Method: 8260C - Volatile On Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		250	33	ug/L			11/23/15 23:54	25
2-Hexanone	ND		130	31	ug/L			11/23/15 23:54	2
4-Methyl-2-pentanone (MIBK)	ND		130	53	ug/L			11/23/15 23:54	25
Acetone	ND		250	75	ug/L			11/23/15 23:54	25
Benzene	ND		25	10	ug/L			11/23/15 23:54	25
Bromodichloromethane	ND		25	9.8	ug/L			11/23/15 23:54	25
Bromoform	ND		25	6.5	ug/L			11/23/15 23:54	25
Bromomethane	ND		25	17	ug/L			11/23/15 23:54	2
Carbon disulfide	ND		25	4.8	ug/L			11/23/15 23:54	25
Carbon tetrachloride	ND		25	6.8	ug/L			11/23/15 23:54	25
Chlorobenzene	ND		25	19	ug/L			11/23/15 23:54	2
Chloroethane	ND		25	8.0	ug/L			11/23/15 23:54	25
Chloroform	ND		25	8.5	ug/L			11/23/15 23:54	25
Chloromethane	ND		25	8.8	ug/L			11/23/15 23:54	2
cis-1,2-Dichloroethene	1600		25	20	ug/L			11/23/15 23:54	25
cis-1,3-Dichloropropene	ND		25	9.0	ug/L			11/23/15 23:54	25
Cyclohexane	ND		25	4.5	ug/L			11/23/15 23:54	2
Dibromochloromethane	ND		25	8.0	ug/L			11/23/15 23:54	25
Dichlorodifluoromethane	ND		25	17	ug/L			11/23/15 23:54	25
Ethylbenzene	ND		25	19	ug/L			11/23/15 23:54	2
Isopropylbenzene	ND		25	20	ug/L			11/23/15 23:54	25
Methyl acetate	ND		63	33	ug/L			11/23/15 23:54	25
Methyl tert-butyl ether	ND		25	4.0	ug/L			11/23/15 23:54	2
Methylcyclohexane	ND		25	4.0	ug/L			11/23/15 23:54	25
Methylene Chloride	ND		25	11	ug/L			11/23/15 23:54	25
Styrene	ND		25	18	ug/L			11/23/15 23:54	25
Tetrachloroethene	ND		25	9.0	ug/L			11/23/15 23:54	25
Toluene	ND		25	13	ug/L			11/23/15 23:54	25
trans-1,2-Dichloroethene	ND		25	23	ug/L			11/23/15 23:54	25
trans-1,3-Dichloropropene	ND		25	9.3	ug/L			11/23/15 23:54	25
Trichloroethene	ND		25	12	ug/L			11/23/15 23:54	25
Trichlorofluoromethane	ND		25	22	ug/L			11/23/15 23:54	25
Vinyl chloride	600		25	23	ug/L			11/23/15 23:54	25
Xylenes, Total	48	J	50		ug/L			11/23/15 23:54	25
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	99		66 - 137			-		11/23/15 23:54	28
4-Bromofluorobenzene (Surr)	98		73 - 120					11/23/15 23:54	28
Toluene-d8 (Surr)	96		71 - 126					11/23/15 23:54	28
Dibromofluoromethane (Surr)	93		60 - 140					11/23/15 23:54	2

Client Sample ID: MW-19 (111015)

Lab Sample ID: 480-91057-4 Date Collected: 11/10/15 14:25 **Matrix: Water**

Date Received: 11/13/15 09:30

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			11/23/15 03:36	1		
1,1,2,2-Tetrachloroethane	ND	1.0	0.21 ug/L			11/23/15 03:36	1		
1.1.2-Trichloro-1.2.2-trifluoroethane	ND	1.0	0.31 ua/L			11/23/15 03:36	1		

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-19 (111015)

Date Collected: 11/10/15 14:25 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91057-4

Matrix: Water

Method: 8260C - Volatile On Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L		•	11/23/15 03:36	1
1,1-Dichloroethane	ND		1.0		ug/L			11/23/15 03:36	1
1.1-Dichloroethene	ND		1.0	0.29	_			11/23/15 03:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/23/15 03:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	_			11/23/15 03:36	1
1,2-Dibromoethane	ND		1.0	0.73	-			11/23/15 03:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	-			11/23/15 03:36	· · · · · · · · · · · · · · · · · · ·
1,2-Dichloroethane	ND		1.0	0.21	-			11/23/15 03:36	1
1,2-Dichloropropane	ND		1.0	0.72	-			11/23/15 03:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	-			11/23/15 03:36	· · · · · · · · · · · · · · · · · · ·
1,4-Dichlorobenzene	ND		1.0	0.84	-			11/23/15 03:36	1
2-Butanone (MEK)	ND		10		ug/L			11/23/15 03:36	1
2-Hexanone	ND		5.0		ug/L			11/23/15 03:36	
4-Methyl-2-pentanone (MIBK)	ND ND		5.0		ug/L ug/L			11/23/15 03:36	1
Acetone	ND ND		10		ug/L ug/L			11/23/15 03:36	1
Benzene	ND ND		1.0	0.41	_			11/23/15 03:36	1
Bromodichloromethane			1.0	0.39	_			11/23/15 03:36	1
Bromoform	ND		1.0	0.26	•			11/23/15 03:36	1
Bromomethane	ND		1.0		ug/L			11/23/15 03:36	1
Carbon disulfide	ND		1.0	0.19	-			11/23/15 03:36	1
Carbon tetrachloride	ND		1.0	0.27	-			11/23/15 03:36	1
Chlorobenzene	ND		1.0	0.75	-			11/23/15 03:36	1
Chloroethane	ND		1.0	0.32	-			11/23/15 03:36	1
Chloroform	ND		1.0	0.34	-			11/23/15 03:36	1
Chloromethane	ND		1.0		ug/L			11/23/15 03:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/23/15 03:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	-			11/23/15 03:36	1
Cyclohexane	ND		1.0	0.18	-			11/23/15 03:36	1
Dibromochloromethane	ND		1.0	0.32	-			11/23/15 03:36	1
Dichlorodifluoromethane	ND		1.0	0.68	-			11/23/15 03:36	1
Ethylbenzene	ND		1.0	0.74	-			11/23/15 03:36	1
Isopropylbenzene	ND		1.0	0.79	-			11/23/15 03:36	1
Methyl acetate	ND		2.5		ug/L			11/23/15 03:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/23/15 03:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/23/15 03:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/23/15 03:36	1
Styrene	ND		1.0	0.73	ug/L			11/23/15 03:36	1
Tetrachloroethene	0.53	J	1.0	0.36	ug/L			11/23/15 03:36	1
Toluene	ND		1.0	0.51	ug/L			11/23/15 03:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/23/15 03:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/23/15 03:36	1
Trichloroethene	ND		1.0	0.46	ug/L			11/23/15 03:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/23/15 03:36	1
Vinyl chloride	ND		1.0		ug/L			11/23/15 03:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/23/15 03:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137			•		11/23/15 03:36	1
4-Bromofluorobenzene (Surr)	99		73 - 120					11/23/15 03:36	1
Toluene-d8 (Surr)	97		71 - 126					11/23/15 03:36	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: MW-19 (111015)

Date Collected: 11/10/15 14:25 Date Received: 11/13/15 09:30

Lab Sample ID: 480-91057-4

Matrix: Water

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

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

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 94 60 - 140 11/23/15 03:36

Client Sample ID: IW-02 (111015) L

Date Collected: 11/10/15 15:55

ND

Date Received: 11/13/15 09:30

Bromodichloromethane

ab	Sample	e ID	:	480	0-9	1()57	7-5

11/23/15 14:17

Matrix: Water

Dil Fac

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed
1,1,1-Trichloroethane	ND		100	82	ug/L			11/23/15 14:17
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			11/23/15 14:17
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			11/23/15 14:17
1,1,2-Trichloroethane	ND		100	23	ug/L			11/23/15 14:17
1.1 Diablaracthana	ND		100	20	//			11/02/15 11:17

100 1,1-Dichloroethane ND 100 ug/L 11/23/15 14:17 38 100 1,1-Dichloroethene ND 29 ug/L 11/23/15 14:17 100 100 ND 100 11/23/15 14:17 1.2.4-Trichlorobenzene 41 ug/L 1,2-Dibromo-3-Chloropropane 100 11/23/15 14:17 100 ND 39 ug/L 1,2-Dibromoethane ND 100 73 ug/L 11/23/15 14:17 100

1,2-Dichlorobenzene ND 100 79 ug/L 11/23/15 14:17 100 ND 100 1.2-Dichloroethane 21 ug/L 11/23/15 14:17 100 1,2-Dichloropropane ND 100 72 ug/L 11/23/15 14:17 100 ND 100 78 1,3-Dichlorobenzene ug/L 11/23/15 14:17 100 100 84

1,4-Dichlorobenzene ND ug/L 11/23/15 14:17 100 2-Butanone (MEK) ND 1000 130 ug/L 11/23/15 14:17 100 2-Hexanone ND 500 120 ug/L 11/23/15 14:17 100 4-Methyl-2-pentanone (MIBK) NΩ 500 210 ug/L 11/23/15 14:17 100 Acetone ND 1000 300 ug/L 11/23/15 14:17 100 Benzene ND 100 41 ug/L 11/23/15 14:17 100

100

39 ug/L

Bromoform 100 26 11/23/15 14:17 ND ug/L Bromomethane ND 100 ug/L 11/23/15 14:17 69 Carbon disulfide ND 100 ug/L 11/23/15 14:17 Carbon tetrachloride ND 100 27 ug/L 11/23/15 14:17 Chlorobenzene ND 100 75 ug/L 11/23/15 14:17 Chloroethane ND 100 32 ug/L 11/23/15 14:17

Chloroform ND 100 34 ug/L 11/23/15 14:17 Chloromethane ND 100 35 ug/L 11/23/15 14:17 cis-1,2-Dichloroethene 11000 100 81 ug/L 11/23/15 14:17 cis-1,3-Dichloropropene ND 100 36 ug/L 11/23/15 14:17 ND 100

Cyclohexane ug/L 11/23/15 14:17 18 Dibromochloromethane ND 100 11/23/15 14:17 32 ug/L Dichlorodifluoromethane ND 100 68 ug/L 11/23/15 14:17 Ethylbenzene ND 100 74 11/23/15 14:17 ug/L Isopropylbenzene ND 100 79 ug/L 11/23/15 14:17

Methyl acetate ND 250 130 ug/L 11/23/15 14:17 100 Methyl tert-butyl ether ND 100 16 ug/L 11/23/15 14:17 100 Methylcyclohexane ND 100 16 ug/L 11/23/15 14:17 100 Methylene Chloride ND 100 44 ug/L 11/23/15 14:17 100

Styrene ND 100 73 ug/L 11/23/15 14:17 100 12000 E 100 36 ug/L 11/23/15 14:17 100 **Tetrachloroethene**

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: IW-02 (111015)

Date Collected: 11/10/15 15:55 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91057-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		100	51	ug/L			11/23/15 14:17	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			11/23/15 14:17	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/23/15 14:17	100
Trichloroethene	2600		100	46	ug/L			11/23/15 14:17	100
Trichlorofluoromethane	ND		100	88	ug/L			11/23/15 14:17	100
Vinyl chloride	580		100	90	ug/L			11/23/15 14:17	100
Xylenes, Total	ND		200	66	ug/L			11/23/15 14:17	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137			•		11/23/15 14:17	100
4-Bromofluorobenzene (Surr)	95		73 - 120					11/23/15 14:17	100
Toluene-d8 (Surr)	94		71 - 126					11/23/15 14:17	100
Dibromofluoromethane (Surr)	91		60 - 140					11/23/15 14:17	100

Dibromonuoromemane (Sum)	91	00 - 140					11/23/15 14.17	100
Method: 8260C - Volatile Orgai Analyte	nic Compound Result Qua		MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND Que	200		ug/L			11/24/15 00:17	200
1,1,2,2-Tetrachloroethane	ND	200		ug/L			11/24/15 00:17	200
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200		ug/L			11/24/15 00:17	200
1,1,2-Trichloroethane	ND	200		ug/L			11/24/15 00:17	200
1,1-Dichloroethane	ND	200		ug/L			11/24/15 00:17	200
1,1-Dichloroethene	ND	200		ug/L			11/24/15 00:17	200
1,2,4-Trichlorobenzene	ND	200		ug/L			11/24/15 00:17	200
1,2-Dibromo-3-Chloropropane	ND	200		ug/L			11/24/15 00:17	200
1,2-Dibromoethane	ND	200		ug/L			11/24/15 00:17	200
1,2-Dichlorobenzene	ND	200		ug/L			11/24/15 00:17	200
1,2-Dichloroethane	ND	200		ug/L			11/24/15 00:17	200
1,2-Dichloropropane	ND	200		ug/L			11/24/15 00:17	200
1,3-Dichlorobenzene	ND	200		ug/L			11/24/15 00:17	200
1,4-Dichlorobenzene	ND	200		ug/L			11/24/15 00:17	200
2-Butanone (MEK)	ND	2000	260	ug/L			11/24/15 00:17	200
2-Hexanone	ND	1000	250	ug/L			11/24/15 00:17	200
4-Methyl-2-pentanone (MIBK)	ND	1000	420	ug/L			11/24/15 00:17	200
Acetone	ND	2000	600	ug/L			11/24/15 00:17	200
Benzene	ND	200	82	ug/L			11/24/15 00:17	200
Bromodichloromethane	ND	200	78	ug/L			11/24/15 00:17	200
Bromoform	ND	200	52	ug/L			11/24/15 00:17	200
Bromomethane	ND	200	140	ug/L			11/24/15 00:17	200
Carbon disulfide	ND	200	38	ug/L			11/24/15 00:17	200
Carbon tetrachloride	ND	200	54	ug/L			11/24/15 00:17	200
Chlorobenzene	ND	200	150	ug/L			11/24/15 00:17	200
Chloroethane	ND	200	64	ug/L			11/24/15 00:17	200
Chloroform	ND	200	68	ug/L			11/24/15 00:17	200
Chloromethane	ND	200	70	ug/L			11/24/15 00:17	200
cis-1,2-Dichloroethene	11000	200	160	ug/L			11/24/15 00:17	200
cis-1,3-Dichloropropene	ND	200	72	ug/L			11/24/15 00:17	200
Cyclohexane	ND	200	36	ug/L			11/24/15 00:17	200
Dibromochloromethane	ND	200	64	ug/L			11/24/15 00:17	200
Dichlorodifluoromethane	ND	200	140	ug/L			11/24/15 00:17	200
Ethylbenzene	ND	200	150	ug/L			11/24/15 00:17	200

TestAmerica Buffalo

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Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: IW-02 (111015)

Lab Sample ID: 480-91057-5 Date Collected: 11/10/15 15:55 Date Received: 11/13/15 09:30

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued) **Analyte** Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Isopropylbenzene $\overline{\mathsf{ND}}$ 200 160 ug/L 11/24/15 00:17 200 Methyl acetate ND 500 260 ug/L 11/24/15 00:17 200 200 Methyl tert-butyl ether ND 32 ug/L 11/24/15 00:17 200 32 ug/L Methylcyclohexane ND 200 11/24/15 00:17 200 Methylene Chloride ND 200 88 ug/L 200 11/24/15 00:17 200 Styrene ND 150 ug/L 11/24/15 00:17 200 **Tetrachloroethene** 13000 200 72 ug/L 11/24/15 00:17 200 Toluene ND 200 100 ug/L 11/24/15 00:17 200 ND 200 200 trans-1,2-Dichloroethene 180 ug/L 11/24/15 00:17 trans-1,3-Dichloropropene ND 200 ug/L 11/24/15 00:17 200 74 **Trichloroethene** 2600 200 92 ug/L 11/24/15 00:17 200 Trichlorofluoromethane ND 200 180 ug/L 11/24/15 00:17 200 200 Vinyl chloride 630 200 180 ug/L 11/24/15 00:17 Xylenes, Total ND 400 130 ug/L 11/24/15 00:17 200 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 101 66 - 137 11/24/15 00:17 200 4-Bromofluorobenzene (Surr) 96 73 - 120 11/24/15 00:17 200 Toluene-d8 (Surr) 94 71 - 126 11/24/15 00:17 200 92 60 - 140 200 Dibromofluoromethane (Surr) 11/24/15 00:17

Client Sample ID: MW-26 (111015)

Date Collected: 11/10/15 17:15 Date Received: 11/13/15 09:30

Lab Sample ID: 480-91057-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		500	410	ug/L			11/24/15 00:41	500
1,1,2,2-Tetrachloroethane	ND		500	110	ug/L			11/24/15 00:41	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	160	ug/L			11/24/15 00:41	500
1,1,2-Trichloroethane	ND		500	120	ug/L			11/24/15 00:41	500
1,1-Dichloroethane	ND		500	190	ug/L			11/24/15 00:41	500
1,1-Dichloroethene	ND		500	150	ug/L			11/24/15 00:41	500
1,2,4-Trichlorobenzene	ND		500	210	ug/L			11/24/15 00:41	500
1,2-Dibromo-3-Chloropropane	ND		500	200	ug/L			11/24/15 00:41	500
1,2-Dibromoethane	ND		500	370	ug/L			11/24/15 00:41	500
1,2-Dichlorobenzene	ND		500	400	ug/L			11/24/15 00:41	500
1,2-Dichloroethane	ND		500	110	ug/L			11/24/15 00:41	500
1,2-Dichloropropane	ND		500	360	ug/L			11/24/15 00:41	500
1,3-Dichlorobenzene	ND		500	390	ug/L			11/24/15 00:41	500
1,4-Dichlorobenzene	ND		500	420	ug/L			11/24/15 00:41	500
2-Butanone (MEK)	ND		5000	660	ug/L			11/24/15 00:41	500
2-Hexanone	ND		2500	620	ug/L			11/24/15 00:41	500
4-Methyl-2-pentanone (MIBK)	ND		2500	1100	ug/L			11/24/15 00:41	500
Acetone	ND		5000	1500	ug/L			11/24/15 00:41	500
Benzene	ND		500	210	ug/L			11/24/15 00:41	500
Bromodichloromethane	ND		500	200	ug/L			11/24/15 00:41	500
Bromoform	ND		500	130	ug/L			11/24/15 00:41	500
Bromomethane	ND		500	350	ug/L			11/24/15 00:41	500
Carbon disulfide	ND		500	95	ug/L			11/24/15 00:41	500

TestAmerica Buffalo

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11/27/2015

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-26 (111015)

Date Collected: 11/10/15 17:15 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91057-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		500	140	ug/L			11/24/15 00:41	500
Chlorobenzene	ND		500	380	ug/L			11/24/15 00:41	500
Chloroethane	ND		500	160	ug/L			11/24/15 00:41	500
Chloroform	ND		500	170	ug/L			11/24/15 00:41	500
Chloromethane	ND		500	180	ug/L			11/24/15 00:41	500
cis-1,2-Dichloroethene	11000		500	410	ug/L			11/24/15 00:41	500
cis-1,3-Dichloropropene	ND		500	180	ug/L			11/24/15 00:41	500
Cyclohexane	ND		500	90	ug/L			11/24/15 00:41	500
Dibromochloromethane	ND		500	160	ug/L			11/24/15 00:41	500
Dichlorodifluoromethane	ND		500	340	ug/L			11/24/15 00:41	500
Ethylbenzene	ND		500	370	ug/L			11/24/15 00:41	500
Isopropylbenzene	ND		500	400	ug/L			11/24/15 00:41	500
Methyl acetate	ND		1300	650	ug/L			11/24/15 00:41	500
Methyl tert-butyl ether	ND		500	80	ug/L			11/24/15 00:41	500
Methylcyclohexane	ND		500	80	ug/L			11/24/15 00:41	500
Methylene Chloride	ND		500	220	ug/L			11/24/15 00:41	500
Styrene	ND		500	370	ug/L			11/24/15 00:41	500
Tetrachloroethene	670		500	180	ug/L			11/24/15 00:41	500
Toluene	ND		500	260	ug/L			11/24/15 00:41	500
trans-1,2-Dichloroethene	ND		500	450	ug/L			11/24/15 00:41	500
trans-1,3-Dichloropropene	ND		500	190	ug/L			11/24/15 00:41	500
Trichloroethene	800		500	230	ug/L			11/24/15 00:41	500
Trichlorofluoromethane	ND		500	440	ug/L			11/24/15 00:41	500
Vinyl chloride	630		500	450	ug/L			11/24/15 00:41	500
Xylenes, Total	ND		1000	330	ug/L			11/24/15 00:41	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		66 - 137			-		11/24/15 00:41	500
4-Bromofluorobenzene (Surr)	100		73 - 120					11/24/15 00:41	500
Toluene-d8 (Surr)	96		71 - 126					11/24/15 00:41	500

Lab Sample ID: 480-91057-7 **Client Sample ID: MW-7 (1111115)** Date Collected: 11/11/15 08:50

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Date Received: 11/13/15 09:30

Dibromofluoromethane (Surr)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	10	8.2	ug/L			11/24/15 01:05	10
1,1,2,2-Tetrachloroethane	ND	10	2.1	ug/L			11/24/15 01:05	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	3.1	ug/L			11/24/15 01:05	10
1,1,2-Trichloroethane	ND	10	2.3	ug/L			11/24/15 01:05	10
1,1-Dichloroethane	ND	10	3.8	ug/L			11/24/15 01:05	10
1,1-Dichloroethene	ND	10	2.9	ug/L			11/24/15 01:05	10
1,2,4-Trichlorobenzene	ND	10	4.1	ug/L			11/24/15 01:05	10
1,2-Dibromo-3-Chloropropane	ND	10	3.9	ug/L			11/24/15 01:05	10
1,2-Dibromoethane	ND	10	7.3	ug/L			11/24/15 01:05	10
1,2-Dichlorobenzene	ND	10	7.9	ug/L			11/24/15 01:05	10
1,2-Dichloroethane	ND	10	2.1	ug/L			11/24/15 01:05	10
1,2-Dichloropropane	ND	10	7.2	ug/L			11/24/15 01:05	10

TestAmerica Buffalo

11/24/15 00:41

Matrix: Water

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91057-7

Matrix: Water

Client Sample ID: MW-7 (111115)

Date Collected: 11/11/15 08:50 Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		10	7.8	ug/L			11/24/15 01:05	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			11/24/15 01:05	10
2-Butanone (MEK)	ND		100	13	ug/L			11/24/15 01:05	10
2-Hexanone	ND		50	12	ug/L			11/24/15 01:05	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			11/24/15 01:05	10
Acetone	ND		100	30	ug/L			11/24/15 01:05	10
Benzene	ND		10	4.1	ug/L			11/24/15 01:05	10
Bromodichloromethane	ND		10	3.9	ug/L			11/24/15 01:05	10
Bromoform	ND		10	2.6	ug/L			11/24/15 01:05	10
Bromomethane	ND		10	6.9	ug/L			11/24/15 01:05	10
Carbon disulfide	ND		10	1.9	ug/L			11/24/15 01:05	10
Carbon tetrachloride	ND		10	2.7	ug/L			11/24/15 01:05	10
Chlorobenzene	ND		10	7.5	ug/L			11/24/15 01:05	10
Chloroethane	ND		10	3.2	ug/L			11/24/15 01:05	10
Chloroform	ND		10	3.4	ug/L			11/24/15 01:05	10
Chloromethane	ND		10	3.5	ug/L			11/24/15 01:05	10
cis-1,2-Dichloroethene	310		10	8.1	ug/L			11/24/15 01:05	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			11/24/15 01:05	10
Cyclohexane	ND		10	1.8	ug/L			11/24/15 01:05	10
Dibromochloromethane	ND		10	3.2	ug/L			11/24/15 01:05	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			11/24/15 01:05	10
Ethylbenzene	ND		10	7.4	ug/L			11/24/15 01:05	10
Isopropylbenzene	ND		10	7.9	ug/L			11/24/15 01:05	10
Methyl acetate	ND		25	13	ug/L			11/24/15 01:05	10
Methyl tert-butyl ether	5.3	J	10	1.6	ug/L			11/24/15 01:05	10
Methylcyclohexane	ND		10	1.6	ug/L			11/24/15 01:05	10
Methylene Chloride	ND		10	4.4	ug/L			11/24/15 01:05	10
Styrene	ND		10	7.3	ug/L			11/24/15 01:05	10
Tetrachloroethene	210		10	3.6	ug/L			11/24/15 01:05	10
Toluene	ND		10	5.1	ug/L			11/24/15 01:05	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			11/24/15 01:05	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			11/24/15 01:05	10
Trichloroethene	90		10	4.6	ug/L			11/24/15 01:05	10
Trichlorofluoromethane	ND		10		ug/L			11/24/15 01:05	10
Vinyl chloride	ND		10		ug/L			11/24/15 01:05	10
Xylenes, Total	ND		20	6.6	ug/L			11/24/15 01:05	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			-		11/24/15 01:05	10
4-Bromofluorobenzene (Surr)	97		73 - 120					11/24/15 01:05	10
Toluene-d8 (Surr)	95		71 - 126					11/24/15 01:05	10
Dibromofluoromethane (Surr)	97		60 - 140					11/24/15 01:05	10

Client Sample ID: MW-1D (111115)

Date Collected: 11/11/15 09:50 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91057-8

Matrix: Water

Method: 8260C - Volatile Orga	nic Compounds by GC	/MS					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND —	20	16 ug/L			11/23/15 15:29	20

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91057-8

TestAmerica Job ID: 480-91057-1

Matrix: Water

Client Sample ID: MW-1D (111115)

Date Collected: 11/11/15 09:50 Date Received: 11/13/15 09:30

Method: 8260C - Volatile Org	anic Compo	unds by G	C/MS (Contir	nued)					
Analyte		Qualifier	` RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			11/23/15 15:29	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			11/23/15 15:29	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			11/23/15 15:29	20
1,1-Dichloroethane	ND		20	7.6	ug/L			11/23/15 15:29	20
1,1-Dichloroethene	ND		20	5.8	ug/L			11/23/15 15:29	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			11/23/15 15:29	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			11/23/15 15:29	20
1,2-Dibromoethane	ND		20	15	ug/L			11/23/15 15:29	20
1,2-Dichlorobenzene	ND		20	16	ug/L			11/23/15 15:29	20
1,2-Dichloroethane	ND		20	4.2	ug/L			11/23/15 15:29	20
1,2-Dichloropropane	ND		20	14	ug/L			11/23/15 15:29	20
1,3-Dichlorobenzene	ND		20		ug/L			11/23/15 15:29	20
1,4-Dichlorobenzene	ND		20		ug/L			11/23/15 15:29	20
2-Butanone (MEK)	ND		200		ug/L			11/23/15 15:29	20
2-Hexanone	ND		100		ug/L			11/23/15 15:29	20
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			11/23/15 15:29	20
Acetone	ND		200		ug/L			11/23/15 15:29	20
Benzene	ND		20		ug/L			11/23/15 15:29	20
Bromodichloromethane	ND		20		ug/L			11/23/15 15:29	20
Bromoform	ND		20		ug/L			11/23/15 15:29	20
Bromomethane	ND		20		ug/L			11/23/15 15:29	20
Carbon disulfide	ND		20		ug/L			11/23/15 15:29	20
Carbon tetrachloride	ND		20		ug/L			11/23/15 15:29	20
Chlorobenzene	ND		20		ug/L			11/23/15 15:29	20
Chloroethane	ND ND		20		ug/L ug/L			11/23/15 15:29	20
Chloroform	ND ND		20		ug/L ug/L			11/23/15 15:29	20
Chloromethane	ND				ug/L ug/L			11/23/15 15:29	20
			20 20		ug/L ug/L			11/23/15 15:29	20
cis-1,2-Dichloroethene	960 ND		20		-			11/23/15 15:29	
cis-1,3-Dichloropropene					ug/L			11/23/15 15:29	20
Cyclohexane	ND		20		ug/L				20
Dibromochloromethane	ND		20		ug/L			11/23/15 15:29	20
Dichlorodifluoromethane	ND		20		ug/L			11/23/15 15:29	20
Ethylbenzene	ND		20		ug/L			11/23/15 15:29	20
sopropylbenzene	ND		20		ug/L			11/23/15 15:29	20
Methyl acetate	ND		50		ug/L			11/23/15 15:29	20
Methyl tert-butyl ether	ND		20		ug/L			11/23/15 15:29	20
Methylcyclohexane	ND		20		ug/L			11/23/15 15:29	20
Methylene Chloride	ND		20		ug/L			11/23/15 15:29	20
Styrene	ND		20		ug/L			11/23/15 15:29	20
Tetrachloroethene	1900		20		ug/L			11/23/15 15:29	20
Toluene	ND		20		ug/L			11/23/15 15:29	20
rans-1,2-Dichloroethene	ND		20	18	ug/L			11/23/15 15:29	20
rans-1,3-Dichloropropene	ND		20		ug/L			11/23/15 15:29	20
Frichloroethene	530		20	9.2	ug/L			11/23/15 15:29	20
Frichlorofluoromethane	ND		20	18	ug/L			11/23/15 15:29	20
/inyl chloride	32		20	18	ug/L			11/23/15 15:29	20
Xylenes, Total	ND		40	13	ug/L			11/23/15 15:29	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137				-,	11/23/15 15:29	

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: MW-1D (111115)

Date Collected: 11/11/15 09:50 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91057-8

Matrix: Water

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99	73 - 120		11/23/15 15:29	20
Toluene-d8 (Surr)	95	71 - 126		11/23/15 15:29	20
Dibromofluoromethane (Surr)	93	60 - 140		11/23/15 15:29	20

Client Sample ID: MW-22 (R) D (111115)

Lab Sample ID: 480-91057-9

Date Collected: 11/11/15 11:20 Matrix: Water

Date Received: 11/13/15 09:30

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	80	66	ug/L			11/24/15 22:01	80
1,1,2,2-Tetrachloroethane	ND	80	17	ug/L			11/24/15 22:01	80
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	80	25	ug/L			11/24/15 22:01	80
1,1,2-Trichloroethane	ND	80	18	ug/L			11/24/15 22:01	80
1,1-Dichloroethane	ND	80	30	ug/L			11/24/15 22:01	80
1,1-Dichloroethene	ND	80	23	ug/L			11/24/15 22:01	80
1,2,4-Trichlorobenzene	ND	80	33	ug/L			11/24/15 22:01	80
1,2-Dibromo-3-Chloropropane	ND	80	31	ug/L			11/24/15 22:01	80
1,2-Dibromoethane	ND	80	58	ug/L			11/24/15 22:01	80
1,2-Dichlorobenzene	ND	80	63	ug/L			11/24/15 22:01	80
1,2-Dichloroethane	ND	80	17	ug/L			11/24/15 22:01	80
1,2-Dichloropropane	ND	80	58	ug/L			11/24/15 22:01	80
1,3-Dichlorobenzene	ND	80	62	ug/L			11/24/15 22:01	80
1,4-Dichlorobenzene	ND	80	67	ug/L			11/24/15 22:01	80
2-Butanone (MEK)	ND	800	110	ug/L			11/24/15 22:01	80
2-Hexanone	ND	400	99	ug/L			11/24/15 22:01	80
4-Methyl-2-pentanone (MIBK)	ND	400	170	ug/L			11/24/15 22:01	80
Acetone	ND	800	240	ug/L			11/24/15 22:01	80
Benzene	ND	80	33	ug/L			11/24/15 22:01	80
Bromodichloromethane	ND	80	31	ug/L			11/24/15 22:01	80
Bromoform	ND	80	21	ug/L			11/24/15 22:01	80
Bromomethane	ND	80	55	ug/L			11/24/15 22:01	80
Carbon disulfide	ND	80	15	ug/L			11/24/15 22:01	80
Carbon tetrachloride	ND	80	22	ug/L			11/24/15 22:01	80
Chlorobenzene	ND	80	60	ug/L			11/24/15 22:01	80
Chloroethane	ND	80	26	ug/L			11/24/15 22:01	80
Chloroform	ND	80		ug/L			11/24/15 22:01	80
Chloromethane	ND	80	28	ug/L			11/24/15 22:01	80
cis-1,2-Dichloroethene	2400	80	65	ug/L			11/24/15 22:01	80
cis-1,3-Dichloropropene	ND	80	29	ug/L			11/24/15 22:01	80
Cyclohexane	ND	80	14	ug/L			11/24/15 22:01	80
Dibromochloromethane	ND	80	26	ug/L			11/24/15 22:01	80
Dichlorodifluoromethane	ND	80		ug/L			11/24/15 22:01	80
Ethylbenzene	ND	80	59	ug/L			11/24/15 22:01	80
Isopropylbenzene	ND	80		ug/L			11/24/15 22:01	80
Methyl acetate	ND	200		ug/L			11/24/15 22:01	80
Methyl tert-butyl ether	ND	80		ug/L			11/24/15 22:01	80
Methylcyclohexane	ND	80		ug/L			11/24/15 22:01	80
Methylene Chloride	ND	80		ug/L			11/24/15 22:01	80

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Method: 9200C Valetile Organic Compounds by CC/MS (Continued)

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Client Sample ID: MW-22 (R) D (111115)

Date Collected: 11/11/15 11:20 Date Received: 11/13/15 09:30

Lab Sample ID: 480-91057-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		80	58	ug/L			11/24/15 22:01	80
Tetrachloroethene	36	J	80	29	ug/L			11/24/15 22:01	80
Toluene	ND		80	41	ug/L			11/24/15 22:01	80
trans-1,2-Dichloroethene	ND		80	72	ug/L			11/24/15 22:01	80
trans-1,3-Dichloropropene	ND		80	30	ug/L			11/24/15 22:01	80
Trichloroethene	ND		80	37	ug/L			11/24/15 22:01	80
Trichlorofluoromethane	ND		80	70	ug/L			11/24/15 22:01	80
Vinyl chloride	ND		80	72	ug/L			11/24/15 22:01	80
Xylenes, Total	ND		160	53	ug/L			11/24/15 22:01	80
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			-		11/24/15 22:01	80
4-Bromofluorobenzene (Surr)	98		73 - 120					11/24/15 22:01	80
Toluene-d8 (Surr)	97		71 - 126					11/24/15 22:01	80

Client Sample ID: GM-9 (1111115) Lab Sample ID: 480-91057-10

60 - 140

Date Collected: 11/11/15 15:35

Dibromofluoromethane (Surr)

Matrix: Water

11/24/15 22:01

Date Received: 11/13/15 09:30 Method: 8260C - Volatile Organic Compounds by GC/MS **MDL** Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac 1,1,1-Trichloroethane ND 10 8.2 ug/L 11/24/15 01:52 10 1,1,2,2-Tetrachloroethane ND 10 2.1 11/24/15 01:52 10 ug/L 1,1,2-Trichloro-1,2,2-trifluoroethane ND 10 3.1 ug/L 11/24/15 01:52 10 1,1,2-Trichloroethane ND 10 2.3 ug/L 11/24/15 01:52 10 1,1-Dichloroethane ND 10 3.8 ug/L 11/24/15 01:52 10 1,1-Dichloroethene ND 10 2.9 ug/L 11/24/15 01:52 10 1,2,4-Trichlorobenzene ND 10 4.1 ug/L 11/24/15 01:52 10 1,2-Dibromo-3-Chloropropane ND 10 3.9 ug/L 11/24/15 01:52 10 ND 10 7.3 1.2-Dibromoethane ug/L 11/24/15 01:52 10 1,2-Dichlorobenzene ND 10 7.9 ug/L 11/24/15 01:52 10 10 1,2-Dichloroethane ND 2.1 ug/L 11/24/15 01:52 10 1,2-Dichloropropane ND 10 7.2 ug/L 11/24/15 01:52 10 ND 10 1,3-Dichlorobenzene 7.8 ug/L 11/24/15 01:52 10 1,4-Dichlorobenzene ND 10 8.4 ug/L 11/24/15 01:52 10 2-Butanone (MEK) ND 100 13 ug/L 11/24/15 01:52 10 2-Hexanone ND 50 12 ug/L 11/24/15 01:52 10 4-Methyl-2-pentanone (MIBK) ND 50 21 ug/L 11/24/15 01:52 10 ND 100 30 Acetone ug/L 11/24/15 01:52 10 Benzene ND 10 4.1 ug/L 11/24/15 01:52 10 Bromodichloromethane ND 10 3.9 ug/L 11/24/15 01:52 10 **Bromoform** ND 10 2.6 ug/L 11/24/15 01:52 10 Bromomethane ND 10 6.9 ug/L 11/24/15 01:52 10 Carbon disulfide 10 1.9 ug/L 11/24/15 01:52 ND 10 Carbon tetrachloride ND 10 2.7 ug/L 10 11/24/15 01:52 Chlorobenzene ND 10 7.5 ug/L 11/24/15 01:52 10 Chloroethane ND 10 10 3.2 ug/L 11/24/15 01:52 Chloroform ND 10 3.4 ug/L 11/24/15 01:52 10 Chloromethane ND 10 3.5 ug/L 11/24/15 01:52 10

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: GM-9 (111115)

Date Collected: 11/11/15 15:35 Date Received: 11/13/15 09:30

Client: ARCADIS U.S. Inc

Lab Sample ID: 480-91057-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	390		10	8.1	ug/L			11/24/15 01:52	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			11/24/15 01:52	10
Cyclohexane	ND		10	1.8	ug/L			11/24/15 01:52	10
Dibromochloromethane	ND		10	3.2	ug/L			11/24/15 01:52	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			11/24/15 01:52	10
Ethylbenzene	ND		10	7.4	ug/L			11/24/15 01:52	10
Isopropylbenzene	ND		10	7.9	ug/L			11/24/15 01:52	10
Methyl acetate	ND		25	13	ug/L			11/24/15 01:52	10
Methyl tert-butyl ether	1.9	J	10	1.6	ug/L			11/24/15 01:52	10
Methylcyclohexane	ND		10	1.6	ug/L			11/24/15 01:52	10
Methylene Chloride	ND		10	4.4	ug/L			11/24/15 01:52	10
Styrene	ND		10	7.3	ug/L			11/24/15 01:52	10
Tetrachloroethene	440		10	3.6	ug/L			11/24/15 01:52	10
Toluene	ND		10	5.1	ug/L			11/24/15 01:52	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			11/24/15 01:52	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			11/24/15 01:52	10
Trichloroethene	110		10	4.6	ug/L			11/24/15 01:52	10
Trichlorofluoromethane	ND		10	8.8	ug/L			11/24/15 01:52	10
Vinyl chloride	14		10	9.0	ug/L			11/24/15 01:52	10
Xylenes, Total	ND		20	6.6	ug/L			11/24/15 01:52	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137			-		11/24/15 01:52	10
4-Bromofluorobenzene (Surr)	100		73 - 120					11/24/15 01:52	10

71 - 126

60 - 140

Client Sample ID: MW-2 (111115)

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Date Collected: 11/11/15 18:50 Date Received: 11/13/15 09:30

Toluene-d8 (Surr)

Dibromofluoromethane (Surr)

Lab Sample ID: 480-91057-11

11/24/15 01:52

11/24/15 01:52

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0		1.0	0.82	ug/L			11/23/15 16:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/23/15 16:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/23/15 16:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/23/15 16:40	1
1,1-Dichloroethane	0.57	J	1.0	0.38	ug/L			11/23/15 16:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/23/15 16:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/23/15 16:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/23/15 16:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/23/15 16:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/23/15 16:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/23/15 16:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/23/15 16:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/23/15 16:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/23/15 16:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/23/15 16:40	1
2-Hexanone	ND		5.0	1.2	ug/L			11/23/15 16:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/23/15 16:40	1

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Project/Site: Crown Dykman - Glen Cove, NY

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

Client Sample ID: MW-2 (111115)

Date Collected: 11/11/15 18:50 Date Received: 11/13/15 09:30

Lab Sample ID: 480-91057-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			11/23/15 16:40	1
Benzene	ND		1.0	0.41	ug/L			11/23/15 16:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/23/15 16:40	1
Bromoform	ND		1.0	0.26	ug/L			11/23/15 16:40	1
Bromomethane	ND		1.0	0.69	ug/L			11/23/15 16:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/23/15 16:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/23/15 16:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/23/15 16:40	1
Chloroethane	ND		1.0	0.32	ug/L			11/23/15 16:40	1
Chloroform	ND		1.0	0.34	ug/L			11/23/15 16:40	1
Chloromethane	ND		1.0	0.35	ug/L			11/23/15 16:40	1
cis-1,2-Dichloroethene	4.6		1.0	0.81	ug/L			11/23/15 16:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/23/15 16:40	1
Cyclohexane	ND		1.0	0.18	ug/L			11/23/15 16:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/23/15 16:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/23/15 16:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/23/15 16:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/23/15 16:40	1
Methyl acetate	ND		2.5	1.3	ug/L			11/23/15 16:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/23/15 16:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/23/15 16:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/23/15 16:40	1
Styrene	ND		1.0	0.73	ug/L			11/23/15 16:40	1
Tetrachloroethene	58		1.0	0.36	ug/L			11/23/15 16:40	1
Toluene	ND		1.0	0.51	ug/L			11/23/15 16:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/23/15 16:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/23/15 16:40	1
Trichloroethene	14		1.0	0.46	ug/L			11/23/15 16:40	1
Trichlorofluoromethane	ND		1.0		ug/L			11/23/15 16:40	1
Vinyl chloride	ND		1.0		ug/L			11/23/15 16:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/23/15 16:40	1
•					-				

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137	_		11/23/15 16:40	1
4-Bromofluorobenzene (Surr)	101		73 - 120			11/23/15 16:40	1
Toluene-d8 (Surr)	97		71 - 126			11/23/15 16:40	1
Dibromofluoromethane (Surr)	91		60 - 140			11/23/15 16:40	1

Client Sample ID: MW-4 (111115)

Date Collected: 11/11/15 20:10 Date Received: 11/13/15 09:30

Lab Sample ID: 480-91057-12

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			11/23/15 17:04	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			11/23/15 17:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			11/23/15 17:04	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			11/23/15 17:04	1
1,1-Dichloroethane	0.58 J	1.0	0.38	ug/L			11/23/15 17:04	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			11/23/15 17:04	1

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11/27/2015

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: MW-4 (111115)

Date Collected: 11/11/15 20:10 Date Received: 11/13/15 09:30

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Lab Sample ID: 480-91057-12

Matrix: Water

Analyte	Result Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND ND	1.0	0.41	ug/L			11/23/15 17:04	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			11/23/15 17:04	1
1,2-Dibromoethane	ND	1.0	0.73	ug/L			11/23/15 17:04	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			11/23/15 17:04	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			11/23/15 17:04	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			11/23/15 17:04	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			11/23/15 17:04	1
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			11/23/15 17:04	1
2-Butanone (MEK)	ND	10	1.3	ug/L			11/23/15 17:04	1
2-Hexanone	ND	5.0	1.2	ug/L			11/23/15 17:04	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			11/23/15 17:04	1
Acetone	ND	10	3.0	ug/L			11/23/15 17:04	1
Benzene	ND	1.0	0.41	ug/L			11/23/15 17:04	1
Bromodichloromethane	ND	1.0	0.39	ug/L			11/23/15 17:04	1
Bromoform	ND	1.0	0.26	ug/L			11/23/15 17:04	1
Bromomethane	ND	1.0	0.69	ug/L			11/23/15 17:04	1
Carbon disulfide	ND	1.0	0.19	ug/L			11/23/15 17:04	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			11/23/15 17:04	1
Chlorobenzene	ND	1.0	0.75	ug/L			11/23/15 17:04	1
Chloroethane	ND	1.0	0.32	ug/L			11/23/15 17:04	1
Chloroform	ND	1.0	0.34	ug/L			11/23/15 17:04	1
Chloromethane	ND	1.0	0.35	ug/L			11/23/15 17:04	1
cis-1,2-Dichloroethene	ND	1.0	0.81	ug/L			11/23/15 17:04	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			11/23/15 17:04	1
Cyclohexane	ND	1.0	0.18	ug/L			11/23/15 17:04	1
Dibromochloromethane	ND	1.0	0.32	ug/L			11/23/15 17:04	1
Dichlorodifluoromethane	ND	1.0	0.68	ug/L			11/23/15 17:04	1
Ethylbenzene	ND	1.0	0.74	ug/L			11/23/15 17:04	1
Isopropylbenzene	ND	1.0	0.79	ug/L			11/23/15 17:04	1
Methyl acetate	ND	2.5	1.3	ug/L			11/23/15 17:04	1
Methyl tert-butyl ether	ND	1.0	0.16	ug/L			11/23/15 17:04	1
Methylcyclohexane	ND	1.0	0.16	ug/L			11/23/15 17:04	1
Methylene Chloride	ND	1.0	0.44	ug/L			11/23/15 17:04	1
Styrene	ND	1.0	0.73	ug/L			11/23/15 17:04	1
Tetrachloroethene	ND	1.0		ug/L			11/23/15 17:04	1
Toluene	ND	1.0	0.51	ug/L			11/23/15 17:04	1
trans-1,2-Dichloroethene	ND	1.0		ug/L			11/23/15 17:04	1
trans-1,3-Dichloropropene	ND	1.0		ug/L			11/23/15 17:04	1
Trichloroethene	ND	1.0		ug/L			11/23/15 17:04	1
Trichlorofluoromethane	ND	1.0		ug/L			11/23/15 17:04	1
Vinyl chloride	ND	1.0		ug/L			11/23/15 17:04	1
Xylenes, Total	ND	2.0		ug/L			11/23/15 17:04	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104	66 - 137					11/23/15 17:04	1

TestAmerica Buffalo

11/23/15 17:04

11/23/15 17:04

11/23/15 17:04

73 - 120

71 - 126

60 - 140

96

94

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91057-13

TestAmerica Job ID: 480-91057-1

Matrix: Water

Client Sample ID: MW-14R (111115)

Date Collected: 11/11/15 22:10 Date Received: 11/13/15 09:30

Method: 8260C - Volatile Orgar ^{Analyte}	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND —	4.0	3.3	ug/L			11/23/15 17:28	
1,1,2,2-Tetrachloroethane	ND	4.0	0.84	ug/L			11/23/15 17:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.0	1.2	ug/L			11/23/15 17:28	
1,1,2-Trichloroethane	ND	4.0	0.92	ug/L			11/23/15 17:28	
1,1-Dichloroethane	ND	4.0	1.5	ug/L			11/23/15 17:28	
1,1-Dichloroethene	ND	4.0	1.2	ug/L			11/23/15 17:28	
1,2,4-Trichlorobenzene	ND	4.0	1.6	ug/L			11/23/15 17:28	
1,2-Dibromo-3-Chloropropane	ND	4.0	1.6	ug/L			11/23/15 17:28	
1,2-Dibromoethane	ND	4.0	2.9	ug/L			11/23/15 17:28	
1,2-Dichlorobenzene	ND	4.0	3.2	ug/L			11/23/15 17:28	
1,2-Dichloroethane	ND	4.0	0.84	ug/L			11/23/15 17:28	
1,2-Dichloropropane	ND	4.0	2.9	ug/L			11/23/15 17:28	
1,3-Dichlorobenzene	ND	4.0	3.1	ug/L			11/23/15 17:28	
1,4-Dichlorobenzene	ND	4.0		ug/L			11/23/15 17:28	
2-Butanone (MEK)	ND	40	5.3	ug/L			11/23/15 17:28	
2-Hexanone	ND	20		ug/L			11/23/15 17:28	
4-Methyl-2-pentanone (MIBK)	ND	20		ug/L			11/23/15 17:28	
Acetone	ND	40		ug/L			11/23/15 17:28	
Benzene	ND	4.0		ug/L			11/23/15 17:28	
Bromodichloromethane	ND	4.0		ug/L			11/23/15 17:28	
Bromoform	ND	4.0		ug/L			11/23/15 17:28	
Bromomethane	ND	4.0		ug/L			11/23/15 17:28	
Carbon disulfide	ND	4.0		ug/L			11/23/15 17:28	
Carbon tetrachloride	ND	4.0		ug/L			11/23/15 17:28	
Chlorobenzene	ND	4.0		ug/L			11/23/15 17:28	
Chloroethane	ND	4.0		ug/L			11/23/15 17:28	
Chloroform	ND	4.0		ug/L			11/23/15 17:28	
Chloromethane	ND	4.0		ug/L			11/23/15 17:28	
cis-1,2-Dichloroethene	260	4.0		ug/L			11/23/15 17:28	
cis-1,3-Dichloropropene	ND	4.0		ug/L			11/23/15 17:28	
Cyclohexane	ND	4.0		ug/L			11/23/15 17:28	
Dibromochloromethane	ND	4.0		ug/L			11/23/15 17:28	
Dichlorodifluoromethane	ND	4.0		ug/L			11/23/15 17:28	
Ethylbenzene	34	4.0		ug/L			11/23/15 17:28	
sopropylbenzene	17	4.0		ug/L			11/23/15 17:28	
Methyl acetate	ND	10		ug/L			11/23/15 17:28	
Methyl tert-butyl ether	1.3 J	4.0		ug/L			11/23/15 17:28	
Methylcyclohexane	1.2 J	4.0		ug/L			11/23/15 17:28	
Methylene Chloride	ND	4.0		ug/L			11/23/15 17:28	
Styrene	ND	4.0		ug/L			11/23/15 17:28	
Tetrachloroethene	ND	4.0		ug/L			11/23/15 17:28	
Toluene	11	4.0		ug/L			11/23/15 17:28	
trans-1,2-Dichloroethene	ND	4.0		ug/L			11/23/15 17:28	
trans-1,3-Dichloropropene	ND	4.0		ug/L			11/23/15 17:28	
Trichloroethene	ND	4.0		ug/L			11/23/15 17:28	
Trichlorofluoromethane	ND	4.0		ug/L			11/23/15 17:28	
Vinyl chloride	460 E	4.0		ug/L			11/23/15 17:28	
Xylenes, Total	190	8.0		ug/L			11/23/15 17:28	

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: MW-14R (111115)

Date Collected: 11/11/15 22:10 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91057-13

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103	66 - 137		11/23/15 17:28	4
4-Bromofluorobenzene (Surr)	100	73 - 120		11/23/15 17:28	4
Toluene-d8 (Surr)	95	71 - 126		11/23/15 17:28	4
Dibromofluoromethane (Surr)	96	60 - 140		11/23/15 17:28	4

Method: 8260C - Volatile Orga								
Analyte	Result Qu	alifier RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	8.0	6.6	ug/L			11/24/15 02:16	8
1,1,2,2-Tetrachloroethane	ND	8.0	1.7	ug/L			11/24/15 02:16	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	2.5	ug/L			11/24/15 02:16	8
1,1,2-Trichloroethane	ND	8.0	1.8	ug/L			11/24/15 02:16	8
1,1-Dichloroethane	ND	8.0	3.0	ug/L			11/24/15 02:16	8
1,1-Dichloroethene	ND	8.0	2.3	ug/L			11/24/15 02:16	8
1,2,4-Trichlorobenzene	ND	8.0	3.3	ug/L			11/24/15 02:16	8
1,2-Dibromo-3-Chloropropane	ND	8.0	3.1	ug/L			11/24/15 02:16	8
1,2-Dibromoethane	ND	8.0	5.8	ug/L			11/24/15 02:16	8
1,2-Dichlorobenzene	ND	8.0	6.3	ug/L			11/24/15 02:16	8
1,2-Dichloroethane	ND	8.0	1.7	ug/L			11/24/15 02:16	8
1,2-Dichloropropane	ND	8.0	5.8	ug/L			11/24/15 02:16	8
1,3-Dichlorobenzene	ND	8.0	6.2	ug/L			11/24/15 02:16	8
1,4-Dichlorobenzene	ND	8.0	6.7	ug/L			11/24/15 02:16	8
2-Butanone (MEK)	ND	80	11	ug/L			11/24/15 02:16	8
2-Hexanone	ND	40		ug/L			11/24/15 02:16	8
4-Methyl-2-pentanone (MIBK)	ND	40	17	ug/L			11/24/15 02:16	8
Acetone	ND	80		ug/L			11/24/15 02:16	8
Benzene	ND	8.0		ug/L			11/24/15 02:16	8
Bromodichloromethane	ND	8.0		ug/L			11/24/15 02:16	8
Bromoform	ND	8.0		ug/L			11/24/15 02:16	8
Bromomethane	ND	8.0	5.5	ug/L			11/24/15 02:16	8
Carbon disulfide	ND	8.0	1.5	ug/L			11/24/15 02:16	8
Carbon tetrachloride	ND	8.0		ug/L			11/24/15 02:16	8
Chlorobenzene	ND	8.0		ug/L			11/24/15 02:16	8
Chloroethane	ND	8.0		ug/L			11/24/15 02:16	8
Chloroform	ND	8.0		ug/L			11/24/15 02:16	8
Chloromethane	ND	8.0		ug/L			11/24/15 02:16	8
cis-1,2-Dichloroethene	250	8.0		ug/L			11/24/15 02:16	8
cis-1,3-Dichloropropene	ND	8.0		ug/L			11/24/15 02:16	8
Cyclohexane	ND	8.0		ug/L			11/24/15 02:16	8
Dibromochloromethane	ND	8.0		ug/L			11/24/15 02:16	8
Dichlorodifluoromethane	ND	8.0		ug/L			11/24/15 02:16	8
Ethylbenzene	35	8.0		ug/L			11/24/15 02:16	8
Isopropylbenzene	16	8.0		ug/L			11/24/15 02:16	8
Methyl acetate	ND	20		ug/L			11/24/15 02:16	8
Methyl tert-butyl ether	1.4 J	8.0		ug/L			11/24/15 02:16	8
Methylcyclohexane	1.3 J	8.0		ug/L			11/24/15 02:16	8
Methylene Chloride	ND	8.0		ug/L			11/24/15 02:16	8
Styrene	ND	8.0		ug/L			11/24/15 02:16	8
Tetrachloroethene	ND	8.0		ug/L			11/24/15 02:16	8
Toluene	10	8.0		ug/L			11/24/15 02:16	8
trans-1,2-Dichloroethene	ND	8.0		ug/L			11/24/15 02:16	8

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13

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91057-13

TestAmerica Job ID: 480-91057-1

Matrix: Water

Client Sample ID: MW-14R (111115)

Date Collected: 11/11/15 22:10 Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		8.0	3.0	ug/L			11/24/15 02:16	8
Trichloroethene	ND		8.0	3.7	ug/L			11/24/15 02:16	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			11/24/15 02:16	8
Vinyl chloride	480		8.0	7.2	ug/L			11/24/15 02:16	8
Xylenes, Total	190		16	5.3	ug/L			11/24/15 02:16	8
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			-		11/24/15 02:16	8
4-Bromofluorobenzene (Surr)	101		73 - 120					11/24/15 02:16	8
Toluene-d8 (Surr)	95		71 - 126					11/24/15 02:16	8
Dibromofluoromethane (Surr)	92		60 - 140					11/24/15 02:16	8

Client Sample ID: MW-25D (111215) Lab Sample ID: 480-91057-14

Date Collected: 11/12/15 09:45 Date Received: 11/13/15 09:30

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	10	8.2	ug/L			11/23/15 17:51	10
1,1,2,2-Tetrachloroethane	ND	10	2.1	ug/L			11/23/15 17:51	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	3.1	ug/L			11/23/15 17:51	10
1,1,2-Trichloroethane	ND	10	2.3	ug/L			11/23/15 17:51	10
1,1-Dichloroethane	ND	10	3.8	ug/L			11/23/15 17:51	10
1,1-Dichloroethene	ND	10	2.9	ug/L			11/23/15 17:51	10
1,2,4-Trichlorobenzene	ND	10	4.1	ug/L			11/23/15 17:51	10
1,2-Dibromo-3-Chloropropane	ND	10	3.9	ug/L			11/23/15 17:51	10
1,2-Dibromoethane	ND	10	7.3	ug/L			11/23/15 17:51	10
1,2-Dichlorobenzene	ND	10	7.9	ug/L			11/23/15 17:51	10
1,2-Dichloroethane	ND	10	2.1	ug/L			11/23/15 17:51	10
1,2-Dichloropropane	ND	10	7.2	ug/L			11/23/15 17:51	10
1,3-Dichlorobenzene	ND	10	7.8	ug/L			11/23/15 17:51	10
1,4-Dichlorobenzene	ND	10	8.4	ug/L			11/23/15 17:51	10
2-Butanone (MEK)	ND	100	13	ug/L			11/23/15 17:51	10
2-Hexanone	ND	50	12	ug/L			11/23/15 17:51	10
4-Methyl-2-pentanone (MIBK)	ND	50	21	ug/L			11/23/15 17:51	10
Acetone	ND	100	30	ug/L			11/23/15 17:51	10
Benzene	ND	10	4.1	ug/L			11/23/15 17:51	10
Bromodichloromethane	ND	10	3.9	ug/L			11/23/15 17:51	10
Bromoform	ND	10	2.6	ug/L			11/23/15 17:51	10
Bromomethane	ND	10	6.9	ug/L			11/23/15 17:51	10
Carbon disulfide	ND	10	1.9	ug/L			11/23/15 17:51	10
Carbon tetrachloride	ND	10	2.7	ug/L			11/23/15 17:51	10
Chlorobenzene	ND	10	7.5	ug/L			11/23/15 17:51	10
Chloroethane	ND	10	3.2	ug/L			11/23/15 17:51	10
Chloroform	ND	10	3.4	ug/L			11/23/15 17:51	10
Chloromethane	ND	10	3.5	ug/L			11/23/15 17:51	10
cis-1,2-Dichloroethene	480	10	8.1	ug/L			11/23/15 17:51	10
cis-1,3-Dichloropropene	ND	10	3.6	ug/L			11/23/15 17:51	10
Cyclohexane	ND	10		ug/L			11/23/15 17:51	10
Dibromochloromethane	ND	10		ug/L			11/23/15 17:51	10

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-91057-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-25D (111215)

Lab Sample ID: 480-91057-14 Date Collected: 11/12/15 09:45 **Matrix: Water**

Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		10	6.8	ug/L			11/23/15 17:51	10
Ethylbenzene	ND		10	7.4	ug/L			11/23/15 17:51	10
Isopropylbenzene	ND		10	7.9	ug/L			11/23/15 17:51	10
Methyl acetate	ND		25	13	ug/L			11/23/15 17:51	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			11/23/15 17:51	10
Methylcyclohexane	ND		10	1.6	ug/L			11/23/15 17:51	10
Methylene Chloride	ND		10	4.4	ug/L			11/23/15 17:51	10
Styrene	ND		10	7.3	ug/L			11/23/15 17:51	10
Tetrachloroethene	26		10	3.6	ug/L			11/23/15 17:51	10
Toluene	ND		10	5.1	ug/L			11/23/15 17:51	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			11/23/15 17:51	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			11/23/15 17:51	10
Trichloroethene	17		10	4.6	ug/L			11/23/15 17:51	10
Trichlorofluoromethane	ND		10	8.8	ug/L			11/23/15 17:51	10
Vinyl chloride	150		10	9.0	ug/L			11/23/15 17:51	10
Xylenes, Total	ND		20	6.6	ug/L			11/23/15 17:51	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137					11/23/15 17:51	10
4-Bromofluorobenzene (Surr)	99		73 - 120					11/23/15 17:51	10
Toluene-d8 (Surr)	95		71 - 126					11/23/15 17:51	10
Dibromofluoromethane (Surr)	93		60 - 140					11/23/15 17:51	10

Lab Sample ID: 480-91057-15 **Client Sample ID: MW-13 (111215)**

Date Collected: 11/12/15 11:40 Date Received: 11/13/15 09:30

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	500	410	ug/L			11/23/15 18:15	500
1,1,2,2-Tetrachloroethane	ND	500	110	ug/L			11/23/15 18:15	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	500	160	ug/L			11/23/15 18:15	500
1,1,2-Trichloroethane	ND	500	120	ug/L			11/23/15 18:15	500
1,1-Dichloroethane	ND	500	190	ug/L			11/23/15 18:15	500
1,1-Dichloroethene	ND	500	150	ug/L			11/23/15 18:15	500
1,2,4-Trichlorobenzene	ND	500	210	ug/L			11/23/15 18:15	500
1,2-Dibromo-3-Chloropropane	ND	500	200	ug/L			11/23/15 18:15	500
1,2-Dibromoethane	ND	500	370	ug/L			11/23/15 18:15	500
1,2-Dichlorobenzene	ND	500	400	ug/L			11/23/15 18:15	500
1,2-Dichloroethane	ND	500	110	ug/L			11/23/15 18:15	500
1,2-Dichloropropane	ND	500	360	ug/L			11/23/15 18:15	500
1,3-Dichlorobenzene	ND	500	390	ug/L			11/23/15 18:15	500
1,4-Dichlorobenzene	ND	500	420	ug/L			11/23/15 18:15	500
2-Butanone (MEK)	ND	5000	660	ug/L			11/23/15 18:15	500
2-Hexanone	ND	2500	620	ug/L			11/23/15 18:15	500
4-Methyl-2-pentanone (MIBK)	ND	2500	1100	ug/L			11/23/15 18:15	500
Acetone	ND	5000	1500	ug/L			11/23/15 18:15	500
Benzene	ND	500	210	ug/L			11/23/15 18:15	500
Bromodichloromethane	ND	500	200	ug/L			11/23/15 18:15	500
Bromoform	ND	500	130	ug/L			11/23/15 18:15	500

TestAmerica Buffalo

Matrix: Water

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91057-15

Matrix: Water

Client Sample ID: MW-13 (111215)

Date Collected: 11/12/15 11:40 Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		500	350	ug/L			11/23/15 18:15	500
Carbon disulfide	ND		500	95	ug/L			11/23/15 18:15	500
Carbon tetrachloride	ND		500	140	ug/L			11/23/15 18:15	500
Chlorobenzene	ND		500	380	ug/L			11/23/15 18:15	500
Chloroethane	ND		500	160	ug/L			11/23/15 18:15	500
Chloroform	ND		500	170	ug/L			11/23/15 18:15	500
Chloromethane	ND		500	180	ug/L			11/23/15 18:15	500
cis-1,2-Dichloroethene	28000		500	410	ug/L			11/23/15 18:15	500
cis-1,3-Dichloropropene	ND		500	180	ug/L			11/23/15 18:15	500
Cyclohexane	ND		500	90	ug/L			11/23/15 18:15	500
Dibromochloromethane	ND		500	160	ug/L			11/23/15 18:15	500
Dichlorodifluoromethane	ND		500	340	ug/L			11/23/15 18:15	500
Ethylbenzene	ND		500	370	ug/L			11/23/15 18:15	500
Isopropylbenzene	ND		500	400	ug/L			11/23/15 18:15	500
Methyl acetate	ND		1300	650	ug/L			11/23/15 18:15	500
Methyl tert-butyl ether	ND		500	80	ug/L			11/23/15 18:15	500
Methylcyclohexane	ND		500	80	ug/L			11/23/15 18:15	500
Methylene Chloride	ND		500	220	ug/L			11/23/15 18:15	500
Styrene	ND		500	370	ug/L			11/23/15 18:15	500
Tetrachloroethene	630		500	180	ug/L			11/23/15 18:15	500
Toluene	ND		500	260	ug/L			11/23/15 18:15	500
trans-1,2-Dichloroethene	ND		500	450	ug/L			11/23/15 18:15	500
trans-1,3-Dichloropropene	ND		500	190	ug/L			11/23/15 18:15	500
Trichloroethene	410	J	500	230	ug/L			11/23/15 18:15	500
Trichlorofluoromethane	ND		500	440	ug/L			11/23/15 18:15	500
Vinyl chloride	730		500	450	ug/L			11/23/15 18:15	500
Xylenes, Total	ND		1000	330	ug/L			11/23/15 18:15	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137			-		11/23/15 18:15	500
4-Bromofluorobenzene (Surr)	100		73 - 120					11/23/15 18:15	500
Toluene-d8 (Surr)	98		71 - 126					11/23/15 18:15	500

Client Sample ID: IW-01S (111215)

Date Collected: 11/12/15 13:10 Date Received: 11/13/15 09:30

Dibromofluoromethane (Surr)

Lab	Sampl	le ID:	480	-910)57-	16

11/23/15 18:15

Matrix: Water

500

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	20	16	ug/L			11/24/15 02:40	20
1,1,2,2-Tetrachloroethane	ND	20	4.2	ug/L			11/24/15 02:40	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20	6.2	ug/L			11/24/15 02:40	20
1,1,2-Trichloroethane	ND	20	4.6	ug/L			11/24/15 02:40	20
1,1-Dichloroethane	ND	20	7.6	ug/L			11/24/15 02:40	20
1,1-Dichloroethene	ND	20	5.8	ug/L			11/24/15 02:40	20
1,2,4-Trichlorobenzene	ND	20	8.2	ug/L			11/24/15 02:40	20
1,2-Dibromo-3-Chloropropane	ND	20	7.8	ug/L			11/24/15 02:40	20
1,2-Dibromoethane	ND	20	15	ug/L			11/24/15 02:40	20
1,2-Dichlorobenzene	ND	20	16	ug/L			11/24/15 02:40	20

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TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: IW-01S (111215)

Lab Sample ID: 480-91057-16

Date Collected: 11/12/15 13:10 Matrix: Water Date Received: 11/13/15 09:30

Analyte	Result Qualifie	r RL	MDL		D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND	20	4.2	ug/L			11/24/15 02:40	20
1,2-Dichloropropane	ND	20	14	ug/L			11/24/15 02:40	20
1,3-Dichlorobenzene	ND	20	16	ug/L			11/24/15 02:40	20
1,4-Dichlorobenzene	ND	20	17	ug/L			11/24/15 02:40	20
2-Butanone (MEK)	ND	200	26	ug/L			11/24/15 02:40	20
2-Hexanone	ND	100	25	ug/L			11/24/15 02:40	20
4-Methyl-2-pentanone (MIBK)	ND	100	42	ug/L			11/24/15 02:40	20
Acetone	ND	200	60	ug/L			11/24/15 02:40	20
Benzene	ND	20	8.2	ug/L			11/24/15 02:40	20
Bromodichloromethane	ND	20	7.8	ug/L			11/24/15 02:40	20
Bromoform	ND	20	5.2	ug/L			11/24/15 02:40	20
Bromomethane	ND	20	14	ug/L			11/24/15 02:40	20
Carbon disulfide	ND	20	3.8	ug/L			11/24/15 02:40	20
Carbon tetrachloride	ND	20	5.4	ug/L			11/24/15 02:40	20
Chlorobenzene	ND	20	15	ug/L			11/24/15 02:40	20
Chloroethane	ND	20	6.4	ug/L			11/24/15 02:40	20
Chloroform	ND	20	6.8	ug/L			11/24/15 02:40	20
Chloromethane	ND	20	7.0	ug/L			11/24/15 02:40	20
cis-1,2-Dichloroethene	800	20	16	ug/L			11/24/15 02:40	20
cis-1,3-Dichloropropene	ND	20		ug/L			11/24/15 02:40	20
Cyclohexane	ND	20	3.6	ug/L			11/24/15 02:40	20
Dibromochloromethane	ND	20		ug/L			11/24/15 02:40	20
Dichlorodifluoromethane	ND	20	14	ug/L			11/24/15 02:40	20
Ethylbenzene	ND	20	15	ug/L			11/24/15 02:40	20
Isopropylbenzene	ND	20	16	ug/L			11/24/15 02:40	20
Methyl acetate	ND	50	26	ug/L			11/24/15 02:40	20
Methyl tert-butyl ether	ND	20	3.2	ug/L			11/24/15 02:40	20
Methylcyclohexane	ND	20	3.2	ug/L			11/24/15 02:40	20
Methylene Chloride	ND	20	8.8	ug/L			11/24/15 02:40	20
Styrene	ND	20	15	ug/L			11/24/15 02:40	20
Tetrachloroethene	35	20	7.2	ug/L			11/24/15 02:40	20
Toluene	ND	20	10	ug/L			11/24/15 02:40	20
trans-1,2-Dichloroethene	ND	20	18	ug/L			11/24/15 02:40	20
trans-1,3-Dichloropropene	ND	20	7.4	ug/L			11/24/15 02:40	20
Trichloroethene	27	20	9.2	ug/L			11/24/15 02:40	20
Trichlorofluoromethane	ND	20	18	ug/L			11/24/15 02:40	20
Vinyl chloride	33	20		ug/L			11/24/15 02:40	20
Xylenes, Total	ND	40		ug/L			11/24/15 02:40	20
Surrogato	%Pocovory Qualific	r Limite				Propored	Analyzod	Dil Es

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103	66 - 137		11/24/15 02:40	20
4-Bromofluorobenzene (Surr)	99	73 - 120		11/24/15 02:40	20
Toluene-d8 (Surr)	97	71 - 126		11/24/15 02:40	20
Dibromofluoromethane (Surr)	93	60 - 140		11/24/15 02:40	20

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91057-17

TestAmerica Job ID: 480-91057-1

Matrix: Water

Client Sample ID: TRIP BLANK

Date Collected: 11/12/15 00:00 Date Received: 11/13/15 09:30

Method: 8260C - Volatile Orga	nic Compounds by GC/M Result Qualifier		MDI	l ln!4	_	Dremanad	Amabassal	D:: ==
Analyte	ND Qualifier —	RL 1.0	MDL	ug/L	D	Prepared	Analyzed 11/24/15 03:04	Dil Fac
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	ND ND	1.0		ug/L ug/L			11/24/15 03:04	1
	ND ND	1.0		-				1
1,1,2-Trichloro-1,2,2-trifluoroethane				ug/L			11/24/15 03:04	
1,1,2-Trichloroethane	ND ND	1.0		ug/L			11/24/15 03:04	1
1,1-Dichloroethane	ND	1.0		ug/L			11/24/15 03:04	1
1,1-Dichloroethene	ND	1.0		ug/L			11/24/15 03:04	1
1,2,4-Trichlorobenzene	ND NB	1.0		ug/L			11/24/15 03:04	1
1,2-Dibromo-3-Chloropropane	ND	1.0		ug/L			11/24/15 03:04	1
1,2-Dibromoethane	ND	1.0		ug/L			11/24/15 03:04	
1,2-Dichlorobenzene	ND	1.0		ug/L			11/24/15 03:04	•
1,2-Dichloroethane	ND	1.0		ug/L			11/24/15 03:04	•
1,2-Dichloropropane	ND	1.0		ug/L			11/24/15 03:04	
1,3-Dichlorobenzene	ND	1.0		ug/L			11/24/15 03:04	•
1,4-Dichlorobenzene	ND	1.0		ug/L			11/24/15 03:04	•
2-Butanone (MEK)	ND	10		ug/L			11/24/15 03:04	
2-Hexanone	ND	5.0		ug/L			11/24/15 03:04	•
4-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			11/24/15 03:04	•
Acetone	ND	10		ug/L			11/24/15 03:04	
Benzene	ND	1.0		ug/L			11/24/15 03:04	•
Bromodichloromethane	ND	1.0		ug/L			11/24/15 03:04	•
Bromoform	ND	1.0		ug/L			11/24/15 03:04	•
Bromomethane	ND	1.0	0.69	ug/L			11/24/15 03:04	•
Carbon disulfide	ND	1.0	0.19	ug/L			11/24/15 03:04	•
Carbon tetrachloride	ND	1.0	0.27	ug/L			11/24/15 03:04	•
Chlorobenzene	ND	1.0	0.75	ug/L			11/24/15 03:04	
Chloroethane	ND	1.0	0.32	ug/L			11/24/15 03:04	
Chloroform	ND	1.0	0.34	ug/L			11/24/15 03:04	
Chloromethane	ND	1.0	0.35	ug/L			11/24/15 03:04	•
cis-1,2-Dichloroethene	ND	1.0	0.81	ug/L			11/24/15 03:04	•
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			11/24/15 03:04	•
Cyclohexane	ND	1.0	0.18	ug/L			11/24/15 03:04	
Dibromochloromethane	ND	1.0	0.32	ug/L			11/24/15 03:04	•
Dichlorodifluoromethane	ND	1.0	0.68	ug/L			11/24/15 03:04	
Ethylbenzene	ND	1.0	0.74	ug/L			11/24/15 03:04	
Isopropylbenzene	ND	1.0	0.79	ug/L			11/24/15 03:04	
Methyl acetate	ND	2.5		ug/L			11/24/15 03:04	
Methyl tert-butyl ether	ND	1.0		ug/L			11/24/15 03:04	•
Methylcyclohexane	ND	1.0		ug/L			11/24/15 03:04	
Methylene Chloride	ND	1.0		ug/L			11/24/15 03:04	
Styrene	ND	1.0		ug/L			11/24/15 03:04	,
Tetrachloroethene	ND	1.0		ug/L			11/24/15 03:04	
Toluene	ND	1.0		ug/L			11/24/15 03:04	
trans-1,2-Dichloroethene	ND	1.0		ug/L			11/24/15 03:04	
trans-1,3-Dichloropropene	ND	1.0		ug/L			11/24/15 03:04	
Trichloroethene	ND	1.0		ug/L			11/24/15 03:04	
Trichlorofluoromethane	ND	1.0		ug/L			11/24/15 03:04	
Vinyl chloride	ND	1.0		ug/L			11/24/15 03:04	
Xylenes, Total	ND	2.0		ug/L			11/24/15 03:04	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-91057-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-91057-17

Date Collected: 11/12/15 00:00 Matrix: Water Date Received: 11/13/15 09:30

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/15 03:04 1
/15 03:04 1
/15 03:04 1
/15 03:04 1
/15 03: /15 03:

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Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

Matrix: Water Prep Type: Total/NA

			Pe	rcent Surre	ogate Recov	ery (Acceptanc
		12DCE	BFB	TOL	DBFM	
Lab Sample ID	Client Sample ID	(66-137)	(73-120)	(71-126)	(60-140)	
480-91057-1	MW-1DD (111015)	102	100	95	91	
480-91057-2	IW-03 (111015)	102	104	98	93	
480-91057-2 - DL	IW-03 (111015)	100	98	96	92	
480-91057-2 MS	IW-03 (111015)	101	101	97	93	
180-91057-2 MSD	IW-03 (111015)	99	100	96	95	
480-91057-3	MW-29 (111015)	103	101	97	96	
80-91057-3 - DL	MW-29 (111015)	99	98	96	93	
80-91057-4	MW-19 (111015)	103	99	97	94	
80-91057-5	IW-02 (111015)	99	95	94	91	
80-91057-5 - DL	IW-02 (111015)	101	96	94	92	
80-91057-6	MW-26 (111015)	96	100	96	92	
80-91057-7	MW-7 (111115)	102	97	95	97	
80-91057-8	MW-1D (111115)	102	99	95	93	
80-91057-9	MW-22 (R) D (111115)	102	98	97	93	
80-91057-10	GM-9 (111115)	103	100	98	94	
80-91057-11	MW-2 (111115)	101	101	97	91	
80-91057-12	MW-4 (111115)	104	96	94	91	
180-91057-13	MW-14R (111115)	103	100	95	96	
180-91057-13 - DL	MW-14R (111115)	102	101	95	92	
80-91057-14	MW-25D (111215)	104	99	95	93	
180-91057-15	MW-13 (111215)	100	100	98	92	
180-91057-16	IW-01S (111215)	103	99	97	93	
80-91057-17	TRIP BLANK	97	99	98	89	
_CS 480-276376/5	Lab Control Sample	100	101	96	94	
_CS 480-276407/5	Lab Control Sample	100	100	96	97	
LCS 480-276559/5	Lab Control Sample	97	102	98	90	
LCS 480-276779/5	Lab Control Sample	98	100	96	92	
MB 480-276376/8	Method Blank	101	98	97	95	
MB 480-276407/7	Method Blank	101	97	96	94	
MB 480-276559/7	Method Blank	100	99	97	91	
MB 480-276779/7	Method Blank	102	100	96	90	

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

Lab Sample ID: MB 480-276376/8

Matrix: Water

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 276376	МВ	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L		-	11/22/15 21:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/22/15 21:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/22/15 21:38	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/22/15 21:38	1
1,1-Dichloroethane	ND		1.0		ug/L			11/22/15 21:38	1
1,1-Dichloroethene	ND		1.0		ug/L			11/22/15 21:38	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/22/15 21:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/22/15 21:38	1
1,2-Dibromoethane	ND		1.0		ug/L			11/22/15 21:38	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/22/15 21:38	1
1,2-Dichloroethane	ND		1.0		ug/L			11/22/15 21:38	1
1,2-Dichloropropane	ND		1.0		ug/L			11/22/15 21:38	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/22/15 21:38	
1,4-Dichlorobenzene	ND		1.0		ug/L			11/22/15 21:38	1
2-Butanone (MEK)	ND		10		ug/L			11/22/15 21:38	1
2-Hexanone	ND		5.0		ug/L			11/22/15 21:38	
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			11/22/15 21:38	1
Acetone (MIBIC)	ND		10		ug/L			11/22/15 21:38	1
Benzene	ND		1.0		ug/L ug/L			11/22/15 21:38	
	ND ND		1.0		-				
Bromodichloromethane Bromoform	ND ND				ug/L			11/22/15 21:38	1
			1.0		ug/L			11/22/15 21:38	1
Bromomethane	ND		1.0		ug/L			11/22/15 21:38	1
Carbon disulfide	ND		1.0		ug/L			11/22/15 21:38	1
Carbon tetrachloride	ND		1.0		ug/L			11/22/15 21:38	
Chlorobenzene	ND		1.0		ug/L			11/22/15 21:38	1
Chloroethane	ND		1.0		ug/L			11/22/15 21:38	1
Chloroform	ND		1.0		ug/L			11/22/15 21:38	
Chloromethane	ND		1.0		ug/L			11/22/15 21:38	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/22/15 21:38	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/22/15 21:38	1
Cyclohexane	ND		1.0		ug/L			11/22/15 21:38	1
Dibromochloromethane	ND		1.0		ug/L			11/22/15 21:38	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/22/15 21:38	1
Ethylbenzene	ND		1.0		ug/L			11/22/15 21:38	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/22/15 21:38	1
Methyl acetate	ND		2.5	1.3	ug/L			11/22/15 21:38	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/22/15 21:38	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/22/15 21:38	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/22/15 21:38	1
Styrene	ND		1.0	0.73	ug/L			11/22/15 21:38	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/22/15 21:38	1
Toluene	ND		1.0	0.51	ug/L			11/22/15 21:38	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/22/15 21:38	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/22/15 21:38	1
Trichloroethene	ND		1.0		ug/L			11/22/15 21:38	1
Trichlorofluoromethane	ND		1.0		ug/L			11/22/15 21:38	1
Vinyl chloride	ND		1.0		ug/L			11/22/15 21:38	1
Xylenes, Total	ND		2.0		ug/L			11/22/15 21:38	1

TestAmerica Buffalo

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11/27/2015

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

MR MR

Lab Sample ID: MB 480-276376/8

Matrix: Water

Analysis Batch: 276376

Client Sample ID: Method Blank

Prep Type: Total/NA

	IND	IND				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137		11/22/15 21:38	1
4-Bromofluorobenzene (Surr)	98		73 - 120		11/22/15 21:38	1
Toluene-d8 (Surr)	97		71 - 126		11/22/15 21:38	1
Dibromofluoromethane (Surr)	95		60 - 140		11/22/15 21:38	1

Lab Sample ID: LCS 480-276376/5

Matrix: Water

Analysis Batch: 276376

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

•	Spike	LCS			%Rec.			
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	25.0	25.0		ug/L		100	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	26.0		ug/L		104	52 - 148	
ne								
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	76 - 122	
1,1-Dichloroethane	25.0	25.2		ug/L		101	71 - 129	
1,1-Dichloroethene	25.0	24.8		ug/L		99	58 - 121	
1,2,4-Trichlorobenzene	25.0	25.4		ug/L		102	70 - 122	
1,2-Dibromo-3-Chloropropane	25.0	26.2		ug/L		105	56 - 134	
1,2-Dibromoethane	25.0	25.0		ug/L		100	77 - 120	
1,2-Dichlorobenzene	25.0	24.4		ug/L		98	80 - 124	
1,2-Dichloroethane	25.0	24.5		ug/L		98	75 - 127	
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120	
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	77 - 120	
1,4-Dichlorobenzene	25.0	24.4		ug/L		98	75 - 120	
2-Butanone (MEK)	125	134		ug/L		107	57 ₋ 140	
2-Hexanone	125	138		ug/L		110	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	127		ug/L		101	71 - 125	
Acetone	125	141		ug/L		113	56 - 142	
Benzene	25.0	24.8		ug/L		99	71 - 124	
Bromodichloromethane	25.0	23.4		ug/L		93	80 - 122	
Bromoform	25.0	23.4		ug/L		93	52 - 132	
Bromomethane	25.0	31.9		ug/L		128	55 - 144	
Carbon disulfide	25.0	24.9		ug/L		100	59 ₋ 134	
Carbon tetrachloride	25.0	25.0		ug/L		100	72 - 134	
Chlorobenzene	25.0	25.0		ug/L		100	72 - 120	
Chloroethane	25.0	31.2		ug/L		125	69 - 136	
Chloroform	25.0	24.5		ug/L		98	73 ₋ 127	
Chloromethane	25.0	22.7		ug/L		91	68 - 124	
cis-1,2-Dichloroethene	25.0	23.6		ug/L		94	74 - 124	
cis-1,3-Dichloropropene	25.0	23.9		ug/L		96	74 - 124	
Cyclohexane	25.0	23.2		ug/L		93	59 - 135	
Dibromochloromethane	25.0	23.3		ug/L		93	75 ₋ 125	
Dichlorodifluoromethane	25.0	20.8		ug/L		83	59 ₋ 135	
Ethylbenzene	25.0	25.0		ug/L		100	77 - 123	
Isopropylbenzene	25.0	25.8		ug/L		103	77 - 122	
Methyl acetate	125	132		ug/L		105	74 - 133	
Methyl tert-butyl ether	25.0	24.3		ug/L		97	64 - 127	

TestAmerica Buffalo

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TestAmerica Job ID: 480-91057-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 480-276376/5

Matrix: Water

Analysis Batch: 276376

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Methylcyclohexane	25.0	25.3	-	ug/L		101	61 - 138	
Methylene Chloride	25.0	25.8		ug/L		103	57 - 132	
Styrene	25.0	24.2		ug/L		97	70 - 130	
Tetrachloroethene	25.0	24.6		ug/L		98	74 - 122	
Toluene	25.0	24.6		ug/L		98	80 - 122	
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	73 - 127	
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	72 - 123	
Trichloroethene	25.0	23.5		ug/L		94	74 - 123	
Trichlorofluoromethane	25.0	28.8		ug/L		115	62 - 152	
Vinyl chloride	25.0	24.6		ug/L		98	65 - 133	
Xylenes, Total	50.0	48.2		ug/L		96	76 - 122	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
4-Bromofluorobenzene (Surr)	101		73 - 120
Toluene-d8 (Surr)	96		71 - 126
Dibromofluoromethane (Surr)	94		60 - 140

Lab Sample ID: MB 480-276407/7

Matrix: Water

Analysis Batch: 276407

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

MB MB **Analyte** Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 1,1,1-Trichloroethane $\overline{\mathsf{ND}}$ 1.0 0.82 ug/L 11/23/15 11:02 ND 11/23/15 11:02 1,1,2,2-Tetrachloroethane 1.0 0.21 ug/L 1.1.2-Trichloro-1.2.2-trifluoroethane ND 1.0 0.31 ug/L 11/23/15 11:02 1,1,2-Trichloroethane ND 1.0 0.23 ug/L 11/23/15 11:02 1,1-Dichloroethane ND 1.0 0.38 ug/L 11/23/15 11:02 ND 1.0 0.29 ug/L 11/23/15 11:02 1,1-Dichloroethene ND 1,2,4-Trichlorobenzene 1.0 0.41 ug/L 11/23/15 11:02 1,2-Dibromo-3-Chloropropane ND 1.0 0.39 ug/L 11/23/15 11:02 1,2-Dibromoethane ND 1.0 0.73 ug/L 11/23/15 11:02 1.2-Dichlorobenzene ND 1.0 0.79 ug/L 11/23/15 11:02 1,2-Dichloroethane ND 1.0 0.21 ug/L 11/23/15 11:02 1,2-Dichloropropane ND 1.0 0.72 ug/L 11/23/15 11:02 1,3-Dichlorobenzene ND 1.0 0.78 ug/L 11/23/15 11:02 1,4-Dichlorobenzene ND 1.0 11/23/15 11:02 0.84 ug/L 2-Butanone (MEK) ND 10 1.3 ug/L 11/23/15 11:02 2-Hexanone ND 5.0 1.2 ug/L 11/23/15 11:02 4-Methyl-2-pentanone (MIBK) ND 5.0 2.1 ug/L 11/23/15 11:02 Acetone ND 10 3.0 ug/L 11/23/15 11:02 Benzene ND 1.0 0.41 ug/L 11/23/15 11:02 Bromodichloromethane 0.39 ug/L ND 1.0 11/23/15 11:02 Bromoform ND 1.0 0.26 ug/L 11/23/15 11:02 Bromomethane ND 1.0 0.69 ug/L 11/23/15 11:02 ND Carbon disulfide 1.0 0.19 ug/L 11/23/15 11:02 Carbon tetrachloride ND 1.0 0.27 ug/L 11/23/15 11:02 Chlorobenzene ND 1.0 0.75 ug/L 11/23/15 11:02

TestAmerica Buffalo

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TestAmerica Job ID: 480-91057-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 480-276407/7

Matrix: Water

Analysis Batch: 276407

Client Sample ID: Method Blank

Prep Type: Total/NA

/ mary one Batom 27 0-101									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0	0.32	ug/L			11/23/15 11:02	1
Chloroform	ND		1.0	0.34	ug/L			11/23/15 11:02	1
Chloromethane	ND		1.0	0.35	ug/L			11/23/15 11:02	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/23/15 11:02	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/23/15 11:02	1
Cyclohexane	ND		1.0	0.18	ug/L			11/23/15 11:02	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/23/15 11:02	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/23/15 11:02	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/23/15 11:02	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/23/15 11:02	1
Methyl acetate	ND		2.5	1.3	ug/L			11/23/15 11:02	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/23/15 11:02	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/23/15 11:02	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/23/15 11:02	1
Styrene	ND		1.0	0.73	ug/L			11/23/15 11:02	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/23/15 11:02	1
Toluene	ND		1.0	0.51	ug/L			11/23/15 11:02	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/23/15 11:02	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/23/15 11:02	1
Trichloroethene	ND		1.0	0.46	ug/L			11/23/15 11:02	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/23/15 11:02	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/23/15 11:02	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/23/15 11:02	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 101 66 - 137 11/23/15 11:02 73 - 120 11/23/15 11:02 4-Bromofluorobenzene (Surr) 97 Toluene-d8 (Surr) 96 71 - 126 11/23/15 11:02 1 Dibromofluoromethane (Surr) 94 60 - 140 11/23/15 11:02

Lab Sample ID: LCS 480-276407/5

Matrix: Water

Analysis Batch: 276407

7 , 0.0	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	25.0	23.3		ug/L		93	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.2		ug/L		97	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	23.5		ug/L		94	52 - 148
ne							
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	23.9		ug/L		96	71 - 129
1,1-Dichloroethene	25.0	22.8		ug/L		91	58 - 121
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.2		ug/L		89	56 - 134
1,2-Dibromoethane	25.0	24.2		ug/L		97	77 - 120
1,2-Dichlorobenzene	25.0	23.1		ug/L		92	80 - 124
1,2-Dichloroethane	25.0	23.8		ug/L		95	75 - 127
1,2-Dichloropropane	25.0	22.8		ug/L		91	76 - 120

TestAmerica Buffalo

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Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

Lab Sample ID: LCS 480-276407/5

Matrix: Water

Analysis Batch: 276407

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

	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	
1,3-Dichlorobenzene	25.0	22.9	ug/L		92	77 - 120	
1,4-Dichlorobenzene	25.0	23.5	ug/L		94	75 - 120	
2-Butanone (MEK)	125	134	ug/L		107	57 ₋ 140	
2-Hexanone	125	136	ug/L		108	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	124	ug/L		99	71 - 125	
Acetone	125	144	ug/L		115	56 - 142	
Benzene	25.0	23.0	ug/L		92	71 - 124	
Bromodichloromethane	25.0	22.3	ug/L		89	80 - 122	
Bromoform	25.0	20.8	ug/L		83	52 - 132	
Bromomethane	25.0	22.3	ug/L		89	55 - 144	
Carbon disulfide	25.0	22.1	ug/L		88	59 - 134	
Carbon tetrachloride	25.0	23.0	ug/L		92	72 - 134	
Chlorobenzene	25.0	23.7	ug/L		95	72 - 120	
Chloroethane	25.0	24.9	ug/L		99	69 ₋ 136	
Chloroform	25.0	22.8	ug/L		91	73 - 127	
Chloromethane	25.0	21.1	ug/L		84	68 - 124	
cis-1,2-Dichloroethene	25.0	21.9	ug/L		88	74 - 124	
cis-1,3-Dichloropropene	25.0	22.6	ug/L		90	74 - 124	
Cyclohexane	25.0	21.7	ug/L		87	59 ₋ 135	
Dibromochloromethane	25.0	22.1	ug/L		89	75 - 125	
Dichlorodifluoromethane	25.0	20.3	ug/L		81	59 - 135	
Ethylbenzene	25.0	23.9	ug/L		96	77 - 123	
Isopropylbenzene	25.0	24.0	ug/L		96	77 - 122	
Methyl acetate	125	130	ug/L		104	74 - 133	
Methyl tert-butyl ether	25.0	23.8	ug/L		95	64 - 127	
Methylcyclohexane	25.0	23.5	ug/L		94	61 - 138	
Methylene Chloride	25.0	23.7	ug/L		95	57 - 132	
Styrene	25.0	23.3	ug/L		93	70 - 130	
Tetrachloroethene	25.0	23.6	ug/L		94	74 - 122	
Toluene	25.0	23.3	ug/L		93	80 - 122	
trans-1,2-Dichloroethene	25.0	22.4	ug/L		90	73 - 127	
trans-1,3-Dichloropropene	25.0	24.2	ug/L		97	72 - 123	
Trichloroethene	25.0	21.6	ug/L		87	74 - 123	
Trichlorofluoromethane	25.0	25.7	ug/L		103	62 - 152	
Vinyl chloride	25.0	22.8	ug/L		91	65 ₋ 133	
Xylenes, Total	50.0	45.8	ug/L		92	76 - 122	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	96		71 - 126
Dibromofluoromethane (Surr)	97		60 - 140

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

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Client Sample ID: IW-03 (111015)

Lab Sample ID: 480-91057-2 MS **Matrix: Water Prep Type: Total/NA**

Analysis Batch: 276407	0	0	011						0/ D
Analyte	•	Sample Qualifier	Spike Added		MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND	- Qualifier		242	Qualifier	ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	ND		250	254		ug/L		102	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		250	250		ug/L		100	52 ₋ 148
1, 1,2-111011010-1,2,2-tilliu010etila ne	ND		200	250		ug/L		100	32 - 140
1,1,2-Trichloroethane	ND		250	251		ug/L		100	76 - 122
1,1-Dichloroethane	ND		250	250		ug/L		100	71 - 129
1,1-Dichloroethene	ND		250	241		ug/L		96	58 - 121
1,2,4-Trichlorobenzene	ND		250	250		ug/L		100	70 - 122
1,2-Dibromo-3-Chloropropane	ND		250	222		ug/L		89	56 - 134
1,2-Dibromoethane	ND		250	244		ug/L		98	77 - 120
1,2-Dichlorobenzene	ND		250	241		ug/L		96	80 - 124
1,2-Dichloroethane	ND		250	246		ug/L		98	75 - 127
1,2-Dichloropropane	ND		250	237		ug/L		95	76 - 120
1,3-Dichlorobenzene	ND		250	233		ug/L		93	77 - 120
1,4-Dichlorobenzene	ND		250	236		ug/L		94	75 ₋ 120
2-Butanone (MEK)	ND		1250	1310		ug/L		105	57 ₋ 140
2-Hexanone	ND		1250	1340		ug/L		107	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		1250	1240		ug/L		99	71 - 125
Acetone	ND		1250	1420		ug/L		114	56 - 142
Benzene	ND		250	245		ug/L		98	71 - 124
Bromodichloromethane	ND		250	216		ug/L		86	80 - 122
Bromoform	ND		250	169		ug/L		68	52 - 132
Bromomethane	ND		250	257		ug/L		103	55 - 144
Carbon disulfide	ND		250	223		ug/L		89	59 ₋ 134
Carbon tetrachloride	ND		250	241		ug/L		96	72 ₋ 134
Chlorobenzene	ND		250	241		ug/L		97	72 - 120
Chloroethane	ND		250	271		ug/L		108	69 - 136
Chloroform	ND		250	242		ug/L		97	73 - 127
Chloromethane	ND		250	226		ug/L		90	68 - 124
cis-1,2-Dichloroethene	130		250	352		ug/L		88	74 ₋ 124
cis-1,3-Dichloropropene	ND		250	226		ug/L		91	74 ₋ 124
Cyclohexane	ND		250	228		ug/L		91	59 - 135
Dibromochloromethane	ND		250	200		ug/L		80	75 ₋ 125
Dichlorodifluoromethane	ND		250	207		ug/L		83	59 ₋ 135
Ethylbenzene	25		250	270		ug/L		98	77 - 123
sopropylbenzene	32		250	269		ug/L		95	77 - 122
Methyl acetate	ND		1250	1280		ug/L		102	74 - 133
Methyl tert-butyl ether	76		250	313		ug/L		95	64 - 127
Methylcyclohexane	4.3	J	250	243		ug/L		96	61 - 138
Methylene Chloride	ND		250	253		ug/L		101	57 ₋ 132
Styrene	ND		250	236		ug/L		94	70 - 130
Tetrachloroethene	ND		250	240		ug/L		96	74 - 122
Toluene	9.0	J	250	251		ug/L		97	80 - 122
rans-1,2-Dichloroethene	ND		250	238		ug/L		95	73 - 127
trans-1,3-Dichloropropene	ND		250	241		ug/L		97	72 - 123
Trichloroethene	ND		250	225		ug/L		90	74 - 123
Trichlorofluoromethane	ND		250	283		ug/L		113	62 - 152
Vinyl chloride	310		250	489		ug/L		72	65 - 133

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

Lab Sample ID: 480-91057-2 MS

Matrix: Water

Analysis Batch: 276407

Sample Sample Spike MS MS

Client Sample ID: IW-03 (111015)

Prep Type: Total/NA

Rec.

AnalyteResult Zylenes, TotalQualifier TotalAdded Added Sesult SolutionResult Added SolutionQualifier Added SolutionQualifier Unit Ug/LUnit Ug/LD WRec SolutionLimits Total Solution

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
4-Bromofluorobenzene (Surr)	101		73 - 120
Toluene-d8 (Surr)	97		71 - 126
Dibromofluoromethane (Surr)	93		60 - 140

Lab Sample ID: 480-91057-2 MSD

Matrix: Water

Client Sample ID: IW-03 (111015)

Prep Type: Total/NA

Analysis Batch: 276407									i icp iy	pe. Tot	airit
•	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
1,1,1-Trichloroethane	ND		250	231		ug/L		92	73 - 126	5	15
1,1,2,2-Tetrachloroethane	ND		250	236		ug/L		95	70 - 126	7	15
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		250	245		ug/L		98	52 - 148	2	20
ne											
1,1,2-Trichloroethane	ND		250	240		ug/L		96	76 - 122	4	15
1,1-Dichloroethane	ND		250	239		ug/L		95	71 - 129	5	20
1,1-Dichloroethene	ND		250	233		ug/L		93	58 - 121	3	16
1,2,4-Trichlorobenzene	ND		250	240		ug/L		96	70 - 122	4	20
1,2-Dibromo-3-Chloropropane	ND		250	219		ug/L		88	56 - 134	1	15
1,2-Dibromoethane	ND		250	236		ug/L		95	77 - 120	3	15
1,2-Dichlorobenzene	ND		250	231		ug/L		92	80 - 124	4	20
1,2-Dichloroethane	ND		250	248		ug/L		99	75 - 127	1	20
1,2-Dichloropropane	ND		250	230		ug/L		92	76 - 120	3	20
1,3-Dichlorobenzene	ND		250	227		ug/L		91	77 - 120	3	20
1,4-Dichlorobenzene	ND		250	229		ug/L		92	75 - 120	3	20
2-Butanone (MEK)	ND		1250	1310		ug/L		105	57 ₋ 140	0	20
2-Hexanone	ND		1250	1300		ug/L		104	65 - 127	3	15
4-Methyl-2-pentanone (MIBK)	ND		1250	1200		ug/L		96	71 - 125	3	35
Acetone	ND		1250	1450		ug/L		116	56 - 142	2	15
Benzene	ND		250	234		ug/L		94	71 - 124	5	13
Bromodichloromethane	ND		250	212		ug/L		85	80 - 122	2	15
Bromoform	ND		250	167		ug/L		67	52 - 132	2	15
Bromomethane	ND		250	224		ug/L		90	55 - 144	14	15
Carbon disulfide	ND		250	209		ug/L		83	59 - 134	7	15
Carbon tetrachloride	ND		250	225		ug/L		90	72 - 134	7	15
Chlorobenzene	ND		250	230		ug/L		92	72 - 120	5	25
Chloroethane	ND		250	256		ug/L		102	69 - 136	6	15
Chloroform	ND		250	233		ug/L		93	73 - 127	4	20
Chloromethane	ND		250	213		ug/L		85	68 - 124	6	15
cis-1,2-Dichloroethene	130		250	335		ug/L		81	74 - 124	5	15
cis-1,3-Dichloropropene	ND		250	218		ug/L		87	74 - 124	4	15
Cyclohexane	ND		250	218		ug/L		87	59 - 135	5	20
Dibromochloromethane	ND		250	191		ug/L		76	75 ₋ 125	5	15
Dichlorodifluoromethane	ND		250	202		ug/L		81	59 ₋ 135	2	20
Ethylbenzene	25		250	257		ug/L		93	77 - 123	5	15

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

Lab Sample ID: 480-91057-2 MSD

Matrix: Water

Analysis Batch: 276407

Client Sample ID: IW-03 (111015)

Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Isopropylbenzene	32		250	260		ug/L		91	77 - 122	4	20
Methyl acetate	ND		1250	1280		ug/L		103	74 - 133	1	20
Methyl tert-butyl ether	76		250	316		ug/L		96	64 - 127	1	37
Methylcyclohexane	4.3	J	250	240		ug/L		94	61 - 138	1	20
Methylene Chloride	ND		250	252		ug/L		101	57 - 132	1	15
Styrene	ND		250	229		ug/L		92	70 - 130	3	20
Tetrachloroethene	ND		250	228		ug/L		91	74 - 122	5	20
Toluene	9.0	J	250	237		ug/L		91	80 - 122	6	15
trans-1,2-Dichloroethene	ND		250	229		ug/L		92	73 - 127	4	20
trans-1,3-Dichloropropene	ND		250	227		ug/L		91	72 - 123	6	15
Trichloroethene	ND		250	217		ug/L		87	74 - 123	4	16
Trichlorofluoromethane	ND		250	261		ug/L		104	62 - 152	8	20
Vinyl chloride	310		250	473		ug/L		65	65 - 133	3	15
Xylenes, Total	7.3	J	500	465		ug/L		92	76 - 122	3	16

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	96		71 - 126
Dibromofluoromethane (Surr)	95		60 - 140

Lab Sample ID: MB 480-276559/7

Matrix: Water

Analysis Batch: 276559

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

•	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/23/15 23:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/23/15 23:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/23/15 23:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/23/15 23:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/23/15 23:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/23/15 23:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/23/15 23:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/23/15 23:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/23/15 23:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/23/15 23:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/23/15 23:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/23/15 23:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/23/15 23:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/23/15 23:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/23/15 23:06	1
2-Hexanone	ND		5.0	1.2	ug/L			11/23/15 23:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/23/15 23:06	1
Acetone	ND		10	3.0	ug/L			11/23/15 23:06	1
Benzene	ND		1.0	0.41	ug/L			11/23/15 23:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/23/15 23:06	1
Bromoform	ND		1.0	0.26	ug/L			11/23/15 23:06	1
Bromomethane	ND		1.0	0.69	ug/L			11/23/15 23:06	1

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TestAmerica Job ID: 480-91057-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 480-276559/7

Matrix: Water

Analysis Batch: 276559

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

Analysis Batch. 270009	MB MB					
Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Carbon disulfide	ND ND	1.0	0.19 ug/L		11/23/15 23:06	1
Carbon tetrachloride	ND	1.0	0.27 ug/L		11/23/15 23:06	1
Chlorobenzene	ND	1.0	0.75 ug/L		11/23/15 23:06	1
Chloroethane	ND	1.0	0.32 ug/L		11/23/15 23:06	1
Chloroform	ND	1.0	0.34 ug/L		11/23/15 23:06	1
Chloromethane	ND	1.0	0.35 ug/L		11/23/15 23:06	1
cis-1,2-Dichloroethene	ND	1.0	0.81 ug/L		11/23/15 23:06	1
cis-1,3-Dichloropropene	ND	1.0	0.36 ug/L		11/23/15 23:06	1
Cyclohexane	ND	1.0	0.18 ug/L		11/23/15 23:06	1
Dibromochloromethane	ND	1.0	0.32 ug/L		11/23/15 23:06	1
Dichlorodifluoromethane	ND	1.0	0.68 ug/L		11/23/15 23:06	1
Ethylbenzene	ND	1.0	0.74 ug/L		11/23/15 23:06	1
Isopropylbenzene	ND	1.0	0.79 ug/L		11/23/15 23:06	1
Methyl acetate	ND	2.5	1.3 ug/L		11/23/15 23:06	1
Methyl tert-butyl ether	ND	1.0	0.16 ug/L		11/23/15 23:06	1
Methylcyclohexane	ND	1.0	0.16 ug/L		11/23/15 23:06	1
Methylene Chloride	ND	1.0	0.44 ug/L		11/23/15 23:06	1
Styrene	ND	1.0	0.73 ug/L		11/23/15 23:06	1
Tetrachloroethene	ND	1.0	0.36 ug/L		11/23/15 23:06	1
Toluene	ND	1.0	0.51 ug/L		11/23/15 23:06	1
trans-1,2-Dichloroethene	ND	1.0	0.90 ug/L		11/23/15 23:06	1
trans-1,3-Dichloropropene	ND	1.0	0.37 ug/L		11/23/15 23:06	1
Trichloroethene	ND	1.0	0.46 ug/L		11/23/15 23:06	1
Trichlorofluoromethane	ND	1.0	0.88 ug/L		11/23/15 23:06	1
Vinyl chloride	ND	1.0	0.90 ug/L		11/23/15 23:06	1
Xylenes, Total	ND	2.0	0.66 ug/L		11/23/15 23:06	1

	MB MB	3		
Surrogate	%Recovery Qu	alifier Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100	66 - 137	11/23/15 23:06	1
4-Bromofluorobenzene (Surr)	99	73 - 120	11/23/15 23:06	1
Toluene-d8 (Surr)	97	71 - 126	11/23/15 23:06	1
Dibromofluoromethane (Surr)	91	60 - 140	11/23/15 23:06	1

Lab Sample ID: LCS 480-276559/5

Matrix: Water

Analysis Batch: 276559

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

randijolo Batom El Coco							
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	25.0	22.7		ug/L		91	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.4		ug/L		98	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	22.9		ug/L		92	52 - 148
ne							
1,1,2-Trichloroethane	25.0	25.2		ug/L		101	76 - 122
1,1-Dichloroethane	25.0	23.3		ug/L		93	71 - 129
1,1-Dichloroethene	25.0	21.8		ug/L		87	58 - 121
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		98	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	56 - 134
1,2-Dibromoethane	25.0	24.7		ug/L		99	77 - 120
				-			

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

Lab Sample ID: LCS 480-276559/5

Matrix: Water

Analysis Batch: 276559

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

Spike	LCS	LCS		%Rec.
Added	Result	Qualifier Unit	D %Rec	Limits
25.0	23.2	ug/L	93	80 - 124
25.0	23.8	ug/L	95	75 - 127
25.0	22.5	ug/L	90	76 - 120
25.0	23.0	ug/L	92	77 - 120
25.0	23.9	ug/L	96	75 - 120
125	128	ug/L	103	57 - 140
125	140	ug/L	112	65 - 127
125	126	ug/L	101	71 - 125
125	141	ug/L	113	56 - 142
25.0	22.6	ug/L	90	71 - 124
25.0	21.4	ug/L	86	80 - 122
25.0	21.4	ug/L	86	52 - 132
25.0	27.8	ug/L	111	55 - 144
25.0	21.3	ug/L	85	59 ₋ 134
25.0	22.0	ug/L	88	72 - 134
25.0	23.6	ug/L	94	72 - 120
25.0	27.1	ug/L	109	69 - 136
25.0	22.8	ug/L	91	73 - 127
25.0	19.4	ug/L	77	68 - 124
25.0	22.0	ug/L	88	74 - 124
25.0	22.6	ug/L	91	74 - 124
25.0	21.0	ug/L	84	59 - 135
25.0	22.0	ug/L	88	75 ₋ 125
25.0	17.1	ug/L	68	59 - 135
25.0	24.6	ug/L	99	77 - 123
25.0	24.0	ug/L	96	77 - 122
125	125	ug/L	100	74 - 133
25.0	23.3	ug/L	93	64 - 127
25.0	22.6	ug/L	91	61 - 138
25.0	23.4	ug/L	94	57 - 132
25.0	24.0	ug/L	96	70 - 130
25.0	24.1	ug/L	96	74 - 122
25.0	24.0	ug/L	96	80 - 122
25.0	21.7	ug/L	87	73 - 127
25.0	25.0	ug/L	100	72 - 123
25.0	21.1	ug/L	85	74 - 123
25.0	24.8	ug/L	99	62 - 152
25.0	21.3	ug/L	85	65 - 133
50.0	46.7	ug/L	93	76 - 122
		-		
	Added 25.0 25.0 25.0 25.0 25.0 25.0 125 125 125 125 25.0	Added Result 25.0 23.2 25.0 23.8 25.0 22.5 25.0 23.0 25.0 23.9 125 128 125 140 125 141 25.0 22.6 25.0 21.4 25.0 21.4 25.0 27.8 25.0 21.3 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 22.0 25.0 23.3 25.0 24.6 25.0 23.3 25.0 23.3 25.0 24.0 25.0	Added Result Qualifier Unit 25.0 23.2 ug/L 25.0 23.8 ug/L 25.0 22.5 ug/L 25.0 23.9 ug/L 125 140 ug/L 125 140 ug/L 125 140 ug/L 125 141 ug/L 25.0 22.6 ug/L 25.0 22.6 ug/L 25.0 22.6 ug/L 25.0 21.4 ug/L 25.0 21.4 ug/L 25.0 27.8 ug/L 25.0 27.8 ug/L 25.0 22.0 ug/L 25.0 22.1 ug/L 25.0 22.1 ug/L 25.0 22.8 ug	Added Result Qualifier Unit D %Rec 25.0 23.2 ug/L 93 25.0 22.5 ug/L 95 25.0 22.5 ug/L 90 25.0 23.0 ug/L 96 25.0 23.9 ug/L 96 125 128 ug/L 103 125 140 ug/L 101 125 140 ug/L 101 125 141 ug/L 113 25.0 22.6 ug/L 90 25.0 22.6 ug/L 90 25.0 22.4 ug/L 86 25.0 21.4 ug/L 86 25.0 21.4 ug/L 86 25.0 21.3 ug/L 85 25.0 22.0 ug/L 85 25.0 22.0 ug/L 94 25.0 22.1 ug/L 91

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
4-Bromofluorobenzene (Surr)	102		73 - 120
Toluene-d8 (Surr)	98		71 - 126
Dibromofluoromethane (Surr)	90		60 - 140

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

Lab Sample ID: MB 480-276779/7

Matrix: Water

Xylenes, Total

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 276779	МВ	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,1-Dichloroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,1-Dichloroethene	ND		1.0		ug/L			11/24/15 21:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/24/15 21:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/24/15 21:29	1
1,2-Dibromoethane	ND		1.0		ug/L			11/24/15 21:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/24/15 21:29	1
1,2-Dichloroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/24/15 21:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/24/15 21:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/24/15 21:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/24/15 21:29	1
2-Hexanone	ND		5.0	1.2	ug/L			11/24/15 21:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/24/15 21:29	1
Acetone	ND		10	3.0	ug/L			11/24/15 21:29	1
Benzene	ND		1.0	0.41	ug/L			11/24/15 21:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/24/15 21:29	1
Bromoform	ND		1.0		ug/L			11/24/15 21:29	1
Bromomethane	ND		1.0	0.69	ug/L			11/24/15 21:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/24/15 21:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/24/15 21:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/24/15 21:29	1
Chloroethane	ND		1.0	0.32	ug/L			11/24/15 21:29	1
Chloroform	ND		1.0	0.34	ug/L			11/24/15 21:29	1
Chloromethane	ND		1.0	0.35	ug/L			11/24/15 21:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/24/15 21:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/24/15 21:29	1
Cyclohexane	ND		1.0	0.18	ug/L			11/24/15 21:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/24/15 21:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/24/15 21:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/24/15 21:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/24/15 21:29	1
Methyl acetate	ND		2.5	1.3	ug/L			11/24/15 21:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/24/15 21:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/24/15 21:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/24/15 21:29	1
Styrene	ND		1.0	0.73	ug/L			11/24/15 21:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/24/15 21:29	1
Toluene	ND		1.0	0.51	ug/L			11/24/15 21:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/24/15 21:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/24/15 21:29	1
Trichloroethene	ND		1.0	0.46	ug/L			11/24/15 21:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/24/15 21:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/24/15 21:29	1
V. T. ()									

TestAmerica Buffalo

11/24/15 21:29

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2.0

0.66 ug/L

ND

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

MR MR

Lab Sample ID: MB 480-276779/7

Matrix: Water

Analysis Batch: 276779

Client Sample ID: Method Blank

Prep Type: Total/NA

	IND IND	•			
Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102	66 - 137		11/24/15 21:29	1
4-Bromofluorobenzene (Surr)	100	73 - 120		11/24/15 21:29	1
Toluene-d8 (Surr)	96	71 - 126		11/24/15 21:29	1
Dibromofluoromethane (Surr)	90	60 - 140		11/24/15 21:29	1

Lab Sample ID: LCS 480-276779/5

Matrix: Water

Analysis Batch: 276779

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier l	Jnit	D	%Rec	Limits	
1,1,1-Trichloroethane	25.0	24.3		ıg/L		97	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	24.9	ι	ıg/L		99	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	24.5	ι	ıg/L		98	52 - 148	
ne								
1,1,2-Trichloroethane	25.0	25.3		ıg/L		101	76 - 122	
1,1-Dichloroethane	25.0	24.6		ıg/L		98	71 - 129	
1,1-Dichloroethene	25.0	23.8		ıg/L		95	58 - 121	
1,2,4-Trichlorobenzene	25.0	24.4	ι	ıg/L		98	70 - 122	
1,2-Dibromo-3-Chloropropane	25.0	23.6	ι	ıg/L		94	56 - 134	
1,2-Dibromoethane	25.0	25.3	ι	ıg/L		101	77 - 120	
1,2-Dichlorobenzene	25.0	24.0	l	ıg/L		96	80 - 124	
1,2-Dichloroethane	25.0	25.6	ι	ıg/L		102	75 - 127	
1,2-Dichloropropane	25.0	23.3	ι	ıg/L		93	76 - 120	
1,3-Dichlorobenzene	25.0	23.1	l	ıg/L		92	77 - 120	
1,4-Dichlorobenzene	25.0	23.6	ι	ıg/L		94	75 - 120	
2-Butanone (MEK)	125	142	ι	ıg/L		114	57 - 140	
2-Hexanone	125	143	l	ıg/L		114	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	128	ι	ıg/L		103	71 - 125	
Acetone	125	157	ι	ıg/L		126	56 - 142	
Benzene	25.0	24.2	ι	ıg/L		97	71 - 124	
Bromodichloromethane	25.0	22.9		ıg/L		92	80 - 122	
Bromoform	25.0	21.3		ıg/L		85	52 ₋ 132	
Bromomethane	25.0	28.4		ig/L		113	55 - 144	
Carbon disulfide	25.0	23.8	ι	ıg/L		95	59 ₋ 134	
Carbon tetrachloride	25.0	24.1		ıg/L		97	72 - 134	
Chlorobenzene	25.0	24.5		ig/L		98	72 - 120	
Chloroethane	25.0	29.2		ıg/L		117	69 - 136	
Chloroform	25.0	24.5		ıg/L		98	73 - 127	
Chloromethane	25.0	19.4	ι	ig/L		78	68 - 124	
cis-1,2-Dichloroethene	25.0	22.9		ıg/L		92	74 - 124	
cis-1,3-Dichloropropene	25.0	23.7		ıg/L		95	74 - 124	
Cyclohexane	25.0	22.1		ig/L		88	59 - 135	
Dibromochloromethane	25.0	22.8		ıg/L		91	75 ₋ 125	
Dichlorodifluoromethane	25.0	15.1		ig/L		60	59 ₋ 135	
Ethylbenzene	25.0	25.4		ig/L		102	77 - 123	
Isopropylbenzene	25.0	24.5		ıg/L		98	77 ₋ 122	
Methyl acetate	125	134		ıg/L		107	74 - 133	
Methyl tert-butyl ether	25.0	24.7		ıg/L		99	64 - 127	
month tort butyr onlor	25.0	27.1	,	.≘, ⊏		33	OT - 121	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

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

Lab Sample ID: LCS 480-276779/5

Matrix: Water

Analysis Batch: 276779

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

Spike	LUS	LCS				%Rec.	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
25.0	23.7		ug/L		95	61 - 138	
25.0	25.2		ug/L		101	57 - 132	
25.0	24.2		ug/L		97	70 - 130	
25.0	23.7		ug/L		95	74 - 122	
25.0	24.6		ug/L		98	80 - 122	
25.0	23.8		ug/L		95	73 - 127	
25.0	25.3		ug/L		101	72 - 123	
25.0	22.7		ug/L		91	74 - 123	
25.0	26.4		ug/L		106	62 - 152	
25.0	21.4		ug/L		86	65 - 133	
50.0	47.3		ug/L		95	76 - 122	
	25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0	25.0 23.7 25.0 25.2 25.0 24.2 25.0 23.7 25.0 24.6 25.0 23.8 25.0 25.3 25.0 25.3 25.0 22.7 25.0 26.4 25.0 21.4	25.0 23.7 25.0 25.2 25.0 24.2 25.0 23.7 25.0 24.6 25.0 23.8 25.0 25.3 25.0 25.3 25.0 26.4 25.0 26.4 25.0 21.4	25.0 23.7 ug/L 25.0 25.2 ug/L 25.0 24.2 ug/L 25.0 23.7 ug/L 25.0 23.7 ug/L 25.0 24.6 ug/L 25.0 23.8 ug/L 25.0 25.3 ug/L 25.0 25.3 ug/L 25.0 26.4 ug/L 25.0 26.4 ug/L	25.0 23.7 ug/L 25.0 25.2 ug/L 25.0 24.2 ug/L 25.0 23.7 ug/L 25.0 24.6 ug/L 25.0 23.8 ug/L 25.0 25.3 ug/L 25.0 25.3 ug/L 25.0 26.4 ug/L 25.0 26.4 ug/L 25.0 21.4 ug/L	25.0 23.7 ug/L 95 25.0 25.2 ug/L 101 25.0 24.2 ug/L 97 25.0 23.7 ug/L 95 25.0 24.6 ug/L 98 25.0 23.8 ug/L 95 25.0 25.3 ug/L 101 25.0 22.7 ug/L 91 25.0 26.4 ug/L 106 25.0 21.4 ug/L 86	25.0 23.7 ug/L 95 61 - 138 25.0 25.2 ug/L 101 57 - 132 25.0 24.2 ug/L 97 70 - 130 25.0 23.7 ug/L 95 74 - 122 25.0 24.6 ug/L 98 80 - 122 25.0 23.8 ug/L 95 73 - 127 25.0 25.3 ug/L 101 72 - 123 25.0 22.7 ug/L 91 74 - 123 25.0 26.4 ug/L 106 62 - 152 25.0 21.4 ug/L 86 65 - 133

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	96		71 - 126
Dibromofluoromethane (Surr)	92		60 - 140

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

GC/MS VOA

Analysis Batch: 276376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91057-2	IW-03 (111015)	Total/NA	Water	8260C	
480-91057-3	MW-29 (111015)	Total/NA	Water	8260C	
480-91057-4	MW-19 (111015)	Total/NA	Water	8260C	
LCS 480-276376/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-276376/8	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 276407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91057-1	MW-1DD (111015)	Total/NA	Water	8260C	
480-91057-2 - DL	IW-03 (111015)	Total/NA	Water	8260C	
480-91057-2 MS	IW-03 (111015)	Total/NA	Water	8260C	
480-91057-2 MSD	IW-03 (111015)	Total/NA	Water	8260C	
480-91057-5	IW-02 (111015)	Total/NA	Water	8260C	
480-91057-8	MW-1D (111115)	Total/NA	Water	8260C	
480-91057-11	MW-2 (111115)	Total/NA	Water	8260C	
480-91057-12	MW-4 (111115)	Total/NA	Water	8260C	
480-91057-13	MW-14R (111115)	Total/NA	Water	8260C	
480-91057-14	MW-25D (111215)	Total/NA	Water	8260C	
480-91057-15	MW-13 (111215)	Total/NA	Water	8260C	
LCS 480-276407/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-276407/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 276559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91057-3 - DL	MW-29 (111015)	Total/NA	Water	8260C	
480-91057-5 - DL	IW-02 (111015)	Total/NA	Water	8260C	
480-91057-6	MW-26 (111015)	Total/NA	Water	8260C	
480-91057-7	MW-7 (111115)	Total/NA	Water	8260C	
480-91057-10	GM-9 (111115)	Total/NA	Water	8260C	
480-91057-13 - DL	MW-14R (111115)	Total/NA	Water	8260C	
480-91057-16	IW-01S (111215)	Total/NA	Water	8260C	
480-91057-17	TRIP BLANK	Total/NA	Water	8260C	
LCS 480-276559/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-276559/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 276779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91057-9	MW-22 (R) D (111115)	Total/NA	Water	8260C	
LCS 480-276779/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-276779/7	Method Blank	Total/NA	Water	8260C	

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-1DD (111015) Lab Sample ID: 480-91057-1

Date Collected: 11/10/15 09:10 Date Received: 11/13/15 09:30

Matrix: Water

Batch Dilution Batch Prepared Batch Method Run Factor Number or Analyzed **Prep Type** Type Analyst Lab TAL BUF Total/NA Analysis 8260C 276407 11/23/15 13:06 GTG

Client Sample ID: IW-03 (111015) Lab Sample ID: 480-91057-2

Date Collected: 11/10/15 10:50 Date Received: 11/13/15 09:30

Matrix: Water

Batch Batch Dilution Batch **Prepared Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA 8260C 276376 11/23/15 02:48 GTG TAL BUF Analysis Total/NA 8260C DL 10 276407 11/23/15 13:29 GTG TAL BUF Analysis

Client Sample ID: MW-29 (111015) Lab Sample ID: 480-91057-3

Batch

Prepared

276376 11/23/15 03:36

GTG

Date Collected: 11/10/15 12:25 Date Received: 11/13/15 09:30

Batch

Analysis

Batch

8260C

Matrix: Water

Prep Type Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA 8260C 4 276376 11/23/15 03:12 GTG TAL BUF Analysis

Dilution

Total/NA Analysis 8260C DL 25 276559 11/23/15 23:54 GTG **TAL BUF**

Client Sample ID: MW-19 (111015) Lab Sample ID: 480-91057-4

Date Collected: 11/10/15 14:25 Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared Method **Factor** Number or Analyzed Prep Type Type Run Analyst Lab

Client Sample ID: IW-02 (111015) Lab Sample ID: 480-91057-5

Date Collected: 11/10/15 15:55

Matrix: Water

TAL BUF

Matrix: Water

Date Received: 11/13/15 09:30

Total/NA

Batch Batch Dilution Batch **Prepared** Method or Analyzed Analyst Prep Type Type Run **Factor** Number Lab Total/NA 8260C 11/23/15 14:17 GTG 100 276407 TAL BUF Analysis Total/NA Analysis 8260C DL 200 276559 11/24/15 00:17 GTG TAL BUF

Client Sample ID: MW-26 (111015) Lab Sample ID: 480-91057-6

Date Collected: 11/10/15 17:15 **Matrix: Water**

Date Received: 11/13/15 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	276559	11/24/15 00:41	GTG	TAL BUF

TestAmerica Buffalo

10

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-7 (111115)

Lab Sample ID: 480-91057-7 Date Collected: 11/11/15 08:50

Matrix: Water

Matrix: Water

Date Received: 11/13/15 09:30

Batch Dilution Batch Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Total/NA Analysis 8260C 10 276559 11/24/15 01:05 GTG TAL BUF

Client Sample ID: MW-1D (111115) Lab Sample ID: 480-91057-8

Date Collected: 11/11/15 09:50 **Matrix: Water**

Date Received: 11/13/15 09:30

Batch Batch Dilution **Batch** Prepared Method Prep Type Type Run **Factor** Number or Analyzed **Analyst** Lab 11/23/15 15:29 GTG TAL BUF Total/NA 8260C 20 276407 Analysis

Client Sample ID: MW-22 (R) D (111115) Lab Sample ID: 480-91057-9

Date Collected: 11/11/15 11:20 **Matrix: Water**

Date Received: 11/13/15 09:30

Ratch Ratch Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed **Analyst** 8260C 80 11/24/15 22:01 GTG TAL BUF Total/NA Analysis

Client Sample ID: GM-9 (111115) Lab Sample ID: 480-91057-10

Date Collected: 11/11/15 15:35 Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared

Method or Analyzed Run **Factor** Number Analyst Prep Type Type Lab TAL BUF Total/NA 8260C 11/24/15 01:52 GTG Analysis 10 276559

Client Sample ID: MW-2 (1111115) Lab Sample ID: 480-91057-11

Date Collected: 11/11/15 18:50 **Matrix: Water**

Date Received: 11/13/15 09:30

Analysis

8260C

Total/NA

Batch Batch Dilution Batch Prepared Prep Type Type Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 8260C 276407 11/23/15 16:40 GTG TAL BUF

Client Sample ID: MW-4 (111115) Lab Sample ID: 480-91057-12

11/23/15 17:04 GTG

TAL BUF

Date Collected: 11/11/15 20:10 Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab

TestAmerica Buffalo

Matrix: Water

2

10

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-14R (111115)

Lab Sample ID: 480-91057-13

Date Collected: 11/11/15 22:10 Matrix: Water

Date Received: 11/13/15 09:30

Batch Dilution Batch Batch **Prepared Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA Analysis 8260C 4 276407 11/23/15 17:28 GTG TAL BUF 8260C Total/NA Analysis DL 8 276559 11/24/15 02:16 GTG **TAL BUF**

Client Sample ID: MW-25D (111215)

Lab Sample ID: 480-91057-14

Date Collected: 11/12/15 09:45 Matrix: Water

Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Total/NA 8260C 11/23/15 17:51 GTG TAL BUF Analysis

Client Sample ID: MW-13 (111215) Lab Sample ID: 480-91057-15

Date Collected: 11/12/15 11:40 Matrix: Water

Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared Method or Analyzed Type Run **Factor** Number Analyst **Prep Type** Lab Total/NA Analysis 8260C 500 276407 11/23/15 18:15 GTG TAL BUF

Client Sample ID: IW-01S (111215)

Lab Sample ID: 480-91057-16

Date Collected: 11/12/15 13:10 Matrix: Water

Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared Method Run Factor Number or Analyzed Prep Type Type **Analyst** Lab Total/NA 8260C 20 276559 11/24/15 02:40 GTG TAL BUF Analysis

Client Sample ID: TRIP BLANK Lab Sample ID: 480-91057-17

Date Collected: 11/12/15 00:00 Matrix: Water

Date Received: 11/13/15 09:30

Batch Dilution Batch Batch **Prepared Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA Analysis 8260C 276559 11/24/15 03:04 GTG TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91057-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF

Protocol References:

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

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Sample Summary

Client: ARCADIS U.S. Inc

480-91057-17

Project/Site: Crown Dykman - Glen Cove, NY

TRIP BLANK

TestAmerica Job ID: 480-91057-1

11/12/15 00:00 11/13/15 09:30

Lab Sample ID	Client Sample ID	Matrix	Collected Received
480-91057-1	MW-1DD (111015)	Water	11/10/15 09:10 11/13/15 09:30
480-91057-2	IW-03 (111015)	Water	11/10/15 10:50 11/13/15 09:30
480-91057-3	MW-29 (111015)	Water	11/10/15 12:25 11/13/15 09:30
480-91057-4	MW-19 (111015)	Water	11/10/15 14:25 11/13/15 09:30
480-91057-5	IW-02 (111015)	Water	11/10/15 15:55 11/13/15 09:30
480-91057-6	MW-26 (111015)	Water	11/10/15 17:15 11/13/15 09:30
480-91057-7	MW-7 (111115)	Water	11/11/15 08:50 11/13/15 09:30
480-91057-8	MW-1D (111115)	Water	11/11/15 09:50 11/13/15 09:30
480-91057-9	MW-22 (R) D (111115)	Water	11/11/15 11:20 11/13/15 09:30
480-91057-10	GM-9 (111115)	Water	11/11/15 15:35 11/13/15 09:30
480-91057-11	MW-2 (111115)	Water	11/11/15 18:50 11/13/15 09:30
480-91057-12	MW-4 (111115)	Water	11/11/15 20:10 11/13/15 09:30
480-91057-13	MW-14R (111115)	Water	11/11/15 22:10 11/13/15 09:30
480-91057-14	MW-25D (111215)	Water	11/12/15 09:45 11/13/15 09:30
480-91057-15	MW-13 (111215)	Water	11/12/15 11:40 11/13/15 09:30
480-91057-16	IW-01S (111215)	Water	11/12/15 13:10 11/13/15 09:30

Water

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Chain of Custody Record

TestAmerica Buffalo

PostAmorio

THE LEADER OF SAME CARENTAL TESTAGE

S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA S (specify) Special Instructions/Note: Q - Na2SO3 R - Na2S2SO3 0 - AsNaO2 P - Na2O4S 480-73997-18814.3 Preservation Codes A - HCL
B - NaOH
C - Zn Acetate
D - Nitro Acid
E - NanSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid Page: Page3.of5-Job#: í - Ice J - ⊡ Water 480-91057 Chain of Custody 30T 30 men W W W W W) **Analysis Requested** E-Mail: melissa.deyo@testamericainc.com $\overline{\mathsf{x}}$ × Lab PM: Deyo, Melissa L (on to sey) DSM/SM michies (W=water, S=solid, O=waste/oll, Preservation Code: Matrix Water 85+t-8tt (015) Andrew leave the Type (C=comp, G=grab) TAT Requested (days): Standard P b J \mathcal{P} P ${\mathcal P}$ 850 950 දි <u>=</u> 1850 1850 1050 11-10-15 1225 SSS1 Stor-11 Sample 11-10-15/1425 11-10-15 11715 11-11-15 1535 Time 2000 Due Date Requested: 11-11-15 11-11-15 151-11-1 PO#: 00266417.0000 21-01-11 11-11-15 1-8-15 Sample Date Project #: 48008440 SSOW#: WO# hone: (518)250-7330 MW-32(R)D(111115 66 Herb Hill Rocal MW-26 (111015 MW-ID(IIII)S MW-100(111015 MW-19 (111015 IW-02(111015 NW-29(111015 MW-7 (111115 Crown Dykman - Glen Cove, NY TW-03(111015 aaron.bobar@arcadis-us.com GM-9(111115) MW-2(11111) 855 Route 146 Suite 210 Client Information Sample Identification company: ARCADIS U.S. Inc Aaron Bobar Clifton Park State, Zip: NY, 12065

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

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11/27/2015

elinquished by:

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

Special Instructions/QC Requirements:

Retum To Client

Radiological

Unknown

Poison B

Spil

Deliverable Requested: 1, II, IV, Other (specify)

Empty Kit Relinquished by:

elinquished by: ρ

Flammable

Possible Hazard Identification

Si Chile

Company APこんのじ

1600

C. Leavith Parellewith 11-13-15

Method of Shipment

Archive For

Company

Date/Time:

6

Cooler Temperature(s) °C and Other Remarks:

14

Received by:

Company

Date/Time:

Custody Seal No.:

Custody Seals Intact: △ Yes △ No

Cooler Temperature(s) °C and Other Remarks.

Received by:

Company

Date/Time:

Custody Seal No.:

Custody Seals Intact:

Chain of Custody Record

TestAmerica Buffalo

TestAmerico

10 Hazelwood Drive Amherst, NY 14228-2298 Eboop (148) 604 7000	Chain of	ain of Custody Record	cord				SOLVENSON SOLVEN	OSPICATION OF THE PROPERTY OF
	Sampler:		Lab PM: Devo Molissa I		Camer Tracking No(s)	:(s)	COC No:	
	Phone: (240) 410 1000	C	- Tangara				Page:	10
out			Anal	Analysis Reguested	I Inserted		Job #	dotate
te 210	Due Date Requested:						ပိ	
	TAT Requested (days):					. 2	B-NaOH N	M - Hexane N - None O - Ashans
State, ZIp. NY, 12065	Stanford					:		- Na2O4S - Na2SO3
Phone: 8) 350-7350	PO#: 00266417.0000		7				ģ	- Na2S2SO3 - H2SO4 - TSP Dodecahydrate
@arcadis-us.com	,WO #;					\$	I - Ice J - DI Water	U - Acetone V - MCAA
٨٨	Project #. 48008440					ienletr	K-EDTA L-EDA	W - ph 4-5 Z - other (specify)
site to therb Hill Road	SSOW#;		Y) asi			100 10	Other:	
	Š	Matrix	W/SW			1edini		
;	Sample	(W=water, S=solid, O=waste/oll,	eld FII mrofie T - 508			in listo		
Sample Identification	Sample Date Time G	G=grab) BT=TISSUE, A=AIr) B	28	2	7	10.00		Special Instructions/Note:
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MW-25D(111215)	11-13-15 945	√ Water N	×					
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IN-015(111315)		(G Water N	<u>→</u>					
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Possible Hazard Identification Non-Hazard Hammable Skin Inflant Poison B	B Tinknown Kadiological	iical	Sample Disposal (At	I (A fee may be as	e assessed if sample Disposal By Lab	es are retained Ion	ger than 1 mc	onth) Months
2	Bolon		Special Instruction	Requiren	is:			
			Time:		Method of Shipment	pment		
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		Company	Received by:		Da	Date/Time:		Company

elinquished by:

Client: ARCADIS U.S. Inc

Job Number: 480-91057-1

Login Number: 91057 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Creator: Kolb, Chris M		
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.	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.	False	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

TestAmerica Buffalo



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-91066-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

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Authorized for release by: 11/27/2015 2:05:52 PM Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I (716)504-9874 melissa.deyo@testamericainc.com

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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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description		
F1	MS and/or MSD Recovery 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.		
E	Result exceeded calibration range.		

These commonly used abbreviations may or may not be present in this report.

Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Glossary Abbreviation

RPD

TEF

TEQ

n	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)

TestAmerica Buffalo

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Job ID: 480-91066-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-91066-1

Receipt

The samples were received on 11/13/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.8° C and 3.8° C.

Receipt Exceptions

The container label for the sample time does not match the information listed on the Chain-of-Custody (COC) for the following sample: IW-01D (111215) (480-91066-14). The container labels list a collection time of 13:15, while the COC lists a collection time of 13:12. Sample was logged in according to Sample label, COC was not received until 4 days later.

A Chain-of-Custody (COC) was not received with these samples. The COC was sent by the client on 11/17/15.

GC/MS VOA

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-6R (111015) (480-91066-1), MW-6R (111015) (480-91066-1[MSD]), MW-6R (111015) (480-91066-1[MSD]), DUP-01 (111015) (480-91066-2), MW-1 (111015) (480-91066-3), MW-27 (111015) (480-91066-4), MW-28 (111015) (480-91066-5) and MW-23S (111115) (480-91066-6). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-23D (111115) (480-91066-7), MW-22D (111115) (480-91066-10), MW-9 (111115) (480-91066-11), MW-18 (111115) (480-91066-15), MW-10S (111215) (480-91066-17), (480-91066-B-7 MS) and (480-91066-B-7 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-10D (111215) (480-91066-13), IW-01D (111215) (480-91066-14) and MW-18 (111115) (480-91066-15). 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.

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2

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-6R (111015)

Lab Sample ID: 480-91066-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	190	F1	5.0	4.1	ug/L	5	_	8260C	Total/NA
Ethylbenzene	25		5.0	3.7	ug/L	5		8260C	Total/NA
Isopropylbenzene	20		5.0	4.0	ug/L	5		8260C	Total/NA
Methyl tert-butyl ether	9.9	F1	5.0	0.80	ug/L	5		8260C	Total/NA
Methylcyclohexane	1.7	J	5.0	0.80	ug/L	5		8260C	Total/NA
Vinyl chloride	220		5.0	4.5	ug/L	5		8260C	Total/NA
Xylenes, Total	11		10	3.3	ug/L	5		8260C	Total/NA

Client Sample ID: DUP-01 (111015)

Lab Sample ID: 480-91066-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	1.8	J	5.0	1.6	ug/L		_	8260C	Total/NA
cis-1,2-Dichloroethene	210		5.0	4.1	ug/L	5		8260C	Total/NA
Ethylbenzene	25		5.0	3.7	ug/L	5		8260C	Total/NA
Isopropylbenzene	19		5.0	4.0	ug/L	5		8260C	Total/NA
Methyl tert-butyl ether	12		5.0	0.80	ug/L	5		8260C	Total/NA
Methylcyclohexane	1.7	J	5.0	0.80	ug/L	5		8260C	Total/NA
Vinyl chloride	240		5.0	4.5	ug/L	5		8260C	Total/NA
Xylenes, Total	11		10	3.3	ug/L	5		8260C	Total/NA

Client Sample ID: MW-1 (111015)

Lab Sample ID: 480-91066-3

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	1700	40	32 ug/L	40	8260C	Total/NA
Tetrachloroethene	260	40	14 ug/L	40	8260C	Total/NA
Trichloroethene	170	40	18 ug/L	40	8260C	Total/NA

Client Sample ID: MW-27 (111015)

Lab Sample ID: 480-91066-4

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	140000	2000	1600	ug/L	2000	8260C	Total/NA
Tetrachloroethene	140000	2000	720	ug/L	2000	8260C	Total/NA
Trichloroethene	18000	2000	920	ug/L	2000	8260C	Total/NA
Vinyl chloride	7700	2000	1800	ug/L	2000	8260C	Total/NA

Client Sample ID: MW-28 (111015)

Lab Sample ID: 480-91066-5

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	47000	2000	1600 ug/L	2000	8260C	Total/NA
Tetrachloroethene	26000	2000	720 ug/L	2000	8260C	Total/NA
Trichloroethene	15000	2000	920 ug/L	2000	8260C	Total/NA
Vinyl chloride	1800 J	2000	1800 ug/L	2000	8260C	Total/NA

Client Sample ID: MW-23S (111115)

Lab Sample ID: 480-91066-6

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Me	thod	Prep Type
cis-1,2-Dichloroethene	750	10	8.1	ug/L		_ 82	60C	Total/NA
Tetrachloroethene	780	10	3.6	ug/L	10	82	60C	Total/NA
Trichloroethene	270	10	4.6	ug/L	10	82	60C	Total/NA
Vinyl chloride	11	10	9.0	ug/L	10	82	60C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Job ID: 480-91066-1

Lab Sample ID: 480-91066-8

Lab Sample ID: 480-91066-10

Lab Sample ID: 480-91066-11

Lab Sample ID: 480-91066-12

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-23D (111115) Lab Sample ID: 480-91066-7

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	1300 F1	20	16	ug/L	20	8260C	Total/NA
Methyl tert-butyl ether	12 J	20	3.2	ug/L	20	8260C	Total/NA
Tetrachloroethene	1300 F1	20	7.2	ug/L	20	8260C	Total/NA
Trichloroethene	500 F1	20	9.2	ug/L	20	8260C	Total/NA
Vinyl chloride	140	20	18	ug/L	20	8260C	Total/NA

Client Sample ID: MW-17R (111015)

- Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
1,2-Dichloropropane	1.7	1.0	0.72	ug/L		8260C	Total/NA
Benzene	4.3	1.0	0.41	ug/L	1	8260C	Total/NA
Chloroethane	4.5	1.0	0.32	ug/L	1	8260C	Total/NA
cis-1,2-Dichloroethene	55	1.0	0.81	ug/L	1	8260C	Total/NA
Cyclohexane	0.50 J	1.0	0.18	ug/L	1	8260C	Total/NA
Ethylbenzene	8.6	1.0	0.74	ug/L	1	8260C	Total/NA
Isopropylbenzene	26	1.0	0.79	ug/L	1	8260C	Total/NA

Client Sample ID: MW-1	6R (111015)			Lab Sa	ample ID:	480-91066-9
Vinyl chloride	62	1.0	0.90 ug/L	1	8260C	Total/NA
Toluene	0.61 J	1.0	0.51 ug/L	1	8260C	Total/NA
Tetrachloroethene	0.74 J	1.0	0.36 ug/L	1	8260C	Total/NA
Methylcyclohexane	1.7	1.0	0.16 ug/L	1	8260C	Total/NA
Methyl tert-butyl ether	14	1.0	0.16 ug/L	1	8260C	Total/NA

Client Sample ID: MW-16R (111015)

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.41	J	1.0	0.41	ug/L	1	_	8260C	Total/NA
cis-1,2-Dichloroethene	16		1.0	0.81	ug/L	1		8260C	Total/NA
Ethylbenzene	34		1.0	0.74	ug/L	1		8260C	Total/NA
Isopropylbenzene	15		1.0	0.79	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.96	J	1.0	0.16	ug/L	1		8260C	Total/NA
Tetrachloroethene	18		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	3.2		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	1.0		1.0	0.90	ug/L	1		8260C	Total/NA
Xylenes, Total	5.7		2.0	0.66	ug/L	1		8260C	Total/NA

Client Sample ID: MW-22D (111115)

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	380		5.0	4.1	ug/L	5	_	8260C	Total/NA
Tetrachloroethene	180		5.0	1.8	ug/L	5		8260C	Total/NA
Trichloroethene	130		5.0	2.3	ug/L	5		8260C	Total/NA
Vinyl chloride	23		5.0	4.5	ug/L	5		8260C	Total/NA

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	700	10	8.1 ug/L		8260C	Total/NA
Vinyl chloride	340	10	9.0 ug/L	10	8260C	Total/NA

Client Sample ID: MP-20 (111115)

This Detection Summary does not include radiochemical test results.

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TestAmerica Job ID: 480-91066-1

Lab Sample ID: 480-91066-14

Lab Sample ID: 480-91066-15

Lab Sample ID: 480-91066-16

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MP-20 (111115) (Continued)

Lab Sample ID: 480-91066-12

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	3.0	1.0	0.81 ug/L		8260C	Total/NA
Tetrachloroethene	0.69 J	1.0	0.36 ug/L	1	8260C	Total/NA
Trichloroethene	0.91 J	1.0	0.46 ug/L	1	8260C	Total/NA

Client Sample ID: MW-10D (111215)

Lab Sample ID: 480-91066-13

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
Tetrachloroethene	28000	1000	360 ug/L	1000 8260C	Total/NA
Trichloroethene	2500	1000	460 ug/L	1000 8260C	Total/NA

Client Sample ID: IW-01D (111215)

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	0.22	J	1.0	0.21	ug/L		_	8260C	Total/NA
1,1-Dichloroethane	1.2		1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	8.9	J	10	3.0	ug/L	1		8260C	Total/NA
Carbon tetrachloride	0.41	J	1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	120	E	1.0	0.81	ug/L	1		8260C	Total/NA
Tetrachloroethene	1700	E	1.0	0.36	ug/L	1		8260C	Total/NA
Toluene	0.84	J	1.0	0.51	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.1		1.0	0.90	ug/L	1		8260C	Total/NA
Trichloroethene	15		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	9.9		1.0	0.90	ug/L	1		8260C	Total/NA
Xylenes, Total	6.4		2.0	0.66	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	120		100	81	ug/L	100		8260C	Total/NA
Tetrachloroethene - DL	2300		100	36	ug/L	100		8260C	Total/NA

Client Sample ID: MW-18 (111115)

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	/lethod	Prep Type
cis-1,2-Dichloroethene	4100	E	40	32	ug/L	40	_ 8	3260C	Total/NA
Tetrachloroethene	4900	E	40	14	ug/L	40	8	3260C	Total/NA
Trichloroethene	1500		40	18	ug/L	40	8	3260C	Total/NA
Vinyl chloride	350		40	36	ug/L	40	8	3260C	Total/NA
cis-1,2-Dichloroethene - DL	3300		80	65	ug/L	80	8	3260C	Total/NA
Tetrachloroethene - DL	4300		80	29	ug/L	80	8	3260C	Total/NA
Trichloroethene - DL	1300		80	37	ug/L	80	8	3260C	Total/NA
Vinyl chloride - DL	290		80	72	ug/L	80	8	3260C	Total/NA

Client Sample ID: MW-3 (111115)

No Detections.

Client Sample ID: MW-10S (111215)

Lab Sample ID: 480-91066-17

 Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3600	100	81	ug/L	100	_	8260C	Total/NA
Tetrachloroethene	2500	100	36	ug/L	100		8260C	Total/NA
Trichloroethene	860	100	46	ug/L	100		8260C	Total/NA
Vinyl chloride	100	100	90	ug/L	100		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

11/27/2015

Detection Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-15R (111115)

TestAmerica Job ID: 480-91066-1

Lab Sample ID: 480-91066-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	0.99	J	1.0	0.81	ug/L	1	8260C	Total/NA
Cyclohexane	0.54	J	1.0	0.18	ug/L	1	8260C	Total/NA
Ethylbenzene	13		1.0	0.74	ug/L	1	8260C	Total/NA
Isopropylbenzene	15		1.0	0.79	ug/L	1	8260C	Total/NA
Methylcyclohexane	3.2		1.0	0.16	ug/L	1	8260C	Total/NA
Tetrachloroethene	1.5		1.0	0.36	ug/L	1	8260C	Total/NA

Client Sample ID: TB Lab Sample ID: 480-91066-19

No Detections.

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Lab Sample ID: 480-91066-1

Matrix: Water

Client Sample ID: MW-6R (111015)

Date Collected: 11/10/15 10:52 Date Received: 11/13/15 09:30

Analyte	Result Qu	ualifier RL	MDL		D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	5.0	4.1	ug/L			11/24/15 03:28	
1,1,2,2-Tetrachloroethane	ND	5.0	1.1	ug/L			11/24/15 03:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	1.6	ug/L			11/24/15 03:28	
1,1,2-Trichloroethane	ND	5.0	1.2	ug/L			11/24/15 03:28	
1,1-Dichloroethane	ND	5.0	1.9	ug/L			11/24/15 03:28	į
1,1-Dichloroethene	ND	5.0	1.5	ug/L			11/24/15 03:28	
1,2,4-Trichlorobenzene	ND	5.0	2.1	ug/L			11/24/15 03:28	
1,2-Dibromo-3-Chloropropane	ND	5.0		ug/L			11/24/15 03:28	
1,2-Dibromoethane	ND	5.0		ug/L			11/24/15 03:28	į
1,2-Dichlorobenzene	ND	5.0		ug/L			11/24/15 03:28	
1,2-Dichloroethane	ND	5.0		ug/L			11/24/15 03:28	į
1,2-Dichloropropane	ND	5.0		ug/L			11/24/15 03:28	į
1,3-Dichlorobenzene	ND	5.0		ug/L			11/24/15 03:28	
1,4-Dichlorobenzene	ND	5.0		ug/L			11/24/15 03:28	į
2-Butanone (MEK)	ND	50		ug/L			11/24/15 03:28	į
2-Hexanone	ND	25		ug/L			11/24/15 03:28	
4-Methyl-2-pentanone (MIBK)	ND	25		ug/L			11/24/15 03:28	į
Acetone	ND	50		ug/L			11/24/15 03:28	į
Benzene	ND	5.0		ug/L			11/24/15 03:28	
Bromodichloromethane	ND ND	5.0		ug/L ug/L			11/24/15 03:28	
Bromoform	ND			ug/L ug/L				
		5.0					11/24/15 03:28	
Bromomethane	ND	5.0		ug/L			11/24/15 03:28	
Carbon disulfide	ND	5.0	0.95	-			11/24/15 03:28	
Carbon tetrachloride	ND	5.0		ug/L			11/24/15 03:28	
Chlorobenzene	ND	5.0		ug/L			11/24/15 03:28	
Chloroethane	ND	5.0		ug/L			11/24/15 03:28	
Chloroform	ND	5.0		ug/L			11/24/15 03:28	
Chloromethane	ND	5.0		ug/L			11/24/15 03:28	!
cis-1,2-Dichloroethene	190 F1			ug/L			11/24/15 03:28	į
cis-1,3-Dichloropropene	ND	5.0		ug/L			11/24/15 03:28	
Cyclohexane	ND	5.0	0.90	-			11/24/15 03:28	į
Dibromochloromethane	ND	5.0		ug/L			11/24/15 03:28	į
Dichlorodifluoromethane	ND	5.0		ug/L			11/24/15 03:28	!
Ethylbenzene	25	5.0		ug/L			11/24/15 03:28	į
Isopropylbenzene	20	5.0		ug/L			11/24/15 03:28	į
Methyl acetate	ND	13		ug/L			11/24/15 03:28	
Methyl tert-butyl ether	9.9 F1	5.0	0.80	ug/L			11/24/15 03:28	
Methylcyclohexane	1.7 J	5.0	0.80	ug/L			11/24/15 03:28	į
Methylene Chloride	ND	5.0	2.2	ug/L			11/24/15 03:28	į.
Styrene	ND	5.0	3.7	ug/L			11/24/15 03:28	
Tetrachloroethene	ND	5.0	1.8	ug/L			11/24/15 03:28	
Toluene	ND	5.0	2.6	ug/L			11/24/15 03:28	
trans-1,2-Dichloroethene	ND	5.0	4.5	ug/L			11/24/15 03:28	
trans-1,3-Dichloropropene	ND	5.0		ug/L			11/24/15 03:28	į
Trichloroethene	ND	5.0		ug/L			11/24/15 03:28	į.
Trichlorofluoromethane	ND	5.0		ug/L			11/24/15 03:28	
Vinyl chloride	220	5.0		ug/L			11/24/15 03:28	į
Xylenes, Total	11	10		ug/L			11/24/15 03:28	į

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Client Sample ID: MW-6R (111015)

Lab Sample ID: 480-91066-1

Matrix: Water

Date Collected: 11/10/15 10:52 Date Received: 11/13/15 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137	11/24/15 03:	28 5
4-Bromofluorobenzene (Surr)	98		73 - 120	11/24/15 03:	28 5
Toluene-d8 (Surr)	96		71 - 126	11/24/15 03:	28 5
Dibromofluoromethane (Surr)	92		60 - 140	11/24/15 03:	28 5

Lab Sample ID: 480-91066-2 Client Sample ID: DUP-01 (111015)

Date Collected: 11/10/15 00:00

Matrix: Water Date Received: 11/13/15 09:30

Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			11/24/15 06:14	- 5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			11/24/15 06:14	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			11/24/15 06:14	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			11/24/15 06:14	5
1,1-Dichloroethane	ND		5.0	1.9	ug/L			11/24/15 06:14	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			11/24/15 06:14	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			11/24/15 06:14	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			11/24/15 06:14	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			11/24/15 06:14	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			11/24/15 06:14	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			11/24/15 06:14	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			11/24/15 06:14	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			11/24/15 06:14	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			11/24/15 06:14	5
2-Butanone (MEK)	ND		50	6.6	ug/L			11/24/15 06:14	5
2-Hexanone	ND		25	6.2	ug/L			11/24/15 06:14	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			11/24/15 06:14	5
Acetone	ND		50	15	ug/L			11/24/15 06:14	5
Benzene	ND		5.0	2.1	ug/L			11/24/15 06:14	5
Bromodichloromethane	ND		5.0	2.0	ug/L			11/24/15 06:14	5
Bromoform	ND		5.0	1.3	ug/L			11/24/15 06:14	5
Bromomethane	ND		5.0	3.5	ug/L			11/24/15 06:14	5
Carbon disulfide	ND		5.0	0.95	ug/L			11/24/15 06:14	Ę
Carbon tetrachloride	ND		5.0	1.4	ug/L			11/24/15 06:14	Ę
Chlorobenzene	ND		5.0	3.8	ug/L			11/24/15 06:14	5
Chloroethane	1.8	J	5.0	1.6	ug/L			11/24/15 06:14	5
Chloroform	ND		5.0	1.7	ug/L			11/24/15 06:14	5
Chloromethane	ND		5.0	1.8	ug/L			11/24/15 06:14	5
cis-1,2-Dichloroethene	210		5.0	4.1	ug/L			11/24/15 06:14	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			11/24/15 06:14	5
Cyclohexane	ND		5.0	0.90	ug/L			11/24/15 06:14	5
Dibromochloromethane	ND		5.0	1.6	ug/L			11/24/15 06:14	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			11/24/15 06:14	į
Ethylbenzene	25		5.0	3.7	ug/L			11/24/15 06:14	
Isopropylbenzene	19		5.0	4.0	ug/L			11/24/15 06:14	Ę
Methyl acetate	ND		13	6.5	ug/L			11/24/15 06:14	Ę
Methyl tert-butyl ether	12		5.0	0.80	ug/L			11/24/15 06:14	
Methylcyclohexane	1.7	J	5.0	0.80	ug/L			11/24/15 06:14	5
Methylene Chloride	ND		5.0	2.2	ug/L			11/24/15 06:14	5

TestAmerica Job ID: 480-91066-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: DUP-01 (111015)

Lab Sample ID: 480-91066-2 Date Collected: 11/10/15 00:00 **Matrix: Water**

Date Received: 11/13/15 09:30

Method: 8260C - Volatile O Analyte	•	Qualifier	RL	•	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	3.7	ug/L			11/24/15 06:14	5
Tetrachloroethene	ND		5.0	1.8	ug/L			11/24/15 06:14	5
Toluene	ND		5.0	2.6	ug/L			11/24/15 06:14	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			11/24/15 06:14	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			11/24/15 06:14	5
Trichloroethene	ND		5.0	2.3	ug/L			11/24/15 06:14	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			11/24/15 06:14	5
Vinyl chloride	240		5.0	4.5	ug/L			11/24/15 06:14	5
Xylenes, Total	11		10	3.3	ug/L			11/24/15 06:14	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			•		11/24/15 06:14	5
4-Bromofluorobenzene (Surr)	99		73 - 120					11/24/15 06:14	5
Toluene-d8 (Surr)	95		71 - 126					11/24/15 06:14	5
Dibromofluoromethane (Surr)	98		60 - 140					11/24/15 06:14	5

Client Sample ID: MW-1 (111015)

Lab Sample ID: 480-91066-3 Date Collected: 11/10/15 09:10 **Matrix: Water**

Date Received: 11/13/15 09:30

Analyte	Result C	Qualifier F	L M	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	33	ug/L			11/24/15 03:52	40
1,1,2,2-Tetrachloroethane	ND	4	10	8.4	ug/L			11/24/15 03:52	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4	10	12	ug/L			11/24/15 03:52	40
1,1,2-Trichloroethane	ND	4	10	9.2	ug/L			11/24/15 03:52	40
1,1-Dichloroethane	ND	4	10	15	ug/L			11/24/15 03:52	40
1,1-Dichloroethene	ND	4	10	12	ug/L			11/24/15 03:52	40
1,2,4-Trichlorobenzene	ND		Ю	16	ug/L			11/24/15 03:52	40
1,2-Dibromo-3-Chloropropane	ND	4	10	16	ug/L			11/24/15 03:52	40
1,2-Dibromoethane	ND	4	10	29	ug/L			11/24/15 03:52	40
1,2-Dichlorobenzene	ND		Ю	32	ug/L			11/24/15 03:52	40
1,2-Dichloroethane	ND	4	10	8.4	ug/L			11/24/15 03:52	40
1,2-Dichloropropane	ND	4	10	29	ug/L			11/24/15 03:52	40
1,3-Dichlorobenzene	ND	4	Ю	31	ug/L			11/24/15 03:52	40
1,4-Dichlorobenzene	ND	4	10	34	ug/L			11/24/15 03:52	40
2-Butanone (MEK)	ND	40	00	53	ug/L			11/24/15 03:52	40
2-Hexanone	ND	20	00	50	ug/L			11/24/15 03:52	40
4-Methyl-2-pentanone (MIBK)	ND	20	00	84	ug/L			11/24/15 03:52	40
Acetone	ND	40	00	120	ug/L			11/24/15 03:52	40
Benzene	ND		10	16	ug/L			11/24/15 03:52	40
Bromodichloromethane	ND	4	10	16	ug/L			11/24/15 03:52	40
Bromoform	ND	4	10	10	ug/L			11/24/15 03:52	40
Bromomethane	ND		10	28	ug/L			11/24/15 03:52	40
Carbon disulfide	ND	4	10	7.6	ug/L			11/24/15 03:52	40
Carbon tetrachloride	ND	4	10	11	ug/L			11/24/15 03:52	40
Chlorobenzene	ND		10	30	ug/L			11/24/15 03:52	40
Chloroethane	ND	4	10	13	ug/L			11/24/15 03:52	40
Chloroform	ND	4	10	14	ug/L			11/24/15 03:52	40
Chloromethane	ND		10	14	ug/L			11/24/15 03:52	40

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91066-3

Matrix: Water

Client Sample ID: MW-1 (111015)

Date Collected: 11/10/15 09:10 Date Received: 11/13/15 09:30

Analyte	Result Q	ualifier R	L MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1700	4	0 32	ug/L			11/24/15 03:52	40
cis-1,3-Dichloropropene	ND	4	0 14	ug/L			11/24/15 03:52	40
Cyclohexane	ND	4	0 7.2	ug/L			11/24/15 03:52	40
Dibromochloromethane	ND	4	0 13	ug/L			11/24/15 03:52	40
Dichlorodifluoromethane	ND	4	0 27	ug/L			11/24/15 03:52	40
Ethylbenzene	ND	4	0 30	ug/L			11/24/15 03:52	40
Isopropylbenzene	ND	4	0 32	ug/L			11/24/15 03:52	40
Methyl acetate	ND	10	0 52	ug/L			11/24/15 03:52	40
Methyl tert-butyl ether	ND	4	0 6.4	ug/L			11/24/15 03:52	40
Methylcyclohexane	ND	4	0 6.4	ug/L			11/24/15 03:52	40
Methylene Chloride	ND	4	0 18	ug/L			11/24/15 03:52	40
Styrene	ND	4	0 29	ug/L			11/24/15 03:52	40
Tetrachloroethene	260	4	0 14	ug/L			11/24/15 03:52	40
Toluene	ND	4	0 20	ug/L			11/24/15 03:52	40
trans-1,2-Dichloroethene	ND	4	0 36	ug/L			11/24/15 03:52	40
trans-1,3-Dichloropropene	ND	4	0 15	ug/L			11/24/15 03:52	40
Trichloroethene	170	4	0 18	ug/L			11/24/15 03:52	40
Trichlorofluoromethane	ND	4	0 35	ug/L			11/24/15 03:52	40
Vinyl chloride	ND	4	0 36	ug/L			11/24/15 03:52	40
Xylenes, Total	ND	8	0 26	ug/L			11/24/15 03:52	40
Surrogate	%Recovery Q	ualifier Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100	66 - 137	_				11/24/15 03:52	40
4-Bromofluorobenzene (Surr)	98	73 - 120					11/24/15 03:52	40
Toluene-d8 (Surr)	97	71 - 126					11/24/15 03:52	40
Dibromofluoromethane (Surr)	92	60 - 140					11/24/15 03:52	40

Client Sample ID: MW-27 (111015)

Date Collected: 11/10/15 12:17 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2000	1600	ug/L			11/24/15 04:15	2000
1,1,2,2-Tetrachloroethane	ND		2000	420	ug/L			11/24/15 04:15	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2000	620	ug/L			11/24/15 04:15	2000
1,1,2-Trichloroethane	ND		2000	460	ug/L			11/24/15 04:15	2000
1,1-Dichloroethane	ND		2000	760	ug/L			11/24/15 04:15	2000
1,1-Dichloroethene	ND		2000	580	ug/L			11/24/15 04:15	2000
1,2,4-Trichlorobenzene	ND		2000	820	ug/L			11/24/15 04:15	2000
1,2-Dibromo-3-Chloropropane	ND		2000	780	ug/L			11/24/15 04:15	2000
1,2-Dibromoethane	ND		2000	1500	ug/L			11/24/15 04:15	2000
1,2-Dichlorobenzene	ND		2000	1600	ug/L			11/24/15 04:15	2000
1,2-Dichloroethane	ND		2000	420	ug/L			11/24/15 04:15	2000
1,2-Dichloropropane	ND		2000	1400	ug/L			11/24/15 04:15	2000
1,3-Dichlorobenzene	ND		2000	1600	ug/L			11/24/15 04:15	2000
1,4-Dichlorobenzene	ND		2000	1700	ug/L			11/24/15 04:15	2000
2-Butanone (MEK)	ND		20000	2600	ug/L			11/24/15 04:15	2000
2-Hexanone	ND		10000	2500	ug/L			11/24/15 04:15	2000
4-Methyl-2-pentanone (MIBK)	ND		10000	4200	ug/L			11/24/15 04:15	2000

TestAmerica Job ID: 480-91066-1

Client Sample ID: MW-27 (111015)

Date Collected: 11/10/15 12:17 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-4

Matrix: Water

Method: 8260C - Volatile O Analyte	Result Qualific		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	20000	6000	ug/L		-	11/24/15 04:15	2000
Benzene	ND	2000	820	ug/L			11/24/15 04:15	2000
Bromodichloromethane	ND	2000	780	ug/L			11/24/15 04:15	2000
Bromoform	ND	2000	520	ug/L			11/24/15 04:15	2000
Bromomethane	ND	2000	1400	ug/L			11/24/15 04:15	2000
Carbon disulfide	ND	2000	380	ug/L			11/24/15 04:15	2000
Carbon tetrachloride	ND	2000	540	ug/L			11/24/15 04:15	2000
Chlorobenzene	ND	2000	1500	ug/L			11/24/15 04:15	2000
Chloroethane	ND	2000	640	ug/L			11/24/15 04:15	2000
Chloroform	ND	2000	680	ug/L			11/24/15 04:15	2000
Chloromethane	ND	2000	700	ug/L			11/24/15 04:15	2000
cis-1,2-Dichloroethene	140000	2000	1600	ug/L			11/24/15 04:15	2000
cis-1,3-Dichloropropene	ND	2000	720	ug/L			11/24/15 04:15	2000
Cyclohexane	ND	2000	360	ug/L			11/24/15 04:15	2000
Dibromochloromethane	ND	2000	640	ug/L			11/24/15 04:15	2000
Dichlorodifluoromethane	ND	2000	1400	ug/L			11/24/15 04:15	2000
Ethylbenzene	ND	2000	1500	ug/L			11/24/15 04:15	2000
Isopropylbenzene	ND	2000	1600	ug/L			11/24/15 04:15	2000
Methyl acetate	ND	5000	2600	ug/L			11/24/15 04:15	2000
Methyl tert-butyl ether	ND	2000	320	ug/L			11/24/15 04:15	2000
Methylcyclohexane	ND	2000	320	ug/L			11/24/15 04:15	2000
Methylene Chloride	ND	2000	880	ug/L			11/24/15 04:15	2000
Styrene	ND	2000	1500	ug/L			11/24/15 04:15	2000
Tetrachloroethene	140000	2000	720	ug/L			11/24/15 04:15	2000
Toluene	ND	2000	1000	ug/L			11/24/15 04:15	2000
trans-1,2-Dichloroethene	ND	2000	1800	ug/L			11/24/15 04:15	2000
trans-1,3-Dichloropropene	ND	2000	740	ug/L			11/24/15 04:15	2000
Trichloroethene	18000	2000	920	ug/L			11/24/15 04:15	2000
Trichlorofluoromethane	ND	2000	1800	ug/L			11/24/15 04:15	2000
Vinyl chloride	7700	2000	1800	ug/L			11/24/15 04:15	2000
Xylenes, Total	ND	4000	1300	ug/L			11/24/15 04:15	2000
Surrogate	%Recovery Qualific	er Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106	66 - 137					11/24/15 04:15	2000
4-Bromofluorobenzene (Surr)	100	73 - 120					11/24/15 04:15	2000
Toluene-d8 (Surr)	97	71 - 126					11/24/15 04:15	2000
Dibromofluoromethane (Surr)	94	60 - 140					11/24/15 04:15	2000

Client Sample ID: MW-28 (111015)

Date Collected: 11/10/15 17:35 Date Received: 11/13/15 09:30

Lab Sample	ID: 480-91066-5
	Barrier Sateries

Matrix: Water

Method: 8260C - Volatile Organ	ic Compounds by GC	/MS						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	2000	1600	ug/L			11/24/15 04:39	2000
1,1,2,2-Tetrachloroethane	ND	2000	420	ug/L			11/24/15 04:39	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2000	620	ug/L			11/24/15 04:39	2000
1,1,2-Trichloroethane	ND	2000	460	ug/L			11/24/15 04:39	2000
1,1-Dichloroethane	ND	2000	760	ug/L			11/24/15 04:39	2000
1,1-Dichloroethene	ND	2000	580	ug/L			11/24/15 04:39	2000

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Client Sample ID: MW-28 (111015)

Lab Sample ID: 480-91066-5

Date Collected: 11/10/15 17:35 **Matrix: Water** Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,2,4-Trichlorobenzene	ND		2000	820	ug/L			11/24/15 04:39	200
1,2-Dibromo-3-Chloropropane	ND		2000	780	ug/L			11/24/15 04:39	200
1,2-Dibromoethane	ND		2000	1500	ug/L			11/24/15 04:39	200
1,2-Dichlorobenzene	ND		2000	1600	-			11/24/15 04:39	200
1,2-Dichloroethane	ND		2000		ug/L			11/24/15 04:39	200
1,2-Dichloropropane	ND		2000	1400	ug/L			11/24/15 04:39	200
1,3-Dichlorobenzene	ND		2000	1600	ug/L			11/24/15 04:39	200
1,4-Dichlorobenzene	ND		2000	1700	_			11/24/15 04:39	200
2-Butanone (MEK)	ND		20000	2600	J			11/24/15 04:39	200
2-Hexanone	ND		10000	2500	•			11/24/15 04:39	200
4-Methyl-2-pentanone (MIBK)	ND		10000	4200	_			11/24/15 04:39	200
Acetone	ND		20000	6000	•			11/24/15 04:39	200
Benzene	ND		2000		ug/L			11/24/15 04:39	200
Bromodichloromethane	ND		2000		ug/L			11/24/15 04:39	200
Bromoform	ND.		2000		ug/L			11/24/15 04:39	200
Bromomethane	ND		2000	1400	-			11/24/15 04:39	200
Carbon disulfide	ND ND		2000		ug/L ug/L			11/24/15 04:39	200
Carbon tetrachloride	ND		2000		ug/L ug/L			11/24/15 04:39	200
Chlorobenzene	ND		2000	1500	-			11/24/15 04:39	200
	ND ND		2000		-				
Chloroethane					ug/L			11/24/15 04:39	200
Chloroform	ND		2000		ug/L			11/24/15 04:39	200
Chloromethane	ND		2000		ug/L			11/24/15 04:39	200
cis-1,2-Dichloroethene	47000		2000	1600	•			11/24/15 04:39	200
cis-1,3-Dichloropropene	ND		2000		ug/L			11/24/15 04:39	200
Cyclohexane	ND		2000		ug/L			11/24/15 04:39	200
Dibromochloromethane	ND		2000		ug/L			11/24/15 04:39	200
Dichlorodifluoromethane	ND		2000	1400	-			11/24/15 04:39	200
Ethylbenzene	ND		2000	1500	-			11/24/15 04:39	200
Isopropylbenzene	ND		2000	1600	-			11/24/15 04:39	200
Methyl acetate	ND		5000	2600	ug/L			11/24/15 04:39	200
Methyl tert-butyl ether	ND		2000		ug/L			11/24/15 04:39	200
Methylcyclohexane	ND		2000		ug/L			11/24/15 04:39	200
Methylene Chloride	ND		2000	880	ug/L			11/24/15 04:39	200
Styrene	ND		2000	1500	ug/L			11/24/15 04:39	200
Tetrachloroethene	26000		2000	720	ug/L			11/24/15 04:39	200
Toluene	ND		2000	1000	ug/L			11/24/15 04:39	200
trans-1,2-Dichloroethene	ND		2000	1800	ug/L			11/24/15 04:39	200
trans-1,3-Dichloropropene	ND		2000	740	ug/L			11/24/15 04:39	200
Trichloroethene	15000		2000		ug/L			11/24/15 04:39	200
Trichlorofluoromethane	ND		2000	1800				11/24/15 04:39	200
Vinyl chloride	1800	J	2000	1800	-			11/24/15 04:39	200
Xylenes, Total	ND		4000	1300	-			11/24/15 04:39	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	104		66 - 137			-		11/24/15 04:39	200
4-Bromofluorobenzene (Surr)	96		73 - 120					11/24/15 04:39	200
Toluene-d8 (Surr)	95		71 - 126					11/24/15 04:39	200
Dibromofluoromethane (Surr)	94		60 - 140					11/24/15 04:39	200

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Client Sample ID: MW-23S (111115)

Date Collected: 11/11/15 09:02 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-6

Matrix: Water

Analyte	Result Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	10		ug/L			11/24/15 05:03	1
1,1,2,2-Tetrachloroethane	ND	10	2.1	ug/L			11/24/15 05:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10		ug/L			11/24/15 05:03	1
1,1,2-Trichloroethane	ND	10	2.3	ug/L			11/24/15 05:03	1
1,1-Dichloroethane	ND	10	3.8	ug/L			11/24/15 05:03	1
1,1-Dichloroethene	ND	10	2.9	ug/L			11/24/15 05:03	1
1,2,4-Trichlorobenzene	ND	10	4.1	ug/L			11/24/15 05:03	1
1,2-Dibromo-3-Chloropropane	ND	10	3.9	ug/L			11/24/15 05:03	1
1,2-Dibromoethane	ND	10	7.3	ug/L			11/24/15 05:03	•
1,2-Dichlorobenzene	ND	10	7.9	ug/L			11/24/15 05:03	
1,2-Dichloroethane	ND	10	2.1	ug/L			11/24/15 05:03	1
1,2-Dichloropropane	ND	10	7.2	ug/L			11/24/15 05:03	1
1,3-Dichlorobenzene	ND	10	7.8	ug/L			11/24/15 05:03	1
1,4-Dichlorobenzene	ND	10		ug/L			11/24/15 05:03	1
2-Butanone (MEK)	ND	100		ug/L			11/24/15 05:03	
2-Hexanone	ND	50		ug/L			11/24/15 05:03	
4-Methyl-2-pentanone (MIBK)	ND	50		ug/L			11/24/15 05:03	
Acetone	ND	100		ug/L			11/24/15 05:03	
Benzene	ND	10		ug/L			11/24/15 05:03	;
Bromodichloromethane	ND	10		ug/L			11/24/15 05:03	
Bromoform	ND	10		ug/L			11/24/15 05:03	
Bromomethane	ND	10		ug/L			11/24/15 05:03	
Carbon disulfide	ND	10		ug/L			11/24/15 05:03	
Carbon tetrachloride	ND	10		ug/L			11/24/15 05:03	1
Chlorobenzene	ND	10		ug/L			11/24/15 05:03	
Chloroethane	ND	10		ug/L			11/24/15 05:03	
Chloroform	ND	10		ug/L			11/24/15 05:03	
Chloromethane	ND	10		ug/L			11/24/15 05:03	;
cis-1,2-Dichloroethene	750	10		ug/L			11/24/15 05:03	
cis-1,3-Dichloropropene	ND	10		ug/L			11/24/15 05:03	
Cyclohexane	ND	10		ug/L			11/24/15 05:03	;
Dibromochloromethane	ND	10		ug/L			11/24/15 05:03	
Dichlorodifluoromethane	ND ND	10		ug/L			11/24/15 05:03	
Ethylbenzene	ND	10		•			11/24/15 05:03	:
				ug/L				
sopropylbenzene	ND	10		ug/L			11/24/15 05:03	
Methyl acetate	ND	25		ug/L			11/24/15 05:03	
Methyl tert-butyl ether	ND	10		ug/L			11/24/15 05:03	
Methylcyclohexane	ND	10		ug/L			11/24/15 05:03	
Methylene Chloride	ND	10		ug/L			11/24/15 05:03	
Styrene	ND	10		ug/L			11/24/15 05:03	,
Tetrachloroethene	780	10		ug/L			11/24/15 05:03	
Toluene	ND	10		ug/L			11/24/15 05:03	
trans-1,2-Dichloroethene	ND	10		ug/L			11/24/15 05:03	
trans-1,3-Dichloropropene	ND	10		ug/L			11/24/15 05:03	,
Trichloroethene	270	10		ug/L			11/24/15 05:03	
Trichlorofluoromethane	ND	10		ug/L			11/24/15 05:03	•
Vinyl chloride	11	10	9.0	ug/L			11/24/15 05:03	•
Xylenes, Total	ND	20	6.6	ug/L			11/24/15 05:03	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

1 - 1 - 0 - - - 1 - 1D - 400 04000 0

Lab Sample ID: 480-91066-6

TestAmerica Job ID: 480-91066-1

Matrix: Water

Client Sample ID: MW-23S (111115)

Date Collected: 11/11/15 09:02 Date Received: 11/13/15 09:30

Surrogate	%Recovery Q	Qualifier Li	mits	Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	103	66	- 137		11/24/15 05:03	10
4-Bromofluorobenzene (Surr)	95	73	- 120		11/24/15 05:03	10
Toluene-d8 (Surr)	95	71	- 126		11/24/15 05:03	10
Dibromofluoromethane (Surr)	95	60	- 140		11/24/15 05:03	10

Client Sample ID: MW-23D (111115)

Lab Sample ID: 480-91066-7

Date Collected: 11/11/15 09:58 Matrix: Water

Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			11/24/15 14:48	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			11/24/15 14:48	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			11/24/15 14:48	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			11/24/15 14:48	20
1,1-Dichloroethane	ND		20	7.6	ug/L			11/24/15 14:48	20
1,1-Dichloroethene	ND		20	5.8	ug/L			11/24/15 14:48	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			11/24/15 14:48	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			11/24/15 14:48	20
1,2-Dibromoethane	ND		20	15	ug/L			11/24/15 14:48	20
1,2-Dichlorobenzene	ND		20	16	ug/L			11/24/15 14:48	20
1,2-Dichloroethane	ND		20	4.2	ug/L			11/24/15 14:48	20
1,2-Dichloropropane	ND		20	14	ug/L			11/24/15 14:48	20
1,3-Dichlorobenzene	ND		20	16	ug/L			11/24/15 14:48	20
1,4-Dichlorobenzene	ND		20	17	ug/L			11/24/15 14:48	20
2-Butanone (MEK)	ND		200	26	ug/L			11/24/15 14:48	20
2-Hexanone	ND		100	25	ug/L			11/24/15 14:48	20
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			11/24/15 14:48	20
Acetone	ND		200	60	ug/L			11/24/15 14:48	20
Benzene	ND		20	8.2	ug/L			11/24/15 14:48	20
Bromodichloromethane	ND		20		ug/L			11/24/15 14:48	20
Bromoform	ND		20		ug/L			11/24/15 14:48	20
Bromomethane	ND		20		ug/L			11/24/15 14:48	20
Carbon disulfide	ND		20		ug/L			11/24/15 14:48	20
Carbon tetrachloride	ND		20		ug/L			11/24/15 14:48	20
Chlorobenzene	ND		20		ug/L			11/24/15 14:48	20
Chloroethane	ND		20		ug/L			11/24/15 14:48	20
Chloroform	ND		20		ug/L			11/24/15 14:48	20
Chloromethane	ND		20		ug/L			11/24/15 14:48	20
cis-1,2-Dichloroethene	1300	F1	20		ug/L			11/24/15 14:48	20
cis-1,3-Dichloropropene	ND	•	20		ug/L			11/24/15 14:48	20
Cyclohexane	ND		20		ug/L			11/24/15 14:48	20
Dibromochloromethane	ND		20		ug/L			11/24/15 14:48	20
Dichlorodifluoromethane	ND		20		ug/L			11/24/15 14:48	20
Ethylbenzene	ND		20		ug/L			11/24/15 14:48	20
Isopropylbenzene	ND		20		ug/L			11/24/15 14:48	20
Methyl acetate	ND		50		ug/L			11/24/15 14:48	20
Methyl tert-butyl ether	12		20		ug/L			11/24/15 14:48	20
Methyl tert-butyl ethel Methylcyclohexane	ND	•	20		ug/L			11/24/15 14:48	20
Methylene Chloride	ND		20		ug/L			11/24/15 14:48	20

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Client Sample ID: MW-23D (111115)

Date Collected: 11/11/15 09:58 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-7

Matrix: Water

Method: 8260C - Volatile O	rganic Compo	unds by G	C/MS (Contir	nued)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		20	15	ug/L			11/24/15 14:48	20
Tetrachloroethene	1300	F1	20	7.2	ug/L			11/24/15 14:48	20
Toluene	ND		20	10	ug/L			11/24/15 14:48	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			11/24/15 14:48	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			11/24/15 14:48	20
Trichloroethene	500	F1	20	9.2	ug/L			11/24/15 14:48	20
Trichlorofluoromethane	ND		20	18	ug/L			11/24/15 14:48	20
Vinyl chloride	140		20	18	ug/L			11/24/15 14:48	20
Xylenes, Total	ND		40	13	ug/L			11/24/15 14:48	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137			•		11/24/15 14:48	20
4-Bromofluorobenzene (Surr)	95		73 - 120					11/24/15 14:48	20
Toluene-d8 (Surr)	95		71 - 126					11/24/15 14:48	20
Dibromofluoromethane (Surr)	93		60 - 140					11/24/15 14:48	20

Client Sample ID: MW-17R (111015)

Date Collected: 11/10/15 16:17 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-8 **Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/24/15 05:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/24/15 05:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/24/15 05:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/24/15 05:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/24/15 05:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/24/15 05:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/24/15 05:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/24/15 05:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/24/15 05:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/24/15 05:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/24/15 05:26	1
1,2-Dichloropropane	1.7		1.0	0.72	ug/L			11/24/15 05:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/24/15 05:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/24/15 05:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/24/15 05:26	1
2-Hexanone	ND		5.0	1.2	ug/L			11/24/15 05:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/24/15 05:26	1
Acetone	ND		10	3.0	ug/L			11/24/15 05:26	1
Benzene	4.3		1.0	0.41	ug/L			11/24/15 05:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/24/15 05:26	1
Bromoform	ND		1.0	0.26	ug/L			11/24/15 05:26	1
Bromomethane	ND		1.0	0.69	ug/L			11/24/15 05:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/24/15 05:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/24/15 05:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/24/15 05:26	1
Chloroethane	4.5		1.0	0.32	ug/L			11/24/15 05:26	1
Chloroform	ND		1.0	0.34	ug/L			11/24/15 05:26	1
Chloromethane	ND		1.0		ug/L			11/24/15 05:26	1

TestAmerica Job ID: 480-91066-1

Client Sample ID: MW-17R (111015)

Lab Sample ID: 480-91066-8

Date Collected: 11/10/15 16:17 Date Received: 11/13/15 09:30 **Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	55		1.0	0.81	ug/L			11/24/15 05:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/24/15 05:26	1
Cyclohexane	0.50	J	1.0	0.18	ug/L			11/24/15 05:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/24/15 05:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/24/15 05:26	1
Ethylbenzene	8.6		1.0	0.74	ug/L			11/24/15 05:26	1
Isopropylbenzene	26		1.0	0.79	ug/L			11/24/15 05:26	1
Methyl acetate	ND		2.5	1.3	ug/L			11/24/15 05:26	1
Methyl tert-butyl ether	14		1.0	0.16	ug/L			11/24/15 05:26	1
Methylcyclohexane	1.7		1.0	0.16	ug/L			11/24/15 05:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/24/15 05:26	1
Styrene	ND		1.0	0.73	ug/L			11/24/15 05:26	1
Tetrachloroethene	0.74	J	1.0	0.36	ug/L			11/24/15 05:26	1
Toluene	0.61	J	1.0	0.51	ug/L			11/24/15 05:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/24/15 05:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/24/15 05:26	1
Trichloroethene	ND		1.0	0.46	ug/L			11/24/15 05:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/24/15 05:26	1
Vinyl chloride	62		1.0	0.90	ug/L			11/24/15 05:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/24/15 05:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137			-		11/24/15 05:26	1
4-Bromofluorobenzene (Surr)	103		73 - 120					11/24/15 05:26	1
Toluene-d8 (Surr)	94		71 - 126					11/24/15 05:26	1
Dibromofluoromethane (Surr)	92		60 - 140					11/24/15 05:26	1

Client Sample ID: MW-16R (111015)

Date Collected: 11/10/15 15:20

Date Received: 11/13/15 09:30

Lab Sample ID: 480-91066-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/24/15 05:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/24/15 05:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/24/15 05:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/24/15 05:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/24/15 05:50	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/24/15 05:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/24/15 05:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/24/15 05:50	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/24/15 05:50	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/24/15 05:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/24/15 05:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/24/15 05:50	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/24/15 05:50	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/24/15 05:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/24/15 05:50	1
2-Hexanone	ND		5.0	1.2	ug/L			11/24/15 05:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/24/15 05:50	1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-16R (111015)

Date Collected: 11/10/15 15:20 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-9

Matrix: Water

Analyte	Result Qua	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND ND	10	3.0	ug/L			11/24/15 05:50	1
Benzene	0.41 J	1.0	0.41	ug/L			11/24/15 05:50	1
Bromodichloromethane	ND	1.0	0.39	ug/L			11/24/15 05:50	1
Bromoform	ND	1.0	0.26	ug/L			11/24/15 05:50	1
Bromomethane	ND	1.0	0.69	ug/L			11/24/15 05:50	1
Carbon disulfide	ND	1.0	0.19	ug/L			11/24/15 05:50	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			11/24/15 05:50	1
Chlorobenzene	ND	1.0	0.75	ug/L			11/24/15 05:50	1
Chloroethane	ND	1.0	0.32	ug/L			11/24/15 05:50	1
Chloroform	ND	1.0	0.34	ug/L			11/24/15 05:50	1
Chloromethane	ND	1.0	0.35	ug/L			11/24/15 05:50	1
cis-1,2-Dichloroethene	16	1.0	0.81	ug/L			11/24/15 05:50	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			11/24/15 05:50	1
Cyclohexane	ND	1.0	0.18	ug/L			11/24/15 05:50	1
Dibromochloromethane	ND	1.0	0.32	ug/L			11/24/15 05:50	1
Dichlorodifluoromethane	ND	1.0	0.68	ug/L			11/24/15 05:50	1
Ethylbenzene	34	1.0	0.74	ug/L			11/24/15 05:50	1
Isopropylbenzene	15	1.0	0.79	ug/L			11/24/15 05:50	1
Methyl acetate	ND	2.5	1.3	ug/L			11/24/15 05:50	1
Methyl tert-butyl ether	ND	1.0	0.16	ug/L			11/24/15 05:50	1
Methylcyclohexane	0.96 J	1.0	0.16	ug/L			11/24/15 05:50	1
Methylene Chloride	ND	1.0	0.44	ug/L			11/24/15 05:50	1
Styrene	ND	1.0	0.73	ug/L			11/24/15 05:50	1
Tetrachloroethene	18	1.0	0.36	ug/L			11/24/15 05:50	1
Toluene	ND	1.0	0.51	ug/L			11/24/15 05:50	1
trans-1,2-Dichloroethene	ND	1.0	0.90	ug/L			11/24/15 05:50	1
trans-1,3-Dichloropropene	ND	1.0	0.37	ug/L			11/24/15 05:50	1
Trichloroethene	3.2	1.0	0.46	ug/L			11/24/15 05:50	1
Trichlorofluoromethane	ND	1.0	0.88	ug/L			11/24/15 05:50	1
Vinyl chloride	1.0	1.0	0.90	ug/L			11/24/15 05:50	1
Xylenes, Total	5.7	2.0	0.66	ug/L			11/24/15 05:50	1
Surrogate	%Recovery Qua	alifier Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99	66 - 137					11/24/15 05:50	1
4-Bromofluorobenzene (Surr)	105	73 - 120					11/24/15 05:50	1
Toluene-d8 (Surr)	94	71 - 126					11/24/15 05:50	1

Client Sample ID: MW-22D (111115)

Date Collected: 11/11/15 13:02 Date Received: 11/13/15 09:30

Dibromofluoromethane (Surr)

Lab Sample ID: 480-91066-10

11/24/15 05:50

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	5.0	4.1	ug/L			11/24/15 15:11	5
1,1,2,2-Tetrachloroethane	ND	5.0	1.1	ug/L			11/24/15 15:11	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	1.6	ug/L			11/24/15 15:11	5
1,1,2-Trichloroethane	ND	5.0	1.2	ug/L			11/24/15 15:11	5
1,1-Dichloroethane	ND	5.0	1.9	ug/L			11/24/15 15:11	5
1,1-Dichloroethene	ND	5.0	1.5	ug/L			11/24/15 15:11	5

60 - 140

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91066-10

TestAmerica Job ID: 480-91066-1

Matrix: Water

Client Sample ID: MW-22D (111115)

Date Collected: 11/11/15 13:02 Date Received: 11/13/15 09:30

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	5.0	2.1	ug/L			11/24/15 15:11	5
1,2-Dibromo-3-Chloropropane	ND	5.0	2.0	ug/L			11/24/15 15:11	5
1,2-Dibromoethane	ND	5.0	3.7	ug/L			11/24/15 15:11	5
1,2-Dichlorobenzene	ND	5.0	4.0	ug/L			11/24/15 15:11	5
1,2-Dichloroethane	ND	5.0	1.1	ug/L			11/24/15 15:11	5
1,2-Dichloropropane	ND	5.0	3.6	ug/L			11/24/15 15:11	5
1,3-Dichlorobenzene	ND	5.0	3.9	ug/L			11/24/15 15:11	5
1,4-Dichlorobenzene	ND	5.0	4.2	ug/L			11/24/15 15:11	5
2-Butanone (MEK)	ND	50	6.6	ug/L			11/24/15 15:11	5
2-Hexanone	ND	25	6.2	ug/L			11/24/15 15:11	5
4-Methyl-2-pentanone (MIBK)	ND	25	11	ug/L			11/24/15 15:11	5
Acetone	ND	50	15	ug/L			11/24/15 15:11	5
Benzene	ND	5.0	2.1	ug/L			11/24/15 15:11	5
Bromodichloromethane	ND	5.0	2.0	ug/L			11/24/15 15:11	5
Bromoform	ND	5.0	1.3	ug/L			11/24/15 15:11	5
Bromomethane	ND	5.0	3.5	ug/L			11/24/15 15:11	5
Carbon disulfide	ND	5.0	0.95	ug/L			11/24/15 15:11	5
Carbon tetrachloride	ND	5.0	1.4	ug/L			11/24/15 15:11	5
Chlorobenzene	ND	5.0	3.8	ug/L			11/24/15 15:11	5
Chloroethane	ND	5.0	1.6	ug/L			11/24/15 15:11	5
Chloroform	ND	5.0	1.7	ug/L			11/24/15 15:11	5
Chloromethane	ND	5.0	1.8	ug/L			11/24/15 15:11	5
cis-1,2-Dichloroethene	380	5.0	4.1	ug/L			11/24/15 15:11	5
cis-1,3-Dichloropropene	ND	5.0	1.8	ug/L			11/24/15 15:11	5
Cyclohexane	ND	5.0	0.90	ug/L			11/24/15 15:11	5
Dibromochloromethane	ND	5.0	1.6	ug/L			11/24/15 15:11	5
Dichlorodifluoromethane	ND	5.0	3.4	ug/L			11/24/15 15:11	5
Ethylbenzene	ND	5.0	3.7	ug/L			11/24/15 15:11	5
Isopropylbenzene	ND	5.0	4.0	ug/L			11/24/15 15:11	5
Methyl acetate	ND	13	6.5	ug/L			11/24/15 15:11	5
Methyl tert-butyl ether	ND	5.0	0.80	ug/L			11/24/15 15:11	5
Methylcyclohexane	ND	5.0	0.80	ug/L			11/24/15 15:11	5
Methylene Chloride	ND	5.0	2.2	ug/L			11/24/15 15:11	5
Styrene	ND	5.0	3.7	ug/L			11/24/15 15:11	5
Tetrachloroethene	180	5.0	1.8	ug/L			11/24/15 15:11	5
Toluene	ND	5.0	2.6	ug/L			11/24/15 15:11	5
trans-1,2-Dichloroethene	ND	5.0	4.5	ug/L			11/24/15 15:11	5
trans-1,3-Dichloropropene	ND	5.0	1.9	ug/L			11/24/15 15:11	5
Trichloroethene	130	5.0	2.3	ug/L			11/24/15 15:11	5
Trichlorofluoromethane	ND	5.0	4.4	ug/L			11/24/15 15:11	5
Vinyl chloride	23	5.0		ug/L			11/24/15 15:11	5
Xylenes, Total	ND	10	3.3	ug/L			11/24/15 15:11	5
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137	-		11/24/15 15:11	5
4-Bromofluorobenzene (Surr)	97		73 - 120			11/24/15 15:11	5
Toluene-d8 (Surr)	93		71 - 126			11/24/15 15:11	5
Dibromofluoromethane (Surr)	93		60 - 140			11/24/15 15:11	5

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91066-11

TestAmerica Job ID: 480-91066-1

Matrix: Water

Client Sample ID: MW-9 (111115)

Date Collected: 11/11/15 16:17

cis-1,3-Dichloropropene

Dibromochloromethane

Dichlorodifluoromethane

Cyclohexane

Ethylbenzene

Methyl acetate

Styrene

Toluene

Isopropylbenzene

Methyl tert-butyl ether

Methylcyclohexane

Methylene Chloride

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

trans-1.2-Dichloroethene

trans-1,3-Dichloropropene

Trichlorofluoromethane

Date Received: 11/13/15 09:30 Method: 8260C - Volatile Organic Compounds by GC/MS RL Dil Fac Analyte Result Qualifier **MDL** Unit D Prepared Analyzed 1,1,1-Trichloroethane $\overline{\mathsf{ND}}$ 10 8.2 ug/L 11/24/15 15:35 10 1,1,2,2-Tetrachloroethane ND 10 11/24/15 15:35 10 2.1 ug/L 1,1,2-Trichloro-1,2,2-trifluoroethane ND 10 3.1 ug/L 11/24/15 15:35 10 1,1,2-Trichloroethane ND 10 2.3 ug/L 11/24/15 15:35 10 ND 1,1-Dichloroethane 10 3.8 ug/L 11/24/15 15:35 10 1.1-Dichloroethene ND 10 2.9 ug/L 11/24/15 15:35 10 1,2,4-Trichlorobenzene ND 10 4.1 ug/L 11/24/15 15:35 10 1,2-Dibromo-3-Chloropropane ND 10 3.9 ug/L 11/24/15 15:35 10 ND 10 7.3 1,2-Dibromoethane ug/L 11/24/15 15:35 10 10 7.9 10 1,2-Dichlorobenzene ND ug/L 11/24/15 15:35 1,2-Dichloroethane ND 10 2.1 ug/L 10 11/24/15 15:35 1,2-Dichloropropane ND 10 7.2 ug/L 11/24/15 15:35 10 ND 10 7.8 ug/L 10 1,3-Dichlorobenzene 11/24/15 15:35 1,4-Dichlorobenzene ND 10 8.4 ug/L 11/24/15 15:35 10 2-Butanone (MEK) ND 100 ug/L 10 13 11/24/15 15:35 2-Hexanone ND 50 12 ug/L 11/24/15 15:35 10 4-Methyl-2-pentanone (MIBK) ND 50 21 11/24/15 15:35 10 ug/L Acetone ND 100 30 ug/L 11/24/15 15:35 10 Benzene ND 10 4.1 ug/L 11/24/15 15:35 10 3.9 Bromodichloromethane ND 10 10 ug/L 11/24/15 15:35 11/24/15 15:35 Bromoform ND 10 2.6 ug/L 10 ND 10 6.9 Bromomethane ug/L 11/24/15 15:35 10 Carbon disulfide NΩ 10 1.9 ug/L 11/24/15 15:35 10 2.7 Carbon tetrachloride ND 10 ug/L 11/24/15 15:35 10 Chlorobenzene ND 10 7.5 ug/L 11/24/15 15:35 10 Chloroethane ND 10 3.2 10 ug/L 11/24/15 15:35 Chloroform ND 10 3.4 ug/L 11/24/15 15:35 10 10 Chloromethane ND 3.5 ug/L 11/24/15 15:35 10 cis-1,2-Dichloroethene 10 8.1 ug/L 11/24/15 15:35 10 700

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3.6 ug/L

ug/L

ug/L

ug/L

ug/L

1.8 ug/L

3.2 ug/L

6.8

7.4 ug/L

7.9 ug/L

13 ug/L

1.6

1.6 ug/L

7.3 ug/L

3.6 ug/L

5.1

9.0

3.7 ug/L

4.6 ug/L

8.8 ug/L

9.0 ug/L

6.6 ug/L

4.4 ug/L

ND

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ND

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11/24/15 15:35 10 11/24/15 15:35 10 11/24/15 15:35 10 11/24/15 15:35 10

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TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91066-11

TestAmerica Job ID: 480-91066-1

Matrix: Water

Client Sample ID: MW-9 (111115)

Date Collected: 11/11/15 16:17 Date Received: 11/13/15 09:30

Surrogate	%Recovery Qualit	ïer Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99	66 - 137	11/24/15 15:	35 10
4-Bromofluorobenzene (Surr)	97	73 - 120	11/24/15 15:	35 10
Toluene-d8 (Surr)	94	71 - 126	11/24/15 15:	35 10
Dibromofluoromethane (Surr)	93	60 - 140	11/24/15 15:	35 10

Client Sample ID: MP-20 (111115) Lab Sample ID: 480-91066-12

Date Collected: 11/11/15 15:12

Ethylbenzene

Methyl acetate

Isopropylbenzene

Methyl tert-butyl ether

Methylcyclohexane

Methylene Chloride

Matrix: Water

Method: 8260C - Volatile Organ Analyte	nic Compounds by GC/ Result Qualifier	MS RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND —	1.0	0.82	ug/L			11/24/15 15:59	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			11/24/15 15:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			11/24/15 15:59	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			11/24/15 15:59	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			11/24/15 15:59	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			11/24/15 15:59	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			11/24/15 15:59	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			11/24/15 15:59	1
1,2-Dibromoethane	ND	1.0	0.73	ug/L			11/24/15 15:59	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			11/24/15 15:59	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			11/24/15 15:59	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			11/24/15 15:59	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			11/24/15 15:59	1
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			11/24/15 15:59	1
2-Butanone (MEK)	ND	10	1.3	ug/L			11/24/15 15:59	1
2-Hexanone	ND	5.0	1.2	ug/L			11/24/15 15:59	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			11/24/15 15:59	1
Acetone	ND	10	3.0	ug/L			11/24/15 15:59	1
Benzene	ND	1.0	0.41	ug/L			11/24/15 15:59	1
Bromodichloromethane	ND	1.0	0.39	ug/L			11/24/15 15:59	1
Bromoform	ND	1.0	0.26	ug/L			11/24/15 15:59	1
Bromomethane	ND	1.0	0.69	ug/L			11/24/15 15:59	1
Carbon disulfide	ND	1.0	0.19	ug/L			11/24/15 15:59	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			11/24/15 15:59	1
Chlorobenzene	ND	1.0	0.75	ug/L			11/24/15 15:59	1
Chloroethane	ND	1.0	0.32	ug/L			11/24/15 15:59	1
Chloroform	ND	1.0	0.34	ug/L			11/24/15 15:59	1
Chloromethane	ND	1.0	0.35	ug/L			11/24/15 15:59	1
cis-1,2-Dichloroethene	3.0	1.0	0.81	ug/L			11/24/15 15:59	1
cis-1,3-Dichloropropene	ND	1.0	0.36	-			11/24/15 15:59	1
Cyclohexane	ND	1.0	0.18	-			11/24/15 15:59	1
Dibromochloromethane	ND	1.0	0.32	-			11/24/15 15:59	1
Dichlorodifluoromethane	ND	1.0		ug/L			11/24/15 15:59	1

TestAmerica Buffalo

11/24/15 15:59

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1.0

1.0

2.5

1.0

1.0

1.0

ND

ND

ND

ND

ND

ND

0.74 ug/L

0.79 ug/L

1.3 ug/L

0.16 ug/L

0.16 ug/L

0.44 ug/L

11/27/2015

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Oli - - + O - - - - | D - MD - 00 (4444445)

Client Sample ID: MP-20 (111115)

Lab Sample ID: 480-91066-12

Date Collected: 11/11/15 15:12 Matrix: Water Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			11/24/15 15:59	1
Tetrachloroethene	0.69	J	1.0	0.36	ug/L			11/24/15 15:59	1
Toluene	ND		1.0	0.51	ug/L			11/24/15 15:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/24/15 15:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/24/15 15:59	1
Trichloroethene	0.91	J	1.0	0.46	ug/L			11/24/15 15:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/24/15 15:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/24/15 15:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/24/15 15:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137			•		11/24/15 15:59	1
4-Bromofluorobenzene (Surr)	98		73 - 120					11/24/15 15:59	1
Toluene-d8 (Surr)	97		71 - 126					11/24/15 15:59	1
Dibromofluoromethane (Surr)	92		60 - 140					11/24/15 15:59	1

Client Sample ID: MW-10D (111215)

Lab Sample ID: 480-91066-13

Date Collected: 11/12/15 11:22

Matrix: Water

Date Received: 11/13/15 09:30

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1000	820	ug/L			11/24/15 22:24	1000
1,1,2,2-Tetrachloroethane	ND	1000	210	ug/L			11/24/15 22:24	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1000	310	ug/L			11/24/15 22:24	1000
1,1,2-Trichloroethane	ND	1000	230	ug/L			11/24/15 22:24	1000
1,1-Dichloroethane	ND	1000	380	ug/L			11/24/15 22:24	1000
1,1-Dichloroethene	ND	1000	290	ug/L			11/24/15 22:24	1000
1,2,4-Trichlorobenzene	ND	1000	410	ug/L			11/24/15 22:24	1000
1,2-Dibromo-3-Chloropropane	ND	1000	390	ug/L			11/24/15 22:24	1000
1,2-Dibromoethane	ND	1000	730	ug/L			11/24/15 22:24	1000
1,2-Dichlorobenzene	ND	1000	790	ug/L			11/24/15 22:24	1000
1,2-Dichloroethane	ND	1000	210	ug/L			11/24/15 22:24	1000
1,2-Dichloropropane	ND	1000	720	ug/L			11/24/15 22:24	1000
1,3-Dichlorobenzene	ND	1000	780	ug/L			11/24/15 22:24	1000
1,4-Dichlorobenzene	ND	1000	840	ug/L			11/24/15 22:24	1000
2-Butanone (MEK)	ND	10000	1300	ug/L			11/24/15 22:24	1000
2-Hexanone	ND	5000	1200	ug/L			11/24/15 22:24	1000
4-Methyl-2-pentanone (MIBK)	ND	5000	2100	ug/L			11/24/15 22:24	1000
Acetone	ND	10000	3000	ug/L			11/24/15 22:24	1000
Benzene	ND	1000	410	ug/L			11/24/15 22:24	1000
Bromodichloromethane	ND	1000	390	ug/L			11/24/15 22:24	1000
Bromoform	ND	1000	260	ug/L			11/24/15 22:24	1000
Bromomethane	ND	1000	690	ug/L			11/24/15 22:24	1000
Carbon disulfide	ND	1000	190	ug/L			11/24/15 22:24	1000
Carbon tetrachloride	ND	1000	270	ug/L			11/24/15 22:24	1000
Chlorobenzene	ND	1000	750	ug/L			11/24/15 22:24	1000
Chloroethane	ND	1000	320	ug/L			11/24/15 22:24	1000
Chloroform	ND	1000	340	ug/L			11/24/15 22:24	1000
Chloromethane	ND	1000	350	ug/L			11/24/15 22:24	1000

TestAmerica Buffalo

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Project/Site: Crown Dykman - Glen Cove, NY

Client: ARCADIS U.S. Inc

Client Sample ID: MW-10D (111215)

Lab Sample ID: 480-91066-13

Date Collected: 11/12/15 11:22 **Matrix: Water** Date Received: 11/13/15 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1000	810	ug/L			11/24/15 22:24	1000
cis-1,3-Dichloropropene	ND		1000	360	ug/L			11/24/15 22:24	1000
Cyclohexane	ND		1000	180	ug/L			11/24/15 22:24	1000
Dibromochloromethane	ND		1000	320	ug/L			11/24/15 22:24	1000
Dichlorodifluoromethane	ND		1000	680	ug/L			11/24/15 22:24	1000
Ethylbenzene	ND		1000	740	ug/L			11/24/15 22:24	1000
Isopropylbenzene	ND		1000	790	ug/L			11/24/15 22:24	1000
Methyl acetate	ND		2500	1300	ug/L			11/24/15 22:24	1000
Methyl tert-butyl ether	ND		1000	160	ug/L			11/24/15 22:24	1000
Methylcyclohexane	ND		1000	160	ug/L			11/24/15 22:24	1000
Methylene Chloride	ND		1000	440	ug/L			11/24/15 22:24	1000
Styrene	ND		1000	730	ug/L			11/24/15 22:24	1000
Tetrachloroethene	28000		1000	360	ug/L			11/24/15 22:24	1000
Toluene	ND		1000	510	ug/L			11/24/15 22:24	1000
trans-1,2-Dichloroethene	ND		1000	900	ug/L			11/24/15 22:24	1000
trans-1,3-Dichloropropene	ND		1000	370	ug/L			11/24/15 22:24	1000
Trichloroethene	2500		1000	460	ug/L			11/24/15 22:24	1000
Trichlorofluoromethane	ND		1000	880	ug/L			11/24/15 22:24	1000
Vinyl chloride	ND		1000	900	ug/L			11/24/15 22:24	1000
Xylenes, Total	ND		2000	660	ug/L			11/24/15 22:24	1000
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			•		11/24/15 22:24	1000
4-Bromofluorobenzene (Surr)	98		73 - 120					11/24/15 22:24	1000
Toluene-d8 (Surr)	95		71 - 126					11/24/15 22:24	1000

Lab Sample ID: 480-91066-14 **Client Sample ID: IW-01D (111215)** Date Collected: 11/12/15 13:15 **Matrix: Water**

60 - 140

Date Received: 11/13/15 09:30

Dibromofluoromethane (Surr)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/24/15 16:47	1
1,1,2,2-Tetrachloroethane	0.22	J	1.0	0.21	ug/L			11/24/15 16:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/24/15 16:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/24/15 16:47	1
1,1-Dichloroethane	1.2		1.0	0.38	ug/L			11/24/15 16:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/24/15 16:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/24/15 16:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/24/15 16:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/24/15 16:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/24/15 16:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/24/15 16:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/24/15 16:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/24/15 16:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/24/15 16:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/24/15 16:47	1
2-Hexanone	ND		5.0	1.2	ug/L			11/24/15 16:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/24/15 16:47	1

TestAmerica Buffalo

11/24/15 22:24

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Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: IW-01D (111215)

Date Collected: 11/12/15 13:15 Date Received: 11/13/15 09:30

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Lab Sample ID: 480-91066-14

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	8.9	J	10	3.0	ug/L			11/24/15 16:47	1
Benzene	ND		1.0	0.41	ug/L			11/24/15 16:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/24/15 16:47	1
Bromoform	ND		1.0	0.26	ug/L			11/24/15 16:47	1
Bromomethane	ND		1.0	0.69	ug/L			11/24/15 16:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/24/15 16:47	1
Carbon tetrachloride	0.41	J	1.0	0.27	ug/L			11/24/15 16:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/24/15 16:47	1
Chloroethane	ND		1.0	0.32	ug/L			11/24/15 16:47	1
Chloroform	ND		1.0	0.34	ug/L			11/24/15 16:47	1
Chloromethane	ND		1.0	0.35	ug/L			11/24/15 16:47	1
cis-1,2-Dichloroethene	120	E	1.0	0.81	ug/L			11/24/15 16:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/24/15 16:47	1
Cyclohexane	ND		1.0	0.18	ug/L			11/24/15 16:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/24/15 16:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/24/15 16:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/24/15 16:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/24/15 16:47	1
Methyl acetate	ND		2.5	1.3	ug/L			11/24/15 16:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/24/15 16:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/24/15 16:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/24/15 16:47	1
Styrene	ND		1.0	0.73	ug/L			11/24/15 16:47	1
Tetrachloroethene	1700	E	1.0	0.36	ug/L			11/24/15 16:47	1
Toluene	0.84	J	1.0	0.51	ug/L			11/24/15 16:47	1
trans-1,2-Dichloroethene	1.1		1.0	0.90	ug/L			11/24/15 16:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/24/15 16:47	1
Trichloroethene	15		1.0	0.46	ug/L			11/24/15 16:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/24/15 16:47	1
Vinyl chloride	9.9		1.0	0.90	_			11/24/15 16:47	1
Xylenes, Total	6.4		2.0	0.66	ug/L			11/24/15 16:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Method: 8260C - Volatile Organ Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND —	100	82	ug/L			11/24/15 22:48	100
1,1,2,2-Tetrachloroethane	ND	100	21	ug/L			11/24/15 22:48	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	100	31	ug/L			11/24/15 22:48	100
1,1,2-Trichloroethane	ND	100	23	ug/L			11/24/15 22:48	100
1,1-Dichloroethane	ND	100	38	ug/L			11/24/15 22:48	100
1,1-Dichloroethene	ND	100	29	ug/L			11/24/15 22:48	100
1,2,4-Trichlorobenzene	ND	100	41	ug/L			11/24/15 22:48	100
1,2-Dibromo-3-Chloropropane	ND	100	39	ug/L			11/24/15 22:48	100
1,2-Dibromoethane	ND	100	73	ug/L			11/24/15 22:48	100
1,2-Dichlorobenzene	ND	100	79	ug/L			11/24/15 22:48	100

66 - 137

73 - 120

71 - 126

60 - 140

103

98

90

96

TestAmerica Buffalo

11/24/15 16:47

11/24/15 16:47

11/24/15 16:47

11/24/15 16:47

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91066-14

TestAmerica Job ID: 480-91066-1

Matrix: Water

Client Sample ID: IW-01D (111215)

Date Collected: 11/12/15 13:15 Date Received: 11/13/15 09:30

Dibromofluoromethane (Surr)

Analyte	Result Q	·	MDL		D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND	100		ug/L			11/24/15 22:48	100
1,2-Dichloropropane	ND	100		ug/L			11/24/15 22:48	100
1,3-Dichlorobenzene	ND	100	78	ug/L			11/24/15 22:48	100
1,4-Dichlorobenzene	ND	100	84	ug/L			11/24/15 22:48	100
2-Butanone (MEK)	ND	1000	130	ug/L			11/24/15 22:48	100
2-Hexanone	ND	500	120	ug/L			11/24/15 22:48	100
4-Methyl-2-pentanone (MIBK)	ND	500	210	ug/L			11/24/15 22:48	100
Acetone	ND	1000	300	ug/L			11/24/15 22:48	100
Benzene	ND	100	41	ug/L			11/24/15 22:48	100
Bromodichloromethane	ND	100	39	ug/L			11/24/15 22:48	100
Bromoform	ND	100	26	ug/L			11/24/15 22:48	100
Bromomethane	ND	100	69	ug/L			11/24/15 22:48	100
Carbon disulfide	ND	100	19	ug/L			11/24/15 22:48	100
Carbon tetrachloride	ND	100	27	ug/L			11/24/15 22:48	100
Chlorobenzene	ND	100	75	ug/L			11/24/15 22:48	100
Chloroethane	ND	100	32	ug/L			11/24/15 22:48	100
Chloroform	ND	100	34	ug/L			11/24/15 22:48	100
Chloromethane	ND	100	35	ug/L			11/24/15 22:48	100
cis-1,2-Dichloroethene	120	100	81	ug/L			11/24/15 22:48	100
cis-1,3-Dichloropropene	ND	100		ug/L			11/24/15 22:48	100
Cyclohexane	ND	100	18	ug/L			11/24/15 22:48	100
Dibromochloromethane	ND	100		ug/L			11/24/15 22:48	100
Dichlorodifluoromethane	ND	100	68	ug/L			11/24/15 22:48	100
Ethylbenzene	ND	100		ug/L			11/24/15 22:48	100
Isopropylbenzene	ND	100	79	ug/L			11/24/15 22:48	100
Methyl acetate	ND	250	130	ug/L			11/24/15 22:48	100
Methyl tert-butyl ether	ND	100	16	ug/L			11/24/15 22:48	100
Methylcyclohexane	ND	100		ug/L			11/24/15 22:48	100
Methylene Chloride	ND	100	44	ug/L			11/24/15 22:48	100
Styrene	ND	100	73	ug/L			11/24/15 22:48	100
Tetrachloroethene	2300	100		ug/L			11/24/15 22:48	100
Toluene	ND	100		ug/L			11/24/15 22:48	100
trans-1,2-Dichloroethene	ND	100		ug/L			11/24/15 22:48	100
trans-1,3-Dichloropropene	ND	100		ug/L			11/24/15 22:48	100
Trichloroethene	ND	100		ug/L			11/24/15 22:48	100
Trichlorofluoromethane	ND	100		ug/L			11/24/15 22:48	100
Vinyl chloride	ND	100		ug/L			11/24/15 22:48	100
Xylenes, Total	ND	200		ug/L			11/24/15 22:48	100
Surrogate	%Recovery Q	Qualifier Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100	66 - 137			-		11/24/15 22:48	100
4-Bromofluorobenzene (Surr)	97	73 - 120					11/24/15 22:48	100
Toluene-d8 (Surr)	97	71 - 126					11/24/15 22:48	100

11/24/15 22:48

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91066-15

TestAmerica Job ID: 480-91066-1

Matrix: Water

Client Sample ID: MW-18 (111115)

Date Collected: 11/11/15 19:57 Date Received: 11/13/15 09:30

Analyte	nic Compounds by GC/l Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND Games	40		ug/L	— <u>-</u>	. ropurou	11/24/15 17:10	4
1,1,2,2-Tetrachloroethane	ND	40		ug/L			11/24/15 17:10	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40		ug/L			11/24/15 17:10	4
1,1,2-Trichloroethane	ND	40		ug/L			11/24/15 17:10	4
1,1-Dichloroethane	ND	40		ug/L			11/24/15 17:10	4
1.1-Dichloroethene	ND	40		ug/L			11/24/15 17:10	4
1,2,4-Trichlorobenzene	ND	40		ug/L			11/24/15 17:10	4
1,2-Dibromo-3-Chloropropane	ND	40		ug/L			11/24/15 17:10	4
1,2-Dibromoethane	ND	40		ug/L			11/24/15 17:10	4
1,2-Dichlorobenzene	ND	40		ug/L			11/24/15 17:10	4
1,2-Dichloroethane	ND	40		ug/L			11/24/15 17:10	4
1,2-Dichloropropane	ND	40		ug/L			11/24/15 17:10	4
1,3-Dichlorobenzene	ND	40		ug/L			11/24/15 17:10	4
I,4-Dichlorobenzene	ND	40		ug/L			11/24/15 17:10	4
2-Butanone (MEK)	ND	400		ug/L			11/24/15 17:10	4
2-Hexanone	ND	200		ug/L			11/24/15 17:10	4
-Methyl-2-pentanone (MIBK)	ND	200		ug/L			11/24/15 17:10	4
Acetone	ND	400		ug/L			11/24/15 17:10	4
Benzene	ND	40		ug/L			11/24/15 17:10	
Bromodichloromethane	ND	40		ug/L			11/24/15 17:10	4
Bromoform	ND	40		ug/L			11/24/15 17:10	4
Bromomethane	ND	40		ug/L			11/24/15 17:10	
Carbon disulfide	ND	40		ug/L			11/24/15 17:10	2
Carbon tetrachloride	ND	40		ug/L			11/24/15 17:10	4
Chlorobenzene	ND	40		ug/L			11/24/15 17:10	
Chloroethane	ND	40		ug/L			11/24/15 17:10	2
Chloroform	ND	40		ug/L			11/24/15 17:10	4
Chloromethane	ND	40		ug/L			11/24/15 17:10	
cis-1,2-Dichloroethene	4100 E	40		ug/L			11/24/15 17:10	4
sis-1,3-Dichloropropene	ND	40		ug/L			11/24/15 17:10	4
Cyclohexane	ND	40		ug/L			11/24/15 17:10	
Dibromochloromethane	ND	40		ug/L			11/24/15 17:10	4
Dichlorodifluoromethane	ND	40		ug/L			11/24/15 17:10	2
thylbenzene	ND	40		ug/L			11/24/15 17:10	
sopropylbenzene	ND	40		ug/L			11/24/15 17:10	4
Methyl acetate	ND	100		ug/L			11/24/15 17:10	4
Nethyl tert-butyl ether	ND	40		ug/L			11/24/15 17:10	
/lethylcyclohexane	ND	40		ug/L			11/24/15 17:10	4
Nethylene Chloride	ND	40		ug/L			11/24/15 17:10	4
Styrene	ND	40		ug/L			11/24/15 17:10	
etrachloroethene	4900 E	40		ug/L			11/24/15 17:10	4
oluene	ND	40		ug/L			11/24/15 17:10	4
rans-1,2-Dichloroethene	ND	40		ug/L			11/24/15 17:10	
rans-1,3-Dichloropropene	ND	40		ug/L			11/24/15 17:10	4
richloroethene	1500	40		ug/L			11/24/15 17:10	4
richlorofluoromethane	ND	40		ug/L			11/24/15 17:10	2
/inyl chloride	350	40		ug/L			11/24/15 17:10	4
Xylenes, Total	ND	80		ug/L			11/24/15 17:10	4

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91066-15

TestAmerica Job ID: 480-91066-1

Matrix: Water

Client Sample ID: MW-18 (111115)

Date Collected: 11/11/15 19:57 Date Received: 11/13/15 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137		11/24/15 17:10	40
4-Bromofluorobenzene (Surr)	100		73 - 120		11/24/15 17:10	40
Toluene-d8 (Surr)	94		71 - 126		11/24/15 17:10	40
Dibromofluoromethane (Surr)	93		60 - 140		11/24/15 17:10	40

- - -	93	00 - 140					11/24/13 17.10	70
Method: 8260C - Volatile Orga Analyte	anic Compour Result Q		MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND -	80	66	ug/L		<u> </u>	11/24/15 23:12	80
1,1,2,2-Tetrachloroethane	ND	80	17	ug/L			11/24/15 23:12	80
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	80	25	ug/L			11/24/15 23:12	80
1,1,2-Trichloroethane	ND	80	18	ug/L			11/24/15 23:12	80
1,1-Dichloroethane	ND	80	30	ug/L			11/24/15 23:12	80
1,1-Dichloroethene	ND	80	23	ug/L			11/24/15 23:12	80
1,2,4-Trichlorobenzene	ND	80	33	ug/L			11/24/15 23:12	80
1,2-Dibromo-3-Chloropropane	ND	80	31	ug/L			11/24/15 23:12	80
1,2-Dibromoethane	ND	80	58	ug/L			11/24/15 23:12	80
1,2-Dichlorobenzene	ND	80	63	ug/L			11/24/15 23:12	80
1,2-Dichloroethane	ND	80	17	ug/L			11/24/15 23:12	80
1,2-Dichloropropane	ND	80	58	ug/L			11/24/15 23:12	80
1,3-Dichlorobenzene	ND	80	62	ug/L			11/24/15 23:12	80
1,4-Dichlorobenzene	ND	80	67	ug/L			11/24/15 23:12	80
2-Butanone (MEK)	ND	800	110	ug/L			11/24/15 23:12	80
2-Hexanone	ND	400	99	ug/L			11/24/15 23:12	80
4-Methyl-2-pentanone (MIBK)	ND	400	170	ug/L			11/24/15 23:12	80
Acetone	ND	800	240	ug/L			11/24/15 23:12	80
Benzene	ND	80	33	ug/L			11/24/15 23:12	80
Bromodichloromethane	ND	80	31	ug/L			11/24/15 23:12	80
Bromoform	ND	80	21	ug/L			11/24/15 23:12	80
Bromomethane	ND	80	55	ug/L			11/24/15 23:12	80
Carbon disulfide	ND	80	15	ug/L			11/24/15 23:12	80
Carbon tetrachloride	ND	80	22	ug/L			11/24/15 23:12	80
Chlorobenzene	ND	80	60	ug/L			11/24/15 23:12	80
Chloroethane	ND	80	26	ug/L			11/24/15 23:12	80
Chloroform	ND	80	27	ug/L			11/24/15 23:12	80
Chloromethane	ND	80	28	ug/L			11/24/15 23:12	80
cis-1,2-Dichloroethene	3300	80	65	ug/L			11/24/15 23:12	80
cis-1,3-Dichloropropene	ND	80	29	ug/L			11/24/15 23:12	80
Cyclohexane	ND	80	14	ug/L			11/24/15 23:12	80
Dibromochloromethane	ND	80	26	ug/L			11/24/15 23:12	80
Dichlorodifluoromethane	ND	80	54	ug/L			11/24/15 23:12	80
Ethylbenzene	ND	80	59	ug/L			11/24/15 23:12	80
Isopropylbenzene	ND	80	63	ug/L			11/24/15 23:12	80
Methyl acetate	ND	200	100	ug/L			11/24/15 23:12	80
Methyl tert-butyl ether	ND	80	13	ug/L			11/24/15 23:12	80
Methylcyclohexane	ND	80	13	ug/L			11/24/15 23:12	80
Methylene Chloride	ND	80	35	ug/L			11/24/15 23:12	80
Styrene	ND	80	58	ug/L			11/24/15 23:12	80
Tetrachloroethene	4300	80		ug/L			11/24/15 23:12	80
Toluene	ND	80	41	ug/L			11/24/15 23:12	80
trans-1,2-Dichloroethene	ND	80	72	ug/L			11/24/15 23:12	80

TestAmerica Buffalo

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4.0

14

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Client Sample ID: MW-18 (111115)

Date Collected: 11/11/15 19:57 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-15

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		80	30	ug/L			11/24/15 23:12	80
Trichloroethene	1300		80	37	ug/L			11/24/15 23:12	80
Trichlorofluoromethane	ND		80	70	ug/L			11/24/15 23:12	80
Vinyl chloride	290		80	72	ug/L			11/24/15 23:12	80
Xylenes, Total	ND		160	53	ug/L			11/24/15 23:12	80
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137			-		11/24/15 23:12	80
4-Bromofluorobenzene (Surr)	94		73 - 120					11/24/15 23:12	80
Toluene-d8 (Surr)	94		71 - 126					11/24/15 23:12	80
Dibromofluoromethane (Surr)	92		60 - 140					11/24/15 23:12	80

Client Sample ID: MW-3 (111115) Lab Sample ID: 480-91066-16

Date Collected: 11/11/15 18:12 Date Received: 11/13/15 09:30

Matrix: Water

Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82 ug/L		11/24/15 17:34	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21 ug/L		11/24/15 17:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31 ug/L		11/24/15 17:34	1
1,1,2-Trichloroethane	ND	1.0	0.23 ug/L		11/24/15 17:34	1
1,1-Dichloroethane	ND	1.0	0.38 ug/L		11/24/15 17:34	1
1,1-Dichloroethene	ND	1.0	0.29 ug/L		11/24/15 17:34	1
1,2,4-Trichlorobenzene	ND	1.0	0.41 ug/L		11/24/15 17:34	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39 ug/L		11/24/15 17:34	1
1,2-Dibromoethane	ND	1.0	0.73 ug/L		11/24/15 17:34	1
1,2-Dichlorobenzene	ND	1.0	0.79 ug/L		11/24/15 17:34	1
1,2-Dichloroethane	ND	1.0	0.21 ug/L		11/24/15 17:34	1
1,2-Dichloropropane	ND	1.0	0.72 ug/L		11/24/15 17:34	1
1,3-Dichlorobenzene	ND	1.0	0.78 ug/L		11/24/15 17:34	1
1,4-Dichlorobenzene	ND	1.0	0.84 ug/L		11/24/15 17:34	1
2-Butanone (MEK)	ND	10	1.3 ug/L		11/24/15 17:34	1
2-Hexanone	ND	5.0	1.2 ug/L		11/24/15 17:34	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1 ug/L		11/24/15 17:34	1
Acetone	ND	10	3.0 ug/L		11/24/15 17:34	1
Benzene	ND	1.0	0.41 ug/L		11/24/15 17:34	1
Bromodichloromethane	ND	1.0	0.39 ug/L		11/24/15 17:34	1
Bromoform	ND	1.0	0.26 ug/L		11/24/15 17:34	1
Bromomethane	ND	1.0	0.69 ug/L		11/24/15 17:34	1
Carbon disulfide	ND	1.0	0.19 ug/L		11/24/15 17:34	1
Carbon tetrachloride	ND	1.0	0.27 ug/L		11/24/15 17:34	1
Chlorobenzene	ND	1.0	0.75 ug/L		11/24/15 17:34	1
Chloroethane	ND	1.0	0.32 ug/L		11/24/15 17:34	1
Chloroform	ND	1.0	0.34 ug/L		11/24/15 17:34	1
Chloromethane	ND	1.0	0.35 ug/L		11/24/15 17:34	1
cis-1,2-Dichloroethene	ND	1.0	0.81 ug/L		11/24/15 17:34	1
cis-1,3-Dichloropropene	ND	1.0	0.36 ug/L		11/24/15 17:34	1
Cyclohexane	ND	1.0	0.18 ug/L		11/24/15 17:34	1
Dibromochloromethane	ND	1.0	0.32 ug/L		11/24/15 17:34	1

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Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-3 (111115)

Date Collected: 11/11/15 18:12 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-16

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/24/15 17:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/24/15 17:34	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/24/15 17:34	1
Methyl acetate	ND		2.5	1.3	ug/L			11/24/15 17:34	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/24/15 17:34	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/24/15 17:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/24/15 17:34	1
Styrene	ND		1.0	0.73	ug/L			11/24/15 17:34	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/24/15 17:34	1
Toluene	ND		1.0	0.51	ug/L			11/24/15 17:34	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/24/15 17:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/24/15 17:34	1
Trichloroethene	ND		1.0	0.46	ug/L			11/24/15 17:34	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/24/15 17:34	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/24/15 17:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/24/15 17:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137			-		11/24/15 17:34	1
4-Bromofluorobenzene (Surr)	96		73 - 120					11/24/15 17:34	1
Toluene-d8 (Surr)	96		71 - 126					11/24/15 17:34	1
Dibromofluoromethane (Surr)	93		60 - 140					11/24/15 17:34	1

Client Sample ID: MW-10S (111215)

Date Collected: 11/12/15 10:02 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-17

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			11/24/15 17:58	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			11/24/15 17:58	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			11/24/15 17:58	100
1,1,2-Trichloroethane	ND		100	23	ug/L			11/24/15 17:58	100
1,1-Dichloroethane	ND		100	38	ug/L			11/24/15 17:58	100
1,1-Dichloroethene	ND		100	29	ug/L			11/24/15 17:58	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			11/24/15 17:58	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			11/24/15 17:58	100
1,2-Dibromoethane	ND		100	73	ug/L			11/24/15 17:58	100
1,2-Dichlorobenzene	ND		100	79	ug/L			11/24/15 17:58	100
1,2-Dichloroethane	ND		100	21	ug/L			11/24/15 17:58	100
1,2-Dichloropropane	ND		100	72	ug/L			11/24/15 17:58	100
1,3-Dichlorobenzene	ND		100	78	ug/L			11/24/15 17:58	100
1,4-Dichlorobenzene	ND		100	84	ug/L			11/24/15 17:58	100
2-Butanone (MEK)	ND		1000	130	ug/L			11/24/15 17:58	100
2-Hexanone	ND		500	120	ug/L			11/24/15 17:58	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			11/24/15 17:58	100
Acetone	ND		1000	300	ug/L			11/24/15 17:58	100
Benzene	ND		100	41	ug/L			11/24/15 17:58	100
Bromodichloromethane	ND		100	39	ug/L			11/24/15 17:58	100
Bromoform	ND		100	26	ug/L			11/24/15 17:58	100

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-10S (111215)

Date Collected: 11/12/15 10:02 Date Received: 11/13/15 09:30 Lab Sample ID: 480-91066-17

Matrix: Water

Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		100	69	ug/L			11/24/15 17:58	100
Carbon disulfide	ND		100	19	ug/L			11/24/15 17:58	100
Carbon tetrachloride	ND		100	27	ug/L			11/24/15 17:58	100
Chlorobenzene	ND		100	75	ug/L			11/24/15 17:58	100
Chloroethane	ND		100	32	ug/L			11/24/15 17:58	100
Chloroform	ND		100	34	ug/L			11/24/15 17:58	100
Chloromethane	ND		100	35	ug/L			11/24/15 17:58	100
cis-1,2-Dichloroethene	3600		100	81	ug/L			11/24/15 17:58	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			11/24/15 17:58	100
Cyclohexane	ND		100	18	ug/L			11/24/15 17:58	100
Dibromochloromethane	ND		100	32	ug/L			11/24/15 17:58	100
Dichlorodifluoromethane	ND		100	68	ug/L			11/24/15 17:58	100
Ethylbenzene	ND		100	74	ug/L			11/24/15 17:58	100
Isopropylbenzene	ND		100	79	ug/L			11/24/15 17:58	100
Methyl acetate	ND		250	130	ug/L			11/24/15 17:58	100
Methyl tert-butyl ether	ND		100	16	ug/L			11/24/15 17:58	100
Methylcyclohexane	ND		100	16	ug/L			11/24/15 17:58	100
Methylene Chloride	ND		100	44	ug/L			11/24/15 17:58	100
Styrene	ND		100	73	ug/L			11/24/15 17:58	100
Tetrachloroethene	2500		100	36	ug/L			11/24/15 17:58	100
Toluene	ND		100	51	ug/L			11/24/15 17:58	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			11/24/15 17:58	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/24/15 17:58	100
Trichloroethene	860		100	46	ug/L			11/24/15 17:58	100
Trichlorofluoromethane	ND		100	88	ug/L			11/24/15 17:58	100
Vinyl chloride	100		100	90	ug/L			11/24/15 17:58	100
Xylenes, Total	ND		200	66	ug/L			11/24/15 17:58	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			-		11/24/15 17:58	100
4-Bromofluorobenzene (Surr)	96		73 - 120					11/24/15 17:58	100
Toluene-d8 (Surr)	96		71 - 126					11/24/15 17:58	100
Dibromofluoromethane (Surr)	89		60 - 140					11/24/15 17:58	100

Client Sample ID: MW-15R (111115)

Date Collected: 11/11/15 22:48 Date Received: 11/13/15 09:30

Lab Sample ID: 480-91066-18

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			11/24/15 18:21	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			11/24/15 18:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			11/24/15 18:21	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			11/24/15 18:21	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			11/24/15 18:21	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			11/24/15 18:21	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			11/24/15 18:21	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			11/24/15 18:21	1
1,2-Dibromoethane	ND	1.0	0.73	ug/L			11/24/15 18:21	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			11/24/15 18:21	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Client Sample ID: MW-15R (111115) Lab Sample ID: 480-91066-18

Date Collected: 11/11/15 22:48 Date Received: 11/13/15 09:30

Toluene-d8 (Surr)

Dibromofluoromethane (Surr)

Matrix: Water

Method: 8260C - Volatile O Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/24/15 18:21	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/24/15 18:21	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/24/15 18:21	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/24/15 18:21	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/24/15 18:21	1
2-Hexanone	ND		5.0	1.2	ug/L			11/24/15 18:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/24/15 18:21	1
Acetone	ND		10	3.0	ug/L			11/24/15 18:21	1
Benzene	ND		1.0	0.41	ug/L			11/24/15 18:21	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/24/15 18:21	1
Bromoform	ND		1.0	0.26	ug/L			11/24/15 18:21	1
Bromomethane	ND		1.0	0.69	ug/L			11/24/15 18:21	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/24/15 18:21	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/24/15 18:21	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/24/15 18:21	1
Chloroethane	ND		1.0	0.32	ug/L			11/24/15 18:21	1
Chloroform	ND		1.0	0.34	ug/L			11/24/15 18:21	1
Chloromethane	ND		1.0	0.35	ug/L			11/24/15 18:21	1
cis-1,2-Dichloroethene	0.99	J	1.0	0.81	ug/L			11/24/15 18:21	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/24/15 18:21	1
Cyclohexane	0.54	J	1.0	0.18	ug/L			11/24/15 18:21	1
Dibromochloromethane	ND		1.0	0.32				11/24/15 18:21	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/24/15 18:21	1
Ethylbenzene	13		1.0	0.74	ug/L			11/24/15 18:21	1
Isopropylbenzene	15		1.0	0.79	ug/L			11/24/15 18:21	1
Methyl acetate	ND		2.5	1.3	ug/L			11/24/15 18:21	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/24/15 18:21	1
Methylcyclohexane	3.2		1.0	0.16	ug/L			11/24/15 18:21	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/24/15 18:21	1
Styrene	ND		1.0	0.73	ug/L			11/24/15 18:21	1
Tetrachloroethene	1.5		1.0	0.36	ug/L			11/24/15 18:21	1
Toluene	ND		1.0	0.51	ug/L			11/24/15 18:21	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/24/15 18:21	1
trans-1,3-Dichloropropene	ND		1.0	0.37				11/24/15 18:21	1
Trichloroethene	ND		1.0	0.46				11/24/15 18:21	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/24/15 18:21	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/24/15 18:21	1
Xylenes, Total	ND		2.0		ug/L			11/24/15 18:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137			-		11/24/15 18:21	1
4-Bromofluorobenzene (Surr)	101		73 - 120					11/24/15 18:21	1
			_, ,					44/04/45 46 64	

TestAmerica Buffalo

11/24/15 18:21

11/24/15 18:21

71 - 126

60 - 140

92

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91066-19

TestAmerica Job ID: 480-91066-1

Matrix: Water

Client Sample ID: TB

Date Collected: 11/12/15 00:00 Date Received: 11/13/15 09:30

Analyte	nic Compounds by GC Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND -	1.0	0.82	ug/L			11/24/15 14:24	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			11/24/15 14:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			11/24/15 14:24	
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			11/24/15 14:24	,
1,1-Dichloroethane	ND	1.0	0.38	ug/L			11/24/15 14:24	
1,1-Dichloroethene	ND	1.0	0.29	ug/L			11/24/15 14:24	
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			11/24/15 14:24	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			11/24/15 14:24	
1,2-Dibromoethane	ND	1.0	0.73	-			11/24/15 14:24	
1,2-Dichlorobenzene	ND	1.0	0.79	-			11/24/15 14:24	
1,2-Dichloroethane	ND	1.0	0.21	_			11/24/15 14:24	
1,2-Dichloropropane	ND	1.0	0.72	-			11/24/15 14:24	
1,3-Dichlorobenzene	ND	1.0	0.78	-			11/24/15 14:24	,
1,4-Dichlorobenzene	ND	1.0	0.84	-			11/24/15 14:24	
2-Butanone (MEK)	ND	10		ug/L			11/24/15 14:24	
2-Hexanone	ND	5.0		ug/L			11/24/15 14:24	
4-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			11/24/15 14:24	
Acetone	ND	10		ug/L			11/24/15 14:24	
Benzene	ND	1.0	0.41	-			11/24/15 14:24	· · · · · .
Bromodichloromethane	ND	1.0	0.39	-			11/24/15 14:24	
Bromoform	ND	1.0	0.26	-			11/24/15 14:24	
Bromomethane	ND	1.0	0.69	-			11/24/15 14:24	
Carbon disulfide	ND	1.0	0.19	-			11/24/15 14:24	
Carbon tetrachloride	ND	1.0	0.13	-			11/24/15 14:24	,
Chlorobenzene	ND	1.0	0.75	-			11/24/15 14:24	· · · · · .
Chloroethane	ND	1.0	0.73	-			11/24/15 14:24	
Chloroform	ND	1.0	0.34	-			11/24/15 14:24	
Chloromethane	ND	1.0	0.35	-			11/24/15 14:24	· · · · · .
cis-1,2-Dichloroethene	ND	1.0	0.81	-			11/24/15 14:24	
cis-1,3-Dichloropropene	ND	1.0	0.36	-			11/24/15 14:24	
Cyclohexane	ND		0.30	-			11/24/15 14:24	· · · · · .
Dibromochloromethane	ND ND	1.0 1.0		-			11/24/15 14:24	
Dichlorodifluoromethane	ND ND	1.0	0.32 0.68	-			11/24/15 14:24	
	ND	1.0	0.00	-			11/24/15 14:24	
Ethylbenzene	ND ND	1.0		_			11/24/15 14:24	
Isopropylbenzene			0.79	-				•
Methyl acetate	ND	2.5		ug/L			11/24/15 14:24	
Methyl tert-butyl ether	ND	1.0		ug/L			11/24/15 14:24	
Methylcyclohexane	ND	1.0		ug/L			11/24/15 14:24	
Methylene Chloride	ND	1.0		ug/L			11/24/15 14:24	
Styrene	ND	1.0		ug/L			11/24/15 14:24	•
Tetrachloroethene	ND	1.0		ug/L			11/24/15 14:24	•
Toluene	ND	1.0		ug/L			11/24/15 14:24	
trans-1,2-Dichloroethene	ND	1.0		ug/L			11/24/15 14:24	
trans-1,3-Dichloropropene	ND	1.0		ug/L			11/24/15 14:24	•
Trichloroethene	ND	1.0		ug/L			11/24/15 14:24	
Trichlorofluoromethane	ND	1.0		ug/L			11/24/15 14:24	•
Vinyl chloride	ND	1.0		ug/L			11/24/15 14:24	1
Xylenes, Total	ND	2.0	0.66	ug/L			11/24/15 14:24	•

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-91066-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: TB Lab Sample ID: 480-91066-19

. Matrix: Water

Date Collected: 11/12/15 00:00 Date Received: 11/13/15 09:30

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137	_		11/24/15 14:24	1
4-Bromofluorobenzene (Surr)	98		73 - 120			11/24/15 14:24	1
Toluene-d8 (Surr)	94		71 - 126			11/24/15 14:24	1
Dibromofluoromethane (Surr)	98		60 - 140			11/24/15 14:24	1

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14

Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

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

Matrix: Water Prep Type: Total/NA

			Pe	rcent Surro	gate Recovery (Acc	eptance Limits
		12DCE	BFB	TOL	DBFM	
b Sample ID	Client Sample ID	(66-137)	(73-120)	(71-126)	(60-140)	
0-91066-1	MW-6R (111015)	102	98	96	92	
0-91066-1 MS	MW-6R (111015)	98	100	96	93	
0-91066-1 MSD	MW-6R (111015)	102	101	99	93	
0-91066-2	DUP-01 (111015)	102	99	95	98	
0-91066-3	MW-1 (111015)	100	98	97	92	
0-91066-4	MW-27 (111015)	106	100	97	94	
0-91066-5	MW-28 (111015)	104	96	95	94	
0-91066-6	MW-23S (111115)	103	95	95	95	
0-91066-7	MW-23D (111115)	104	95	95	93	
0-91066-7 MS	MW-23D (111115)	97	103	94	90	
0-91066-7 MSD	MW-23D (111115)	102	101	97	94	
0-91066-8	MW-17R (111015)	99	103	94	92	
0-91066-9	MW-16R (111015)	99	105	94	91	
0-91066-10	MW-22D (111115)	100	97	93	93	
0-91066-11	MW-9 (111115)	99	97	94	93	
0-91066-12	MP-20 (111115)	99	98	97	92	
0-91066-13	MW-10D (111215)	102	98	95	94	
0-91066-14	IW-01D (111215)	103	98	90	96	
0-91066-14 - DL	IW-01D (111215)	100	97	97	91	
0-91066-15	MW-18 (111115)	104	100	94	93	
0-91066-15 - DL	MW-18 (111115)	100	94	94	92	
0-91066-16	MW-3 (111115)	105	96	96	93	
0-91066-17	MW-10S (111215)	102	96	96	89	
0-91066-18	MW-15R (111115)	104	101	92	95	
0-91066-19	ТВ	105	98	94	98	
S 480-276559/5	Lab Control Sample	97	102	98	90	
S 480-276625/5	Lab Control Sample	95	103	98	92	
S 480-276779/5	Lab Control Sample	98	100	96	92	
3 480-276559/7	Method Blank	100	99	97	91	
3 480-276625/7	Method Blank	98	98	94	91	
B 480-276779/7	Method Blank	102	100	96	90	

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

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QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

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

Lab Sample ID: MB 480-276559/7

Matrix: Water

Xylenes, Total

Analysis Batch: 276559

Client Sample ID: Method Blank

Prep Type: Total/NA

Amalusta		MB	DI	MDI	l lmi4	D	Dramarad	Amalumad	Dil Fac
Analyte 1,1,1-Trichloroethane	ND	Qualifier	RL 1.0	MDL 0.82		D	Prepared	Analyzed 11/23/15 23:06	Dil Fac
	ND ND				-				1
1,1,2,2-Tetrachloroethane			1.0	0.21	_			11/23/15 23:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	-			11/23/15 23:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	-			11/23/15 23:06	1
1,1-Dichloroethane	ND		1.0	0.38	-			11/23/15 23:06	1
1,1-Dichloroethene	ND		1.0	0.29	-			11/23/15 23:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	_			11/23/15 23:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	-			11/23/15 23:06	1
1,2-Dibromoethane	ND		1.0	0.73	-			11/23/15 23:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	-			11/23/15 23:06	1
1,2-Dichloroethane	ND		1.0	0.21	-			11/23/15 23:06	1
1,2-Dichloropropane	ND		1.0	0.72	-			11/23/15 23:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	-			11/23/15 23:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/23/15 23:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/23/15 23:06	1
2-Hexanone	ND		5.0	1.2	ug/L			11/23/15 23:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/23/15 23:06	1
Acetone	ND		10	3.0	ug/L			11/23/15 23:06	1
Benzene	ND		1.0	0.41	ug/L			11/23/15 23:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/23/15 23:06	1
Bromoform	ND		1.0	0.26	ug/L			11/23/15 23:06	1
Bromomethane	ND		1.0	0.69	ug/L			11/23/15 23:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/23/15 23:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/23/15 23:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/23/15 23:06	1
Chloroethane	ND		1.0	0.32	_			11/23/15 23:06	1
Chloroform	ND		1.0	0.34	-			11/23/15 23:06	1
Chloromethane	ND		1.0	0.35	-			11/23/15 23:06	1
cis-1,2-Dichloroethene	ND		1.0	0.81	_			11/23/15 23:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	-			11/23/15 23:06	1
Cyclohexane	ND		1.0	0.18				11/23/15 23:06	· · · · · · · · · · · · · · · · · · ·
Dibromochloromethane	ND		1.0	0.32	_			11/23/15 23:06	1
Dichlorodifluoromethane	ND		1.0	0.68	-			11/23/15 23:06	1
Ethylbenzene	ND		1.0	0.74	-			11/23/15 23:06	
Isopropylbenzene	ND		1.0	0.79				11/23/15 23:06	1
Methyl acetate	ND ND		2.5		ug/L			11/23/15 23:06	1
	ND		1.0						
Methyl tert-butyl ether	ND ND			0.16				11/23/15 23:06	1
Methylona Chlorida			1.0	0.16				11/23/15 23:06	1
Methylene Chloride	ND		1.0	0.44				11/23/15 23:06	1
Styrene	ND		1.0	0.73	-			11/23/15 23:06	1
Tetrachloroethene	ND		1.0	0.36	-			11/23/15 23:06	1
Toluene	ND		1.0	0.51	-			11/23/15 23:06	
trans-1,2-Dichloroethene	ND		1.0	0.90				11/23/15 23:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	_			11/23/15 23:06	1
Trichloroethene	ND		1.0	0.46	-			11/23/15 23:06	
Trichlorofluoromethane	ND		1.0		ug/L			11/23/15 23:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/23/15 23:06	1

TestAmerica Buffalo

11/23/15 23:06

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2.0

0.66 ug/L

ND

11/27/2015

QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

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

MR MR

Lab Sample ID: MB 480-276559/7

Matrix: Water

Analysis Batch: 276559

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

	IVID IVID				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100	66 - 137		11/23/15 23:06	1
4-Bromofluorobenzene (Surr)	99	73 - 120		11/23/15 23:06	1
Toluene-d8 (Surr)	97	71 - 126		11/23/15 23:06	1
Dibromofluoromethane (Surr)	91	60 - 140		11/23/15 23:06	1

Lab Sample ID: LCS 480-276559/5

Matrix: Water

Analysis Batch: 276559

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 276559	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	25.0	22.7		ug/L		91	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	24.4		ug/L		98	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	22.9		ug/L		92	52 - 148	
ne								
1,1,2-Trichloroethane	25.0	25.2		ug/L		101	76 - 122	
1,1-Dichloroethane	25.0	23.3		ug/L		93	71 - 129	
1,1-Dichloroethene	25.0	21.8		ug/L		87	58 - 121	
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		98	70 - 122	
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	56 ₋ 134	
1,2-Dibromoethane	25.0	24.7		ug/L		99	77 - 120	
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 124	
1,2-Dichloroethane	25.0	23.8		ug/L		95	75 - 127	
1,2-Dichloropropane	25.0	22.5		ug/L		90	76 - 120	
1,3-Dichlorobenzene	25.0	23.0		ug/L		92	77 - 120	
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	75 - 120	
2-Butanone (MEK)	125	128		ug/L		103	57 - 140	
2-Hexanone	125	140		ug/L		112	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	126		ug/L		101	71 - 125	
Acetone	125	141		ug/L		113	56 - 142	
Benzene	25.0	22.6		ug/L		90	71 - 124	
Bromodichloromethane	25.0	21.4		ug/L		86	80 - 122	
Bromoform	25.0	21.4		ug/L		86	52 - 132	
Bromomethane	25.0	27.8		ug/L		111	55 - 144	
Carbon disulfide	25.0	21.3		ug/L		85	59 ₋ 134	
Carbon tetrachloride	25.0	22.0		ug/L		88	72 - 134	
Chlorobenzene	25.0	23.6		ug/L		94	72 - 120	
Chloroethane	25.0	27.1		ug/L		109	69 - 136	
Chloroform	25.0	22.8		ug/L		91	73 - 127	
Chloromethane	25.0	19.4		ug/L		77	68 - 124	
cis-1,2-Dichloroethene	25.0	22.0		ug/L		88	74 - 124	
cis-1,3-Dichloropropene	25.0	22.6		ug/L		91	74 - 124	
Cyclohexane	25.0	21.0		ug/L		84	59 - 135	
Dibromochloromethane	25.0	22.0		ug/L		88	75 ₋ 125	
Dichlorodifluoromethane	25.0	17.1		ug/L		68	59 ₋ 135	
Ethylbenzene	25.0	24.6		ug/L		99	77 - 123	
•				-				
Isopropylbenzene	25.0	24.0		ug/L		96	77 - 122	
Isopropylbenzene Methyl acetate	25.0 125	24.0 125		ug/L ug/L		96 100	77 - 122 74 - 133	

TestAmerica Job ID: 480-91066-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: LCS 480-276559/5

Project/Site: Crown Dykman - Gien Cove, NY

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

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

Matrix: Water Analysis Batch: 276559

7 maryolo Batom 27 0000	Spike	1.09	LCS				%Rec.	
Analyte	Added	_	Qualifier	Unit	D	%Rec	Limits	
			Qualifier					
Methylcyclohexane	25.0	22.6		ug/L		91	61 - 138	
Methylene Chloride	25.0	23.4		ug/L		94	57 - 132	
Styrene	25.0	24.0		ug/L		96	70 - 130	
Tetrachloroethene	25.0	24.1		ug/L		96	74 - 122	
Toluene	25.0	24.0		ug/L		96	80 - 122	
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	73 - 127	
trans-1,3-Dichloropropene	25.0	25.0		ug/L		100	72 - 123	
Trichloroethene	25.0	21.1		ug/L		85	74 - 123	
Trichlorofluoromethane	25.0	24.8		ug/L		99	62 - 152	
Vinyl chloride	25.0	21.3		ug/L		85	65 - 133	
Xylenes, Total	50.0	46.7		ug/L		93	76 - 122	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
4-Bromofluorobenzene (Surr)	102		73 - 120
Toluene-d8 (Surr)	98		71 - 126
Dibromofluoromethane (Surr)	90		60 - 140

Lab Sample ID: 480-91066-1 MS

Matrix: Water

Analysis Batch: 276559

Client Sample ID: MW-6R (111015) Prep Type: Total/NA

Analyte Result (number) Qualifier (number) Added (number) Qualifier (number) Unit (number) D (number) MR Limits 1,1,1-Trichloroethane ND 125 123 ug/L 99 73 - 126 1,1,2-Trichloroethane ND 125 130 ug/L 98 52 - 148 ne 1,1,2-Trichloroethane ND 125 122 ug/L 99 76 - 122 1,1-Dichloroethane ND 125 124 ug/L 99 76 - 122 1,1-Dichloroethane ND 125 122 ug/L 98 71 - 129 1,1-Dichloroethane ND 125 121 ug/L 98 71 - 129 1,2-Dibromo-3-Chloropropane ND 125 118 ug/L 98 70 - 122 1,2-Dibromo-3-Chloropropane ND 125 118 ug/L 94 86 - 134 1,2-Dichlorobenzene ND 125 118 ug/L 99 75 - 120 1,2-Dichlorobenzene	Analysis Batch. 270559	Sample	Sample	Spike	MS	MS				%Rec.
1,1,2,2-Tetrachloroethane ND 125 130 ug/L 104 70 - 126 1,1,2-Trichloro-1,2,2-triffluoroetha ND 125 122 ug/L 98 52 - 148 ne ND 125 122 ug/L 99 76 - 122 1,1,2-Trichloroethane ND 125 124 ug/L 98 71 - 129 1,1-Dichloroethane ND 125 122 ug/L 98 71 - 129 1,1-Dichloroethane ND 125 121 ug/L 98 70 - 122 1,2-Fichlorobenzene ND 125 123 ug/L 98 70 - 122 1,2-Dibromo-3-Chloropropane ND 125 118 ug/L 94 56 - 134 1,2-Dichlorobenzene ND 125 125 ug/L 94 56 - 134 1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichloroperpane ND 125 119 ug/L 95 76 - 12	Analyte	•	•	•	_	_	Unit	D	%Rec	
1,1,2-Trichloro-1,2,2-trifluoroetha ND 125 122 ug/L 98 52 - 148	1,1,1-Trichloroethane	ND		125	123		ug/L		99	73 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane ND 125 122 ug/L 98 52 - 148 1,1,2-Trichloroethane ND 125 124 ug/L 99 76 - 122 1,1-Dichloroethane ND 125 122 ug/L 98 71 - 129 1,1-Dichloroethane ND 125 122 ug/L 98 71 - 129 1,1-Dichloroethene ND 125 121 ug/L 98 70 - 122 1,2-Trichlorobenzene ND 125 123 ug/L 98 70 - 122 1,2-Dibromo-3-Chloropropane ND 125 118 ug/L 94 56 - 134 1,2-Dibromoethane ND 125 125 ug/L 100 77 - 120 1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichlorobenzene ND 125 118 ug/L 99 75 - 127 1,2-Dichloroethane ND 125 118 ug/L 99 75 - 127 1,2-Dichlorobenzene ND 125 119 ug/L 99 75 - 120 1,3-Dichlorobenzene ND 125 119 ug/L 95 76 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 666 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 110 65 - 142 Benzene ND 125 124 ug/L 99 71 - 125 Benzene ND 125 108 ug/L 99 71 - 124 Bromodichloromethane ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 142 ug/L 144 55 - 144 Carbon disulfide ND 125 142 ug/L 144 55 - 144 Carbon disulfide ND 125 142 ug/L 144 55 - 144 Carbon disulfide ND 125 142 ug/L 84 59 - 134 Carbon disulfide ND 125 106 ug/L 84 59 - 134 Carbon disulfide ND 125 106 ug/L 84 59 - 134 Carbon disulfide ND 125 106 ug/L 84 59 - 134 Carbon disulfide ND 125 126 ug/L 126 127 Carbon disulfide ND 125 126 ug/L 126 127 Carbon disulfide ND 125 126 ug/L 126 127 Carbon disulfide ND 125 1	1,1,2,2-Tetrachloroethane	ND		125	130		ug/L		104	70 - 126
1,1,2-Trichloroethane ND 125 124 ug/L 99 76 - 122 1,1-Dichloroethane ND 125 122 ug/L 98 71 - 129 1,1-Dichloroethane ND 125 121 ug/L 97 58 - 121 1,2,4-Trichlorobenzene ND 125 123 ug/L 98 70 - 122 1,2-Dibromo-3-Chloropropane ND 125 118 ug/L 94 56 - 134 1,2-Dibromoethane ND 125 118 ug/L 94 56 - 134 1,2-Dibromoethane ND 125 118 ug/L 94 56 - 134 1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichlorobenzene ND 125 118 ug/L 99 75 - 120 1,2-Dichloroperpane ND 125 119 ug/L 95 76 - 120 1,3-Dichlorobenzene ND 125 119 ug/L 95 77 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 <td>1,1,2-Trichloro-1,2,2-trifluoroetha</td> <td>ND</td> <td></td> <td>125</td> <td>122</td> <td></td> <td>-</td> <td></td> <td>98</td> <td>52 - 148</td>	1,1,2-Trichloro-1,2,2-trifluoroetha	ND		125	122		-		98	52 - 148
1,1-Dichloroethane ND 125 122 ug/L 98 71 - 129 1,1-Dichloroethene ND 125 121 ug/L 97 58 - 121 1,2,4-Trichlorobenzene ND 125 123 ug/L 98 70 - 122 1,2-Dibromo-3-Chloropropane ND 125 118 ug/L 94 56 - 134 1,2-Dibromoethane ND 125 125 ug/L 100 77 - 120 1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichloropopane ND 125 119 ug/L 95 76 - 120 1,3-Dichlorobenzene ND 125 119 ug/L 95 77 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Hexanone (MEK) ND 625 686 ug/L 106	ne									
1,1-Dichloroethene ND 125 121 ug/L 97 58-121 1,2,4-Trichlorobenzene ND 125 123 ug/L 98 70-122 1,2-Dibromo-3-Chloropropane ND 125 118 ug/L 94 56-134 1,2-Dibromoethane ND 125 125 ug/L 100 77-120 1,2-Dichlorobenzene ND 125 118 ug/L 94 80-124 1,2-Dichlorobenzene ND 125 118 ug/L 99 75-127 1,2-Dichloroperopane ND 125 119 ug/L 95 76-120 1,3-Dichlorobenzene ND 125 119 ug/L 95 76-120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75-120 2-Butanone (MEK) ND 625 665 ug/L 106 57-140 2-Hexanone ND 625 665 ug/L 10 65-127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 11 65-142 <td>1,1,2-Trichloroethane</td> <td>ND</td> <td></td> <td>125</td> <td>124</td> <td></td> <td>ug/L</td> <td></td> <td>99</td> <td>76 - 122</td>	1,1,2-Trichloroethane	ND		125	124		ug/L		99	76 - 122
1,2,4-Trichlorobenzene ND 125 123 ug/L 98 70 - 122 1,2-Dibromo-3-Chloropropane ND 125 118 ug/L 94 56 - 134 1,2-Dibromoethane ND 125 125 ug/L 100 77 - 120 1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichlorobenzene ND 125 118 ug/L 99 75 - 127 1,2-Dichlorobenzene ND 125 119 ug/L 95 76 - 120 1,3-Dichlorobenzene ND 125 119 ug/L 95 77 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 686 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 113	1,1-Dichloroethane	ND		125	122		ug/L		98	71 - 129
1,2-Dibromo-3-Chloropropane ND 125 118 ug/L 94 56 - 134 1,2-Dibromoethane ND 125 125 ug/L 100 77 - 120 1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichlorobenzene ND 125 119 ug/L 99 75 - 127 1,2-Dichloropropane ND 125 119 ug/L 95 76 - 120 1,3-Dichlorobenzene ND 125 119 ug/L 95 77 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 637 ug/L 102 71 - 125 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 125 124 ug/L 99 71 - 124	1,1-Dichloroethene	ND		125	121		ug/L		97	58 ₋ 121
1,2-Dibromoethane ND 125 125 ug/L 100 77 - 120 1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichlorobenzene ND 125 124 ug/L 99 75 - 127 1,2-Dichloropropane ND 125 119 ug/L 95 76 - 120 1,3-Dichlorobenzene ND 125 119 ug/L 95 77 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 686 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122	1,2,4-Trichlorobenzene	ND		125	123		ug/L		98	70 - 122
1,2-Dichlorobenzene ND 125 118 ug/L 94 80 - 124 1,2-Dichloroethane ND 125 124 ug/L 99 75 - 127 1,2-Dichloropropane ND 125 119 ug/L 95 76 - 120 1,3-Dichlorobenzene ND 125 119 ug/L 95 77 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 686 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromoform ND 125 85.6 ug/L 144 55 - 144	1,2-Dibromo-3-Chloropropane	ND		125	118		ug/L		94	56 ₋ 134
1,2-Dichloroethane ND 125 124 ug/L 99 75 - 127 1,2-Dichloropropane ND 125 119 ug/L 95 76 - 120 1,3-Dichlorobenzene ND 125 119 ug/L 95 77 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 686 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromomethane ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 14 55 - 144 <tr< td=""><td>1,2-Dibromoethane</td><td>ND</td><td></td><td>125</td><td>125</td><td></td><td>ug/L</td><td></td><td>100</td><td>77 - 120</td></tr<>	1,2-Dibromoethane	ND		125	125		ug/L		100	77 - 120
1,2-Dichloropropane ND 125 119 ug/L 95 76 - 120 1,3-Dichlorobenzene ND 125 119 ug/L 95 77 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 686 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromomethane ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 106 ug/L 84 59 - 134 <td>1,2-Dichlorobenzene</td> <td>ND</td> <td></td> <td>125</td> <td>118</td> <td></td> <td>ug/L</td> <td></td> <td>94</td> <td>80 - 124</td>	1,2-Dichlorobenzene	ND		125	118		ug/L		94	80 - 124
1,3-Dichlorobenzene ND 125 119 ug/L 95 77 - 120 1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 686 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromomethane ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 106 ug/L 84 59 - 134	1,2-Dichloroethane	ND		125	124		ug/L		99	75 - 127
1,4-Dichlorobenzene ND 125 119 ug/L 95 75 - 120 2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 686 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromoform ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 106 ug/L 84 59 - 134	1,2-Dichloropropane	ND		125	119		ug/L		95	76 - 120
2-Butanone (MEK) ND 625 665 ug/L 106 57 - 140 2-Hexanone ND 625 686 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromoform ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 87 80 - 122 Carbon disulfide ND 125 142 ug/L 84 59 - 134	1,3-Dichlorobenzene	ND		125	119		ug/L		95	77 - 120
2-Hexanone ND 625 686 ug/L 110 65 - 127 4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromoform ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 87 80 - 122 Carbon disulfide ND 125 106 ug/L 84 59 - 134	1,4-Dichlorobenzene	ND		125	119		ug/L		95	75 - 120
4-Methyl-2-pentanone (MIBK) ND 625 637 ug/L 102 71 - 125 Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromoform ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 106 ug/L 84 59 - 134	2-Butanone (MEK)	ND		625	665		ug/L		106	57 - 140
Acetone ND 625 704 ug/L 113 56 - 142 Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromoform ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 106 ug/L 84 59 - 134	2-Hexanone	ND		625	686		ug/L		110	65 - 127
Benzene ND 125 124 ug/L 99 71 - 124 Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromoform ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 106 ug/L 84 59 - 134	4-Methyl-2-pentanone (MIBK)	ND		625	637		ug/L		102	71 - 125
Bromodichloromethane ND 125 108 ug/L 87 80 - 122 Bromoform ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 106 ug/L 84 59 - 134	Acetone	ND		625	704		ug/L		113	56 - 142
Bromoform ND 125 85.6 ug/L 69 52 - 132 Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 106 ug/L 84 59 - 134	Benzene	ND		125	124		ug/L		99	71 - 124
Bromomethane ND 125 142 ug/L 114 55 - 144 Carbon disulfide ND 125 106 ug/L 84 59 - 134	Bromodichloromethane	ND		125	108		ug/L		87	80 - 122
Carbon disulfide ND 125 106 ug/L 84 59 - 134	Bromoform	ND		125	85.6		ug/L		69	52 - 132
• • • • • • • • • • • • • • • • • • • •	Bromomethane	ND		125	142		ug/L		114	55 - 144
Carbon tetrachloride ND 125 116 ug/L 93 72 - 134	Carbon disulfide	ND		125	106		ug/L		84	59 - 134
	Carbon tetrachloride	ND		125	116		ug/L		93	72 - 134

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TestAmerica Job ID: 480-91066-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: 480-91066-1 MS

Matrix: Water

Analysis Batch: 276559

Client Sample ID: MW-6R (111015)

Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chlorobenzene	ND		125	120		ug/L		96	72 - 120
Chloroethane	ND		125	148		ug/L		119	69 - 136
Chloroform	ND		125	119		ug/L		95	73 - 127
Chloromethane	ND		125	102		ug/L		81	68 - 124
cis-1,2-Dichloroethene	190	F1	125	233	F1	ug/L		31	74 - 124
cis-1,3-Dichloropropene	ND		125	109		ug/L		87	74 - 124
Cyclohexane	ND		125	111		ug/L		89	59 - 135
Dibromochloromethane	ND		125	101		ug/L		81	75 - 125
Dichlorodifluoromethane	ND		125	84.3		ug/L		67	59 - 135
Ethylbenzene	25		125	145		ug/L		96	77 - 123
Isopropylbenzene	20		125	155		ug/L		108	77 - 122
Methyl acetate	ND		625	632		ug/L		101	74 - 133
Methyl tert-butyl ether	9.9	F1	125	191	F1	ug/L		145	64 - 127
Methylcyclohexane	1.7	J	125	119		ug/L		94	61 - 138
Methylene Chloride	ND		125	123		ug/L		98	57 - 132
Styrene	ND		125	117		ug/L		94	70 - 130
Tetrachloroethene	ND		125	120		ug/L		96	74 - 122
Toluene	ND		125	128		ug/L		102	80 - 122
trans-1,2-Dichloroethene	ND		125	116		ug/L		93	73 - 127
trans-1,3-Dichloropropene	ND		125	115		ug/L		92	72 - 123
Trichloroethene	ND		125	111		ug/L		89	74 - 123
Trichlorofluoromethane	ND		125	132		ug/L		106	62 - 152
Vinyl chloride	220		125	353		ug/L		109	65 - 133
Xylenes, Total	11		250	246		ug/L		94	76 - 122

MS MS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	96		71 - 126
Dibromofluoromethane (Surr)	93		60 - 140

Lab Sample ID: 480-91066-1 MSD

Matrix: Water

Analysis Batch: 276559

,	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	ND		125	125	-	ug/L		100	73 - 126	2	15
1,1,2,2-Tetrachloroethane	ND		125	126		ug/L		101	70 - 126	3	15
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		125	125		ug/L		100	52 - 148	2	20
ne											
1,1,2-Trichloroethane	ND		125	129		ug/L		104	76 - 122	4	15
1,1-Dichloroethane	ND		125	130		ug/L		104	71 - 129	6	20
1,1-Dichloroethene	ND		125	124		ug/L		99	58 - 121	3	16
1,2,4-Trichlorobenzene	ND		125	125		ug/L		100	70 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		125	121		ug/L		96	56 - 134	2	15
1,2-Dibromoethane	ND		125	123		ug/L		99	77 - 120	1	15
1,2-Dichlorobenzene	ND		125	121		ug/L		96	80 - 124	2	20
1,2-Dichloroethane	ND		125	127		ug/L		101	75 - 127	2	20

TestAmerica Buffalo

Client Sample ID: MW-6R (111015)

Prep Type: Total/NA

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QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

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

Client Sample ID: MW-6R (111015) **Prep Type: Total/NA**

Lab Sample ID: 480-91066-1 MSD

Matrix: Water

Analysis Batch: 276559

Analyte	-	Sample Qualifier	Spike Added		MSD Qualifier	Unit		%Rec	%Rec. Limits	RPD	RPD Limit
							D				
1,2-Dichloropropane	ND		125	121		ug/L		96	76 - 120	1	20
1,3-Dichlorobenzene	ND		125	119		ug/L		95	77 - 120	0	20
1,4-Dichlorobenzene	ND		125	121		ug/L		97	75 - 120	2	20
2-Butanone (MEK)	ND		625	688		ug/L		110	57 - 140	3	20
2-Hexanone	ND		625	699		ug/L		112	65 - 127	2	15
4-Methyl-2-pentanone (MIBK)	ND		625	639		ug/L		102	71 - 125	0	35
Acetone	ND		625	713		ug/L		114	56 - 142	1	15
Benzene	ND		125	126		ug/L		101	71 - 124	2	13
Bromodichloromethane	ND		125	113		ug/L		90	80 - 122	4	15
Bromoform	ND		125	90.9		ug/L		73	52 - 132	6	15
Bromomethane	ND		125	146		ug/L		117	55 - 144	3	15
Carbon disulfide	ND		125	112		ug/L		90	59 - 134	6	15
Carbon tetrachloride	ND		125	122		ug/L		97	72 - 134	5	15
Chlorobenzene	ND		125	124		ug/L		99	72 - 120	4	25
Chloroethane	ND		125	150		ug/L		120	69 - 136	1	15
Chloroform	ND		125	124		ug/L		99	73 - 127	5	20
Chloromethane	ND		125	107		ug/L		85	68 - 124	5	15
cis-1,2-Dichloroethene	190	F1	125	239	F1	ug/L		36	74 - 124	3	15
cis-1,3-Dichloropropene	ND		125	114		ug/L		91	74 - 124	5	15
Cyclohexane	ND		125	119		ug/L		95	59 - 135	7	20
Dibromochloromethane	ND		125	103		ug/L		83	75 - 125	2	15
Dichlorodifluoromethane	ND		125	93.1		ug/L		75	59 - 135	10	20
Ethylbenzene	25		125	150		ug/L		100	77 - 123	3	15
Isopropylbenzene	20		125	155		ug/L		108	77 - 122	0	20
Methyl acetate	ND		625	662		ug/L		106	74 - 133	5	20
Methyl tert-butyl ether	9.9	F1	125	196	F1	ug/L		149	64 - 127	2	37
Methylcyclohexane	1.7	J	125	126		ug/L		99	61 - 138	5	20
Methylene Chloride	ND		125	127		ug/L		102	57 ₋ 132	3	15
Styrene	ND		125	120		ug/L		96	70 - 130	2	20
Tetrachloroethene	ND		125	124		ug/L		99	74 - 122	3	20
Toluene	ND		125	134		ug/L		107	80 - 122	5	15
trans-1,2-Dichloroethene	ND		125	121		ug/L		97	73 - 127	4	20
trans-1,3-Dichloropropene	ND		125	121		ug/L		96	72 - 123	5	15
Trichloroethene	ND		125	116		ug/L		93	74 - 123	5	16
Trichlorofluoromethane	ND		125	138		ug/L		111	62 - 152	5	20
Vinyl chloride	220		125	373		ug/L		125	65 - 133	5	15
Xylenes, Total	11		250	256		ug/L		98	76 - 122	4	16

<i>N</i> SD MSD

Surrogate	%Recovery	Qualifier	Limits	
1,2-Dichloroethane-d4 (Surr)	102		66 - 137	
4-Bromofluorobenzene (Surr)	101		73 - 120	
Toluene-d8 (Surr)	99		71 - 126	
Dibromofluoromethane (Surr)	93		60 - 140	

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

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

Lab Sample ID: MB 480-276625/7

Matrix: Water

Analysis Batch: 276625

Client Sample ID: Method Blank

Prep Type: Total/NA

		MB							
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/24/15 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/24/15 10:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/24/15 10:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/24/15 10:59	1
1,1-Dichloroethane	ND		1.0		ug/L			11/24/15 10:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/24/15 10:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/24/15 10:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/24/15 10:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/24/15 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/24/15 10:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/24/15 10:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/24/15 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/24/15 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/24/15 10:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/24/15 10:59	1
2-Hexanone	ND		5.0	1.2	ug/L			11/24/15 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/24/15 10:59	1
Acetone	ND		10	3.0	ug/L			11/24/15 10:59	1
Benzene	ND		1.0	0.41	ug/L			11/24/15 10:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/24/15 10:59	1
Bromoform	ND		1.0		ug/L			11/24/15 10:59	1
Bromomethane	ND		1.0		ug/L			11/24/15 10:59	1
Carbon disulfide	ND		1.0		ug/L			11/24/15 10:59	1
Carbon tetrachloride	ND		1.0		ug/L			11/24/15 10:59	1
Chlorobenzene	ND		1.0		ug/L			11/24/15 10:59	1
Chloroethane	ND		1.0		ug/L			11/24/15 10:59	1
Chloroform	ND		1.0		ug/L			11/24/15 10:59	1
Chloromethane	ND		1.0		ug/L			11/24/15 10:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/24/15 10:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/24/15 10:59	1
Cyclohexane	ND		1.0		ug/L			11/24/15 10:59	1
Dibromochloromethane	ND		1.0		ug/L			11/24/15 10:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/24/15 10:59	1
Ethylbenzene	ND		1.0		ug/L			11/24/15 10:59	1
Isopropylbenzene	ND		1.0		ug/L			11/24/15 10:59	1
Methyl acetate	ND		2.5		ug/L			11/24/15 10:59	
Methyl tert-butyl ether	ND		1.0		ug/L			11/24/15 10:59	1
Methylcyclohexane	ND		1.0		ug/L			11/24/15 10:59	1
Methylene Chloride	ND		1.0		ug/L			11/24/15 10:59	1
Styrene	ND		1.0		ug/L			11/24/15 10:59	· · · · · · · · 1
Tetrachloroethene	ND		1.0		ug/L			11/24/15 10:59	-
Toluene	ND		1.0		ug/L			11/24/15 10:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/24/15 10:59	
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/24/15 10:59	-
Trichloroethene	ND		1.0		ug/L			11/24/15 10:59	-
Trichlorofluoromethane	ND		1.0		ug/L ug/L			11/24/15 10:59	
Vinyl chloride	ND ND		1.0		ug/L ug/L			11/24/15 10:59	
Xylenes, Total	ND ND		2.0		ug/L ug/L			11/24/15 10:59	1

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

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Lab Sample ID: MB 480-276625/7

Matrix: Water

Surrogate

Analysis Batch: 276625

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

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

11/24/15 10:59

MB MB %Recovery Qualifier Dil Fac Limits Prepared Analyzed 66 - 137 11/24/15 10:59 98 98 73 - 120 11/24/15 10:59 94 71 - 126 11/24/15 10:59

Lab Sample ID: LCS 480-276625/5

Matrix: Water

Toluene-d8 (Surr)

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

Analysis Batch: 276625								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	25.0	23.6		ug/L		94	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	23.3		ug/L		93	52 - 148	
ne								
1,1,2-Trichloroethane	25.0	24.9		ug/L		100	76 - 122	
1,1-Dichloroethane	25.0	24.4		ug/L		98	71 - 129	
1,1-Dichloroethene	25.0	23.4		ug/L		93	58 - 121	
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	70 - 122	
1,2-Dibromo-3-Chloropropane	25.0	23.1		ug/L		92	56 - 134	
1,2-Dibromoethane	25.0	24.8		ug/L		99	77 - 120	
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	80 - 124	
1,2-Dichloroethane	25.0	24.2		ug/L		97	75 - 127	
1,2-Dichloropropane	25.0	23.3		ug/L		93	76 - 120	
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	77 - 120	
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	75 - 120	
2-Butanone (MEK)	125	133		ug/L		107	57 - 140	
2-Hexanone	125	139		ug/L		111	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	127		ug/L		102	71 - 125	
Acetone	125	146		ug/L		117	56 - 142	
Benzene	25.0	23.4		ug/L		94	71 - 124	
Bromodichloromethane	25.0	22.3		ug/L		89	80 - 122	
Bromoform	25.0	21.1		ug/L		84	52 - 132	
Bromomethane	25.0	22.9		ug/L		92	55 - 144	
Carbon disulfide	25.0	22.7		ug/L		91	59 - 134	
Carbon tetrachloride	25.0	22.2		ug/L		89	72 - 134	
Chlorobenzene	25.0	24.1		ug/L		97	72 - 120	
Chloroethane	25.0	24.3		ug/L		97	69 - 136	
Chloroform	25.0	23.1		ug/L		92	73 - 127	
Chloromethane	25.0	22.7		ug/L		91	68 - 124	
cis-1,2-Dichloroethene	25.0	21.8		ug/L		87	74 - 124	
cis-1,3-Dichloropropene	25.0	22.7		ug/L		91	74 - 124	
Cyclohexane	25.0	21.8		ug/L		87	59 - 135	
Dibromochloromethane	25.0	22.2		ug/L		89	75 ₋ 125	
Dichlorodifluoromethane	25.0	24.3		ug/L		97	59 - 135	
Ethylbenzene	25.0	24.7		ug/L		99	77 - 123	
Isopropylbenzene	25.0	24.2		ug/L		97	77 - 122	
Methyl acetate	125	130		ug/L		104	74 - 133	
Methyl tert-butyl ether	25.0	23.9		ug/L		96	64 - 127	

TestAmerica Job ID: 480-91066-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 480-276625/5

Matrix: Water

Analysis Batch: 276625

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

•	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Methylcyclohexane	25.0	22.9		ug/L		92	61 - 138	
Methylene Chloride	25.0	24.8		ug/L		99	57 - 132	
Styrene	25.0	24.2		ug/L		97	70 - 130	
Tetrachloroethene	25.0	24.6		ug/L		98	74 - 122	
Toluene	25.0	24.4		ug/L		98	80 - 122	
trans-1,2-Dichloroethene	25.0	22.7		ug/L		91	73 - 127	
trans-1,3-Dichloropropene	25.0	25.0		ug/L		100	72 - 123	
Trichloroethene	25.0	22.3		ug/L		89	74 - 123	
Trichlorofluoromethane	25.0	25.5		ug/L		102	62 - 152	
Vinyl chloride	25.0	23.5		ug/L		94	65 - 133	
Xylenes, Total	50.0	46.8		ug/L		94	76 - 122	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		66 - 137
4-Bromofluorobenzene (Surr)	103		73 - 120
Toluene-d8 (Surr)	98		71 - 126
Dibromofluoromethane (Surr)	92		60 - 140

Lab Sample ID: 480-91066-7 MS

Matrix: Water

Client Sample ID: MW-23D (111115) Prep Type: Total/NA

Analysis Batch: 276625										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	ND		500	482		ug/L		96	73 - 126	
1,1,2,2-Tetrachloroethane	ND		500	506		ug/L		101	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		500	499		ug/L		100	52 - 148	
ne										
1,1,2-Trichloroethane	ND		500	532		ug/L		106	76 - 122	
1,1-Dichloroethane	ND		500	500		ug/L		100	71 - 129	
1,1-Dichloroethene	ND		500	491		ug/L		98	58 - 121	
1,2,4-Trichlorobenzene	ND		500	491		ug/L		98	70 - 122	
1,2-Dibromo-3-Chloropropane	ND		500	463		ug/L		93	56 - 134	
1,2-Dibromoethane	ND		500	499		ug/L		100	77 - 120	
1,2-Dichlorobenzene	ND		500	471		ug/L		94	80 - 124	
1,2-Dichloroethane	ND		500	482		ug/L		96	75 - 127	
1,2-Dichloropropane	ND		500	471		ug/L		94	76 - 120	
1,3-Dichlorobenzene	ND		500	481		ug/L		96	77 - 120	
1,4-Dichlorobenzene	ND		500	487		ug/L		97	75 - 120	
2-Butanone (MEK)	ND		2500	2640		ug/L		106	57 ₋ 140	
2-Hexanone	ND		2500	2720		ug/L		109	65 - 127	
4-Methyl-2-pentanone (MIBK)	ND		2500	2470		ug/L		99	71 - 125	
Acetone	ND		2500	2820		ug/L		113	56 - 142	
Benzene	ND		500	486		ug/L		97	71 - 124	
Bromodichloromethane	ND		500	437		ug/L		87	80 - 122	
Bromoform	ND		500	388		ug/L		78	52 - 132	
Bromomethane	ND		500	459		ug/L		92	55 - 144	
Carbon disulfide	ND		500	438		ug/L		88	59 ₋ 134	
Carbon tetrachloride	ND		500	463		ug/L		93	72 - 134	

TestAmerica Buffalo

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TestAmerica Job ID: 480-91066-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: 480-91066-7 MS

Matrix: Water

Analysis Batch: 276625

Client Sample ID: MW-23D (111115) Prep Type: Total/NA

Analysis Batch. 270020	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chlorobenzene	ND		500	483		ug/L		97	72 - 120
Chloroethane	ND		500	480		ug/L		96	69 - 136
Chloroform	ND		500	481		ug/L		96	73 - 127
Chloromethane	ND		500	407		ug/L		81	68 - 124
cis-1,2-Dichloroethene	1300	F1	500	1520	F1	ug/L		43	74 - 124
cis-1,3-Dichloropropene	ND		500	439		ug/L		88	74 - 124
Cyclohexane	ND		500	453		ug/L		91	59 ₋ 135
Dibromochloromethane	ND		500	421		ug/L		84	75 ₋ 125
Dichlorodifluoromethane	ND		500	349		ug/L		70	59 - 135
Ethylbenzene	ND		500	501		ug/L		100	77 - 123
Isopropylbenzene	ND		500	493		ug/L		99	77 - 122
Methyl acetate	ND		2500	2550		ug/L		102	74 - 133
Methyl tert-butyl ether	12	J	500	487		ug/L		95	64 - 127
Methylcyclohexane	ND		500	471		ug/L		94	61 - 138
Methylene Chloride	ND		500	506		ug/L		101	57 ₋ 132
Styrene	ND		500	493		ug/L		99	70 - 130
Tetrachloroethene	1300	F1	500	1550	F1	ug/L		42	74 - 122
Toluene	ND		500	490		ug/L		98	80 - 122
trans-1,2-Dichloroethene	ND		500	478		ug/L		96	73 - 127
trans-1,3-Dichloropropene	ND		500	479		ug/L		96	72 - 123
Trichloroethene	500	F1	500	857	F1	ug/L		71	74 - 123
Trichlorofluoromethane	ND		500	522		ug/L		104	62 - 152
Vinyl chloride	140		500	553		ug/L		82	65 - 133
Xylenes, Total	ND		1000	950		ug/L		95	76 - 122

MS MS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
4-Bromofluorobenzene (Surr)	103		73 - 120
Toluene-d8 (Surr)	94		71 - 126
Dibromofluoromethane (Surr)	90		60 - 140

Lab Sample ID: 480-91066-7 MSD

Matrix: Water

Analysis Batch: 276625

	Sample S	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result (Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	ND		500	466	-	ug/L		93	73 - 126	3	15
1,1,2,2-Tetrachloroethane	ND		500	497		ug/L		99	70 - 126	2	15
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		500	476		ug/L		95	52 - 148	5	20
ne											
1,1,2-Trichloroethane	ND		500	517		ug/L		103	76 - 122	3	15
1,1-Dichloroethane	ND		500	492		ug/L		98	71 - 129	1	20
1,1-Dichloroethene	ND		500	473		ug/L		95	58 - 121	4	16
1,2,4-Trichlorobenzene	ND		500	481		ug/L		96	70 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		500	437		ug/L		87	56 - 134	6	15
1,2-Dibromoethane	ND		500	499		ug/L		100	77 - 120	0	15
1,2-Dichlorobenzene	ND		500	475		ug/L		95	80 - 124	1	20
1,2-Dichloroethane	ND		500	509		ug/L		102	75 ₋ 127	5	20

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Client Sample ID: MW-23D (111115)

Prep Type: Total/NA

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

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

Client Sample ID: MW-23D (111115)

Prep Type: Total/NA

Lab Sample ID: 480-91066-7 MSD

Matrix: Water

Analysis Batch: 276625

Analysis Balcii. 270025	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2-Dichloropropane	ND		500	474		ug/L		95	76 - 120	0	20
1,3-Dichlorobenzene	ND		500	457		ug/L		91	77 - 120	5	20
1,4-Dichlorobenzene	ND		500	466		ug/L		93	75 - 120	4	20
2-Butanone (MEK)	ND		2500	2770		ug/L		111	57 - 140	5	20
2-Hexanone	ND		2500	2690		ug/L		108	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	ND		2500	2500		ug/L		100	71 - 125	1	35
Acetone	ND		2500	2920		ug/L		117	56 - 142	3	15
Benzene	ND		500	483		ug/L		97	71 - 124	1	13
Bromodichloromethane	ND		500	453		ug/L		91	80 - 122	4	15
Bromoform	ND		500	415		ug/L		83	52 - 132	7	15
Bromomethane	ND		500	448		ug/L		90	55 - 144	3	15
Carbon disulfide	ND		500	448		ug/L		90	59 - 134	2	15
Carbon tetrachloride	ND		500	457		ug/L		91	72 - 134	1	15
Chlorobenzene	ND		500	478		ug/L		96	72 - 120	1	25
Chloroethane	ND		500	472		ug/L		94	69 - 136	2	15
Chloroform	ND		500	489		ug/L		98	73 - 127	2	20
Chloromethane	ND		500	401		ug/L		80	68 - 124	1	15
cis-1,2-Dichloroethene	1300	F1	500	1510	F1	ug/L		41	74 - 124	0	15
cis-1,3-Dichloropropene	ND		500	453		ug/L		91	74 - 124	3	15
Cyclohexane	ND		500	452		ug/L		90	59 - 135	0	20
Dibromochloromethane	ND		500	431		ug/L		86	75 - 125	2	15
Dichlorodifluoromethane	ND		500	345		ug/L		69	59 - 135	1	20
Ethylbenzene	ND		500	485		ug/L		97	77 - 123	3	15
Isopropylbenzene	ND		500	465		ug/L		93	77 - 122	6	20
Methyl acetate	ND		2500	2670		ug/L		107	74 - 133	5	20
Methyl tert-butyl ether	12	J	500	501		ug/L		98	64 - 127	3	37
Methylcyclohexane	ND		500	469		ug/L		94	61 - 138	0	20
Methylene Chloride	ND		500	519		ug/L		104	57 - 132	2	15
Styrene	ND		500	483		ug/L		97	70 - 130	2	20
Tetrachloroethene	1300	F1	500	1470	F1	ug/L		28	74 - 122	5	20
Toluene	ND		500	467		ug/L		93	80 - 122	5	15
trans-1,2-Dichloroethene	ND		500	485		ug/L		97	73 - 127	1	20
trans-1,3-Dichloropropene	ND		500	479		ug/L		96	72 - 123	0	15
Trichloroethene	500	F1	500	824	F1	ug/L		65	74 - 123	4	16
Trichlorofluoromethane	ND		500	509		ug/L		102	62 - 152	3	20
Vinyl chloride	140		500	533		ug/L		78	65 - 133	4	15
Xylenes, Total	ND		1000	937		ug/L		94	76 ₋ 122	1	16

ISD .	MSD
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Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		66 - 137
4-Bromofluorobenzene (Surr)	101		73 - 120
Toluene-d8 (Surr)	97		71 - 126
Dibromofluoromethane (Surr)	94		60 - 140

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

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

Lab Sample ID: MB 480-276779/7

Matrix: Water

Analysis Batch: 276779

Client Sample ID: Method Blank

Prep Type: Total/NA

		MB					_		
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/24/15 21:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/24/15 21:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/24/15 21:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/24/15 21:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/24/15 21:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/24/15 21:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/24/15 21:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/24/15 21:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/24/15 21:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/24/15 21:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/24/15 21:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/24/15 21:29	1
2-Hexanone	ND		5.0	1.2	ug/L			11/24/15 21:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/24/15 21:29	1
Acetone	ND		10		ug/L			11/24/15 21:29	1
Benzene	ND		1.0		ug/L			11/24/15 21:29	1
Bromodichloromethane	ND		1.0		ug/L			11/24/15 21:29	1
Bromoform	ND		1.0		ug/L			11/24/15 21:29	1
Bromomethane	ND		1.0		ug/L			11/24/15 21:29	1
Carbon disulfide	ND		1.0		ug/L			11/24/15 21:29	1
Carbon tetrachloride	ND		1.0		ug/L			11/24/15 21:29	1
Chlorobenzene	ND		1.0		ug/L			11/24/15 21:29	1
Chloroethane	ND		1.0		ug/L			11/24/15 21:29	1
Chloroform	ND		1.0		ug/L			11/24/15 21:29	1
Chloromethane	ND		1.0		ug/L			11/24/15 21:29	
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/24/15 21:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/24/15 21:29	1
Cyclohexane	ND		1.0		ug/L			11/24/15 21:29	
Dibromochloromethane	ND		1.0		ug/L			11/24/15 21:29	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/24/15 21:29	1
Ethylbenzene	ND		1.0		ug/L			11/24/15 21:29	
Isopropylbenzene	ND		1.0		ug/L			11/24/15 21:29	1
Methyl acetate	ND		2.5		ug/L			11/24/15 21:29	
Methyl tert-butyl ether	ND		1.0		ug/L			11/24/15 21:29	
Methylcyclohexane	ND		1.0		ug/L			11/24/15 21:29	1
Methylene Chloride	ND		1.0		ug/L			11/24/15 21:29	1
Styrene	ND		1.0		ug/L			11/24/15 21:29	
Tetrachloroethene	ND		1.0		ug/L			11/24/15 21:29	-
Toluene	ND ND		1.0		ug/L ug/L			11/24/15 21:29	-
trans-1,2-Dichloroethene	ND		1.0		ug/L ug/L			11/24/15 21:29	
	ND ND		1.0		ug/L ug/L				
trans-1,3-Dichloropropene								11/24/15 21:29	1
Trichloroethene Trichlorofluoromethane	ND		1.0		ug/L			11/24/15 21:29	1
	ND		1.0		ug/L			11/24/15 21:29	1
Vinyl chloride Xylenes, Total	ND ND		1.0 2.0		ug/L ug/L			11/24/15 21:29 11/24/15 21:29	1

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11/27/2015

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Client Sample ID: Method Blank

Prep Type: Total/NA

Method: 8260C	- voiatile C	organic (compounas	by GC/IVIS	(Continuea)

Lab Sample ID: MB 480-276779/7

Matrix: Water

Analysis Batch: 276779

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 66 - 137 11/24/15 21:29 102 4-Bromofluorobenzene (Surr) 100 73 - 120 11/24/15 21:29 Toluene-d8 (Surr) 96 71 - 126 11/24/15 21:29 Dibromofluoromethane (Surr) 90 60 - 140 11/24/15 21:29

Lab Sample ID: LCS 480-276779/5

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ab Sample ID: LCS 480-276779/5	Client Sample ID: Lab Control Sample
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 276779	

	Spike Added	Result	Ouglifier	l lmi4	_		
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane			Qualifier	Unit	D	%Rec	Limits
1.1.2.2-Tetrachloroethane	25.0	24.3		ug/L		97	73 - 126
., .,=,=	25.0	24.9		ug/L		99	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	24.5		ug/L		98	52 - 148
ne							
1,1,2-Trichloroethane	25.0	25.3		ug/L		101	76 - 122
1,1-Dichloroethane	25.0	24.6		ug/L		98	71 - 129
1,1-Dichloroethene	25.0	23.8		ug/L		95	58 - 121
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		98	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.6		ug/L		94	56 - 134
1,2-Dibromoethane	25.0	25.3		ug/L		101	77 - 120
1,2-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 124
1,2-Dichloroethane	25.0	25.6		ug/L		102	75 - 127
1,2-Dichloropropane	25.0	23.3		ug/L		93	76 - 120
1,3-Dichlorobenzene	25.0	23.1		ug/L		92	77 - 120
1,4-Dichlorobenzene	25.0	23.6		ug/L		94	75 - 120
2-Butanone (MEK)	125	142		ug/L		114	57 ₋ 140
2-Hexanone	125	143		ug/L		114	65 - 127
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		103	71 - 125
Acetone	125	157		ug/L		126	56 - 142
Benzene	25.0	24.2		ug/L		97	71 - 124
Bromodichloromethane	25.0	22.9		ug/L		92	80 - 122
Bromoform	25.0	21.3		ug/L		85	52 - 132
Bromomethane	25.0	28.4		ug/L		113	55 - 144
Carbon disulfide	25.0	23.8		ug/L		95	59 ₋ 134
Carbon tetrachloride	25.0	24.1		ug/L		97	72 - 134
Chlorobenzene	25.0	24.5		ug/L		98	72 - 120
Chloroethane	25.0	29.2		ug/L		117	69 - 136
Chloroform	25.0	24.5		ug/L		98	73 - 127
Chloromethane	25.0	19.4		ug/L		78	68 - 124
cis-1,2-Dichloroethene	25.0	22.9		ug/L		92	74 - 124
cis-1,3-Dichloropropene	25.0	23.7		ug/L		95	74 ₋ 124
Cyclohexane	25.0	22.1		ug/L		88	59 - 135
Dibromochloromethane	25.0	22.8		ug/L		91	75 ₋ 125
Dichlorodifluoromethane	25.0	15.1		ug/L		60	59 ₋ 135
Ethylbenzene	25.0	25.4		ug/L		102	77 - 123
Isopropylbenzene	25.0	24.5		ug/L		98	77 - 123 77 - 122
Methyl acetate	125	134		ug/L		107	74 - 133
Methyl tert-butyl ether	25.0	24.7		ug/L		99	64 - 127

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

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

Lab Sample ID: LCS 480-276779/5

Matrix: Water

Analysis Batch: 276779

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Methylcyclohexane	25.0	23.7	-	ug/L		95	61 - 138	
Methylene Chloride	25.0	25.2		ug/L		101	57 ₋ 132	
Styrene	25.0	24.2		ug/L		97	70 - 130	
Tetrachloroethene	25.0	23.7		ug/L		95	74 - 122	
Toluene	25.0	24.6		ug/L		98	80 - 122	
trans-1,2-Dichloroethene	25.0	23.8		ug/L		95	73 - 127	
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	72 - 123	
Trichloroethene	25.0	22.7		ug/L		91	74 - 123	
Trichlorofluoromethane	25.0	26.4		ug/L		106	62 - 152	
Vinyl chloride	25.0	21.4		ug/L		86	65 ₋ 133	
Xylenes, Total	50.0	47.3		ug/L		95	76 - 122	

1	CS	1	CS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	96		71 - 126
Dibromofluoromethane (Surr)	92		60 - 140

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

GC/MS VOA

Analysis Batch: 276559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91066-1	MW-6R (111015)	Total/NA	Water	8260C	_
480-91066-1 MS	MW-6R (111015)	Total/NA	Water	8260C	
480-91066-1 MSD	MW-6R (111015)	Total/NA	Water	8260C	
480-91066-2	DUP-01 (111015)	Total/NA	Water	8260C	
480-91066-3	MW-1 (111015)	Total/NA	Water	8260C	
480-91066-4	MW-27 (111015)	Total/NA	Water	8260C	
480-91066-5	MW-28 (111015)	Total/NA	Water	8260C	
480-91066-6	MW-23S (111115)	Total/NA	Water	8260C	
480-91066-8	MW-17R (111015)	Total/NA	Water	8260C	
480-91066-9	MW-16R (111015)	Total/NA	Water	8260C	
LCS 480-276559/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-276559/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 276625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91066-7	MW-23D (111115)	Total/NA	Water	8260C	
480-91066-7 MS	MW-23D (111115)	Total/NA	Water	8260C	
480-91066-7 MSD	MW-23D (111115)	Total/NA	Water	8260C	
480-91066-10	MW-22D (111115)	Total/NA	Water	8260C	
480-91066-11	MW-9 (111115)	Total/NA	Water	8260C	
480-91066-12	MP-20 (111115)	Total/NA	Water	8260C	
480-91066-14	IW-01D (111215)	Total/NA	Water	8260C	
480-91066-15	MW-18 (111115)	Total/NA	Water	8260C	
480-91066-16	MW-3 (111115)	Total/NA	Water	8260C	
480-91066-17	MW-10S (111215)	Total/NA	Water	8260C	
480-91066-18	MW-15R (111115)	Total/NA	Water	8260C	
480-91066-19	ТВ	Total/NA	Water	8260C	
LCS 480-276625/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-276625/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 276779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91066-13	MW-10D (111215)	Total/NA	Water	8260C	
480-91066-14 - DL	IW-01D (111215)	Total/NA	Water	8260C	
480-91066-15 - DL	MW-18 (111115)	Total/NA	Water	8260C	
LCS 480-276779/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-276779/7	Method Blank	Total/NA	Water	8260C	

Page 49 of 59

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-6R (111015)

Date Collected: 11/10/15 10:52

Lab Sample ID: 480-91066-1

Matrix: Water

Date Received: 11/13/15 09:30 Batch Batch

Method Factor Number or Analyzed **Prep Type** Type Run Analyst Lab

Dilution

Batch

Prepared

Analyst

Lab

Total/NA Analysis 8260C 5 276559 11/24/15 03:28 GTG

TAL BUF

Client Sample ID: DUP-01 (111015)

Date Collected: 11/10/15 00:00 Date Received: 11/13/15 09:30

Lab Sample ID: 480-91066-2

Matrix: Water

Matrix: Water

Batch Batch Dilution Batch **Prepared Prep Type** Type Method Run Factor Number or Analyzed

Total/NA 8260C 276559 11/24/15 06:14 GTG TAL BUF Analysis 5

Client Sample ID: MW-1 (111015) Lab Sample ID: 480-91066-3

Date Collected: 11/10/15 09:10 Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared

Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Total/NA Analysis 8260C 40 276559 11/24/15 03:52 GTG TAL BUF

Lab Sample ID: 480-91066-4 **Client Sample ID: MW-27 (111015) Matrix: Water**

Date Collected: 11/10/15 12:17 Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared

Method Factor Number or Analyzed **Prep Type** Type Run Analyst Lab

11/24/15 04:15 GTG TAL BUF Total/NA Analysis 8260C 2000 276559

Lab Sample ID: 480-91066-5 Client Sample ID: MW-28 (111015) **Matrix: Water**

Date Collected: 11/10/15 17:35 Date Received: 11/13/15 09:30

Date Received: 11/13/15 09:30

Client Sample ID: MW-23S (111115)

Batch Dilution **Batch** Batch Prepared

Method Factor Number or Analyzed Prep Type Type Run **Analyst** Lab Total/NA Analysis 8260C 2000 276559 11/24/15 04:39 GTG TAL BUF

Date Collected: 11/11/15 09:02 **Matrix: Water**

Batch Dilution Batch Batch Prepared Method Run Number or Analyzed **Prep Type** Type **Factor** Analyst Lab Total/NA Analysis 8260C 10 276559 11/24/15 05:03 GTG TAL BUF

TestAmerica Buffalo

Lab Sample ID: 480-91066-6

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-23D (111115)

Date Collected: 11/11/15 09:58 Date Received: 11/13/15 09:30

Lab Sample ID: 480-91066-7

Matrix: Water

Dilution Batch Batch Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Total/NA Analysis 8260C 20 276625 11/24/15 14:48 GVF TAL BUF

Client Sample ID: MW-17R (111015) Lab Sample ID: 480-91066-8

Date Collected: 11/10/15 16:17 Date Received: 11/13/15 09:30

Matrix: Water

Batch Batch Dilution **Batch** Prepared Method **Prep Type** Type Run Factor Number or Analyzed **Analyst** Lab 11/24/15 05:26 GTG TAL BUF Total/NA 8260C 276559 Analysis

Client Sample ID: MW-16R (111015) Lab Sample ID: 480-91066-9

Date Collected: 11/10/15 15:20

Matrix: Water

Date Received: 11/13/15 09:30

Ratch Ratch Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed **Analyst** 8260C 276559 11/24/15 05:50 GTG TAL BUF Total/NA Analysis

Client Sample ID: MW-22D (111115) Lab Sample ID: 480-91066-10

Date Collected: 11/11/15 13:02

Matrix: Water

Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared Method or Analyzed Run **Factor** Number Analyst Prep Type Type Lab TAL BUF Total/NA 8260C 5 276625 11/24/15 15:11 GVF Analysis

Client Sample ID: MW-9 (1111115) Lab Sample ID: 480-91066-11

Date Collected: 11/11/15 16:17

Matrix: Water

Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared Factor **Prep Type** Type Method Run Number or Analyzed Analyst Lab Total/NA Analysis 8260C 10 276625 11/24/15 15:35 GVF TAL BUF

Client Sample ID: MP-20 (1111115) Lab Sample ID: 480-91066-12

Date Collected: 11/11/15 15:12 Date Received: 11/13/15 09:30

Batch Batch Dilution Batch **Prepared**

Prep Type Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA Analysis 8260C 11/24/15 15:59 GVF TAL BUF

TestAmerica Buffalo

Matrix: Water

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91066-13

Client Sample ID: MW-10D (111215) Date Collected: 11/12/15 11:22 **Matrix: Water**

Date Received: 11/13/15 09:30

Batch Dilution Batch Batch Prepared **Prep Type** Type Method Run Factor Number or Analyzed Analyst Total/NA Analysis 8260C 1000 276779 11/24/15 22:24 GTG TAL BUF

Client Sample ID: IW-01D (111215) Lab Sample ID: 480-91066-14

Date Collected: 11/12/15 13:15 **Matrix: Water**

Date Received: 11/13/15 09:30

Batch Batch Dilution **Batch Prepared** Method Prep Type Type Run **Factor** Number or Analyzed Analyst Lab Total/NA 8260C 276625 11/24/15 16:47 GVF TAL BUF Analysis Total/NA 8260C 11/24/15 22:48 GTG Analysis DL 100 276779 TAL BUF

Client Sample ID: MW-18 (111115) Lab Sample ID: 480-91066-15

Date Collected: 11/11/15 19:57 **Matrix: Water**

Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared Method Number or Analyzed **Prep Type** Type Run Factor Analyst Lab Total/NA Analysis 8260C 40 276625 11/24/15 17:10 GVF TAL BUF Total/NA Analysis 8260C DL 80 276779 11/24/15 23:12 GTG TAL BUF

Client Sample ID: MW-3 (111115) Lab Sample ID: 480-91066-16

Date Collected: 11/11/15 18:12 **Matrix: Water**

Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared **Prep Type** Type Method Factor Number or Analyzed Run Analyst Lab Total/NA Analysis 8260C 276625 11/24/15 17:34 GVF TAL BUF

Client Sample ID: MW-10S (111215) Lab Sample ID: 480-91066-17

Date Collected: 11/12/15 10:02 **Matrix: Water**

Date Received: 11/13/15 09:30

Dilution Batch **Batch** Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab TAL BUF Total/NA Analysis 8260C 100 276625 11/24/15 17:58 GVF

Client Sample ID: MW-15R (111115) Lab Sample ID: 480-91066-18

Date Collected: 11/11/15 22:48 **Matrix: Water**

Date Received: 11/13/15 09:30

Batch Batch Dilution Batch Prepared Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Total/NA 8260C 276625 11/24/15 18:21 GVF TAL BUF Analysis

Lab Chronicle

Client: ARCADIS U.S. Inc

Client Sample ID: TB

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Lab Sample ID: 480-91066-19

Date Collected: 11/12/15 00:00 Matrix: Water

Date Received: 11/13/15 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	276625	11/24/15 14:24	GVF	TAL BUF

Laboratory References:

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

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Certification Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF

Protocol References:

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

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91066-1

Lab Sample ID	Client Sample ID	Matrix	Collected Received
480-91066-1	MW-6R (111015)	Water	11/10/15 10:52 11/13/15 09:3
480-91066-2	DUP-01 (111015)	Water	11/10/15 00:00 11/13/15 09:3
480-91066-3	MW-1 (111015)	Water	11/10/15 09:10 11/13/15 09:3
480-91066-4	MW-27 (111015)	Water	11/10/15 12:17 11/13/15 09:3
480-91066-5	MW-28 (111015)	Water	11/10/15 17:35 11/13/15 09:3
480-91066-6	MW-23S (111115)	Water	11/11/15 09:02 11/13/15 09:3
480-91066-7	MW-23D (111115)	Water	11/11/15 09:58 11/13/15 09:3
480-91066-8	MW-17R (111015)	Water	11/10/15 16:17 11/13/15 09:3
480-91066-9	MW-16R (111015)	Water	11/10/15 15:20 11/13/15 09:3
480-91066-10	MW-22D (111115)	Water	11/11/15 13:02 11/13/15 09:3
480-91066-11	MW-9 (111115)	Water	11/11/15 16:17 11/13/15 09:3
480-91066-12	MP-20 (111115)	Water	11/11/15 15:12 11/13/15 09:3
480-91066-13	MW-10D (111215)	Water	11/12/15 11:22 11/13/15 09:3
480-91066-14	IW-01D (111215)	Water	11/12/15 13:15 11/13/15 09:3
480-91066-15	MW-18 (111115)	Water	11/11/15 19:57 11/13/15 09:3
480-91066-16	MW-3 (111115)	Water	11/11/15 18:12 11/13/15 09:3
480-91066-17	MW-10S (111215)	Water	11/12/15 10:02 11/13/15 09:3
480-91066-18	MW-15R (111115)	Water	11/11/15 22:48 11/13/15 09:3
480-91066-19	ТВ	Water	11/12/15 00:00 11/13/15 09:3

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Amherst, NY 14228-2298		,				THE LEADER IN ENVIRONMENTAL TESTING
IONE (7.10) 091-7091	Sampler: 7000	Volse	Lab PM:		Carrier Tracking No(s):	COC No. 480-73997-18814.1
Client Information Client Contact	15	447. 2249		E-Mail: melissa.deyo@testamericainc.com		Page 1016 Pays 10f2
Company: ARCADIS U.S. Inc				Analysis Requested	nested	# qor
Address: 855 Route 146, Suite 210	Due Date Requested:	1				
City: Clifton Park State, Zip:	TAT Requested (days): Standard	tandard	SIG (2.5)			B - NaOH N - None C - Zn Acetate O - ANASOZ D - Nitric Acid P - NaZO4S F - NaHSO4 O - NaZSO3
NY, 12065			5.8			
Phone 518 - 250 - 7330	PO #: 00266417.0000		(0)			
Email: aaron.bobar@arcadis-us.com	*OM	•				J-DI Water
Project Name: Crown Dykman - Glen Cove, NY	Project #: 48008440					L-EDA
Ste. GO HerbHIII ROCK	SSOW#:			_		Of co
Samula Mantifiration	Sample Date Time	Sample Type (C=comp,	Matrix (wwwater, Sasolid, Owwaterold Convention), jed of the conform MS/M	Seoc - TCL Vol		redmuk leto
	Sample Date	Preserva		19	1000000000000000000000000000000000000	
MW-1 (111015)	11.10:15 0910	50	Water	×		3
MW-GR (111015)	11.10.15 1052		Water			3
DUP-61 (111015)	11-13-15	4	Water	×		03
MW-27 (111015)	11-13-15 1217		Water	×		23
MW-16R (111015)	11.10.15 1520	5	Water	×		100
MW-17R (111015)	11.10.15 1617		Water	×		10
MW-28 (111015)	11.13.15 1735	5	Water	×		10
MW-235 (11115)	11.11.15 0902	12 G	Water	×		100
MW-23D (11115)	11.11.15 0958	58	Water	×		10
MW-22D (11115)	11-11-15 1302	5 2	Water	×		3
MP-20 (11115)	11-11-15 1512	5	Water	×		60
nt	Poison B Onknown	Radiological	Sa	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	assessed if samples are retained	ained longer than 1 month)
i, III, IV, Other (specify) $C_{\mathcal{O}}$	Auron Be	Jar	S	Requirem	occar by Lab	Archive For Months
Empty Kit Relinquished by:			Time:		Method of Shipment:	
Remoderate of Jan Kelsey Dr. My	Date/Time: 12 15		COMPANYICADIS		Date/Time:	Company
commission by:	Date/Time:		Company	Received by:	Date/Time:	Company
	Date/Time:		Company	Received by:	Date/Time:	Company
Custody Seals Intact. Custody Seal No.:						

Amherst, NY 14228-2298 Phone (716) 691-2600 Fax (716) 691-7991			200	pioces descent licens	5			ı	HETEADIF IN LAVIKONIMALE TESTING
Client Information	Sampler Dan	Z	1/5ev	Lab PM Deyo, Melissa L	elissa L	Carri	Carrier Tracking No(s):	84	COC No: 480-73997-18814.2
Client Contact: Aaron Bobar	Phone 570.	44	. 2249	E-Mail melissa.	E-Mail melissa.deyo@testamericainc.com	то		Page	Page 2015 Paige 20 /2
Company: ARCADIS U.S. Inc					An	Analysis Requested	ted	# doc	***
Address: 855 Route 146 Suite 210	Due Date Requested:	:pa		267				Pre	
City: Clifton Park State, Zip:	TAT Requested (days): Standurd	ays): Sta	ndurd	-				6 6 6 6	B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S
NY, 12065								m i.	
Final 512-250 - 7330	00266417.0000			(0)			-	oi.	
aaron.bobar@arcadis-us.com	WO W			1 10 8	(on				J-DI Water V-MCAA
Project Name: Crown Dykman - Glen Cove, NY	Project # 48008440			e (Xe	10 20				
Ste GG Herb Hill Road	SSOW			Idms				of con	ler:
Sample Identification	Sample Date	Sample	Sample Type (C=comp, oG=crab)	Matrix (Wewater, Sesolid, Owestelol, ed.	Seroc - TCL Vol			nedmuk (sto	-
And the second s	V	X	10	X	d	Carle Jan 180	100000000000000000000000000000000000000	1	special instructions/Note:
MW-9 (111115)	11.11.15	1017	5	Water	×			n	The state of the s
MW-3 (111115)	11.11.15	1812		Water	×			i n	
MW-18 (11115)	11.11.15	1957	5	Water	×			, h	
MW-15R (11115)	11.11.15	2248	رل	Water	×			1 10	
MW-105 (11215)	11.12.15	1002	5	Water	×			N	
MW-10D (111215)	11.12.15	1122	4	Water	×			, u	
IM-01D (111215)	11.12.15	1312	7	Water	×			, 60	
Trip Blank		1	7	Water	×			N	
			>	Water				n de la	
			^	Water				1 1 1 1	
anik la 11 4114. din			^	Water					
Non-Hazard Planmable Skin Irritant Poison B	on B Jaknown	Radiological	logical	S	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	e may be assesse	d if samples are	retained long	ger than 1 month)
6	Hursn 1	40		Ś	Special Instructions/QC Requirements	Requirements:	ву гар	Archive For	Months
Empty Kit Relinquished by:		Date:		Time:		N	Method of Shipment:		
Man Kulsey My M	Date/Time		Comp	Company ADIS	Received by:		Date/Time;		Company
Relinquished by:	Date		Company	any	Received by:		Date/Time:		Company
	Date/Time:		Company	any	Received by:		Date/Time:		Company
Custody Seals Intact: Custody Seal No.:									

Client: ARCADIS U.S. Inc

Job Number: 480-91066-1

Login Number: 91066 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth P

Creator: Kinecki, Kenneth P		
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.	False	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-91445-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

Meliss Delyo

Authorized for release by:

11/30/2015 3:51:03 PM

Melissa Deyo, Project Manager I (716)504-9874

melissa.deyo@testamericainc.com

..... LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: 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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Client Sample Results	8
Surrogate Summary	20
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Definitions/Glossary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

X Surrogate is outside control limits

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

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	y used abbreviations may	y or may not be	present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CNF Contains no Free Liquid

DER Duplicate error ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision level concentration
MDA Minimum detectable activity
EDL Estimated Detection Limit

MDC Minimum detectable concentration

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

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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Job ID: 480-91445-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-91445-1

Receipt

The samples were received on 11/20/2015 3:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 20151118-MW24-INITIAL (480-91445-1) and 20151118-MW24-3V (480-91445-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-277305 recovered above the upper control limit for Chloromethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: 20151118-MW24-INITIAL (480-91445-1) and 20151118-MW24-3V (480-91445-2).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-277305 recovered outside acceptance criteria, low biased, for 1,1,2-Trichloro-1,2,2-trifluoroethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: 20151118-MW24-INITIAL (480-91445-1) and 20151118-MW24-3V (480-91445-2).

Method(s) 8260C: The laboratory control sample (LCS) for batch analytical batch 480-277305 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 20151118-MW24-INITIAL (480-91445-1) and 20151118-MW24-3V (480-91445-2).

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) 8270C LL, 8270D: The minimum response factor (RF) criteria for the initial calibration (ICAL) analyzed in batch 480-276424 was outside criteria for the following analytes: Bis(2-chloroethoxy)methane and Pentachlorophenol. As indicated in the reference method, sample analysis may proceed: however, any detection or non-detection for the affected analytes is considered estimated.

Method(s) 8270C LL, 8270D: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 480-276424 was outside criteria for the following analyte(s): Bis(2-chloroethoxy)methane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-277163 recovered above the upper control limit for bis (2-chloroisopropyl) ether, 2-Methylphenol and 4-Methylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 20151118-MW24-INITIAL (480-91445-1) and 20151118-MW24-3V (480-91445-2).

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 480-277163 was outside the method criteria for the following analytes: 4-Chloro-3-methylphenol, Bis(2-chloroethoxy)methane, Isophorone and N-Nitrosodi-n-propylamine. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes are considered estimated.

Method(s) 8270D: Surrogate recovery for the following samples were outside control limits: 20151118-MW24-INITIAL (480-91445-1) and 20151118-MW24-3V (480-91445-2). Re-extraction and re-analysis was performed with concurring results. Both sets of data have been reported.

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

GC Semi VOA

Method(s) 8082A: All primary data is reported from the ZB-35 column.

Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Job ID: 480-91445-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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.

Organic Prep

Method(s) 3510C: Due to the matrix, the initial volume used for the following sample deviated from the standard procedure: 20151118-MW24-INITIAL (480-91445-1). The reporting limit (RL) have been adjusted proportionately.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-276865.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-276284.

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

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TestAmerica Job ID: 480-91445-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: 20151118-MW24-INITIAL

Lab Sample ID: 480-91445-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	470		20	16	ug/L	20	8260C	Total/NA
Tetrachloroethene	77		20	7.2	ug/L	20	8260C	Total/NA
Trichloroethene	53		20	9.2	ug/L	20	8260C	Total/NA
Bis(2-ethylhexyl) phthalate	2.2	J	5.8	2.1	ug/L	1	8270D	Total/NA
Butyl benzyl phthalate	0.72	JB	5.8	0.49	ug/L	1	8270D	Total/NA
Diethyl phthalate	0.86	J	5.8	0.26	ug/L	1	8270D	Total/NA
Benzaldehyde - RE	2.4	J	13	0.67	ug/L	1	8270D	Total/NA
Diethyl phthalate - RE	1.1	J	13	0.55	ug/L	1	8270D	Total/NA
Aluminum	1.0		0.20	0.060	mg/L	1	6010C	Total/NA
Arsenic	0.045		0.015	0.0056	mg/L	1	6010C	Total/NA
Barium	0.55		0.0020	0.00070	mg/L	1	6010C	Total/NA
Beryllium	0.00048	J	0.0020	0.00030	mg/L	1	6010C	Total/NA
Cadmium	0.0018	J	0.0020	0.00050	mg/L	1	6010C	Total/NA
Calcium	45.2		0.50	0.10	mg/L	1	6010C	Total/NA
Chromium	0.23		0.0040	0.0010	mg/L	1	6010C	Total/NA
Cobalt	0.025		0.0040	0.00063	mg/L	1	6010C	Total/NA
Copper	0.016		0.010	0.0016	mg/L	1	6010C	Total/NA
Iron	42.3		0.050	0.019	mg/L	1	6010C	Total/NA
Lead	0.0080	J	0.010	0.0030	mg/L	1	6010C	Total/NA
Magnesium	8.0		0.20	0.043	mg/L	1	6010C	Total/NA
Manganese	43.7		0.0030	0.00040	mg/L	1	6010C	Total/NA
Nickel	0.010		0.010	0.0013	mg/L	1	6010C	Total/NA
Potassium	4.3		0.50	0.10	mg/L	1	6010C	Total/NA
Silver	0.0033	J	0.0060	0.0017	mg/L	1	6010C	Total/NA
Sodium	57.1		1.0	0.32	mg/L	1	6010C	Total/NA
Vanadium	0.014		0.0050	0.0015	mg/L	1	6010C	Total/NA
Zinc	0.020		0.010	0.0015	mg/L	1	6010C	Total/NA
Mercury	0.00013	J	0.00020	0.00012	mg/L	1	7470A	Total/NA

Client Sample ID: 20151118-MW24-3V

Lab Sample ID: 480-91445-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Me	thod	Prep Type
cis-1,2-Dichloroethene	620		10	8.1	ug/L	10	826	30C	Total/NA
Tetrachloroethene	110		10	3.6	ug/L	10	826	30C	Total/NA
Trichloroethene	72		10	4.6	ug/L	10	826	30C	Total/NA
Vinyl chloride	21		10	9.0	ug/L	10	826	30C	Total/NA
Butyl benzyl phthalate	0.49	JB	4.9	0.41	ug/L	1	827	70D	Total/NA
Diethyl phthalate	0.23	J	4.9	0.21	ug/L	1	827	70D	Total/NA
Aluminum	0.25		0.20	0.060	mg/L	1	60	10C	Total/NA
Arsenic	0.010	J	0.015	0.0056	mg/L	1	60	10C	Total/NA
Barium	0.20		0.0020	0.00070	mg/L	1	60	10C	Total/NA
Calcium	44.4		0.50	0.10	mg/L	1	60	10C	Total/NA
Chromium	0.056		0.0040	0.0010	mg/L	1	60	10C	Total/NA
Cobalt	0.0045		0.0040	0.00063	mg/L	1	60	10C	Total/NA
Copper	0.0041	J	0.010	0.0016	mg/L	1	60	10C	Total/NA
Iron	11.3		0.050	0.019	mg/L	1	60	10C	Total/NA
Lead	0.0045	J	0.010	0.0030	mg/L	1	60	10C	Total/NA
Magnesium	8.2		0.20	0.043	mg/L	1	60	10C	Total/NA
Manganese	21.1		0.0030	0.00040	mg/L	1	60	10C	Total/NA
Nickel	0.0080	J	0.010	0.0013	mg/L	1	60	10C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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Detection Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: 20151118-MW24-3V (Continued)

TestAmerica Job ID: 480-91445-1

Lab Sample ID: 480-91445-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	4.6		0.50	0.10	mg/L	1	_	6010C	Total/NA
Sodium	66.5		1.0	0.32	mg/L	1		6010C	Total/NA
Vanadium	0.0036	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Zinc	0.0060	J	0.010	0.0015	mg/L	1		6010C	Total/NA

Client Sample ID: TRIP BLANK

No Detections.

Lab Sample ID: 480-91445-3

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Client: ARCADIS U.S. Inc

Date Collected: 11/18/15 15:50

Date Received: 11/20/15 03:10

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: 20151118-MW24-INITIAL

TestAmerica Job ID: 480-91445-1

Lab Sample ID: 480-91445-1

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	20	16	ug/L			11/29/15 12:29	20
1,1,2,2-Tetrachloroethane	ND	20	4.2	ug/L			11/29/15 12:29	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20	6.2	ug/L			11/29/15 12:29	20
1,1,2-Trichloroethane	ND	20	4.6	ug/L			11/29/15 12:29	20
1,1-Dichloroethane	ND	20	7.6	ug/L			11/29/15 12:29	20
1,1-Dichloroethene	ND	20	5.8	ug/L			11/29/15 12:29	20
1,2,4-Trichlorobenzene	ND	20	8.2	ug/L			11/29/15 12:29	20
1,2-Dibromo-3-Chloropropane	ND	20	7.8	ug/L			11/29/15 12:29	20
1,2-Dibromoethane	ND	20	15	ug/L			11/29/15 12:29	20
1,2-Dichlorobenzene	ND	20	16	ug/L			11/29/15 12:29	20
1,2-Dichloroethane	ND	20	4.2	ug/L			11/29/15 12:29	20
1,2-Dichloropropane	ND	20	14	ug/L			11/29/15 12:29	20
1,3-Dichlorobenzene	ND	20	16	ug/L			11/29/15 12:29	20
1,4-Dichlorobenzene	ND	20	17	ug/L			11/29/15 12:29	20
0 D ((MEIO)								

Method: 8260C - Volatile Orgar Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil F
1,1,1-Trichloroethane	ND		20	16	ug/L			11/29/15 12:29	
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			11/29/15 12:29	:
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			11/29/15 12:29	:
1,1,2-Trichloroethane	ND		20	4.6	ug/L			11/29/15 12:29	:
1,1-Dichloroethane	ND		20	7.6	ug/L			11/29/15 12:29	:
1,1-Dichloroethene	ND		20	5.8	ug/L			11/29/15 12:29	:
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			11/29/15 12:29	:
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			11/29/15 12:29	:
1,2-Dibromoethane	ND		20	15	ug/L			11/29/15 12:29	:
1,2-Dichlorobenzene	ND		20	16	ug/L			11/29/15 12:29	:
1,2-Dichloroethane	ND		20	4.2	ug/L			11/29/15 12:29	:
1,2-Dichloropropane	ND		20	14	ug/L			11/29/15 12:29	:
1,3-Dichlorobenzene	ND		20	16	ug/L			11/29/15 12:29	:
1,4-Dichlorobenzene	ND		20	17	ug/L			11/29/15 12:29	:
2-Butanone (MEK)	ND		200	26	ug/L			11/29/15 12:29	:
2-Hexanone	ND		100	25	ug/L			11/29/15 12:29	
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			11/29/15 12:29	:
Acetone	ND	*	200	60	ug/L			11/29/15 12:29	:
Benzene	ND		20	8.2	ug/L			11/29/15 12:29	:
Bromodichloromethane	ND		20		ug/L			11/29/15 12:29	:
Bromoform	ND		20	5.2	ug/L			11/29/15 12:29	:
Bromomethane	ND		20		ug/L			11/29/15 12:29	
Carbon disulfide	ND		20	3.8	ug/L			11/29/15 12:29	:
Carbon tetrachloride	ND		20	5.4	ug/L			11/29/15 12:29	:
Chlorobenzene	ND		20	15	ug/L			11/29/15 12:29	
Chloroethane	ND		20	6.4	ug/L			11/29/15 12:29	:
Chloroform	ND		20	6.8	ug/L			11/29/15 12:29	:
Chloromethane	ND		20	7.0	ug/L			11/29/15 12:29	:
cis-1,2-Dichloroethene	470		20		ug/L			11/29/15 12:29	:
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			11/29/15 12:29	:
Cyclohexane	ND		20		ug/L			11/29/15 12:29	
Dibromochloromethane	ND		20	6.4	ug/L			11/29/15 12:29	:
Dichlorodifluoromethane	ND		20	14	ug/L			11/29/15 12:29	:
Ethylbenzene	ND		20		ug/L			11/29/15 12:29	
Isopropylbenzene	ND		20		ug/L			11/29/15 12:29	:
Methyl acetate	ND		50		ug/L			11/29/15 12:29	:
Methyl tert-butyl ether	ND		20	3.2	ug/L			11/29/15 12:29	
Methylcyclohexane	ND		20		ug/L			11/29/15 12:29	:
Methylene Chloride	ND		20		ug/L			11/29/15 12:29	:
Styrene	ND		20		ug/L			11/29/15 12:29	:
Tetrachloroethene	77		20		ug/L			11/29/15 12:29	:
Toluene	ND		20		ug/L			11/29/15 12:29	:
trans-1,2-Dichloroethene	ND		20		ug/L			11/29/15 12:29	:
trans-1,3-Dichloropropene	ND		20		ug/L			11/29/15 12:29	:
Trichloroethene	53		20		ug/L			11/29/15 12:29	:
Trichlorofluoromethane	ND		20		ug/L			11/29/15 12:29	
Vinyl chloride	ND		20		ug/L			11/29/15 12:29	
Xylenes, Total	ND		40		ug/L			11/29/15 12:29	:

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Client Sample ID: 20151118-MW24-INITIAL

Lab Sample ID: 480-91445-1 Date Collected: 11/18/15 15:50

Matrix: Water

Date Received: 11/20/15 03:10

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89	66 - 137		11/29/15 12:29	20
4-Bromofluorobenzene (Surr)	100	73 - 120		11/29/15 12:29	20
Toluene-d8 (Surr)	93	71 - 126		11/29/15 12:29	20
Dibromofluoromethane (Surr)	92	60 - 140		11/29/15 12:29	20

Analyte	Result Qualit	ier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND ND	5.8	0.76	ug/L		11/20/15 15:04	11/23/15 15:10	1
bis (2-chloroisopropyl) ether	ND	5.8	0.60	ug/L		11/20/15 15:04	11/23/15 15:10	1
2,4,5-Trichlorophenol	ND	5.8	0.56	ug/L		11/20/15 15:04	11/23/15 15:10	1
2,4,6-Trichlorophenol	ND	5.8	0.71	ug/L		11/20/15 15:04	11/23/15 15:10	1
2,4-Dichlorophenol	ND	5.8	0.59	ug/L		11/20/15 15:04	11/23/15 15:10	1
2,4-Dimethylphenol	ND	5.8	0.58	ug/L		11/20/15 15:04	11/23/15 15:10	1
2,4-Dinitrophenol	ND	12	2.6	ug/L		11/20/15 15:04	11/23/15 15:10	1
2,4-Dinitrotoluene	ND	5.8	0.52	ug/L		11/20/15 15:04	11/23/15 15:10	1
2,6-Dinitrotoluene	ND	5.8	0.46	ug/L		11/20/15 15:04	11/23/15 15:10	1
2-Chloronaphthalene	ND	5.8	0.53	ug/L		11/20/15 15:04	11/23/15 15:10	1
2-Chlorophenol	ND	5.8	0.61	ug/L		11/20/15 15:04	11/23/15 15:10	1
2-Methylphenol	ND	5.8	0.46	ug/L		11/20/15 15:04	11/23/15 15:10	1
2-Methylnaphthalene	ND	5.8	0.70	ug/L		11/20/15 15:04	11/23/15 15:10	1
2-Nitroaniline	ND	12	0.49	ug/L		11/20/15 15:04	11/23/15 15:10	1
2-Nitrophenol	ND	5.8		ug/L		11/20/15 15:04	11/23/15 15:10	1
3,3'-Dichlorobenzidine	ND	5.8	0.46	ug/L		11/20/15 15:04	11/23/15 15:10	1
3-Nitroaniline	ND	12		ug/L		11/20/15 15:04	11/23/15 15:10	1
4,6-Dinitro-2-methylphenol	ND	12		ug/L		11/20/15 15:04	11/23/15 15:10	1
4-Bromophenyl phenyl ether	ND	5.8		ug/L		11/20/15 15:04	11/23/15 15:10	1
4-Chloro-3-methylphenol	ND	5.8		ug/L		11/20/15 15:04	11/23/15 15:10	1
4-Chloroaniline	ND	5.8		ug/L		11/20/15 15:04	11/23/15 15:10	1
4-Chlorophenyl phenyl ether	ND	5.8		ug/L		11/20/15 15:04	11/23/15 15:10	1
4-Methylphenol	ND	12		ug/L		11/20/15 15:04	11/23/15 15:10	1
4-Nitroaniline	ND	12		ug/L		11/20/15 15:04	11/23/15 15:10	1
4-Nitrophenol	ND	12		ug/L		11/20/15 15:04	11/23/15 15:10	1
Acenaphthene	ND	5.8		ug/L		11/20/15 15:04	11/23/15 15:10	1
Acenaphthylene	ND	5.8		ug/L		11/20/15 15:04	11/23/15 15:10	1
Acetophenone	ND	5.8	0.63	-		11/20/15 15:04	11/23/15 15:10	1
Anthracene	ND	5.8	0.32	-		11/20/15 15:04	11/23/15 15:10	1
Atrazine	ND	5.8	0.53	-		11/20/15 15:04	11/23/15 15:10	1
Benzaldehyde	ND	5.8		ug/L			11/23/15 15:10	1
Benzo[a]anthracene	ND	5.8		ug/L		11/20/15 15:04	11/23/15 15:10	1
Benzo[a]pyrene	ND	5.8		ug/L			11/23/15 15:10	1
Benzo[b]fluoranthene	ND	5.8		ug/L			11/23/15 15:10	1
Benzo[g,h,i]perylene	ND	5.8		ug/L			11/23/15 15:10	1
Benzo[k]fluoranthene	ND	5.8		ug/L			11/23/15 15:10	1
Bis(2-chloroethoxy)methane	ND	5.8		ug/L			11/23/15 15:10	
Bis(2-chloroethyl)ether	ND	5.8		ug/L			11/23/15 15:10	1
Bis(2-ethylhexyl) phthalate	2.2 J	5.8		ug/L			11/23/15 15:10	. 1
Butyl benzyl phthalate	0.72 JB	5.8		ug/L			11/23/15 15:10	1
Caprolactam	ND	5.8		ug/L			11/23/15 15:10	1
Carbazole	ND	5.8		ug/L			11/23/15 15:10	1
Chrysene	ND	5.8		ug/L ug/L			11/23/15 15:10	

TestAmerica Buffalo

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11/30/2015

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Client Sample ID: 20151118-MW24-INITIAL

Lab Sample ID: 480-91445-1 **Matrix: Water**

Date Collected: 11/18/15 15:50 Date Received: 11/20/15 03:10

Method: 8270D - Semivolatile	e Organic Compounds (G	C/MS) (Cor	ntinued)
Analyte	Result Qualifier	ŔĹ	MDL Unit

Analyte	Result	Qualifier	ŔĹ	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		5.8	0.49	ug/L		11/20/15 15:04	11/23/15 15:10	1
Di-n-butyl phthalate	ND		5.8	0.36	ug/L		11/20/15 15:04	11/23/15 15:10	1
Di-n-octyl phthalate	ND		5.8	0.55	ug/L		11/20/15 15:04	11/23/15 15:10	1
Dibenzofuran	ND		12	0.59	ug/L		11/20/15 15:04	11/23/15 15:10	1
Diethyl phthalate	0.86	J	5.8	0.26	ug/L		11/20/15 15:04	11/23/15 15:10	1
Dimethyl phthalate	ND		5.8	0.42	ug/L		11/20/15 15:04	11/23/15 15:10	•
Fluoranthene	ND		5.8	0.46	ug/L		11/20/15 15:04	11/23/15 15:10	•
Fluorene	ND		5.8	0.42	ug/L		11/20/15 15:04	11/23/15 15:10	1
Hexachlorobenzene	ND		5.8	0.59	ug/L		11/20/15 15:04	11/23/15 15:10	•
Hexachlorobutadiene	ND		5.8	0.79	ug/L		11/20/15 15:04	11/23/15 15:10	1
Hexachlorocyclopentadiene	ND		5.8	0.68	ug/L		11/20/15 15:04	11/23/15 15:10	1
Hexachloroethane	ND		5.8	0.68	ug/L		11/20/15 15:04	11/23/15 15:10	•
Indeno[1,2,3-cd]pyrene	ND		5.8	0.55	ug/L		11/20/15 15:04	11/23/15 15:10	•
Isophorone	ND		5.8	0.50	ug/L		11/20/15 15:04	11/23/15 15:10	1
N-Nitrosodi-n-propylamine	ND		5.8	0.63	ug/L		11/20/15 15:04	11/23/15 15:10	1
N-Nitrosodiphenylamine	ND		5.8	0.59	ug/L		11/20/15 15:04	11/23/15 15:10	1
Naphthalene	ND		5.8	0.88	ug/L		11/20/15 15:04	11/23/15 15:10	1
Nitrobenzene	ND		5.8	0.34	ug/L		11/20/15 15:04	11/23/15 15:10	•
Pentachlorophenol	ND		12	2.6	ug/L		11/20/15 15:04	11/23/15 15:10	•
Phenanthrene	ND		5.8	0.51	ug/L		11/20/15 15:04	11/23/15 15:10	
Phenol	ND		5.8	0.45	ug/L		11/20/15 15:04	11/23/15 15:10	1
Pyrene	ND		5.8	0.39	ug/L		11/20/15 15:04	11/23/15 15:10	•

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	82		46 - 120	11/20/15 15:04	11/23/15 15:10	1
Phenol-d5 (Surr)	0.04	Χ	16 - 120	11/20/15 15:04	11/23/15 15:10	1
p-Terphenyl-d14 (Surr)	66	Χ	67 - 150	11/20/15 15:04	11/23/15 15:10	1
2,4,6-Tribromophenol (Surr)	3	X	52 - 132	11/20/15 15:04	11/23/15 15:10	1
2-Fluorobiphenyl	88		48 - 120	11/20/15 15:04	11/23/15 15:10	1
2-Fluorophenol (Surr)	0	Χ	20 - 120	11/20/15 15:04	11/23/15 15:10	1

Method: 8270D - S	Semivolatile (Organic	Comp	ounds	(GC/MS) - F	₹E

Analyte	Result Qualif	ier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND	13	1.6	ug/L		11/25/15 08:18	11/27/15 19:04	1
bis (2-chloroisopropyl) ether	ND	13	1.3	ug/L		11/25/15 08:18	11/27/15 19:04	1
2,4,5-Trichlorophenol	ND	13	1.2	ug/L		11/25/15 08:18	11/27/15 19:04	1
2,4,6-Trichlorophenol	ND	13	1.5	ug/L		11/25/15 08:18	11/27/15 19:04	1
2,4-Dichlorophenol	ND	13	1.3	ug/L		11/25/15 08:18	11/27/15 19:04	1
2,4-Dimethylphenol	ND	13	1.3	ug/L		11/25/15 08:18	11/27/15 19:04	1
2,4-Dinitrophenol	ND	25	5.6	ug/L		11/25/15 08:18	11/27/15 19:04	1
2,4-Dinitrotoluene	ND	13	1.1	ug/L		11/25/15 08:18	11/27/15 19:04	1
2,6-Dinitrotoluene	ND	13	1.0	ug/L		11/25/15 08:18	11/27/15 19:04	1
2-Chloronaphthalene	ND	13	1.2	ug/L		11/25/15 08:18	11/27/15 19:04	1
2-Chlorophenol	ND	13	1.3	ug/L		11/25/15 08:18	11/27/15 19:04	1
2-Methylphenol	ND	13	1.0	ug/L		11/25/15 08:18	11/27/15 19:04	1
2-Methylnaphthalene	ND	13	1.5	ug/L		11/25/15 08:18	11/27/15 19:04	1
2-Nitroaniline	ND	25	1.1	ug/L		11/25/15 08:18	11/27/15 19:04	1
2-Nitrophenol	ND	13	1.2	ug/L		11/25/15 08:18	11/27/15 19:04	1
3,3'-Dichlorobenzidine	ND	13	1.0	ug/L		11/25/15 08:18	11/27/15 19:04	1
3-Nitroaniline	ND	25	1.2	ug/L		11/25/15 08:18	11/27/15 19:04	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Client Sample ID: 20151118-MW24-INITIAL

Lab Sample ID: 480-91445-1 Date Collected: 11/18/15 15:50

Matrix: Water Date Received: 11/20/15 03:10

Result	Qualifier	RL			D	Prepared	Analyzed	Dil Fa
ND		25	5.5	ug/L		11/25/15 08:18	11/27/15 19:04	
ND		13	1.1	ug/L		11/25/15 08:18	11/27/15 19:04	
ND		13	1.1	ug/L		11/25/15 08:18	11/27/15 19:04	
ND		13	1.5	ug/L		11/25/15 08:18	11/27/15 19:04	
ND		13	0.88	ug/L		11/25/15 08:18	11/27/15 19:04	
ND		25	0.90	ug/L		11/25/15 08:18	11/27/15 19:04	
ND		25	0.63	ug/L		11/25/15 08:18	11/27/15 19:04	
ND		25	3.8	ug/L		11/25/15 08:18	11/27/15 19:04	
ND		13		-		11/25/15 08:18	11/27/15 19:04	
ND		13		-		11/25/15 08:18	11/27/15 19:04	
ND		13		-		11/25/15 08:18	11/27/15 19:04	
ND		13		-		11/25/15 08:18	11/27/15 19:04	
ND		13		_		11/25/15 08:18	11/27/15 19:04	
								
ND	-	13		-				
ND		13		_				
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		25		-				
ND		13		-				
ND		13	0.98	ua/L		11/25/15 08:18	11/27/15 19:04	
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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Client Sample ID: 20151118-MW24-INITIAL

Date Collected: 11/18/15 15:50 Date Received: 11/20/15 03:10 Lab Sample ID: 480-91445-1

. Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	75		46 - 120	11/25/15 08:18	11/27/15 19:04	
Phenol-d5 (Surr)	0.06	X	16 - 120	11/25/15 08:18	11/27/15 19:04	1
p-Terphenyl-d14 (Surr)	40	Χ	67 - 150	11/25/15 08:18	11/27/15 19:04	1
2,4,6-Tribromophenol (Surr)	3	X	52 - 132	11/25/15 08:18	11/27/15 19:04	1
2-Fluorobiphenyl	100		48 - 120	11/25/15 08:18	11/27/15 19:04	1
2-Fluorophenol (Surr)	0	X	20 - 120	11/25/15 08:18	11/27/15 19:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.51	0.18	ug/L		11/21/15 08:19	11/23/15 16:08	1
PCB-1221	ND		0.51	0.18	ug/L		11/21/15 08:19	11/23/15 16:08	1
PCB-1232	ND		0.51	0.18	ug/L		11/21/15 08:19	11/23/15 16:08	1
PCB-1242	ND		0.51	0.18	ug/L		11/21/15 08:19	11/23/15 16:08	1
PCB-1248	ND		0.51	0.18	ug/L		11/21/15 08:19	11/23/15 16:08	1
PCB-1254	ND		0.51	0.25	ug/L		11/21/15 08:19	11/23/15 16:08	1
PCB-1260	ND		0.51	0.25	ug/L		11/21/15 08:19	11/23/15 16:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		24 - 137				11/21/15 08:19	11/23/15 16:08	1
DCB Decachlorobiphenyl	52		19 - 125				11/21/15 08:19	11/23/15 16:08	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.0		0.20	0.060	mg/L		11/23/15 07:30	11/23/15 13:38	1
Antimony	ND		0.020	0.0068	mg/L		11/23/15 07:30	11/23/15 13:38	1
Arsenic	0.045		0.015	0.0056	mg/L		11/23/15 07:30	11/23/15 13:38	1
Barium	0.55		0.0020	0.00070	mg/L		11/23/15 07:30	11/23/15 13:38	1
Beryllium	0.00048	J	0.0020	0.00030	mg/L		11/23/15 07:30	11/23/15 13:38	1
Cadmium	0.0018	J	0.0020	0.00050	mg/L		11/23/15 07:30	11/23/15 13:38	1
Calcium	45.2		0.50	0.10	mg/L		11/23/15 07:30	11/23/15 13:38	1
Chromium	0.23		0.0040	0.0010	mg/L		11/23/15 07:30	11/23/15 13:38	1
Cobalt	0.025		0.0040	0.00063	mg/L		11/23/15 07:30	11/23/15 13:38	1
Copper	0.016		0.010	0.0016	mg/L		11/23/15 07:30	11/23/15 13:38	1
Iron	42.3		0.050	0.019	mg/L		11/23/15 07:30	11/23/15 13:38	1
Lead	0.0080	J	0.010	0.0030	mg/L		11/23/15 07:30	11/23/15 13:38	1
Magnesium	8.0		0.20	0.043	mg/L		11/23/15 07:30	11/23/15 13:38	1
Manganese	43.7		0.0030	0.00040	mg/L		11/23/15 07:30	11/23/15 13:38	1
Nickel	0.010		0.010	0.0013	mg/L		11/23/15 07:30	11/23/15 13:38	1
Potassium	4.3		0.50	0.10	mg/L		11/23/15 07:30	11/23/15 13:38	1
Selenium	ND		0.025	0.0087	mg/L		11/23/15 07:30	11/23/15 13:38	1
Silver	0.0033	J	0.0060	0.0017	mg/L		11/23/15 07:30	11/23/15 13:38	1
Sodium	57.1		1.0	0.32	mg/L		11/23/15 07:30	11/23/15 13:38	1
Thallium	ND		0.020	0.010	mg/L		11/23/15 07:30	11/23/15 13:38	1
Vanadium	0.014		0.0050	0.0015	mg/L		11/23/15 07:30	11/23/15 13:38	1
Zinc	0.020		0.010	0.0015	mg/L		11/23/15 07:30	11/23/15 13:38	1

Method: 7470A - Mercury (CVA	AA)							
Analyte	Result Qualifier	RL	MDL Ur	nit C	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013 J	0.00020	0.00012 mg	g/L		11/23/15 09:15	11/23/15 14:28	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Client Sample ID: 20151118-MW24-3V

Lab Sample ID: 480-91445-2 Date Collected: 11/18/15 18:00

Matrix: Water Date Received: 11/20/15 03:10

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
I,1,1-Trichloroethane	ND -	10	8.2	ug/L			11/29/15 12:52	1
,1,2,2-Tetrachloroethane	ND	10	2.1	ug/L			11/29/15 12:52	1
,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	3.1	ug/L			11/29/15 12:52	1
,1,2-Trichloroethane	ND	10	2.3	ug/L			11/29/15 12:52	1
,1-Dichloroethane	ND	10		ug/L			11/29/15 12:52	1
I,1-Dichloroethene	ND	10		ug/L			11/29/15 12:52	1
,2,4-Trichlorobenzene	ND	10		ug/L			11/29/15 12:52	;
,2-Dibromo-3-Chloropropane	ND	10		ug/L			11/29/15 12:52	
,2-Dibromoethane	ND	10		ug/L			11/29/15 12:52	
,2-Dichlorobenzene	ND	10		ug/L			11/29/15 12:52	:
,2-Dichloroethane	ND	10		ug/L			11/29/15 12:52	
,2-Dichloropropane	ND	10		ug/L			11/29/15 12:52	
,3-Dichlorobenzene	ND	10		ug/L			11/29/15 12:52	
,4-Dichlorobenzene	ND	10		ug/L			11/29/15 12:52	
2-Butanone (MEK)	ND	100		ug/L			11/29/15 12:52	
2-Hexanone	ND	50		ug/L			11/29/15 12:52	;
-Methyl-2-pentanone (MIBK)	ND	50		ug/L			11/29/15 12:52	
Acetone	ND *	100		ug/L			11/29/15 12:52	
Benzene	ND	100		ug/L			11/29/15 12:52	
Bromodichloromethane	ND ND	10		ug/L ug/L			11/29/15 12:52	
Bromoform	ND	10		-			11/29/15 12:52	
Bromomethane				ug/L				
	ND	10		ug/L			11/29/15 12:52	
Carbon disulfide	ND	10		ug/L			11/29/15 12:52	
Carbon tetrachloride	ND	10		ug/L			11/29/15 12:52	
Chlorobenzene	ND	10		ug/L			11/29/15 12:52	
Chloroethane	ND	10		ug/L			11/29/15 12:52	
Chloroform	ND	10		ug/L			11/29/15 12:52	
Chloromethane	ND	10		ug/L			11/29/15 12:52	
cis-1,2-Dichloroethene	620	10	8.1	ug/L			11/29/15 12:52	
cis-1,3-Dichloropropene	ND	10		ug/L			11/29/15 12:52	
Cyclohexane	ND	10		ug/L			11/29/15 12:52	
Dibromochloromethane	ND	10		ug/L			11/29/15 12:52	
Dichlorodifluoromethane	ND	10		ug/L			11/29/15 12:52	
Ethylbenzene	ND	10		ug/L			11/29/15 12:52	
sopropylbenzene	ND	10		ug/L			11/29/15 12:52	,
Methyl acetate	ND	25		ug/L			11/29/15 12:52	
Methyl tert-butyl ether	ND	10		ug/L			11/29/15 12:52	
Nethylcyclohexane	ND	10	1.6	ug/L			11/29/15 12:52	
Methylene Chloride	ND	10	4.4	ug/L			11/29/15 12:52	
Styrene	ND	10	7.3	ug/L			11/29/15 12:52	
etrachloroethene	110	10	3.6	ug/L			11/29/15 12:52	
oluene	ND	10	5.1	ug/L			11/29/15 12:52	
ans-1,2-Dichloroethene	ND	10	9.0	ug/L			11/29/15 12:52	
rans-1,3-Dichloropropene	ND	10		ug/L			11/29/15 12:52	
richloroethene	72	10	4.6	ug/L			11/29/15 12:52	
richlorofluoromethane	ND	10		ug/L			11/29/15 12:52	
/inyl chloride	21	10		ug/L			11/29/15 12:52	
Xylenes, Total	ND	20		ug/L			11/29/15 12:52	

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Client Sample ID: 20151118-MW24-3V

Lab Sample ID: 480-91445-2 Date Collected: 11/18/15 18:00

Matrix: Water

Date Received: 11/20/15 03:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		66 - 137		11/29/15 12:52	10
4-Bromofluorobenzene (Surr)	99		73 - 120		11/29/15 12:52	10
Toluene-d8 (Surr)	96		71 - 126		11/29/15 12:52	10
Dibromofluoromethane (Surr)	98		60 - 140		11/29/15 12:52	10

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND ND	4.9	0.63	ug/L			11/23/15 15:39	
bis (2-chloroisopropyl) ether	ND	4.9	0.50	ug/L		11/20/15 15:04	11/23/15 15:39	1
2,4,5-Trichlorophenol	ND	4.9	0.47	ug/L		11/20/15 15:04	11/23/15 15:39	1
2,4,6-Trichlorophenol	ND	4.9	0.59	ug/L		11/20/15 15:04	11/23/15 15:39	1
2,4-Dichlorophenol	ND	4.9	0.49	ug/L		11/20/15 15:04	11/23/15 15:39	1
2,4-Dimethylphenol	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
2,4-Dinitrophenol	ND	9.7	2.2	ug/L		11/20/15 15:04	11/23/15 15:39	1
2,4-Dinitrotoluene	ND	4.9	0.43	ug/L		11/20/15 15:04	11/23/15 15:39	1
2,6-Dinitrotoluene	ND	4.9	0.39	ug/L		11/20/15 15:04	11/23/15 15:39	1
2-Chloronaphthalene	ND	4.9	0.45	ug/L		11/20/15 15:04	11/23/15 15:39	1
2-Chlorophenol	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
2-Methylphenol	ND	4.9	0.39	ug/L		11/20/15 15:04	11/23/15 15:39	1
2-Methylnaphthalene	ND	4.9	0.58	ug/L		11/20/15 15:04	11/23/15 15:39	1
2-Nitroaniline	ND	9.7		ug/L		11/20/15 15:04	11/23/15 15:39	1
2-Nitrophenol	ND	4.9	0.47	ug/L		11/20/15 15:04	11/23/15 15:39	1
3,3'-Dichlorobenzidine	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
3-Nitroaniline	ND	9.7	0.47	ug/L		11/20/15 15:04	11/23/15 15:39	1
4,6-Dinitro-2-methylphenol	ND	9.7		ug/L		11/20/15 15:04	11/23/15 15:39	1
4-Bromophenyl phenyl ether	ND	4.9	0.44	ug/L		11/20/15 15:04	11/23/15 15:39	1
4-Chloro-3-methylphenol	ND	4.9	0.44	ug/L		11/20/15 15:04	11/23/15 15:39	1
4-Chloroaniline	ND	4.9	0.57	ug/L		11/20/15 15:04	11/23/15 15:39	1
4-Chlorophenyl phenyl ether	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
4-Methylphenol	ND	9.7	0.35	ug/L		11/20/15 15:04	11/23/15 15:39	1
4-Nitroaniline	ND	9.7		ug/L		11/20/15 15:04	11/23/15 15:39	1
4-Nitrophenol	ND	9.7	1.5	ug/L		11/20/15 15:04	11/23/15 15:39	1
Acenaphthene	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
Acenaphthylene	ND	4.9	0.37	ug/L		11/20/15 15:04	11/23/15 15:39	1
Acetophenone	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
Anthracene	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
Atrazine	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
Benzaldehyde	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
Benzo[a]anthracene	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
Benzo[a]pyrene	ND	4.9	0.46	ug/L		11/20/15 15:04	11/23/15 15:39	1
Benzo[b]fluoranthene	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
Benzo[g,h,i]perylene	ND	4.9		ug/L		11/20/15 15:04	11/23/15 15:39	1
Benzo[k]fluoranthene	ND	4.9	0.71	ug/L		11/20/15 15:04	11/23/15 15:39	1
Bis(2-chloroethoxy)methane	ND	4.9		ug/L			11/23/15 15:39	1
Bis(2-chloroethyl)ether	ND	4.9		ug/L			11/23/15 15:39	1
Bis(2-ethylhexyl) phthalate	ND	4.9		ug/L			11/23/15 15:39	1
Butyl benzyl phthalate	0.49 JB	4.9		ug/L			11/23/15 15:39	1
Caprolactam	ND	4.9		ug/L			11/23/15 15:39	1
Carbazole	ND	4.9		ug/L			11/23/15 15:39	1
Chrysene	ND	4.9		ug/L			11/23/15 15:39	1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: 20151118-MW24-3V

Date Collected: 11/18/15 18:00 Date Received: 11/20/15 03:10 Lab Sample ID: 480-91445-2 Matrix: Water

TestAmerica Job ID: 480-91445-1

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		4.9	0.41	ug/L		11/20/15 15:04	11/23/15 15:39	1
Di-n-butyl phthalate	ND		4.9	0.30	ug/L		11/20/15 15:04	11/23/15 15:39	1
Di-n-octyl phthalate	ND		4.9	0.46	ug/L		11/20/15 15:04	11/23/15 15:39	1
Dibenzofuran	ND		9.7	0.49	ug/L		11/20/15 15:04	11/23/15 15:39	1
Diethyl phthalate	0.23	J	4.9	0.21	ug/L		11/20/15 15:04	11/23/15 15:39	1
Dimethyl phthalate	ND		4.9	0.35	ug/L		11/20/15 15:04	11/23/15 15:39	1
Fluoranthene	ND		4.9	0.39	ug/L		11/20/15 15:04	11/23/15 15:39	1
Fluorene	ND		4.9	0.35	ug/L		11/20/15 15:04	11/23/15 15:39	1
Hexachlorobenzene	ND		4.9	0.49	ug/L		11/20/15 15:04	11/23/15 15:39	1
Hexachlorobutadiene	ND		4.9	0.66	ug/L		11/20/15 15:04	11/23/15 15:39	1
Hexachlorocyclopentadiene	ND		4.9	0.57	ug/L		11/20/15 15:04	11/23/15 15:39	1
Hexachloroethane	ND		4.9	0.57	ug/L		11/20/15 15:04	11/23/15 15:39	1
Indeno[1,2,3-cd]pyrene	ND		4.9	0.46	ug/L		11/20/15 15:04	11/23/15 15:39	1
Isophorone	ND		4.9	0.42	ug/L		11/20/15 15:04	11/23/15 15:39	1
N-Nitrosodi-n-propylamine	ND		4.9	0.52	ug/L		11/20/15 15:04	11/23/15 15:39	1
N-Nitrosodiphenylamine	ND		4.9	0.49	ug/L		11/20/15 15:04	11/23/15 15:39	1
Naphthalene	ND		4.9	0.74	ug/L		11/20/15 15:04	11/23/15 15:39	1
Nitrobenzene	ND		4.9	0.28	ug/L		11/20/15 15:04	11/23/15 15:39	1
Pentachlorophenol	ND		9.7	2.1	ug/L		11/20/15 15:04	11/23/15 15:39	1
Phenanthrene	ND		4.9	0.43	ug/L		11/20/15 15:04	11/23/15 15:39	1
Phenol	ND		4.9	0.38	ug/L		11/20/15 15:04	11/23/15 15:39	1
Pyrene	ND		4.9	0.33	ug/L		11/20/15 15:04	11/23/15 15:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	80		46 - 120	11/20/15 15:04	11/23/15 15:39	1
Phenol-d5 (Surr)	0.5	X	16 - 120	11/20/15 15:04	11/23/15 15:39	1
p-Terphenyl-d14 (Surr)	82		67 - 150	11/20/15 15:04	11/23/15 15:39	1
2,4,6-Tribromophenol (Surr)	14	X	52 - 132	11/20/15 15:04	11/23/15 15:39	1
2-Fluorobiphenyl	88		48 - 120	11/20/15 15:04	11/23/15 15:39	1
2-Fluorophenol (Surr)	2	Χ	20 - 120	11/20/15 15:04	11/23/15 15:39	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.8	0.63	ug/L		11/25/15 08:18	11/27/15 19:32	1
bis (2-chloroisopropyl) ether	ND		4.8	0.50	ug/L		11/25/15 08:18	11/27/15 19:32	1
2,4,5-Trichlorophenol	ND		4.8	0.46	ug/L		11/25/15 08:18	11/27/15 19:32	1
2,4,6-Trichlorophenol	ND		4.8	0.59	ug/L		11/25/15 08:18	11/27/15 19:32	1
2,4-Dichlorophenol	ND		4.8	0.49	ug/L		11/25/15 08:18	11/27/15 19:32	1
2,4-Dimethylphenol	ND		4.8	0.48	ug/L		11/25/15 08:18	11/27/15 19:32	1
2,4-Dinitrophenol	ND		9.6	2.1	ug/L		11/25/15 08:18	11/27/15 19:32	1
2,4-Dinitrotoluene	ND		4.8	0.43	ug/L		11/25/15 08:18	11/27/15 19:32	1
2,6-Dinitrotoluene	ND		4.8	0.39	ug/L		11/25/15 08:18	11/27/15 19:32	1
2-Chloronaphthalene	ND		4.8	0.44	ug/L		11/25/15 08:18	11/27/15 19:32	1
2-Chlorophenol	ND		4.8	0.51	ug/L		11/25/15 08:18	11/27/15 19:32	1
2-Methylphenol	ND		4.8	0.39	ug/L		11/25/15 08:18	11/27/15 19:32	1
2-Methylnaphthalene	ND		4.8	0.58	ug/L		11/25/15 08:18	11/27/15 19:32	1
2-Nitroaniline	ND		9.6	0.40	ug/L		11/25/15 08:18	11/27/15 19:32	1
2-Nitrophenol	ND		4.8	0.46	ug/L		11/25/15 08:18	11/27/15 19:32	1
3,3'-Dichlorobenzidine	ND		4.8	0.39	ug/L		11/25/15 08:18	11/27/15 19:32	1
3-Nitroaniline	ND		9.6	0.46	ug/L		11/25/15 08:18	11/27/15 19:32	1

TestAmerica Buffalo

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11

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Client Sample ID: 20151118-MW24-3V

Lab Sample ID: 480-91445-2

Date Collected: 11/18/15 18:00 **Matrix: Water** Date Received: 11/20/15 03:10

Analyte	Result Qua	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
4,6-Dinitro-2-methylphenol	ND	9.6	2.1	ug/L		11/25/15 08:18	11/27/15 19:32	
4-Bromophenyl phenyl ether	ND	4.8	0.43	ug/L		11/25/15 08:18	11/27/15 19:32	
4-Chloro-3-methylphenol	ND	4.8	0.43	ug/L		11/25/15 08:18	11/27/15 19:32	•
4-Chloroaniline	ND	4.8	0.57	ug/L		11/25/15 08:18	11/27/15 19:32	
4-Chlorophenyl phenyl ether	ND	4.8	0.34	ug/L		11/25/15 08:18	11/27/15 19:32	•
4-Methylphenol	ND	9.6	0.35	ug/L		11/25/15 08:18	11/27/15 19:32	
4-Nitroaniline	ND	9.6	0.24	ug/L		11/25/15 08:18	11/27/15 19:32	
4-Nitrophenol	ND	9.6	1.5	ug/L		11/25/15 08:18	11/27/15 19:32	
Acenaphthene	ND	4.8	0.39	ug/L		11/25/15 08:18	11/27/15 19:32	
Acenaphthylene	ND	4.8	0.37	ug/L		11/25/15 08:18	11/27/15 19:32	
Acetophenone	ND	4.8	0.52	ug/L		11/25/15 08:18	11/27/15 19:32	• • • • • • • • • • • • • • • • • • • •
Anthracene	ND	4.8	0.27	ug/L		11/25/15 08:18	11/27/15 19:32	
Atrazine	ND	4.8	0.44	ug/L		11/25/15 08:18	11/27/15 19:32	
Benzaldehyde	ND	4.8	0.26	ug/L		11/25/15 08:18	11/27/15 19:32	
Benzo[a]anthracene	ND	4.8		ug/L		11/25/15 08:18	11/27/15 19:32	
Benzo[a]pyrene	ND	4.8	0.45	ug/L		11/25/15 08:18	11/27/15 19:32	
Benzo[b]fluoranthene	ND	4.8		ug/L		11/25/15 08:18	11/27/15 19:32	· · · · · · .
Benzo[g,h,i]perylene	ND	4.8		ug/L		11/25/15 08:18	11/27/15 19:32	
Benzo[k]fluoranthene	ND	4.8		ug/L			11/27/15 19:32	
Bis(2-chloroethoxy)methane	ND	4.8		ug/L			11/27/15 19:32	· · · · · .
Bis(2-chloroethyl)ether	ND	4.8	0.39	ug/L		11/25/15 08:18	11/27/15 19:32	
Bis(2-ethylhexyl) phthalate	ND	4.8		ug/L			11/27/15 19:32	
Butyl benzyl phthalate	ND	4.8					11/27/15 19:32	
Caprolactam	ND	4.8	2.1	ug/L			11/27/15 19:32	
Carbazole	ND	4.8		_			11/27/15 19:32	
Chrysene	ND	4.8		ug/L			11/27/15 19:32	
Dibenz(a,h)anthracene	ND	4.8		ug/L			11/27/15 19:32	
Di-n-butyl phthalate	ND	4.8		ug/L			11/27/15 19:32	
Di-n-octyl phthalate	ND	4.8		ug/L			11/27/15 19:32	
Dibenzofuran	ND	9.6		ug/L			11/27/15 19:32	
Diethyl phthalate	ND	4.8		ug/L			11/27/15 19:32	
Dimethyl phthalate	ND	4.8		ug/L			11/27/15 19:32	· · · · · .
Fluoranthene	ND	4.8		ug/L			11/27/15 19:32	
Fluorene	ND	4.8		ug/L			11/27/15 19:32	
Hexachlorobenzene	ND	4.8		ug/L			11/27/15 19:32	
Hexachlorobutadiene	ND	4.8		ug/L			11/27/15 19:32	
Hexachlorocyclopentadiene	ND	4.8		ug/L			11/27/15 19:32	
Hexachloroethane	ND	4.8		ug/L			11/27/15 19:32	· · · · · .
Indeno[1,2,3-cd]pyrene	ND	4.8		ug/L			11/27/15 19:32	
Isophorone	ND	4.8		ug/L			11/27/15 19:32	
N-Nitrosodi-n-propylamine	ND	4.8		ug/L			11/27/15 19:32	· · · · · · .
N-Nitrosodiphenylamine	ND ND	4.8		ug/L ug/L			11/27/15 19:32	
Naphthalene	ND ND	4.8		ug/L ug/L			11/27/15 19:32	
Nitrobenzene							11/27/15 19:32	· · · · · · .
	ND ND	4.8		ug/L				
Pentachlorophenol	ND ND	9.6		ug/L			11/27/15 19:32	
Phenalthrene	ND ND	4.8		ug/L			11/27/15 19:32	
Phenol Pyrene	ND ND	4.8 4.8		ug/L ug/L			11/27/15 19:32 11/27/15 19:32	

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Lab Sample ID: 480-91445-2

Matrix: Water

Client Sample	ID:	20151118-MW24-3V

Date Collected: 11/18/15 18:00 Date Received: 11/20/15 03:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	77		46 - 120	11/25/15 08:18	11/27/15 19:32	1
Phenol-d5 (Surr)	2	Χ	16 - 120	11/25/15 08:18	11/27/15 19:32	1
p-Terphenyl-d14 (Surr)	86		67 - 150	11/25/15 08:18	11/27/15 19:32	1
2,4,6-Tribromophenol (Surr)	20	X	52 - 132	11/25/15 08:18	11/27/15 19:32	1
2-Fluorobiphenyl	100		48 - 120	11/25/15 08:18	11/27/15 19:32	1
2-Fluorophenol (Surr)	4	X	20 - 120	11/25/15 08:18	11/27/15 19:32	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49	0.17	ug/L		11/21/15 08:19	11/23/15 16:24	1
PCB-1221	ND		0.49	0.17	ug/L		11/21/15 08:19	11/23/15 16:24	1
PCB-1232	ND		0.49	0.17	ug/L		11/21/15 08:19	11/23/15 16:24	1
PCB-1242	ND		0.49	0.17	ug/L		11/21/15 08:19	11/23/15 16:24	1
PCB-1248	ND		0.49	0.17	ug/L		11/21/15 08:19	11/23/15 16:24	1
PCB-1254	ND		0.49	0.24	ug/L		11/21/15 08:19	11/23/15 16:24	1
PCB-1260	ND		0.49	0.24	ug/L		11/21/15 08:19	11/23/15 16:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		24 - 137				11/21/15 08:19	11/23/15 16:24	1
DCB Decachlorobiphenyl	75		19 - 125				11/21/15 08:19	11/23/15 16:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.25		0.20	0.060	mg/L		11/23/15 07:30	11/23/15 13:41	1
Antimony	ND		0.020	0.0068	mg/L		11/23/15 07:30	11/23/15 13:41	1
Arsenic	0.010	J	0.015	0.0056	mg/L		11/23/15 07:30	11/23/15 13:41	1
Barium	0.20		0.0020	0.00070	mg/L		11/23/15 07:30	11/23/15 13:41	1
Beryllium	ND		0.0020	0.00030	mg/L		11/23/15 07:30	11/23/15 13:41	1
Cadmium	ND		0.0020	0.00050	mg/L		11/23/15 07:30	11/23/15 13:41	1
Calcium	44.4		0.50	0.10	mg/L		11/23/15 07:30	11/23/15 13:41	1
Chromium	0.056		0.0040	0.0010	mg/L		11/23/15 07:30	11/23/15 13:41	1
Cobalt	0.0045		0.0040	0.00063	mg/L		11/23/15 07:30	11/23/15 13:41	1
Copper	0.0041	J	0.010	0.0016	mg/L		11/23/15 07:30	11/23/15 13:41	1
Iron	11.3		0.050	0.019	mg/L		11/23/15 07:30	11/23/15 13:41	1
Lead	0.0045	J	0.010	0.0030	mg/L		11/23/15 07:30	11/23/15 13:41	1
Magnesium	8.2		0.20	0.043	mg/L		11/23/15 07:30	11/23/15 13:41	1
Manganese	21.1		0.0030	0.00040	mg/L		11/23/15 07:30	11/23/15 13:41	1
Nickel	0.0080	J	0.010	0.0013	mg/L		11/23/15 07:30	11/23/15 13:41	1
Potassium	4.6		0.50	0.10	mg/L		11/23/15 07:30	11/23/15 13:41	1
Selenium	ND		0.025	0.0087	mg/L		11/23/15 07:30	11/23/15 13:41	1
Silver	ND		0.0060	0.0017	mg/L		11/23/15 07:30	11/23/15 13:41	1
Sodium	66.5		1.0	0.32	mg/L		11/23/15 07:30	11/23/15 13:41	1
Thallium	ND		0.020	0.010	mg/L		11/23/15 07:30	11/23/15 13:41	1
Vanadium	0.0036	J	0.0050	0.0015	mg/L		11/23/15 07:30	11/23/15 13:41	1
Zinc	0.0060	J	0.010	0.0015	mg/L		11/23/15 07:30	11/23/15 13:41	1

Method: 7470A - Mercury (CVA	A)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		11/23/15 09:15	11/23/15 14:33	1

Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-91445-3

TestAmerica Job ID: 480-91445-1

Matrix: Water

Client Sample ID: TRIP BLANK

Date Collected: 11/18/15 00:00 Date Received: 11/20/15 03:10

Analyte	nic Compounds by GC/N Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND Qualifier —	1.0		ug/L		гіерагец	11/27/15 21:52	Dii Fac
1,1,2,2-Tetrachloroethane	ND	1.0		ug/L			11/27/15 21:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0		ug/L			11/27/15 21:52	1
1,1,2-Trichloroethane	ND	1.0		ug/L			11/27/15 21:52	1
1,1-Dichloroethane	ND	1.0		ug/L			11/27/15 21:52	1
1,1-Dichloroethene	ND	1.0		ug/L			11/27/15 21:52	1
1,2,4-Trichlorobenzene	ND	1.0		ug/L			11/27/15 21:52	1
1,2-Dibromo-3-Chloropropane	ND	1.0		ug/L			11/27/15 21:52	1
1,2-Dibromoethane	ND	1.0		ug/L			11/27/15 21:52	1
1,2-Dichlorobenzene	ND	1.0		ug/L			11/27/15 21:52	1
1,2-Dichloroethane	ND	1.0		ug/L			11/27/15 21:52	1
1,2-Dichloropropane	ND	1.0		ug/L			11/27/15 21:52	1
1,3-Dichlorobenzene	ND	1.0		ug/L			11/27/15 21:52	1
1,4-Dichlorobenzene	ND	1.0		ug/L			11/27/15 21:52	1
2-Butanone (MEK)	ND	10		ug/L			11/27/15 21:52	1
2-Hexanone	ND	5.0		ug/L			11/27/15 21:52	1
4-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			11/27/15 21:52	1
Acetone	ND	10		ug/L			11/27/15 21:52	1
Benzene	ND	1.0	0.41	ug/L			11/27/15 21:52	1
Bromodichloromethane	ND	1.0		ug/L			11/27/15 21:52	1
Bromoform	ND	1.0		ug/L			11/27/15 21:52	1
Bromomethane	ND	1.0		ug/L			11/27/15 21:52	1
Carbon disulfide	ND	1.0		ug/L			11/27/15 21:52	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			11/27/15 21:52	1
Chlorobenzene	ND	1.0	0.75	ug/L			11/27/15 21:52	1
Chloroethane	ND	1.0	0.32	ug/L			11/27/15 21:52	1
Chloroform	ND	1.0	0.34	ug/L			11/27/15 21:52	1
Chloromethane	ND	1.0	0.35	ug/L			11/27/15 21:52	1
cis-1,2-Dichloroethene	ND	1.0	0.81	ug/L			11/27/15 21:52	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			11/27/15 21:52	1
Cyclohexane	ND	1.0	0.18	ug/L			11/27/15 21:52	1
Dibromochloromethane	ND	1.0	0.32	ug/L			11/27/15 21:52	1
Dichlorodifluoromethane	ND	1.0	0.68	ug/L			11/27/15 21:52	1
Ethylbenzene	ND	1.0	0.74	ug/L			11/27/15 21:52	1
Isopropylbenzene	ND	1.0	0.79	ug/L			11/27/15 21:52	1
Methyl acetate	ND	2.5	1.3	ug/L			11/27/15 21:52	1
Methyl tert-butyl ether	ND	1.0	0.16	ug/L			11/27/15 21:52	1
Methylcyclohexane	ND	1.0	0.16	ug/L			11/27/15 21:52	1
Methylene Chloride	ND	1.0	0.44	ug/L			11/27/15 21:52	1
Styrene	ND	1.0	0.73	ug/L			11/27/15 21:52	1
Tetrachloroethene	ND	1.0	0.36	ug/L			11/27/15 21:52	1
Toluene	ND	1.0	0.51	ug/L			11/27/15 21:52	1
trans-1,2-Dichloroethene	ND	1.0	0.90	ug/L			11/27/15 21:52	1
trans-1,3-Dichloropropene	ND	1.0	0.37	ug/L			11/27/15 21:52	1
Trichloroethene	ND	1.0	0.46	ug/L			11/27/15 21:52	1
Trichlorofluoromethane	ND	1.0	0.88	ug/L			11/27/15 21:52	1
Vinyl chloride	ND	1.0	0.90	ug/L			11/27/15 21:52	1
Xylenes, Total	ND	2.0	0.66	ug/L			11/27/15 21:52	1

TestAmerica Buffalo

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Client Sample Results

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-91445-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-91445-3

. Matrix: Water

Date Collected: 11/18/15 00:00 Date Received: 11/20/15 03:10

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		66 - 137	_		11/27/15 21:52	1
4-Bromofluorobenzene (Surr)	100		73 - 120			11/27/15 21:52	1
Toluene-d8 (Surr)	96		71 - 126			11/27/15 21:52	1
Dibromofluoromethane (Surr)	98		60 - 140			11/27/15 21:52	1

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Matrix: Water Prep Type: Total/NA

			Pe	ercent Surre	ogate Reco
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(66-137)	(73-120)	(71-126)	(60-140)
480-91445-1	20151118-MW24-INITIAL	89	100	93	92
480-91445-2	20151118-MW24-3V	91	99	96	98
480-91445-3	TRIP BLANK	94	100	96	98
LCS 480-277214/4	Lab Control Sample	90	105	97	96
LCS 480-277305/4	Lab Control Sample	90	104	96	95
MB 480-277214/6	Method Blank	95	100	97	99
MB 480-277305/6	Method Blank	91	100	94	95

Surrogate Legend

Client: ARCADIS U.S. Inc

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		NBZ	PHL	TPH	TBP	FBP	2FP		
Lab Sample ID	Client Sample ID	(46-120)	(16-120)	(67-150)	(52-132)	(48-120)	(20-120)		
80-91445-1	20151118-MW24-INITIAL	82	0.04 X	66 X	3 X	88	0 X		
480-91445-1 - RE	20151118-MW24-INITIAL	75	0.06 X	40 X	3 X	100	0 X		
80-91445-2	20151118-MW24-3V	80	0.5 X	82	14 X	88	2 X		
30-91445-2 - RE	20151118-MW24-3V	77	2 X	86	20 X	100	4 X		
CS 480-276209/2-A	Lab Control Sample	69	44	89	78	72	58		
MB 480-276209/1-A	Method Blank	63	34	88	66	69	48		
1B 480-276865/1-A	Method Blank	80	49	100	81	104	59		

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPH = p-Terphenyl-d14 (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water Prep Type: Total/NA

		TCX2	DCB2	It Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(24-137)	(19-125)	
480-91445-1	20151118-MW24-INITIAL	$-\frac{(24-137)}{67}$	52	
480-91445-2	20151118-MW24-3V	85	75	
LCS 480-276284/2-A	Lab Control Sample	66	84	
LCSD 480-276284/3-A	Lab Control Sample Dup	73	80	
MB 480-276284/1-A	Method Blank	68	69	

TestAmerica Buffalo

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Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

DCB = DCB Decachlorobiphenyl

TestAmerica Job ID: 480-91445-1

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RL

1.0

1.0

MDL Unit

0.82 ug/L

0.21 ug/L

D

Prepared

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

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

MB MB

ND

Result Qualifier

Lab Sample ID: MB 480-277214/6

Matrix: Water

1,1,1-Trichloroethane

1,1,2,2-Tetrachloroethane

Dichlorodifluoromethane

Ethylbenzene

Methyl acetate

Styrene

Toluene

Isopropylbenzene

Methyl tert-butyl ether

Methylcyclohexane

Methylene Chloride

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

trans-1,2-Dichloroethene

trans-1,3-Dichloropropene

Trichlorofluoromethane

Analyte

Analysis Batch: 277214

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyzed

11/27/15 20:47

11/27/15 20:47

1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31 ug/L	11/27/15 20:47	1
1,1,2-Trichloroethane	ND	1.0	0.23 ug/L	11/27/15 20:47	1
1,1-Dichloroethane	ND	1.0	0.38 ug/L	11/27/15 20:47	1
1,1-Dichloroethene	ND	1.0	0.29 ug/L	11/27/15 20:47	1
1,2,4-Trichlorobenzene	ND	1.0	0.41 ug/L	11/27/15 20:47	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39 ug/L	11/27/15 20:47	1
1,2-Dibromoethane	ND	1.0	0.73 ug/L	11/27/15 20:47	1
1,2-Dichlorobenzene	ND	1.0	0.79 ug/L	11/27/15 20:47	1
1,2-Dichloroethane	ND	1.0	0.21 ug/L	11/27/15 20:47	1
1,2-Dichloropropane	ND	1.0	0.72 ug/L	11/27/15 20:47	1
1,3-Dichlorobenzene	ND	1.0	0.78 ug/L	11/27/15 20:47	1
1,4-Dichlorobenzene	ND	1.0	0.84 ug/L	11/27/15 20:47	1
2-Butanone (MEK)	ND	10	1.3 ug/L	11/27/15 20:47	1
2-Hexanone	ND	5.0	1.2 ug/L	11/27/15 20:47	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1 ug/L	11/27/15 20:47	1
Acetone	ND	10	3.0 ug/L	11/27/15 20:47	1
Benzene	ND	1.0	0.41 ug/L	11/27/15 20:47	1
Bromodichloromethane	ND	1.0	0.39 ug/L	11/27/15 20:47	1
Bromoform	ND	1.0	0.26 ug/L	11/27/15 20:47	1
Bromomethane	ND	1.0	0.69 ug/L	11/27/15 20:47	1
Carbon disulfide	ND	1.0	0.19 ug/L	11/27/15 20:47	1
Carbon tetrachloride	ND	1.0	0.27 ug/L	11/27/15 20:47	1
Chlorobenzene	ND	1.0	0.75 ug/L	11/27/15 20:47	1
Chloroethane	ND	1.0	0.32 ug/L	11/27/15 20:47	1
Chloroform	ND	1.0	0.34 ug/L	11/27/15 20:47	1
Chloromethane	ND	1.0	0.35 ug/L	11/27/15 20:47	1
cis-1,2-Dichloroethene	ND	1.0	0.81 ug/L	11/27/15 20:47	1
cis-1,3-Dichloropropene	ND	1.0	0.36 ug/L	11/27/15 20:47	1
Cyclohexane	ND	1.0	0.18 ug/L	11/27/15 20:47	1
Dibromochloromethane	ND	1.0	0.32 ug/L	11/27/15 20:47	1
The state of the s					

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0.68 ug/L

0.74 ug/L

0.79 ug/L

1.3 ug/L

0.16 ug/L

0.16 ug/L

0.44 ug/L

0.73 ug/L

0.36 ug/L

0.51 ug/L

0.90 ug/L

0.37 ug/L

0.46 ug/L

0.88 ug/L

0.90 ug/L

0.66 ug/L

TestAmerica Buffalo

11/27/15 20:47

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11/30/2015

Dil Fac

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

	MB MB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95	66 - 137		11/27/15 20:47	1
4-Bromofluorobenzene (Surr)	100	73 - 120		11/27/15 20:47	1
Toluene-d8 (Surr)	97	71 - 126		11/27/15 20:47	1
Dibromofluoromethane (Surr)	99	60 - 140		11/27/15 20:47	1

Lab Sample ID: LCS 480-277214/4

Matrix: Water

Analysis Batch: 277214

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

	Spike		LCS				%Rec.	
Analyte	Added		Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	25.0	21.7		ug/L		87	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	23.9		ug/L		96	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	22.4		ug/L		90	52 - 148	
ne 1,1,2-Trichloroethane	25.0	25.1		ug/L		100	76 - 122	
1,1-Dichloroethane	25.0	23.6		ug/L ug/L		94	70 - 122 71 ₋ 129	
1.1-Dichloroethene	25.0	25.1		ug/L ug/L		100	58 ₋ 121	
1,2,4-Trichlorobenzene	25.0	22.5		ug/L		90	70 - 122	
1,2-Dibromo-3-Chloropropane	25.0	20.9		ug/L ug/L		84	56 ₋ 134	
1,2-Dibromoethane	25.0	26.4		ug/L		105	77 - 120	
1,2-Dichlorobenzene	25.0	24.0		ug/L ug/L		96	80 ₋ 124	
1,2-Dichloroethane	25.0	21.8		ug/L ug/L		90 87	75 ₋ 127	
1,2-Dichloropropane	25.0	25.5				102	76 ₋ 120	
1,3-Dichlorobenzene	25.0	25.5		ug/L ug/L		98	76 - 120 77 - 120	
1,4-Dichlorobenzene	25.0 25.0	25.1		ug/L ug/L		100	77 - 120 75 - 120	
2-Butanone (MEK)	125	123		-		98	57 - 140	
				ug/L			65 - 127	
2-Hexanone	125	120		ug/L		96	71 ₋ 125	
4-Methyl-2-pentanone (MIBK)	125 125	115		ug/L		92 125	71 - 125 56 - 142	
Acetone		156		ug/L		125		
Benzene Bromodiahleremethane	25.0	24.7		ug/L		99	71 - 124	
Bromodichloromethane	25.0	24.3		ug/L		97	80 - 122	
Bromoform	25.0	24.2		ug/L		97	52 - 132	
Bromomethane	25.0	22.5		ug/L		90	55 ₋ 144	
Carbon disulfide	25.0	23.3		ug/L		93	59 ₋ 134	
Carbon tetrachloride	25.0	22.0		ug/L		88	72 - 134	
Chlorobenzene	25.0	25.3		ug/L		101	72 - 120	
Chloroethane	25.0	22.6		ug/L		90	69 - 136	
Chloroform	25.0	23.7		ug/L		95	73 - 127	
Chloromethane	25.0	24.1		ug/L		96	68 - 124	
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	74 - 124	
cis-1,3-Dichloropropene	25.0	27.3		ug/L		109	74 - 124	
Cyclohexane	25.0	23.5		ug/L		94	59 - 135	
Dibromochloromethane	25.0	24.7		ug/L		99	75 - 125	
Dichlorodifluoromethane	25.0	26.3		ug/L		105	59 - 135	
Ethylbenzene	25.0	24.0		ug/L		96	77 ₋ 123	
Isopropylbenzene	25.0	23.5		ug/L		94	77 - 122	
Methyl acetate	125	137		ug/L		110	74 - 133	
Methyl tert-butyl ether	25.0	22.8		ug/L		91	64 - 127	
Methylcyclohexane	25.0	24.2		ug/L		97	61 - 138	
Methylene Chloride	25.0	27.4		ug/L		110	57 - 132	
Styrene	25.0	24.4		ug/L		98	70 - 130	
Tetrachloroethene	25.0	25.6		ug/L		102	74 - 122	
Toluene	25.0	23.6		ug/L		94	80 - 122	
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	73 - 127	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

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

Lab Sample ID: LCS 480-277214/4

Matrix: Water

Analysis Batch: 277214

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

_	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,3-Dichloropropene	25.0	24.4		ug/L		97	72 - 123	
Trichloroethene	25.0	25.3		ug/L		101	74 - 123	
Trichlorofluoromethane	25.0	23.4		ug/L		94	62 - 152	
Vinyl chloride	25.0	25.1		ug/L		100	65 - 133	
Xylenes, Total	50.0	48.4		ug/L		97	76 - 122	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		66 - 137
4-Bromofluorobenzene (Surr)	105		73 - 120
Toluene-d8 (Surr)	97		71 - 126
Dibromofluoromethane (Surr)	96		60 - 140

Client Sample ID: Method Blank

Prep Type: Total/NA

Lab Sample ID: MB 480-277305/6

Matrix: Water

Analysis Batch: 277305

7 manyolo Batom 211 coc	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/29/15 11:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/29/15 11:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/29/15 11:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/29/15 11:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/29/15 11:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/29/15 11:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/29/15 11:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/29/15 11:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/29/15 11:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/29/15 11:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/29/15 11:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/29/15 11:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/29/15 11:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/29/15 11:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/29/15 11:39	1
2-Hexanone	ND		5.0	1.2	ug/L			11/29/15 11:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/29/15 11:39	1
Acetone	ND		10	3.0	ug/L			11/29/15 11:39	1
Benzene	ND		1.0	0.41	ug/L			11/29/15 11:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/29/15 11:39	1
Bromoform	ND		1.0	0.26	ug/L			11/29/15 11:39	1
Bromomethane	ND		1.0	0.69	ug/L			11/29/15 11:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/29/15 11:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/29/15 11:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/29/15 11:39	1
Chloroethane	ND		1.0	0.32	ug/L			11/29/15 11:39	1
Chloroform	ND		1.0	0.34	ug/L			11/29/15 11:39	1
Chloromethane	ND		1.0	0.35	ug/L			11/29/15 11:39	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/29/15 11:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/29/15 11:39	1
Cyclohexane	ND		1.0	0.18	ug/L			11/29/15 11:39	1

TestAmerica Buffalo

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TestAmerica Job ID: 480-91445-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

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

Client Sample ID: Lab Control Sample

100

109

102

97

149

75 - 120

57 - 140

65 - 127

71 - 125

56 - 142

%Rec.

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 277305

Lab Sample ID: MB 480-277305/6

	MB MB					
Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND ND	1.0	0.32 ug/L		11/29/15 11:39	1
Dichlorodifluoromethane	ND	1.0	0.68 ug/L		11/29/15 11:39	1
Ethylbenzene	ND	1.0	0.74 ug/L		11/29/15 11:39	1
Isopropylbenzene	ND	1.0	0.79 ug/L		11/29/15 11:39	1
Methyl acetate	ND	2.5	1.3 ug/L		11/29/15 11:39	1
Methyl tert-butyl ether	ND	1.0	0.16 ug/L		11/29/15 11:39	1
Methylcyclohexane	ND	1.0	0.16 ug/L		11/29/15 11:39	1
Methylene Chloride	ND	1.0	0.44 ug/L		11/29/15 11:39	1
Styrene	ND	1.0	0.73 ug/L		11/29/15 11:39	1
Tetrachloroethene	ND	1.0	0.36 ug/L		11/29/15 11:39	1
Toluene	ND	1.0	0.51 ug/L		11/29/15 11:39	1
trans-1,2-Dichloroethene	ND	1.0	0.90 ug/L		11/29/15 11:39	1
trans-1,3-Dichloropropene	ND	1.0	0.37 ug/L		11/29/15 11:39	1
Trichloroethene	ND	1.0	0.46 ug/L		11/29/15 11:39	1
Trichlorofluoromethane	ND	1.0	0.88 ug/L		11/29/15 11:39	1
Vinyl chloride	ND	1.0	0.90 ug/L		11/29/15 11:39	1
Xylenes, Total	ND	2.0	0.66 ug/L		11/29/15 11:39	1

MB MB %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 66 - 137 1,2-Dichloroethane-d4 (Surr) 11/29/15 11:39 91 4-Bromofluorobenzene (Surr) 100 73 - 120 11/29/15 11:39 Toluene-d8 (Surr) 94 71 - 126 11/29/15 11:39 Dibromofluoromethane (Surr) 95 60 - 140 11/29/15 11:39

Spike

25.0

125

125

125

125

Lab Sample ID: LCS 480-277305/4

Matrix: Water

1,4-Dichlorobenzene

4-Methyl-2-pentanone (MIBK)

2-Butanone (MEK)

2-Hexanone

Acetone

Analysis Batch: 277305

Analyte	Added	Result Qualifier	Unit	D %Rec	Limits
1,1,1-Trichloroethane	25.0	23.2	ug/L	93	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.2	ug/L	97	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	22.9	ug/L	92	52 - 148
ne					
1,1,2-Trichloroethane	25.0	25.2	ug/L	101	76 - 122
1,1-Dichloroethane	25.0	23.9	ug/L	96	71 - 129
1,1-Dichloroethene	25.0	26.5	ug/L	106	58 - 121
1,2,4-Trichlorobenzene	25.0	23.6	ug/L	94	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.7	ug/L	91	56 - 134
1,2-Dibromoethane	25.0	26.3	ug/L	105	77 - 120
1,2-Dichlorobenzene	25.0	24.5	ug/L	98	80 - 124
1,2-Dichloroethane	25.0	21.9	ug/L	88	75 - 127
1,2-Dichloropropane	25.0	25.6	ug/L	102	76 - 120
1,3-Dichlorobenzene	25.0	24.5	ug/L	98	77 - 120

LCS LCS

25.0

136

128

121

186 *

ug/L

ug/L

ug/L

ug/L

ug/L

TestAmerica Buffalo

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-0

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14

TestAmerica Job ID: 480-91445-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 480-277305/4

Matrix: Water

Analysis Batch: 277305

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS		%Rec.	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
Benzene	25.0	25.5	ug/L	102	71 - 124	
Bromodichloromethane	25.0	24.5	ug/L	98	80 - 122	
Bromoform	25.0	25.6	ug/L	102	52 - 132	
Bromomethane	25.0	21.6	ug/L	86	55 - 144	
Carbon disulfide	25.0	24.3	ug/L	97	59 - 134	
Carbon tetrachloride	25.0	24.0	ug/L	96	72 - 134	
Chlorobenzene	25.0	25.7	ug/L	103	72 - 120	
Chloroethane	25.0	22.8	ug/L	91	69 - 136	
Chloroform	25.0	23.9	ug/L	96	73 - 127	
Chloromethane	25.0	25.1	ug/L	100	68 - 124	
cis-1,2-Dichloroethene	25.0	25.4	ug/L	102	74 - 124	
cis-1,3-Dichloropropene	25.0	27.6	ug/L	111	74 - 124	
Cyclohexane	25.0	25.6	ug/L	102	59 - 135	
Dibromochloromethane	25.0	25.0	ug/L	100	75 - 125	
Dichlorodifluoromethane	25.0	30.1	ug/L	121	59 - 135	
Ethylbenzene	25.0	24.4	ug/L	98	77 - 123	
Isopropylbenzene	25.0	23.9	ug/L	96	77 - 122	
Methyl acetate	125	145	ug/L	116	74 - 133	
Methyl tert-butyl ether	25.0	23.1	ug/L	92	64 - 127	
Methylcyclohexane	25.0	27.2	ug/L	109	61 - 138	
Methylene Chloride	25.0	28.2	ug/L	113	57 - 132	
Styrene	25.0	24.8	ug/L	99	70 - 130	
Tetrachloroethene	25.0	26.7	ug/L	107	74 - 122	
Toluene	25.0	24.0	ug/L	96	80 - 122	
trans-1,2-Dichloroethene	25.0	26.0	ug/L	104	73 - 127	
trans-1,3-Dichloropropene	25.0	24.7	ug/L	99	72 - 123	
Trichloroethene	25.0	26.2	ug/L	105	74 - 123	
Trichlorofluoromethane	25.0	23.1	ug/L	92	62 - 152	
Vinyl chloride	25.0	26.3	ug/L	105	65 - 133	
Xylenes, Total	50.0	49.3	ug/L	99	76 - 122	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		66 - 137
4-Bromofluorobenzene (Surr)	104		73 - 120
Toluene-d8 (Surr)	96		71 - 126
Dibromofluoromethane (Surr)	95		60 - 140

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-276209/1-A

Matrix: Water

Analysis Batch: 276424

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 276209

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		11/20/15 15:04	11/23/15 13:42	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		11/20/15 15:04	11/23/15 13:42	1
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		11/20/15 15:04	11/23/15 13:42	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		11/20/15 15:04	11/23/15 13:42	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-276209/1-A

Matrix: Water

Analysis Batch: 276424

Client Sample ID: Method Blank
Prep Type: Total/NA
Pron Batch: 276209

Analysis Batch: 276424	MR	МВ						Prep Batch:	276209
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.51	ug/L	<u>-</u>	•	11/23/15 13:42	1
2,4-Dimethylphenol	ND		5.0		ug/L			11/23/15 13:42	1
2,4-Dinitrophenol	ND		10		ug/L			11/23/15 13:42	1
2,4-Dinitrotoluene	ND		5.0		ug/L			11/23/15 13:42	1
2,6-Dinitrotoluene	ND		5.0		ug/L			11/23/15 13:42	1
2-Chloronaphthalene	ND		5.0		ug/L			11/23/15 13:42	· · · · · · · · · · · 1
2-Chlorophenol	ND		5.0		ug/L			11/23/15 13:42	1
2-Methylphenol	ND		5.0		ug/L			11/23/15 13:42	1
2-Methylnaphthalene	ND		5.0		ug/L			11/23/15 13:42	
2-Nitroaniline	ND		10		ug/L			11/23/15 13:42	1
2-Nitrophenol	ND		5.0		ug/L			11/23/15 13:42	1
	ND		5.0		ug/L			11/23/15 13:42	
3,3'-Dichlorobenzidine3-Nitroaniline	ND ND		10		ug/L ug/L			11/23/15 13:42	1
					•				
4,6-Dinitro-2-methylphenol	ND		10		ug/L			11/23/15 13:42	1
4-Bromophenyl phenyl ether	ND		5.0		ug/L			11/23/15 13:42	1
4-Chloro-3-methylphenol	ND		5.0		ug/L			11/23/15 13:42	1
4-Chloroaniline	ND		5.0		ug/L			11/23/15 13:42	1
4-Chlorophenyl phenyl ether	ND		5.0		ug/L			11/23/15 13:42	1
4-Methylphenol	ND		10		ug/L			11/23/15 13:42	1
4-Nitroaniline	ND		10		ug/L			11/23/15 13:42	
4-Nitrophenol	ND		10		ug/L			11/23/15 13:42	1
Acenaphthene	ND		5.0		ug/L			11/23/15 13:42	1
Acenaphthylene	ND		5.0		ug/L			11/23/15 13:42	1
Acetophenone	ND		5.0		ug/L			11/23/15 13:42	1
Anthracene	ND		5.0		ug/L		11/20/15 15:04	11/23/15 13:42	1
Atrazine	ND		5.0		ug/L		11/20/15 15:04	11/23/15 13:42	1
Benzaldehyde	ND		5.0		ug/L		11/20/15 15:04	11/23/15 13:42	1
Benzo[a]anthracene	ND		5.0		ug/L		11/20/15 15:04	11/23/15 13:42	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L			11/23/15 13:42	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		11/20/15 15:04	11/23/15 13:42	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		11/20/15 15:04	11/23/15 13:42	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		11/20/15 15:04	11/23/15 13:42	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		11/20/15 15:04	11/23/15 13:42	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		11/20/15 15:04	11/23/15 13:42	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		11/20/15 15:04	11/23/15 13:42	1
Butyl benzyl phthalate	0.495	J	5.0	0.42	ug/L		11/20/15 15:04	11/23/15 13:42	1
Caprolactam	ND		5.0	2.2	ug/L		11/20/15 15:04	11/23/15 13:42	1
Carbazole	ND		5.0	0.30	ug/L		11/20/15 15:04	11/23/15 13:42	1
Chrysene	ND		5.0	0.33	ug/L		11/20/15 15:04	11/23/15 13:42	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		11/20/15 15:04	11/23/15 13:42	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		11/20/15 15:04	11/23/15 13:42	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		11/20/15 15:04	11/23/15 13:42	1
Dibenzofuran	ND		10		ug/L		11/20/15 15:04	11/23/15 13:42	1
Diethyl phthalate	ND		5.0		ug/L		11/20/15 15:04	11/23/15 13:42	1
Dimethyl phthalate	ND		5.0		ug/L			11/23/15 13:42	1
Fluoranthene	ND		5.0		ug/L			11/23/15 13:42	1
Fluorene	ND		5.0		ug/L			11/23/15 13:42	1
Hexachlorobenzene	ND		5.0		ug/L			11/23/15 13:42	1

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TestAmerica Job ID: 480-91445-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-276209/1-A **Matrix: Water**

Analysis Batch: 276424

Client Sample ID: Method Blank **Prep Type: Total/NA Prep Batch: 276209**

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		5.0	0.68	ug/L		11/20/15 15:04	11/23/15 13:42	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		11/20/15 15:04	11/23/15 13:42	1
Hexachloroethane	ND		5.0	0.59	ug/L		11/20/15 15:04	11/23/15 13:42	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		11/20/15 15:04	11/23/15 13:42	1
Isophorone	ND		5.0	0.43	ug/L		11/20/15 15:04	11/23/15 13:42	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		11/20/15 15:04	11/23/15 13:42	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		11/20/15 15:04	11/23/15 13:42	1
Naphthalene	ND		5.0	0.76	ug/L		11/20/15 15:04	11/23/15 13:42	1
Nitrobenzene	ND		5.0	0.29	ug/L		11/20/15 15:04	11/23/15 13:42	1
Pentachlorophenol	ND		10	2.2	ug/L		11/20/15 15:04	11/23/15 13:42	1
Phenanthrene	ND		5.0	0.44	ug/L		11/20/15 15:04	11/23/15 13:42	1
Phenol	ND		5.0	0.39	ug/L		11/20/15 15:04	11/23/15 13:42	1
Pyrene	ND		5.0	0.34	ug/L		11/20/15 15:04	11/23/15 13:42	1

MB MB

%Recovery Qualifier	r Limits	Prepared	Analyzed	Dil Fac
63	46 - 120	11/20/15 15:04	11/23/15 13:42	1
34	16 - 120	11/20/15 15:04	11/23/15 13:42	1
88	67 - 150	11/20/15 15:04	11/23/15 13:42	1
66	52 - 132	11/20/15 15:04	11/23/15 13:42	1
69	48 - 120	11/20/15 15:04	11/23/15 13:42	1
48	20 - 120	11/20/15 15:04	11/23/15 13:42	1
	63 34 88 66 69	63 46 - 120 34 16 - 120 88 67 - 150 66 52 - 132 69 48 - 120	63 46 - 120 11/20/15 15:04 34 16 - 120 11/20/15 15:04 88 67 - 150 11/20/15 15:04 66 52 - 132 11/20/15 15:04 69 48 - 120 11/20/15 15:04	63 46 - 120 11/20/15 15:04 11/23/15 13:42 34 16 - 120 11/20/15 15:04 11/23/15 13:42 88 67 - 150 11/20/15 15:04 11/23/15 13:42 66 52 - 132 11/20/15 15:04 11/23/15 13:42 69 48 - 120 11/20/15 15:04 11/23/15 13:42

Lab Sample ID: LCS 480-276209/2-A

Matrix: Water

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 276209

Analysis Batch: 276424	Spike	LCS	LCS				Prep Batch: 276209 %Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Biphenyl	16.0	11.8		ug/L		74	30 - 140
bis (2-chloroisopropyl) ether	16.0	11.7		ug/L		73	28 - 136
2,4,5-Trichlorophenol	16.0	12.3		ug/L		77	65 - 126
2,4,6-Trichlorophenol	16.0	12.1		ug/L		75	64 - 120
2,4-Dichlorophenol	16.0	12.2		ug/L		76	64 - 120
2,4-Dimethylphenol	16.0	11.9		ug/L		74	57 - 120
2,4-Dinitrophenol	32.0	24.6		ug/L		77	42 - 153
2,4-Dinitrotoluene	16.0	13.2		ug/L		83	65 - 154
2,6-Dinitrotoluene	16.0	12.9		ug/L		80	74 - 134
2-Chloronaphthalene	16.0	11.6		ug/L		72	41 - 124
2-Chlorophenol	16.0	11.3		ug/L		71	48 - 120
2-Methylphenol	16.0	11.8		ug/L		74	39 - 120
2-Methylnaphthalene	16.0	11.4		ug/L		71	34 - 122
2-Nitroaniline	16.0	13.0		ug/L		81	67 - 136
2-Nitrophenol	16.0	11.6		ug/L		73	59 - 120
3,3'-Dichlorobenzidine	32.0	26.1		ug/L		82	33 - 140
3-Nitroaniline	16.0	11.7		ug/L		73	28 - 130
4,6-Dinitro-2-methylphenol	32.0	24.1		ug/L		75	64 - 159
4-Bromophenyl phenyl ether	16.0	12.7		ug/L		79	71 - 126
4-Chloro-3-methylphenol	16.0	12.3		ug/L		77	64 - 120
4-Chloroaniline	16.0	9.68		ug/L		60	10 - 130

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TestAmerica Job ID: 480-91445-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID:	LCS 480-276209/2-A
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Matrix: Water

Analysis Batch: 276424

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 276209

Analysis Batch: 276424	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	
4-Chlorophenyl phenyl ether	16.0	12.9	ug/L		80	71 - 122	
4-Methylphenol	16.0	11.4	ug/L		71	39 - 120	
4-Nitroaniline	16.0	13.9	ug/L		87	47 - 130	
4-Nitrophenol	32.0	19.9	ug/L		62	16 - 120	
Acenaphthene	16.0	12.3	ug/L		77	60 - 120	
Acenaphthylene	16.0	12.2	ug/L		76	63 - 120	
Acetophenone	16.0	11.8	ug/L		74	45 - 120	
Anthracene	16.0	13.2	ug/L		82	58 ₋ 148	
Atrazine	32.0	29.1	ug/L		91	56 - 179	
Benzaldehyde	32.0	22.2	ug/L		69	30 - 140	
Benzo[a]anthracene	16.0	14.2	ug/L		89	55 - 151	
Benzo[a]pyrene	16.0	13.5	ug/L		85	60 ₋ 145	
Benzo[b]fluoranthene	16.0	14.9	ug/L		93	54 - 140	
Benzo[g,h,i]perylene	16.0	15.8	ug/L		99	66 - 152	
Benzo[k]fluoranthene	16.0	14.3	ug/L		89	51 ₋ 153	
Bis(2-chloroethoxy)methane	16.0	12.0	ug/L		75	50 - 128	
Bis(2-chloroethyl)ether	16.0	10.8	ug/L		67	51 ₋ 120	
Bis(2-ethylhexyl) phthalate	16.0	15.0	ug/L		94	53 - 158	
Butyl benzyl phthalate	16.0	13.7	ug/L		85	58 - 163	
Caprolactam	32.0	12.3	ug/L		38	14 - 130	
Carbazole	16.0	13.0	ug/L		81	59 - 148	
Chrysene	16.0	14.2	ug/L		89	69 - 140	
Dibenz(a,h)anthracene	16.0	14.7	ug/L		92	57 ₋ 148	
Di-n-butyl phthalate	16.0	13.5	ug/L		85	58 ₋ 149	
Di-n-octyl phthalate	16.0	14.1	ug/L		88	55 - 167	
Dibenzofuran	16.0	12.7	ug/L		79	49 - 137	
Diethyl phthalate	16.0	13.5	ug/L		84	59 ₋ 146	
Dimethyl phthalate	16.0	13.4	ug/L		84	59 - 141	
Fluoranthene	16.0	13.5	ug/L		84	55 ₋ 147	
Fluorene	16.0	13.0	ug/L		81	55 ₋ 143	
Hexachlorobenzene	16.0	12.5	ug/L		78	14 - 130	
Hexachlorobutadiene	16.0	9.36	ug/L		59	14 - 130	
Hexachlorocyclopentadiene	16.0	8.38	ug/L		52	13 - 130	
Hexachloroethane	16.0	9.36	ug/L		59	14 - 130	
Indeno[1,2,3-cd]pyrene	16.0	14.7	ug/L		92	69 - 146	
Isophorone	16.0	12.2	ug/L		76	48 - 133	
N-Nitrosodi-n-propylamine	16.0	12.4	ug/L		77	56 - 120	
Naphthalene	16.0	11.0	ug/L		69	35 - 130	
Nitrobenzene	16.0	11.2			70	45 - 123	
Pentachlorophenol	32.0	24.3	ug/L		76	39 - 136	
Phenanthrene	16.0	12.9	ug/L		81	57 - 147	
Phenol	16.0	7.32	ug/L		46	17 - 120	
Pyrene	16.0	13.9	ug/L		87	58 - 136	

LCS LCS rrogate %Recovery Qualifier Li

Surrogate	%Recovery G	ualifier Limits	
Nitrobenzene-d5 (Surr)	69	46 - 120	-
Phenol-d5 (Surr)	44	16 - 120	
p-Terphenyl-d14 (Surr)	89	67 - 150	

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-276209/2-A

Matrix: Water

Analysis Batch: 276424

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

Prep Batch: 276209

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol (Surr)	78		52 - 132
2-Fluorobiphenyl	72		48 - 120
2-Fluorophenol (Surr)	58		20 - 120

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

Prep Batch: 276865

Matrix: Water

Lab Sample ID: MB 480-276865/1-A

Analysis Batch: 277163

Alialysis Batch. 277 103	МВ	МВ						Frep Datch.	270003
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		11/25/15 08:18	11/27/15 18:35	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		11/25/15 08:18	11/27/15 18:35	1
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		11/25/15 08:18	11/27/15 18:35	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		11/25/15 08:18	11/27/15 18:35	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		11/25/15 08:18	11/27/15 18:35	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		11/25/15 08:18	11/27/15 18:35	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		11/25/15 08:18	11/27/15 18:35	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		11/25/15 08:18	11/27/15 18:35	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		11/25/15 08:18	11/27/15 18:35	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		11/25/15 08:18	11/27/15 18:35	1
2-Chlorophenol	ND		5.0	0.53	ug/L		11/25/15 08:18	11/27/15 18:35	1
2-Methylphenol	ND		5.0	0.40	ug/L		11/25/15 08:18	11/27/15 18:35	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		11/25/15 08:18	11/27/15 18:35	1
2-Nitroaniline	ND		10	0.42	ug/L		11/25/15 08:18	11/27/15 18:35	1
2-Nitrophenol	ND		5.0	0.48	ug/L		11/25/15 08:18	11/27/15 18:35	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		11/25/15 08:18	11/27/15 18:35	1
3-Nitroaniline	ND		10	0.48	ug/L		11/25/15 08:18	11/27/15 18:35	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		11/25/15 08:18	11/27/15 18:35	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		11/25/15 08:18	11/27/15 18:35	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		11/25/15 08:18	11/27/15 18:35	1
4-Chloroaniline	ND		5.0	0.59	ug/L		11/25/15 08:18	11/27/15 18:35	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		11/25/15 08:18	11/27/15 18:35	1
4-Methylphenol	ND		10	0.36	ug/L		11/25/15 08:18	11/27/15 18:35	1
4-Nitroaniline	ND		10	0.25	ug/L		11/25/15 08:18	11/27/15 18:35	1
4-Nitrophenol	ND		10	1.5	ug/L		11/25/15 08:18	11/27/15 18:35	1
Acenaphthene	ND		5.0	0.41	ug/L		11/25/15 08:18	11/27/15 18:35	1
Acenaphthylene	ND		5.0	0.38	ug/L		11/25/15 08:18	11/27/15 18:35	1
Acetophenone	ND		5.0	0.54	ug/L		11/25/15 08:18	11/27/15 18:35	1
Anthracene	ND		5.0	0.28	ug/L		11/25/15 08:18	11/27/15 18:35	1
Atrazine	ND		5.0	0.46	ug/L		11/25/15 08:18	11/27/15 18:35	1
Benzaldehyde	ND		5.0	0.27	ug/L		11/25/15 08:18	11/27/15 18:35	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		11/25/15 08:18	11/27/15 18:35	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		11/25/15 08:18	11/27/15 18:35	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		11/25/15 08:18	11/27/15 18:35	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		11/25/15 08:18	11/27/15 18:35	1
Benzo[k]fluoranthene	ND		5.0		ug/L			11/27/15 18:35	1
Bis(2-chloroethoxy)methane	ND		5.0		ug/L		11/25/15 08:18	11/27/15 18:35	1
Bis(2-chloroethyl)ether	ND		5.0		ug/L		11/25/15 08:18	11/27/15 18:35	1
Bis(2-ethylhexyl) phthalate	ND		5.0		ug/L		11/25/15 08:18	11/27/15 18:35	1
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TestAmerica Buffalo

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TestAmerica Job ID: 480-91445-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-276865/1-A

Matrix: Water

Analysis Batch: 277163

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276865

	MB	MB							
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND		5.0	0.42	ug/L		11/25/15 08:18	11/27/15 18:35	1
Caprolactam	ND		5.0	2.2	ug/L		11/25/15 08:18	11/27/15 18:35	1
Carbazole	ND		5.0	0.30	ug/L		11/25/15 08:18	11/27/15 18:35	1
Chrysene	ND		5.0	0.33	ug/L		11/25/15 08:18	11/27/15 18:35	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		11/25/15 08:18	11/27/15 18:35	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		11/25/15 08:18	11/27/15 18:35	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		11/25/15 08:18	11/27/15 18:35	1
Dibenzofuran	ND		10	0.51	ug/L		11/25/15 08:18	11/27/15 18:35	1
Diethyl phthalate	ND		5.0	0.22	ug/L		11/25/15 08:18	11/27/15 18:35	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		11/25/15 08:18	11/27/15 18:35	1
Fluoranthene	ND		5.0	0.40	ug/L		11/25/15 08:18	11/27/15 18:35	1
Fluorene	ND		5.0	0.36	ug/L		11/25/15 08:18	11/27/15 18:35	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		11/25/15 08:18	11/27/15 18:35	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		11/25/15 08:18	11/27/15 18:35	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		11/25/15 08:18	11/27/15 18:35	1
Hexachloroethane	ND		5.0	0.59	ug/L		11/25/15 08:18	11/27/15 18:35	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		11/25/15 08:18	11/27/15 18:35	1
Isophorone	ND		5.0	0.43	ug/L		11/25/15 08:18	11/27/15 18:35	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		11/25/15 08:18	11/27/15 18:35	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		11/25/15 08:18	11/27/15 18:35	1
Naphthalene	ND		5.0	0.76	ug/L		11/25/15 08:18	11/27/15 18:35	1
Nitrobenzene	ND		5.0	0.29	ug/L		11/25/15 08:18	11/27/15 18:35	1
Pentachlorophenol	ND		10	2.2	ug/L		11/25/15 08:18	11/27/15 18:35	1
Phenanthrene	ND		5.0	0.44	ug/L		11/25/15 08:18	11/27/15 18:35	1
Phenol	ND		5.0	0.39	ug/L		11/25/15 08:18	11/27/15 18:35	1
Pyrene	ND		5.0	0.34	ug/L		11/25/15 08:18	11/27/15 18:35	1
	440	140							

		MB	MB				
5	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
7	litrobenzene-d5 (Surr)	80		46 - 120	11/25/15 08:18	11/27/15 18:35	1
F	Phenol-d5 (Surr)	49		16 - 120	11/25/15 08:18	11/27/15 18:35	1
p	-Terphenyl-d14 (Surr)	100		67 - 150	11/25/15 08:18	11/27/15 18:35	1
2	2,4,6-Tribromophenol (Surr)	81		52 - 132	11/25/15 08:18	11/27/15 18:35	1
2	?-Fluorobiphenyl	104		48 - 120	11/25/15 08:18	11/27/15 18:35	1
2	?-Fluorophenol (Surr)	59		20 - 120	11/25/15 08:18	11/27/15 18:35	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-276284/1-A

Matrix: Water

Analysis Batch: 276502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276284

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		11/21/15 08:19	11/23/15 15:20	1
PCB-1221	ND		0.50	0.18	ug/L		11/21/15 08:19	11/23/15 15:20	1
PCB-1232	ND		0.50	0.18	ug/L		11/21/15 08:19	11/23/15 15:20	1
PCB-1242	ND		0.50	0.18	ug/L		11/21/15 08:19	11/23/15 15:20	1
PCB-1248	ND		0.50	0.18	ug/L		11/21/15 08:19	11/23/15 15:20	1
PCB-1254	ND		0.50	0.25	ug/L		11/21/15 08:19	11/23/15 15:20	1

TestAmerica Buffalo

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11/30/2015

TestAmerica Job ID: 480-91445-1

Project/Site: Crown Dykman - Glen Cove, NY

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 480-276284/1-A

Lab Sample ID: LCS 480-276284/2-A

Lab Sample ID: LCSD 480-276284/3-A

Matrix: Water

Matrix: Water

PCB-1260

Analysis Batch: 276502

Analyte

PCB-1260

Analysis Batch: 276502

Client: ARCADIS U.S. Inc

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

ug/L

Prep Batch: 276284

MB MB **MDL** Unit Result Qualifier RL Prepared Analyzed Dil Fac $\overline{\mathsf{ND}}$ 0.50 0.25 ug/L 11/21/15 08:19 11/23/15 15:20

MB MB

Qualifier Surrogate %Recovery Limits Prepared Analyzed Dil Fac Tetrachloro-m-xylene 68 24 - 137 11/21/15 08:19 11/23/15 15:20 69 11/21/15 08:19 11/23/15 15:20 DCB Decachlorobiphenyl 19 - 125

3.58

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 276284

%Rec.

Spike LCS LCS Added Result Qualifier Unit Limits Analyte D %Rec PCB-1016 4 00 3 75 ug/L 94 62 - 130

4.00

89 56 - 123

LCS LCS

Limits Surrogate %Recovery Qualifier Tetrachloro-m-xylene 66 24 - 137 DCB Decachlorobiphenyl 84 19 - 125

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Analysis Batch: 276502

Prep Type: Total/NA Prep Batch: 276284

%Rec. **RPD**

LCSD LCSD Spike Added Analyte Result Qualifier Unit D %Rec Limits RPD Limit PCB-1016 4.00 3.84 96 62 - 130 2 50 ug/L PCB-1260 4.00 3.58 ug/L 90 56 - 123 50

LCSD LCSD

%Recovery Qualifier Surrogate Limits 24 - 137 Tetrachloro-m-xylene 73 DCB Decachlorobiphenyl 80 19 - 125

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-276226/1-A

Matrix: Water

Analysis Batch: 276637

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

Prep Batch: 276226

_	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		11/23/15 07:30	11/23/15 13:31	1
Antimony	ND		0.020	0.0068	mg/L		11/23/15 07:30	11/23/15 13:31	1
Arsenic	ND		0.015	0.0056	mg/L		11/23/15 07:30	11/23/15 13:31	1
Barium	ND		0.0020	0.00070	mg/L		11/23/15 07:30	11/23/15 13:31	1
Beryllium	ND		0.0020	0.00030	mg/L		11/23/15 07:30	11/23/15 13:31	1
Cadmium	ND		0.0020	0.00050	mg/L		11/23/15 07:30	11/23/15 13:31	1
Calcium	ND		0.50	0.10	mg/L		11/23/15 07:30	11/23/15 13:31	1
Chromium	ND		0.0040	0.0010	mg/L		11/23/15 07:30	11/23/15 13:31	1
Cobalt	ND		0.0040	0.00063	mg/L		11/23/15 07:30	11/23/15 13:31	1
Copper	ND		0.010	0.0016	mg/L		11/23/15 07:30	11/23/15 13:31	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

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

Lab Sample ID: MB 480-276226/1-A

Matrix: Water

Antimony

Arsenic

Barium

Beryllium

Cadmium

Calcium

Cobalt

Copper

Iron

Lead

Nickel

Silver

Zinc

Sodium

Thallium

Vanadium

Magnesium

Manganese

Potassium

Selenium

Chromium

Analysis Batch: 276637

Client Sample ID: Method Blank **Prep Type: Total/NA**

Prep Batch: 276226

	MR	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Īron	ND		0.050	0.019	mg/L		11/23/15 07:30	11/23/15 13:31	1
Lead	ND		0.010	0.0030	mg/L		11/23/15 07:30	11/23/15 13:31	1
Magnesium	ND		0.20	0.043	mg/L		11/23/15 07:30	11/23/15 13:31	1
Manganese	ND		0.0030	0.00040	mg/L		11/23/15 07:30	11/23/15 13:31	1
Nickel	ND		0.010	0.0013	mg/L		11/23/15 07:30	11/23/15 13:31	1
Potassium	ND		0.50	0.10	mg/L		11/23/15 07:30	11/23/15 13:31	1
Selenium	ND		0.025	0.0087	mg/L		11/23/15 07:30	11/23/15 13:31	1
Silver	ND		0.0060	0.0017	mg/L		11/23/15 07:30	11/23/15 13:31	1
Sodium	ND		1.0	0.32	mg/L		11/23/15 07:30	11/23/15 13:31	1
Thallium	ND		0.020	0.010	mg/L		11/23/15 07:30	11/23/15 13:31	1
Vanadium	ND		0.0050	0.0015	mg/L		11/23/15 07:30	11/23/15 13:31	1
Zinc	ND		0.010	0.0015	mg/L		11/23/15 07:30	11/23/15 13:31	1

80 - 120

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Lab Sample ID: LCS 480-276226/2-A				Clier	nt Sar	mple ID	: Lab Control Sample
Matrix: Water							Prep Type: Total/NA
Analysis Batch: 276637							Prep Batch: 276226
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Aluminum	10.0	9.05		mg/L		90	80 - 120

0.190

0.186

0.190

0.191

0.193

9.16

0.194

0.189

0.194

9.26

0.193

0.193

0.184

9.36

0.188

0.0488

9.35

0.188

0.192

0.190

9.72

mg/L

0.200

0.200

0.200

0.200

0.200

10.0

0.200

0.200

0.200

10.0

0.200

0.200

0.200

0.200

0.0500

10.0

10.0

0.200

0.200

0.200

10.0

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-91445-1

Project/Site: Crown Dykman - Glen Cove, NY

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-276414/1-A

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 276608

Prep Batch: 276414

Analysis Batch: 276608

MB MB

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Mercury
 ND
 0.00020
 0.00012
 mg/L
 11/23/15 09:15
 11/23/15 14:16
 1

Lab Sample ID: LCS 480-276414/2-A

Matrix: Water

Analysis Batch: 276608

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 276414

Spike LCS LCS %Rec.

Analyte Added Result Qualifier Unit D %Rec Limits

 Analyte
 Added Result Qualifier
 Unit
 D %Rec
 Limits

 Mercury
 0.00667
 0.00650
 mg/L
 97
 80 - 120

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

GC/MS VOA

Analysis Batch: 277214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-3	TRIP BLANK	Total/NA	Water	8260C	
LCS 480-277214/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-277214/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 277305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1	20151118-MW24-INITIAL	Total/NA	Water	8260C	<u> </u>
480-91445-2	20151118-MW24-3V	Total/NA	Water	8260C	
LCS 480-277305/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-277305/6	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 276209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1	20151118-MW24-INITIAL	Total/NA	Water	3510C	
480-91445-2	20151118-MW24-3V	Total/NA	Water	3510C	
LCS 480-276209/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-276209/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 276424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1	20151118-MW24-INITIAL	Total/NA	Water	8270D	276209
480-91445-2	20151118-MW24-3V	Total/NA	Water	8270D	276209
LCS 480-276209/2-A	Lab Control Sample	Total/NA	Water	8270D	276209
MB 480-276209/1-A	Method Blank	Total/NA	Water	8270D	276209

Prep Batch: 276865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1 - RE	20151118-MW24-INITIAL	Total/NA	Water	3510C	
480-91445-2 - RE	20151118-MW24-3V	Total/NA	Water	3510C	
MB 480-276865/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 277163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1 - RE	20151118-MW24-INITIAL	Total/NA	Water	8270D	276865
480-91445-2 - RE	20151118-MW24-3V	Total/NA	Water	8270D	276865
MB 480-276865/1-A	Method Blank	Total/NA	Water	8270D	276865

GC Semi VOA

Prep Batch: 276284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1	20151118-MW24-INITIAL	Total/NA	Water	3510C	
480-91445-2	20151118-MW24-3V	Total/NA	Water	3510C	
LCS 480-276284/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-276284/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-276284/1-A	Method Blank	Total/NA	Water	3510C	

TestAmerica Buffalo

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QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

GC Semi VOA (Continued)

Analysis Batch: 276502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1	20151118-MW24-INITIAL	Total/NA	Water	8082A	276284
480-91445-2	20151118-MW24-3V	Total/NA	Water	8082A	276284
LCS 480-276284/2-A	Lab Control Sample	Total/NA	Water	8082A	276284
LCSD 480-276284/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	276284
MB 480-276284/1-A	Method Blank	Total/NA	Water	8082A	276284

Metals

Prep Batch: 276226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1	20151118-MW24-INITIAL	Total/NA	Water	3005A	
480-91445-2	20151118-MW24-3V	Total/NA	Water	3005A	
LCS 480-276226/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 480-276226/1-A	Method Blank	Total/NA	Water	3005A	

Prep Batch: 276414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1	20151118-MW24-INITIAL	Total/NA	Water	7470A	
480-91445-2	20151118-MW24-3V	Total/NA	Water	7470A	
LCS 480-276414/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 480-276414/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 276608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1	20151118-MW24-INITIAL	Total/NA	Water	7470A	276414
480-91445-2	20151118-MW24-3V	Total/NA	Water	7470A	276414
LCS 480-276414/2-A	Lab Control Sample	Total/NA	Water	7470A	276414
MB 480-276414/1-A	Method Blank	Total/NA	Water	7470A	276414

Analysis Batch: 276637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91445-1	20151118-MW24-INITIAL	Total/NA	Water	6010C	276226
480-91445-2	20151118-MW24-3V	Total/NA	Water	6010C	276226
LCS 480-276226/2-A	Lab Control Sample	Total/NA	Water	6010C	276226
MB 480-276226/1-A	Method Blank	Total/NA	Water	6010C	276226

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: 20151118-MW24-INITIAL

Date Collected: 11/18/15 15:50 Date Received: 11/20/15 03:10

Lab Sample ID: 480-91445-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	277305	11/29/15 12:29	CDC	TAL BUF
Total/NA	Prep	3510C	RE		276865	11/25/15 08:18	RMZ	TAL BUF
Total/NA	Analysis	8270D	RE	1	277163	11/27/15 19:04	PJQ	TAL BUF
Total/NA	Prep	3510C			276209	11/20/15 15:04	JIL	TAL BUF
Total/NA	Analysis	8270D		1	276424	11/23/15 15:10	LMW	TAL BUF
Total/NA	Prep	3510C			276284	11/21/15 08:19	RJS	TAL BUF
Total/NA	Analysis	8082A		1	276502	11/23/15 16:08	KS	TAL BUF
Total/NA	Prep	3005A			276226	11/23/15 07:30	CMM	TAL BUF
Total/NA	Analysis	6010C		1	276637	11/23/15 13:38	SLB	TAL BUF
Total/NA	Prep	7470A			276414	11/23/15 09:15	TAS	TAL BUF
Total/NA	Analysis	7470A		1	276608	11/23/15 14:28	TAS	TAL BUF

Client Sample ID: 20151118-MW24-3V

Date Collected: 11/18/15 18:00

Date Received: 11/20/15 03:10

Lab Sample ID: 480-91445-2

Matrix: Water

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	277305	11/29/15 12:52	CDC	TAL BUF
Total/NA	Prep	3510C	RE		276865	11/25/15 08:18	RMZ	TAL BUF
Total/NA	Analysis	8270D	RE	1	277163	11/27/15 19:32	PJQ	TAL BUF
Total/NA	Prep	3510C			276209	11/20/15 15:04	JIL	TAL BUF
Total/NA	Analysis	8270D		1	276424	11/23/15 15:39	LMW	TAL BUF
Total/NA	Prep	3510C			276284	11/21/15 08:19	RJS	TAL BUF
Total/NA	Analysis	8082A		1	276502	11/23/15 16:24	KS	TAL BUF
Total/NA	Prep	3005A			276226	11/23/15 07:30	CMM	TAL BUF
Total/NA	Analysis	6010C		1	276637	11/23/15 13:41	SLB	TAL BUF
Total/NA	Prep	7470A			276414	11/23/15 09:15	TAS	TAL BUF
Total/NA	Analysis	7470A		1	276608	11/23/15 14:33	TAS	TAL BUF

Date Received: 11/20/15 03:10

Client Sample ID: TRIP BLANK Lab Sample ID: 480-91445-3 Date Collected: 11/18/15 00:00 **Matrix: Water**

l		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Analysis	8260C		1	277214	11/27/15 21:52	GVF	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF

Protocol References:

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

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-91445-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-91445-1	20151118-MW24-INITIAL	Water	11/18/15 15:50 11	1/20/15 03:10
480-91445-2	20151118-MW24-3V	Water	11/18/15 18:00 11	1/20/15 03:10
480-91445-3	TRIP BLANK	Water	11/18/15 00:00 11	1/20/15 03:10

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THE LEADER BY EXPERT LANGESTAL TESTALS

Chain of Custody Record

480501-Albany

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298 Phone (716) 691-2600 Fax (716) 691-7991

S - H2SO4 T - TSP Dodecahydrate U - Acetone Special Instructions/Note: V - MCAA W - ph 4-5 Z - other (specify) N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2SO3 3 Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For 51d Mont 480-74462-18912.1 reservation Codes 6.47 G - Amchlor H - Ascorbic Acid 0330 Page 1 of 1 I - Ice J - DI Water K - EDTA L - EDA areniatrop to redmuN latoT 1-36-11 480-91445 Chain of Custody Soler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: **Analysis Rer** melissa.deyo@testamericainc.com X X SEGO - TOL Volatiles 270D - TCL Semivolatiles Lab PM: Deyo, Melissa L X May Way (on to say) dam/ammintage TH-ALS Company E-Mail: Company A's A's Company Preservation Code Water Water Matrix Radiological (C=comp, G=grab) Type Chris Dovern Due Date Requested: 11 25 15 518-250-7300 days Date/Time: (1/19/15 10:47 S C/ Sample 15:50 18:00 Time Juknown (days) PO#. 00266417.0000 Sample Date Project #: 48008440 SSOW#: 11/18/18 3/18/115 Phone: Poison B 一 Skin Imtant Other (specify) 20151118-MW24-INITIAL Custody Seal No.: 70151118 - MW24-3V Flammable Possible Hazard Identification Project Name: Crown Dykman - Glen Cove, NY hone: 518-250-730 BLANK Deliverable Requested: 1, II, III aaron.bobar@arcadis-us.com Empty Kit Relinquished by 855 Route 146 Suite 210 Custody Seals Intact:

Δ Yes Δ No Client Information Sample Identification Company: ARCADIS U.S. Inc Non-Hazard TRIP inquished by: Aaron Bobar **Clifton Park** State, Zip: NY, 12065

Client: ARCADIS U.S. Inc

Job Number: 480-91445-1

Login Number: 91445 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	True	Johnnett
background The seed of a control of a contro	Т	
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.	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	

TestAmerica Buffalo

First Post-Injection Analytical Sampling – January 2015



ANALYTICAL REPORT

Job Number: 480-94483-1

Job Description: Crown Dykman - Glen Cove, NY

For: ARCADIS U.S. Inc 855 Route 146 Suite 210 Clifton Park, NY 12065

Attention: Aaron Bobar

Approved for release. Rebecca M Jones Project Management Assistant I 2/4/2016 11:36 AM

Designee for
Melissa L Deyo, Project Manager I
10 Hazelwood Drive, Amherst, NY, 14228-2298
(716)504-9874
melissa.deyo@testamericainc.com
02/04/2016

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1



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Job Narrative 480-94483-1

Receipt

The samples were received on 1/29/2016 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.6° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-23S (480-94483-1), MW-23D (480-94483-2), MW-1D (480-94483-5), MW-13 (480-94483-6), MW-1 (480-94483-7) and DUP-1_012816 (480-94483-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-285459 recovered outside acceptance criteria, low biased, for 1,1,2-Trichloro-1,2,2-trifluoroethane, 1,1-Dichloroethene, Carbon disulfide, Cyclohexane, and Methylcyclohexane. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated sample was non-detect for this analyte, the data have been reported. The following samples are impacted: MW-23S (480-94483-1), MW-23D (480-94483-2), MW-1DD (480-94483-3), MW-1D (480-94483-5), MW-13 (480-94483-6), MW-1 (480-94483-7), DUP-1_012816 (480-94483-8) and TRIP BLANK (480-94483-9).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: GM-9 (480-94483-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-285817 recovered outside acceptance criteria, low biased, for 2-Hexanone and Cyclohexane. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: GM-9 (480-94483-4).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-285817 recovered outside control limits for the following analyte: Acetone. Acetone has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified. The following samples are impacted: GM-9 (480-94483-4).

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

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-94483-1

Lab Sample ID	Client Sample ID	Matrix	Collected Received
480-94483-1	MW-23S	Water	01/27/16 15:50 01/29/16 01
480-94483-2	MW-23D	Water	01/27/16 15:50 01/29/16 01
480-94483-3	MW-1DD	Water	01/28/16 08:25 01/29/16 01
480-94483-4	GM-9	Water	01/28/16 08:20 01/29/16 01
480-94483-5	MW-1D	Water	01/28/16 09:00 01/29/16 01
480-94483-6	MW-13	Water	01/28/16 09:20 01/29/16 01
480-94483-7	MW-1	Water	01/28/16 09:30 01/29/16 01
480-94483-8	DUP-1_012816	Water	01/28/16 00:00 01/29/16 01
480-94483-9	TRIP BLANK	Water	01/28/16 00:00 01/29/16 01

Detection Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-94483-1

Client Sample ID: MW-23	<u> </u>					Lab Sa	mple ID:	480-94483-
_ Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	270		10	8.1	ug/L		8260C	Total/NA
Tetrachloroethene	210		10		ug/L	10	8260C	Total/NA
Trichloroethene	88		10		ug/L	10	8260C	Total/NA
Client Sample ID: MW-23I)					Lab Sa	mple ID:	480-94483-
							-	
Analyte		Qualifier	RL	MDL		Dil Fac D		Prep Type
cis-1,2-Dichloroethene	500		8.0		ug/L	8	8260C	Total/NA
Tetrachloroethene	560		8.0		ug/L	8	8260C	Total/NA
Trichloroethene	220		8.0	3.7	ug/L	8	8260C	Total/NA
Client Sample ID: MW-1D	D					Lab Sa	mple ID:	480-94483-
 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	65		1.0	0.81	ug/L		8260C	Total/NA
Methyl tert-butyl ether	0.39	J	1.0	0.16	-	1	8260C	Total/NA
Tetrachloroethene	46		1.0	0.36	-	1	8260C	Total/NA
Trichloroethene	18		1.0	0.46	-	1	8260C	Total/NA
Client Sample ID: GM-9						Lab Sa	mple ID:	480-94483-
_ Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
1,2-Dichloroethane	0.42		2.0	0.42	ug/L		8260C	Total/NA
cis-1,2-Dichloroethene	89		2.0		ug/L	2	8260C	Total/NA
Methyl tert-butyl ether	1.6	J	2.0	0.32	-	2	8260C	Total/NA
Tetrachloroethene	120		2.0	0.72	-	2	8260C	Total/NA
Trichloroethene	26		2.0	0.92	-	2	8260C	Total/NA
Vinyl chloride	2.4		2.0		ug/L	2	8260C	Total/NA
Client Sample ID: MW-1D						Lab Sa	mple ID:	480-94483-
 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	1900		20	16	ug/L		8260C	Total/NA
Tetrachloroethene	1700		20		ug/L	20	8260C	Total/NA
Trichloroethene	810		20		ug/L	20	8260C	Total/NA
Vinyl chloride	46		20		ug/L	20	8260C	Total/NA
Client Sample ID: MW-13						Lab Sa	mple ID:	480-94483-
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	44000		500		ug/L		8260C	Total/NA
Tetrachloroethene	4100		500		ug/L	500	8260C	Total/NA
Trichloroethene	2800		500		ug/L	500	8260C	Total/NA
Vinyl chloride	1200		500		ug/L	500	8260C	Total/NA
Client Sample ID: MW-1						Lab Sa	mple ID:	480-94483-
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	1200		20		ug/L	$-\frac{20}{20}$	8260C	Total/NA
,	1200		_0	10	~ _ _	20		. 0.0.71471

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: TRIP BLANK

TestAmerica Job ID: 480-94483-1

Lab Sample ID: 480-94483-9

Client Sample ID: MW-1 (Continued)						Lab Sample ID: 480-9448		
Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type	
Trichloroethene	180	20	9.2	ug/L	20	8260C	Total/NA	
Client Sample ID: DUP	-1_012816				Lab Sa	mple ID:	480-94483-8	
Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type	
Analyte cis-1,2-Dichloroethene	Result Qualifier 45000	RL		Unit ug/L	Dil Fac D	Method 8260C	Prep Type Total/NA	
			410					
cis-1,2-Dichloroethene	45000	500	410 180	ug/L	500	8260C	Total/NA	

No Detections.

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-94483-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF

Protocol References:

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

Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-23S Lab Sample ID: 480-94483-1

Date Collected: 01/27/16 15:50 **Matrix: Water** Date Received: 01/29/16 01:00

Method: 8260C - Volatile Organ Analyte	Result Q		MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND ND	10		ug/L			01/29/16 17:46	1
1,1,2,2-Tetrachloroethane	ND	10		ug/L			01/29/16 17:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10		ug/L			01/29/16 17:46	1
1,1,2-Trichloroethane	ND	10		ug/L			01/29/16 17:46	<u>.</u> 1
1,1-Dichloroethane	ND	10		ug/L			01/29/16 17:46	1
1,1-Dichloroethene	ND	10		ug/L			01/29/16 17:46	1
1,2,4-Trichlorobenzene	ND	10		ug/L			01/29/16 17:46	
1,2-Dibromo-3-Chloropropane	ND	10		ug/L			01/29/16 17:46	1
1,2-Dibromoethane	ND	10		ug/L			01/29/16 17:46	1
1,2-Dichlorobenzene	ND	10		ug/L			01/29/16 17:46	
1,2-Dichloroethane	ND	10		ug/L			01/29/16 17:46	1
1,2-Dichloropropane	ND	10		ug/L			01/29/16 17:46	1
1,3-Dichlorobenzene	ND	10		ug/L			01/29/16 17:46	· 1
1,4-Dichlorobenzene	ND	10		ug/L			01/29/16 17:46	1
2-Butanone (MEK)	ND	100		ug/L			01/29/16 17:46	1
2-Hexanone	ND	50		ug/L			01/29/16 17:46	
4-Methyl-2-pentanone (MIBK)	ND	50		ug/L			01/29/16 17:46	1
Acetone	ND	100		ug/L			01/29/16 17:46	1
Benzene	ND	10		ug/L			01/29/16 17:46	<u>'</u> 1
Bromodichloromethane	ND	10		ug/L			01/29/16 17:46	1
Bromoform	ND	10		ug/L			01/29/16 17:46	1
Bromomethane	ND	10		ug/L			01/29/16 17:46	<u>'</u> 1
Carbon disulfide	ND	10		ug/L ug/L			01/29/16 17:46	1
Carbon tetrachloride	ND	10		ug/L			01/29/16 17:46	1
Chlorobenzene	ND	10		ug/L			01/29/16 17:46	<u>'</u> 1
Chloroethane	ND ND	10		ug/L ug/L			01/29/16 17:46	1
Chloroform	ND ND	10		-			01/29/16 17:46	1
Chloromethane	ND			ug/L			01/29/16 17:46	! 1
		10		ug/L				
cis-1,2-Dichloroethene	270	10		ug/L			01/29/16 17:46	1
cis-1,3-Dichloropropene	ND	10		ug/L			01/29/16 17:46	1
Cyclohexane	ND	10		ug/L			01/29/16 17:46	1
Dibromochloromethane	ND	10		ug/L			01/29/16 17:46	1
Dichlorodifluoromethane	ND	10		ug/L			01/29/16 17:46	
Ethylbenzene	ND	10		ug/L			01/29/16 17:46	1
Isopropylbenzene	ND	10		ug/L			01/29/16 17:46	1
Methyl acetate	ND	25		ug/L			01/29/16 17:46	
Methyl tert-butyl ether	ND	10		ug/L			01/29/16 17:46	1
Methylcyclohexane	ND	10		ug/L			01/29/16 17:46	1
Methylene Chloride	ND	10		ug/L			01/29/16 17:46	1
Styrene	ND	10		ug/L			01/29/16 17:46	1
Tetrachloroethene	210	10		ug/L			01/29/16 17:46	1
Toluene	ND	10		ug/L			01/29/16 17:46	
trans-1,2-Dichloroethene	ND	10		ug/L			01/29/16 17:46	1
rans-1,3-Dichloropropene	ND	10		ug/L			01/29/16 17:46	1
Trichloroethene	88	10		ug/L			01/29/16 17:46	
Trichlorofluoromethane	ND	10		ug/L			01/29/16 17:46	1
Vinyl chloride	ND	10		ug/L			01/29/16 17:46	1
Xylenes, Total	ND	20	6.6	ug/L			01/29/16 17:46	1

TestAmerica Job ID: 480-94483-1

Client Sample Results

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-23S

Date Collected: 01/27/16 15:50 Date Received: 01/29/16 01:00 Lab Sample ID: 480-94483-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		66 - 137		01/29/16 17:46	10
4-Bromofluorobenzene (Surr)	97		73 - 120		01/29/16 17:46	10
Toluene-d8 (Surr)	88		71 - 126		01/29/16 17:46	10
Dibromofluoromethane (Surr)	92		60 - 140		01/29/16 17:46	10

Client Sample ID: MW-23D

Date Collected: 01/27/16 15:50

Lab Sample ID: 480-94483-2

Matrix: Water

Date Collected: 01/27/16 15:50 Date Received: 01/29/16 01:00

Analyte	Result Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	8.0	6.6	ug/L			01/29/16 18:09	8
1,1,2,2-Tetrachloroethane	ND	8.0	1.7	ug/L			01/29/16 18:09	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0	2.5	ug/L			01/29/16 18:09	8
1,1,2-Trichloroethane	ND	8.0	1.8	ug/L			01/29/16 18:09	8
1,1-Dichloroethane	ND	8.0	3.0	ug/L			01/29/16 18:09	8
1,1-Dichloroethene	ND	8.0	2.3	ug/L			01/29/16 18:09	8
1,2,4-Trichlorobenzene	ND	8.0	3.3	ug/L			01/29/16 18:09	8
1,2-Dibromo-3-Chloropropane	ND	8.0	3.1	ug/L			01/29/16 18:09	8
1,2-Dibromoethane	ND	8.0	5.8	ug/L			01/29/16 18:09	8
1,2-Dichlorobenzene	ND	8.0	6.3	ug/L			01/29/16 18:09	8
1,2-Dichloroethane	ND	8.0	1.7	ug/L			01/29/16 18:09	8
1,2-Dichloropropane	ND	8.0	5.8	ug/L			01/29/16 18:09	8
1,3-Dichlorobenzene	ND	8.0	6.2	ug/L			01/29/16 18:09	8
1,4-Dichlorobenzene	ND	8.0	6.7	ug/L			01/29/16 18:09	8
2-Butanone (MEK)	ND	80	11	ug/L			01/29/16 18:09	8
2-Hexanone	ND	40	9.9	ug/L			01/29/16 18:09	8
4-Methyl-2-pentanone (MIBK)	ND	40	17	ug/L			01/29/16 18:09	8
Acetone	ND	80	24	ug/L			01/29/16 18:09	8
Benzene	ND	8.0	3.3	ug/L			01/29/16 18:09	8
Bromodichloromethane	ND	8.0	3.1	ug/L			01/29/16 18:09	8
Bromoform	ND	8.0	2.1	ug/L			01/29/16 18:09	8
Bromomethane	ND	8.0	5.5	ug/L			01/29/16 18:09	8
Carbon disulfide	ND	8.0	1.5	ug/L			01/29/16 18:09	8
Carbon tetrachloride	ND	8.0	2.2	ug/L			01/29/16 18:09	8
Chlorobenzene	ND	8.0	6.0	ug/L			01/29/16 18:09	8
Chloroethane	ND	8.0	2.6	ug/L			01/29/16 18:09	8
Chloroform	ND	8.0	2.7	ug/L			01/29/16 18:09	8
Chloromethane	ND	8.0	2.8	ug/L			01/29/16 18:09	8
cis-1,2-Dichloroethene	500	8.0	6.5	ug/L			01/29/16 18:09	8
cis-1,3-Dichloropropene	ND	8.0	2.9	ug/L			01/29/16 18:09	8
Cyclohexane	ND	8.0	1.4	ug/L			01/29/16 18:09	8
Dibromochloromethane	ND	8.0	2.6	ug/L			01/29/16 18:09	8
Dichlorodifluoromethane	ND	8.0	5.4	ug/L			01/29/16 18:09	8
Ethylbenzene	ND	8.0	5.9	ug/L			01/29/16 18:09	8
Isopropylbenzene	ND	8.0	6.3	ug/L			01/29/16 18:09	8
Methyl acetate	ND	20	10	ug/L			01/29/16 18:09	8
Methyl tert-butyl ether	ND	8.0	1.3	ug/L			01/29/16 18:09	8
Methylcyclohexane	ND	8.0	1.3	ug/L			01/29/16 18:09	8
Methylene Chloride	ND	8.0		ug/L			01/29/16 18:09	8

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-23D Lab Sample ID: 480-94483-2

Date Collected: 01/27/16 15:50 Matrix: Water Date Received: 01/29/16 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		8.0	5.8	ug/L			01/29/16 18:09	8
Tetrachloroethene	560		8.0	2.9	ug/L			01/29/16 18:09	8
Toluene	ND		8.0	4.1	ug/L			01/29/16 18:09	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			01/29/16 18:09	8
trans-1,3-Dichloropropene	ND		8.0	3.0	ug/L			01/29/16 18:09	8
Trichloroethene	220		8.0	3.7	ug/L			01/29/16 18:09	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			01/29/16 18:09	8
Vinyl chloride	ND		8.0	7.2	ug/L			01/29/16 18:09	8
Xylenes, Total	ND		16	5.3	ug/L			01/29/16 18:09	8
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 137			-		01/29/16 18:09	8
4-Bromofluorobenzene (Surr)	95		73 - 120					01/29/16 18:09	8
Toluene-d8 (Surr)	87		71 - 126					01/29/16 18:09	8
Dibromofluoromethane (Surr)	93		60 - 140					01/29/16 18:09	8

Client Sample ID: MW-1DD Lab Sample ID: 480-94483-3

Date Collected: 01/28/16 08:25 Matrix: Water Date Received: 01/29/16 01:00

The third cooper Veletile Owner's Commenced by CO/NO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/29/16 18:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/29/16 18:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/29/16 18:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/29/16 18:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/29/16 18:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/29/16 18:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/29/16 18:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/29/16 18:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/29/16 18:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/29/16 18:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/29/16 18:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/29/16 18:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/29/16 18:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/29/16 18:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/29/16 18:33	1
2-Hexanone	ND		5.0	1.2	ug/L			01/29/16 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/29/16 18:33	1
Acetone	ND		10	3.0	ug/L			01/29/16 18:33	1
Benzene	ND		1.0	0.41	ug/L			01/29/16 18:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/29/16 18:33	1
Bromoform	ND		1.0	0.26	ug/L			01/29/16 18:33	1
Bromomethane	ND		1.0	0.69	ug/L			01/29/16 18:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/29/16 18:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/29/16 18:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/29/16 18:33	1
Chloroethane	ND		1.0		ug/L			01/29/16 18:33	1
Chloroform	ND		1.0	0.34	_			01/29/16 18:33	1
Chloromethane	ND		1.0	0.35	ug/L			01/29/16 18:33	1

TestAmerica Buffalo

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-1DD Lab Sample ID: 480-94483-3

Date Collected: 01/28/16 08:25 Matrix: Water Date Received: 01/29/16 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	65		1.0	0.81	ug/L			01/29/16 18:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/29/16 18:33	1
Cyclohexane	ND		1.0	0.18	ug/L			01/29/16 18:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/29/16 18:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/29/16 18:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/29/16 18:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/29/16 18:33	1
Methyl acetate	ND		2.5	1.3	ug/L			01/29/16 18:33	1
Methyl tert-butyl ether	0.39	J	1.0	0.16	ug/L			01/29/16 18:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/29/16 18:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/29/16 18:33	1
Styrene	ND		1.0	0.73	ug/L			01/29/16 18:33	1
Tetrachloroethene	46		1.0	0.36	ug/L			01/29/16 18:33	1
Toluene	ND		1.0	0.51	ug/L			01/29/16 18:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/29/16 18:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/29/16 18:33	1
Trichloroethene	18		1.0	0.46	ug/L			01/29/16 18:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/29/16 18:33	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/29/16 18:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/29/16 18:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		66 - 137			-		01/29/16 18:33	1
4-Bromofluorobenzene (Surr)	98		73 - 120					01/29/16 18:33	1
Toluene-d8 (Surr)	88		71 - 126					01/29/16 18:33	1
Dibromofluoromethane (Surr)	91		60 - 140					01/29/16 18:33	1

Client Sample ID: GM-9

Lab Sample ID: 480-94483-4

Date Collected: 01/28/16 08:20

Matrix: Water

Date Received: 01/29/16 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			02/02/16 12:48	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			02/02/16 12:48	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			02/02/16 12:48	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			02/02/16 12:48	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			02/02/16 12:48	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			02/02/16 12:48	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			02/02/16 12:48	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			02/02/16 12:48	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			02/02/16 12:48	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			02/02/16 12:48	2
1,2-Dichloroethane	0.42	J	2.0	0.42	ug/L			02/02/16 12:48	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			02/02/16 12:48	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			02/02/16 12:48	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			02/02/16 12:48	2
2-Butanone (MEK)	ND		20	2.6	ug/L			02/02/16 12:48	2
2-Hexanone	ND		10	2.5	ug/L			02/02/16 12:48	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			02/02/16 12:48	2

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: GM-9 Lab Sample ID: 480-94483-4

Date Collected: 01/28/16 08:20 Matrix: Water Date Received: 01/29/16 01:00

Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	20	6.0	ug/L			02/02/16 12:48	2
Benzene	ND		2.0	0.82	ug/L			02/02/16 12:48	2
Bromodichloromethane	ND		2.0	0.78	ug/L			02/02/16 12:48	2
Bromoform	ND		2.0	0.52	ug/L			02/02/16 12:48	2
Bromomethane	ND		2.0		ug/L			02/02/16 12:48	2
Carbon disulfide	ND		2.0	0.38	ug/L			02/02/16 12:48	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			02/02/16 12:48	2
Chlorobenzene	ND		2.0	1.5	ug/L			02/02/16 12:48	2
Chloroethane	ND		2.0	0.64	ug/L			02/02/16 12:48	2
Chloroform	ND		2.0	0.68	ug/L			02/02/16 12:48	2
Chloromethane	ND		2.0	0.70	ug/L			02/02/16 12:48	2
cis-1,2-Dichloroethene	89		2.0	1.6	ug/L			02/02/16 12:48	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			02/02/16 12:48	2
Cyclohexane	ND		2.0	0.36	ug/L			02/02/16 12:48	2
Dibromochloromethane	ND		2.0	0.64	ug/L			02/02/16 12:48	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			02/02/16 12:48	2
Ethylbenzene	ND		2.0	1.5	ug/L			02/02/16 12:48	2
Isopropylbenzene	ND		2.0	1.6	ug/L			02/02/16 12:48	2
Methyl acetate	ND		5.0	2.6	ug/L			02/02/16 12:48	2
Methyl tert-butyl ether	1.6	J	2.0	0.32	ug/L			02/02/16 12:48	2
Methylcyclohexane	ND		2.0	0.32	ug/L			02/02/16 12:48	2
Methylene Chloride	ND		2.0	0.88	ug/L			02/02/16 12:48	2
Styrene	ND		2.0	1.5	ug/L			02/02/16 12:48	2
Tetrachloroethene	120		2.0	0.72	ug/L			02/02/16 12:48	2
Toluene	ND		2.0	1.0	ug/L			02/02/16 12:48	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			02/02/16 12:48	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			02/02/16 12:48	2
Trichloroethene	26		2.0	0.92	ug/L			02/02/16 12:48	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			02/02/16 12:48	2
Vinyl chloride	2.4		2.0	1.8	ug/L			02/02/16 12:48	2
Xylenes, Total	ND		4.0	1.3	ug/L			02/02/16 12:48	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		66 - 137			-		02/02/16 12:48	2
4-Bromofluorobenzene (Surr)	97		73 - 120					02/02/16 12:48	2
Toluene-d8 (Surr)	85		71 - 126					02/02/16 12:48	2
Dibromofluoromethane (Surr)	89		60 - 140					02/02/16 12:48	2

Client Sample ID: MW-1D Lab Sample ID: 480-94483-5

Date Collected: 01/28/16 09:00 Matrix: Water Date Received: 01/29/16 01:00

Method: 8260C - Volatile Orga	nic Compounds by GC	/MS						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND -	20	16	ug/L			01/29/16 19:19	20
1,1,2,2-Tetrachloroethane	ND	20	4.2	ug/L			01/29/16 19:19	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20	6.2	ug/L			01/29/16 19:19	20
1,1,2-Trichloroethane	ND	20	4.6	ug/L			01/29/16 19:19	20
1,1-Dichloroethane	ND	20	7.6	ug/L			01/29/16 19:19	20
1,1-Dichloroethene	ND	20	5.8	ug/L			01/29/16 19:19	20

TestAmerica Buffalo

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-1D Lab Sample ID: 480-94483-5

Date Collected: 01/28/16 09:00 Matrix: Water Date Received: 01/29/16 01:00

Analyte	Result Qualifier	RL		Unit	D Prepared	Analyzed	Dil Fa
1,2,4-Trichlorobenzene	ND	20	8.2	ug/L		01/29/16 19:19	2
1,2-Dibromo-3-Chloropropane	ND	20	7.8	ug/L		01/29/16 19:19	2
1,2-Dibromoethane	ND	20	15	ug/L		01/29/16 19:19	2
1,2-Dichlorobenzene	ND	20	16	ug/L		01/29/16 19:19	2
1,2-Dichloroethane	ND	20	4.2	ug/L		01/29/16 19:19	2
1,2-Dichloropropane	ND	20	14	ug/L		01/29/16 19:19	2
1,3-Dichlorobenzene	ND	20	16	ug/L		01/29/16 19:19	2
1,4-Dichlorobenzene	ND	20	17	ug/L		01/29/16 19:19	2
2-Butanone (MEK)	ND	200	26	ug/L		01/29/16 19:19	2
2-Hexanone	ND	100	25	ug/L		01/29/16 19:19	2
4-Methyl-2-pentanone (MIBK)	ND	100		ug/L		01/29/16 19:19	2
Acetone	ND	200	60	ug/L		01/29/16 19:19	2
Benzene	ND	20	8.2	ug/L		01/29/16 19:19	2
Bromodichloromethane	ND	20		ug/L		01/29/16 19:19	2
Bromoform	ND	20		ug/L		01/29/16 19:19	2
Bromomethane	ND	20		ug/L		01/29/16 19:19	2
Carbon disulfide	ND	20		ug/L		01/29/16 19:19	2
Carbon tetrachloride	ND	20		ug/L		01/29/16 19:19	2
Chlorobenzene	ND	20		ug/L		01/29/16 19:19	2
Chloroethane	ND	20		ug/L		01/29/16 19:19	2
Chloroform	ND	20		ug/L		01/29/16 19:19	2
Chloromethane	ND	20		ug/L		01/29/16 19:19	2
cis-1,2-Dichloroethene	1900	20		ug/L		01/29/16 19:19	2
cis-1,3-Dichloropropene	ND	20		ug/L		01/29/16 19:19	2
Cyclohexane	ND	20		ug/L		01/29/16 19:19	2
Dibromochloromethane	ND	20		ug/L		01/29/16 19:19	2
Dichlorodifluoromethane	ND	20		ug/L		01/29/16 19:19	2
Ethylbenzene	ND	20		ug/L		01/29/16 19:19	2
Isopropylbenzene	ND	20		ug/L		01/29/16 19:19	2
Methyl acetate	ND	50		ug/L		01/29/16 19:19	2
Methyl tert-butyl ether	ND	20		ug/L		01/29/16 19:19	2
Methylcyclohexane	ND	20		ug/L		01/29/16 19:19	2
Methylene Chloride	ND	20		ug/L		01/29/16 19:19	2
Styrene	ND	20		ug/L		01/29/16 19:19	2
Tetrachloroethene	1700	20		ug/L		01/29/16 19:19	2
Toluene	ND	20		ug/L		01/29/16 19:19	2
trans-1,2-Dichloroethene	ND	20		ug/L		01/29/16 19:19	2
trans-1,3-Dichloropropene	ND	20		ug/L		01/29/16 19:19	2
Trichloroethene	810	20		ug/L		01/29/16 19:19	2
Trichlorofluoromethane	ND	20		ug/L		01/29/16 19:19	2
Vinyl chloride	46	20		ug/L		01/29/16 19:19	2
Xylenes, Total	ND	40		ug/L		01/29/16 19:19	2
Surrogate	%Recovery Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	87	66 - 137				01/29/16 19:19	2
4-Bromofluorobenzene (Surr)	97	73 - 120				01/29/16 19:19	2
Toluene-d8 (Surr)	88	71 - 126				01/29/16 19:19	2
Dibromofluoromethane (Surr)	93	60 - 140				01/29/16 19:19	2

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-13 Lab Sample ID: 480-94483-6

Date Collected: 01/28/16 09:20 Matrix: Water Date Received: 01/29/16 01:00

Method: 8260C - Volatile Organ Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND -	500	410	ug/L			01/29/16 19:42	500
1,1,2,2-Tetrachloroethane	ND	500		ug/L			01/29/16 19:42	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	500		ug/L			01/29/16 19:42	500
1,1,2-Trichloroethane	ND	500		ug/L			01/29/16 19:42	500
1,1-Dichloroethane	ND	500		ug/L			01/29/16 19:42	500
1,1-Dichloroethene	ND	500		ug/L			01/29/16 19:42	500
1,2,4-Trichlorobenzene	ND	500		ug/L			01/29/16 19:42	500
1,2-Dibromo-3-Chloropropane	ND	500		ug/L			01/29/16 19:42	500
1,2-Dibromoethane	ND	500		ug/L			01/29/16 19:42	500
1,2-Dichlorobenzene	ND	500		ug/L			01/29/16 19:42	500
1,2-Dichloroethane	ND	500		ug/L			01/29/16 19:42	500
1,2-Dichloropropane	ND	500		ug/L			01/29/16 19:42	500
1,3-Dichlorobenzene	ND	500		ug/L			01/29/16 19:42	500
1,4-Dichlorobenzene	ND	500		ug/L			01/29/16 19:42	500
2-Butanone (MEK)	ND	5000		ug/L			01/29/16 19:42	500
2-Hexanone	ND ND	2500		ug/L			01/29/16 19:42	500
4-Methyl-2-pentanone (MIBK)	ND	2500	1100	-			01/29/16 19:42	500
Acetone	ND	5000	1500	-			01/29/16 19:42	500
Benzene	ND ND	500		ug/L ug/L			01/29/16 19:42	500
Bromodichloromethane	ND	500		ug/L ug/L			01/29/16 19:42	500
Bromoform	ND ND	500		ug/L ug/L			01/29/16 19:42	500
Bromomethane		500		ug/L ug/L			01/29/16 19:42	500
Carbon disulfide	ND ND	500		ug/L ug/L			01/29/16 19:42	500
	ND ND			ug/L ug/L			01/29/16 19:42	
Carbon tetrachloride		500		-				500
Chlorothoro	ND	500		ug/L			01/29/16 19:42	500
Chloroethane	ND	500		ug/L			01/29/16 19:42	500
Chloroform	ND	500		ug/L			01/29/16 19:42	500
Chloromethane	ND	500		ug/L			01/29/16 19:42	500
cis-1,2-Dichloroethene	44000	500		ug/L			01/29/16 19:42	500
cis-1,3-Dichloropropene	ND	500		ug/L			01/29/16 19:42	500
Cyclohexane	ND	500		ug/L			01/29/16 19:42	500
Dibromochloromethane	ND	500		ug/L			01/29/16 19:42	500
Dichlorodifluoromethane	ND	500		ug/L			01/29/16 19:42	500
Ethylbenzene	ND	500		ug/L			01/29/16 19:42	500
Isopropylbenzene	ND	500		ug/L			01/29/16 19:42	500
Methyl acetate	ND	1300		ug/L			01/29/16 19:42	500
Methyl tert-butyl ether	ND	500		ug/L			01/29/16 19:42	500
Methylcyclohexane	ND	500		ug/L			01/29/16 19:42	500
Methylene Chloride	ND	500		ug/L			01/29/16 19:42	500
Styrene	ND	500		ug/L			01/29/16 19:42	500
Tetrachloroethene	4100	500		ug/L			01/29/16 19:42	500
Toluene	ND	500		ug/L			01/29/16 19:42	500
trans-1,2-Dichloroethene	ND	500		ug/L			01/29/16 19:42	500
trans-1,3-Dichloropropene	ND	500	190	ug/L			01/29/16 19:42	500
Trichloroethene	2800	500		ug/L			01/29/16 19:42	500
Trichlorofluoromethane	ND	500	440	ug/L			01/29/16 19:42	500
Vinyl chloride	1200	500	450	ug/L			01/29/16 19:42	500
Xylenes, Total	ND	1000	330	ug/L			01/29/16 19:42	500

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-13 Lab Sample ID: 480-94483-6

Date Collected: 01/28/16 09:20 Matrix: Water Date Received: 01/29/16 01:00

Surrogate	%Recover	y Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	-d4 (Surr) 8	9	66 - 137		01/29/16 19:42	500
4-Bromofluorobenz	ene (Surr) 9	7	73 - 120		01/29/16 19:42	500
Toluene-d8 (Surr)	9	0	71 - 126		01/29/16 19:42	500
Dibromofluorometh	ane (Surr) 9	4	60 - 140		01/29/16 19:42	500

Client Sample ID: MW-1

Date Collected: 01/28/16 09:30

Lab Sample ID: 480-94483-7

Matrix: Water

Date Collected: 01/28/16 09:30
Date Received: 01/29/16 01:00

Method: 8260C - Volatile Organ Analyte	nic Compounds by GC Result Qualifier	/MS RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	20	16	ug/L			01/29/16 20:05	20
1,1,2,2-Tetrachloroethane	ND	20	4.2	ug/L			01/29/16 20:05	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20	6.2	ug/L			01/29/16 20:05	20
1,1,2-Trichloroethane	ND	20	4.6	ug/L			01/29/16 20:05	20
1,1-Dichloroethane	ND	20	7.6	ug/L			01/29/16 20:05	20
1,1-Dichloroethene	ND	20	5.8	ug/L			01/29/16 20:05	20
1,2,4-Trichlorobenzene	ND	20	8.2	ug/L			01/29/16 20:05	20
1,2-Dibromo-3-Chloropropane	ND	20	7.8	ug/L			01/29/16 20:05	20
1,2-Dibromoethane	ND	20	15	ug/L			01/29/16 20:05	20
1,2-Dichlorobenzene	ND	20	16	ug/L			01/29/16 20:05	20
1,2-Dichloroethane	ND	20	4.2	ug/L			01/29/16 20:05	20
1,2-Dichloropropane	ND	20	14	ug/L			01/29/16 20:05	20
1,3-Dichlorobenzene	ND	20	16	ug/L			01/29/16 20:05	20
1,4-Dichlorobenzene	ND	20	17	ug/L			01/29/16 20:05	20
2-Butanone (MEK)	ND	200	26	ug/L			01/29/16 20:05	20
2-Hexanone	ND	100	25	ug/L			01/29/16 20:05	20
4-Methyl-2-pentanone (MIBK)	ND	100	42	ug/L			01/29/16 20:05	20
Acetone	ND	200	60	ug/L			01/29/16 20:05	20
Benzene	ND	20	8.2	ug/L			01/29/16 20:05	20
Bromodichloromethane	ND	20	7.8	ug/L			01/29/16 20:05	20
Bromoform	ND	20	5.2	ug/L			01/29/16 20:05	20
Bromomethane	ND	20	14	ug/L			01/29/16 20:05	20
Carbon disulfide	ND	20	3.8	ug/L			01/29/16 20:05	20
Carbon tetrachloride	ND	20	5.4	ug/L			01/29/16 20:05	20
Chlorobenzene	ND	20	15	ug/L			01/29/16 20:05	20
Chloroethane	ND	20	6.4	ug/L			01/29/16 20:05	20
Chloroform	ND	20	6.8	ug/L			01/29/16 20:05	20
Chloromethane	ND	20	7.0	ug/L			01/29/16 20:05	20
cis-1,2-Dichloroethene	1200	20	16	ug/L			01/29/16 20:05	20
cis-1,3-Dichloropropene	ND	20	7.2	ug/L			01/29/16 20:05	20
Cyclohexane	ND	20	3.6	ug/L			01/29/16 20:05	20
Dibromochloromethane	ND	20	6.4	ug/L			01/29/16 20:05	20
Dichlorodifluoromethane	ND	20	14	ug/L			01/29/16 20:05	20
Ethylbenzene	ND	20	15	ug/L			01/29/16 20:05	20
Isopropylbenzene	ND	20	16	ug/L			01/29/16 20:05	20
Methyl acetate	ND	50	26	ug/L			01/29/16 20:05	20
Methyl tert-butyl ether	ND	20	3.2	ug/L			01/29/16 20:05	20
Methylcyclohexane	ND	20	3.2	ug/L			01/29/16 20:05	20
Methylene Chloride	ND	20	8.8	ug/L			01/29/16 20:05	20

TestAmerica Buffalo

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-1 Lab Sample ID: 480-94483-7

Date Collected: 01/28/16 09:30 Matrix: Water Date Received: 01/29/16 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		20	15	ug/L			01/29/16 20:05	20
Tetrachloroethene	330		20	7.2	ug/L			01/29/16 20:05	20
Toluene	ND		20	10	ug/L			01/29/16 20:05	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			01/29/16 20:05	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			01/29/16 20:05	20
Trichloroethene	180		20	9.2	ug/L			01/29/16 20:05	20
Trichlorofluoromethane	ND		20	18	ug/L			01/29/16 20:05	20
Vinyl chloride	ND		20	18	ug/L			01/29/16 20:05	20
Xylenes, Total	ND		40	13	ug/L			01/29/16 20:05	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 137			=		01/29/16 20:05	20
4-Bromofluorobenzene (Surr)	96		73 - 120					01/29/16 20:05	20

71 - 126

60 - 140

86

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Date Collected: 01/28/16 00:00 Matrix: Water

Date Received: 01/29/16 01:00

Toluene-d8 (Surr)

Dibromofluoromethane (Surr)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	500	410	ug/L			01/29/16 20:29	500
1,1,2,2-Tetrachloroethane	ND	500	110	ug/L			01/29/16 20:29	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	500	160	ug/L			01/29/16 20:29	500
1,1,2-Trichloroethane	ND	500	120	ug/L			01/29/16 20:29	500
1,1-Dichloroethane	ND	500	190	ug/L			01/29/16 20:29	500
1,1-Dichloroethene	ND	500	150	ug/L			01/29/16 20:29	500
1,2,4-Trichlorobenzene	ND	500	210	ug/L			01/29/16 20:29	500
1,2-Dibromo-3-Chloropropane	ND	500	200	ug/L			01/29/16 20:29	500
1,2-Dibromoethane	ND	500	370	ug/L			01/29/16 20:29	500
1,2-Dichlorobenzene	ND	500	400	ug/L			01/29/16 20:29	500
1,2-Dichloroethane	ND	500		ug/L			01/29/16 20:29	500
1,2-Dichloropropane	ND	500	360	ug/L			01/29/16 20:29	500
1,3-Dichlorobenzene	ND	500	390	ug/L			01/29/16 20:29	500
1,4-Dichlorobenzene	ND	500	420	ug/L			01/29/16 20:29	500
2-Butanone (MEK)	ND	5000	660	ug/L			01/29/16 20:29	500
2-Hexanone	ND	2500	620	ug/L			01/29/16 20:29	500
4-Methyl-2-pentanone (MIBK)	ND	2500	1100	ug/L			01/29/16 20:29	500
Acetone	ND	5000	1500	ug/L			01/29/16 20:29	500
Benzene	ND	500	210	ug/L			01/29/16 20:29	500
Bromodichloromethane	ND	500	200	ug/L			01/29/16 20:29	500
Bromoform	ND	500	130	ug/L			01/29/16 20:29	500
Bromomethane	ND	500	350	ug/L			01/29/16 20:29	500
Carbon disulfide	ND	500	95	ug/L			01/29/16 20:29	500
Carbon tetrachloride	ND	500	140	ug/L			01/29/16 20:29	500
Chlorobenzene	ND	500	380	ug/L			01/29/16 20:29	500
Chloroethane	ND	500		ug/L			01/29/16 20:29	500
Chloroform	ND	500		ug/L			01/29/16 20:29	500
Chloromethane	ND	500		ug/L			01/29/16 20:29	500

TestAmerica Buffalo

01/29/16 20:05

01/29/16 20:05

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Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: DUP-1_012816

Lab Sample ID: 480-94483-8

Date Collected: 01/28/16 00:00 **Matrix: Water** Date Received: 01/29/16 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	45000		500	410	ug/L			01/29/16 20:29	500
cis-1,3-Dichloropropene	ND		500	180	ug/L			01/29/16 20:29	500
Cyclohexane	ND		500	90	ug/L			01/29/16 20:29	500
Dibromochloromethane	ND		500	160	ug/L			01/29/16 20:29	500
Dichlorodifluoromethane	ND		500	340	ug/L			01/29/16 20:29	500
Ethylbenzene	ND		500	370	ug/L			01/29/16 20:29	500
Isopropylbenzene	ND		500	400	ug/L			01/29/16 20:29	500
Methyl acetate	ND		1300	650	ug/L			01/29/16 20:29	500
Methyl tert-butyl ether	ND		500	80	ug/L			01/29/16 20:29	500
Methylcyclohexane	ND		500	80	ug/L			01/29/16 20:29	500
Methylene Chloride	ND		500	220	ug/L			01/29/16 20:29	500
Styrene	ND		500	370	ug/L			01/29/16 20:29	500
Tetrachloroethene	4400		500	180	ug/L			01/29/16 20:29	500
Toluene	ND		500	260	ug/L			01/29/16 20:29	500
trans-1,2-Dichloroethene	ND		500	450	ug/L			01/29/16 20:29	500
trans-1,3-Dichloropropene	ND		500	190	ug/L			01/29/16 20:29	500
Trichloroethene	2800		500	230	ug/L			01/29/16 20:29	500
Trichlorofluoromethane	ND		500	440	ug/L			01/29/16 20:29	500
Vinyl chloride	1200		500	450	ug/L			01/29/16 20:29	500
Xylenes, Total	ND		1000	330	ug/L			01/29/16 20:29	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 137			-		01/29/16 20:29	500
4-Bromofluorobenzene (Surr)	98		73 - 120					01/29/16 20:29	500
Toluene-d8 (Surr)	86		71 - 126					01/29/16 20:29	500
Dibromofluoromethane (Surr)	94		60 - 140					01/29/16 20:29	500

Client Sample ID: TRIP BLANK Lab Sample ID: 480-94483-9

Date Collected: 01/28/16 00:00 **Matrix: Water** Date Received: 01/29/16 01:00

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			01/29/16 20:52	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			01/29/16 20:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			01/29/16 20:52	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			01/29/16 20:52	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			01/29/16 20:52	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			01/29/16 20:52	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			01/29/16 20:52	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			01/29/16 20:52	1
1,2-Dibromoethane	ND	1.0	0.73	ug/L			01/29/16 20:52	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			01/29/16 20:52	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			01/29/16 20:52	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			01/29/16 20:52	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			01/29/16 20:52	1
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			01/29/16 20:52	1
2-Butanone (MEK)	ND	10	1.3	ug/L			01/29/16 20:52	1
2-Hexanone	ND	5.0	1.2	ug/L			01/29/16 20:52	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			01/29/16 20:52	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: TRIP BLANK

Date Received: 01/29/16 01:00

Lab Sample ID: 480-94483-9 Date Collected: 01/28/16 00:00

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			01/29/16 20:52	1
Benzene	ND		1.0	0.41	ug/L			01/29/16 20:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/29/16 20:52	1
Bromoform	ND		1.0	0.26	ug/L			01/29/16 20:52	1
Bromomethane	ND		1.0	0.69	ug/L			01/29/16 20:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/29/16 20:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/29/16 20:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/29/16 20:52	1
Chloroethane	ND		1.0	0.32	ug/L			01/29/16 20:52	1
Chloroform	ND		1.0	0.34	ug/L			01/29/16 20:52	1
Chloromethane	ND		1.0	0.35	ug/L			01/29/16 20:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/29/16 20:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/29/16 20:52	1
Cyclohexane	ND		1.0	0.18	ug/L			01/29/16 20:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/29/16 20:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/29/16 20:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/29/16 20:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/29/16 20:52	1
Methyl acetate	ND		2.5	1.3	ug/L			01/29/16 20:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/29/16 20:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/29/16 20:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/29/16 20:52	1
Styrene	ND		1.0	0.73	ug/L			01/29/16 20:52	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/29/16 20:52	1
Toluene	ND		1.0	0.51	ug/L			01/29/16 20:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/29/16 20:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/29/16 20:52	1
Trichloroethene	ND		1.0	0.46	ug/L			01/29/16 20:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/29/16 20:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/29/16 20:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/29/16 20:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		66 - 137			-		01/29/16 20:52	1
4-Bromofluorobenzene (Surr)	97		73 - 120					01/29/16 20:52	1
Toluene-d8 (Surr)	88		71 - 126					01/29/16 20:52	1
Dibromofluoromethane (Surr)	92		60 - 140					01/29/16 20:52	1

Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surre	ogate Reco
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(66-137)	(73-120)	(71-126)	(60-140)
480-94483-1	MW-23S	91	97	88	92
480-94483-2	MW-23D	88	95	87	93
480-94483-3	MW-1DD	91	98	88	91
480-94483-4	GM-9	86	97	85	89
480-94483-5	MW-1D	87	97	88	93
480-94483-6	MW-13	89	97	90	94
480-94483-7	MW-1	88	96	86	91
480-94483-8	DUP-1_012816	88	98	86	94
480-94483-9	TRIP BLANK	89	97	88	92
LCS 480-285459/52	Lab Control Sample	97	95	88	90
LCS 480-285817/5	Lab Control Sample	87	94	85	88
MB 480-285459/7	Method Blank	93	99	89	95
MB 480-285817/7	Method Blank	85	97	86	89

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 480-285459/7

Matrix: Water

Analysis Batch: 285459

Client: ARCADIS U.S. Inc

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

TestAmerica Job ID: 480-94483-1

Analyta	MB		ים	MADI	l lni4	_	Dremand	Amaluesal	Dil Ca
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/16 13:17	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/16 13:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/16 13:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/16 13:17	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/16 13:17	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/16 13:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/16 13:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/16 13:17	1
1,2-Dibromoethane	ND		1.0		ug/L			01/29/16 13:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/16 13:17	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/16 13:17	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/16 13:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/16 13:17	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/29/16 13:17	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/29/16 13:17	1
2-Hexanone	ND		5.0	1.2	ug/L			01/29/16 13:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/29/16 13:17	1
Acetone	ND		10	3.0	ug/L			01/29/16 13:17	1
Benzene	ND		1.0	0.41	ug/L			01/29/16 13:17	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/29/16 13:17	1
Bromoform	ND		1.0	0.26	ug/L			01/29/16 13:17	1
Bromomethane	ND		1.0	0.69	ug/L			01/29/16 13:17	1
Carbon disulfide	0.202	J	1.0		ug/L			01/29/16 13:17	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/16 13:17	1
Chlorobenzene	ND		1.0		ug/L			01/29/16 13:17	1
Chloroethane	ND		1.0		ug/L			01/29/16 13:17	1
Chloroform	ND		1.0		ug/L			01/29/16 13:17	1
Chloromethane	ND		1.0		ug/L			01/29/16 13:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/16 13:17	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/16 13:17	1
Cyclohexane	ND		1.0		ug/L			01/29/16 13:17	
Dibromochloromethane	ND		1.0		ug/L			01/29/16 13:17	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/16 13:17	1
Ethylbenzene	ND		1.0		ug/L			01/29/16 13:17	
Isopropylbenzene	ND		1.0	0.79	ug/L			01/29/16 13:17	1
Methyl acetate	ND		2.5		ug/L			01/29/16 13:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/16 13:17	· · · · · · · · · · · 1
Methylcyclohexane	ND		1.0		ug/L			01/29/16 13:17	
Methylene Chloride	ND		1.0		ug/L			01/29/16 13:17	1
Styrene	ND		1.0		ug/L			01/29/16 13:17	
Tetrachloroethene	ND		1.0		ug/L			01/29/16 13:17	1
Toluene	ND ND		1.0		ug/L ug/L			01/29/16 13:17	1
									ا ۔
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/16 13:17	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/16 13:17	1
Trichloroethene	ND		1.0		ug/L			01/29/16 13:17	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/16 13:17	1
Vinyl chloride	ND		1.0		ug/L			01/29/16 13:17	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/29/16 13:17	1

TestAmerica Buffalo

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02/04/2016

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-94483-1

		MB	MB				
Surro	gate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Di	ichloroethane-d4 (Surr)	93		66 - 137		01/29/16 13:17	1
4-Broi	mofluorobenzene (Surr)	99		73 - 120		01/29/16 13:17	1
Tolue	ne-d8 (Surr)	89		71 - 126		01/29/16 13:17	1
Dibroi	mofluoromethane (Surr)	95		60 - 140		01/29/16 13:17	1

Lab Sample ID: LCS 480-285459/52

Matrix: Water

Analysis Batch: 285459

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

	Spike		LCS			%Rec.
Analyte	Added			Init D		Limits
1,1,1-Trichloroethane	25.0	21.1		g/L	84	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.4		g/L	90	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	15.6	u	g/L	62	52 - 148
1,1,2-Trichloroethane	25.0	22.4	u	g/L	90	76 - 122
1,1-Dichloroethane	25.0	20.8	u	g/L	83	71 - 129
1,1-Dichloroethene	25.0	19.7	u	g/L	79	58 - 121
1,2,4-Trichlorobenzene	25.0	23.0	u	g/L	92	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.1	u	g/L	101	56 - 134
1,2-Dibromoethane	25.0	23.8	u	g/L	95	77 - 120
1,2-Dichlorobenzene	25.0	22.0	u	g/L	88	80 - 124
1,2-Dichloroethane	25.0	23.2	u	g/L	93	75 - 127
1,2-Dichloropropane	25.0	21.2	u	g/L	85	76 - 120
1,3-Dichlorobenzene	25.0	22.4	u	g/L	90	77 - 120
1,4-Dichlorobenzene	25.0	21.6	u	g/L	86	75 - 120
2-Butanone (MEK)	125	73.0	u	g/L	58	57 ₋ 140
2-Hexanone	125	103	u	g/L	82	65 - 127
4-Methyl-2-pentanone (MIBK)	125	103	u	g/L	83	71 - 125
Acetone	125	107	u	g/L	86	56 - 142
Benzene	25.0	20.9	u	g/L	83	71 - 124
Bromodichloromethane	25.0	24.4	u	g/L	98	80 - 122
Bromoform	25.0	25.4	u	g/L	102	52 - 132
3romomethane	25.0	32.8	u	g/L	131	55 - 144
Carbon disulfide	25.0	19.1	u	g/L	77	59 - 134
Carbon tetrachloride	25.0	21.4	u	g/L	86	72 - 134
Chlorobenzene	25.0	22.0	u	g/L	88	72 - 120
Chloroethane	25.0	30.5	u	g/L	122	69 - 136
Chloroform	25.0	21.5	u	g/L	86	73 - 127
Chloromethane	25.0	20.9	u	g/L	84	68 - 124
cis-1,2-Dichloroethene	25.0	21.4	u	g/L	86	74 - 124
cis-1,3-Dichloropropene	25.0	25.9	u	g/L	104	74 - 124
Cyclohexane	25.0	16.1	u	g/L	64	59 - 135
Dibromochloromethane	25.0	25.6	u	g/L	102	75 - 125
Dichlorodifluoromethane	25.0	25.3	u	g/L	101	59 - 135
Ethylbenzene	25.0	22.2	u	g/L	89	77 - 123
sopropylbenzene	25.0	22.2	u	g/L	89	77 - 122
Methyl acetate	125	110	u	g/L	88	74 - 133
Methyl tert-butyl ether	25.0	21.7		g/L	87	64 - 127
Methylcyclohexane	25.0	18.3	u	g/L	73	61 - 138
Methylene Chloride	25.0	20.1	u	g/L	80	57 - 132
Styrene	25.0	22.6	u	g/L	90	70 - 130
Tetrachloroethene	25.0	23.2	u	g/L	93	74 - 122
Toluene	25.0	21.5	u	g/L	86	80 - 122
trans-1,2-Dichloroethene	25.0	20.8	u	g/L	83	73 - 127

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-94483-1

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

Lab Sample ID: LCS 480-285459/52

Matrix: Water

Analysis Batch: 285459

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,3-Dichloropropene	25.0	23.9		ug/L		95	72 - 123	
Trichloroethene	25.0	21.8		ug/L		87	74 - 123	
Trichlorofluoromethane	25.0	27.8		ug/L		111	62 - 152	
Vinyl chloride	25.0	23.4		ug/L		94	65 - 133	
Xylenes, Total	50.0	43.0		ug/L		86	76 - 122	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	88		71 - 126
Dibromofluoromethane (Surr)	90		60 - 140

Lab Sample ID: MB 480-285817/7

Matrix: Water

Analysis Batch: 285817

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 285817	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/16 12:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/16 12:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/16 12:09	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/16 12:09	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/02/16 12:09	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/16 12:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/16 12:09	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/16 12:09	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/16 12:09	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/16 12:09	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/16 12:09	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/16 12:09	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/16 12:09	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/16 12:09	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/16 12:09	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/16 12:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/16 12:09	1
Acetone	ND		10	3.0	ug/L			02/02/16 12:09	1
Benzene	ND		1.0	0.41	ug/L			02/02/16 12:09	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/16 12:09	1
Bromoform	ND		1.0	0.26	ug/L			02/02/16 12:09	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/16 12:09	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/16 12:09	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/16 12:09	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/16 12:09	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/16 12:09	1
Chloroform	ND		1.0	0.34	ug/L			02/02/16 12:09	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/16 12:09	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/16 12:09	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/16 12:09	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/16 12:09	1

TestAmerica Buffalo

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02/04/2016

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-94483-1 Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 480-285817/7

Matrix: Water

Analysis Batch: 285817

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

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/16 12:09	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/16 12:09	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/16 12:09	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/16 12:09	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/16 12:09	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/16 12:09	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/16 12:09	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/16 12:09	1
Styrene	ND		1.0	0.73	ug/L			02/02/16 12:09	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/16 12:09	1
Toluene	ND		1.0	0.51	ug/L			02/02/16 12:09	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/16 12:09	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/16 12:09	1
Trichloroethene	ND		1.0	0.46	ug/L			02/02/16 12:09	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/16 12:09	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/16 12:09	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/16 12:09	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared A	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85	66 - 137	02/	02/16 12:09	1
4-Bromofluorobenzene (Surr)	97	73 - 120	02/	02/16 12:09	1
Toluene-d8 (Surr)	86	71 - 126	02/	02/16 12:09	1
Dibromofluoromethane (Surr)	89	60 - 140	02/	02/16 12:09	1

Lab Sample ID: LCS 480-285817/5

Matrix: Water

Analysis Batch: 285817

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

Alialysis Dalcii. 2000 II								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	25.0	23.1		ug/L		92	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	22.4		ug/L		90	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	18.3		ug/L		73	52 - 148	
ne								
1,1,2-Trichloroethane	25.0	23.0		ug/L		92	76 - 122	
1,1-Dichloroethane	25.0	22.1		ug/L		88	71 - 129	
1,1-Dichloroethene	25.0	21.6		ug/L		86	58 - 121	
1,2,4-Trichlorobenzene	25.0	22.9		ug/L		91	70 - 122	
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/L		95	56 - 134	
1,2-Dibromoethane	25.0	24.9		ug/L		99	77 - 120	
1,2-Dichlorobenzene	25.0	22.7		ug/L		91	80 - 124	
1,2-Dichloroethane	25.0	24.7		ug/L		99	75 - 127	
1,2-Dichloropropane	25.0	22.2		ug/L		89	76 - 120	
1,3-Dichlorobenzene	25.0	22.7		ug/L		91	77 - 120	
1,4-Dichlorobenzene	25.0	22.5		ug/L		90	75 - 120	
2-Butanone (MEK)	125	100		ug/L		80	57 - 140	
2-Hexanone	125	103		ug/L		83	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	104		ug/L		83	71 - 125	
Acetone	125	53.9	*	ug/L		43	56 - 142	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-94483-1

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

Lab Sample ID: LCS 480-285817/5

Matrix: Water

Analysis Batch: 285817

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

•	Spike	LCS	LCS		%Rec.
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits
Benzene	25.0	22.5	ug/L	90	71 - 124
Bromodichloromethane	25.0	25.8	ug/L	103	80 - 122
Bromoform	25.0	25.3	ug/L	101	52 - 132
Bromomethane	25.0	30.4	ug/L	122	55 - 144
Carbon disulfide	25.0	21.6	ug/L	86	59 - 134
Carbon tetrachloride	25.0	23.8	ug/L	95	72 - 134
Chlorobenzene	25.0	23.1	ug/L	93	72 - 120
Chloroethane	25.0	26.7	ug/L	107	69 - 136
Chloroform	25.0	23.5	ug/L	94	73 - 127
Chloromethane	25.0	20.9	ug/L	84	68 - 124
cis-1,2-Dichloroethene	25.0	22.9	ug/L	92	74 - 124
cis-1,3-Dichloropropene	25.0	26.7	ug/L	107	74 - 124
Cyclohexane	25.0	18.5	ug/L	74	59 - 135
Dibromochloromethane	25.0	25.5	ug/L	102	75 - 125
Dichlorodifluoromethane	25.0	29.1	ug/L	116	59 - 135
Ethylbenzene	25.0	23.2	ug/L	93	77 - 123
sopropylbenzene	25.0	23.0	ug/L	92	77 - 122
Methyl acetate	125	97.6	ug/L	78	74 - 133
Methyl tert-butyl ether	25.0	22.8	ug/L	91	64 - 127
Methylcyclohexane	25.0	20.2	ug/L	81	61 - 138
Methylene Chloride	25.0	20.4	ug/L	82	57 - 132
Styrene	25.0	23.6	ug/L	95	70 - 130
Tetrachloroethene	25.0	22.9	ug/L	91	74 - 122
Toluene	25.0	22.7	ug/L	91	80 - 122
rans-1,2-Dichloroethene	25.0	22.8	ug/L	91	73 - 127
trans-1,3-Dichloropropene	25.0	24.4	ug/L	97	72 - 123
Γrichloroethene	25.0	23.4	ug/L	94	74 - 123
Trichlorofluoromethane	25.0	25.3	ug/L	101	62 - 152
Vinyl chloride	25.0	23.1	ug/L	93	65 - 133
Xylenes, Total	50.0	45.0	ug/L	90	76 - 122

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	87		66 - 137
4-Bromofluorobenzene (Surr)	94		73 - 120
Toluene-d8 (Surr)	85		71 - 126
Dibromofluoromethane (Surr)	88		60 - 140

Definitions/Glossary

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

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.

Glossary

Abbreviation	ese commonly used abbreviations may or may not be present in this report.			
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis			
%R	Percent Recovery			
CFL	Contains Free Liquid			
CNF	Contains no Free Liquid			
DER	Duplicate error ratio (normalized absolute difference)			

Dil Fac Dilution Factor

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision level concentration MDA Minimum detectable activity EDL **Estimated Detection Limit**

MDC Minimum detectable concentration

MDL Method Detection Limit MLMinimum Level (Dioxin) NC Not Calculated

Not detected at the reporting limit (or MDL or EDL if shown) ND

Practical Quantitation Limit PQL

QC **Quality Control RER** Relative error ratio

RLReporting 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)

QC Association Summary

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

GC/MS VOA

Analysis Batch: 285459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-94483-1	MW-23S	Total/NA	Water	8260C	
480-94483-2	MW-23D	Total/NA	Water	8260C	
480-94483-3	MW-1DD	Total/NA	Water	8260C	
480-94483-5	MW-1D	Total/NA	Water	8260C	
480-94483-6	MW-13	Total/NA	Water	8260C	
480-94483-7	MW-1	Total/NA	Water	8260C	
480-94483-8	DUP-1_012816	Total/NA	Water	8260C	
480-94483-9	TRIP BLANK	Total/NA	Water	8260C	
LCS 480-285459/52	Lab Control Sample	Total/NA	Water	8260C	
MB 480-285459/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 285817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-94483-4	GM-9	Total/NA	Water	8260C	
LCS 480-285817/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-285817/7	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

Client: ARCADIS U.S. Inc.

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-94483-1

Client Sample ID: MW-23S Lab Sample ID: 480-94483-1

Date Collected: 01/27/16 15:50 **Matrix: Water**

Date Received: 01/29/16 01:00

Batch **Batch** Dilution Batch **Prepared** Method Number or Analyzed **Prep Type** Type Run **Factor** Analyst Lab Total/NA Analysis 8260C 10 285459 01/29/16 17:46 RRS TAL BUF

Client Sample ID: MW-23D Lab Sample ID: 480-94483-2

Date Collected: 01/27/16 15:50

Date Received: 01/29/16 01:00

Matrix: Water

Dilution Batch **Batch Batch Prepared Prep Type** Type Method Run **Factor** Number or Analyzed **Analyst** Lab Total/NA 8260C 8 285459 01/29/16 18:09 RRS TAL BUF Analysis

Client Sample ID: MW-1DD Lab Sample ID: 480-94483-3

Date Collected: 01/28/16 08:25

Date Received: 01/29/16 01:00

Matrix: Water

Dilution Batch Batch Batch **Prepared Prep Type** Type Method Run Factor Number or Analyzed Analyst Lab 8260C 285459 TAL BUF Total/NA Analysis 01/29/16 18:33 RRS

Client Sample ID: GM-9 Lab Sample ID: 480-94483-4

Date Collected: 01/28/16 08:20

Date Received: 01/29/16 01:00

Matrix: Water

Batch Batch Dilution Batch **Prepared** Method Run **Factor** Number or Analyzed **Prep Type** Type **Analyst** Lab Total/NA 8260C 02/02/16 12:48 RRS TAL BUF Analysis 2

Client Sample ID: MW-1D Lab Sample ID: 480-94483-5

Date Collected: 01/28/16 09:00

Date Received: 01/29/16 01:00

Matrix: Water

Batch Ratch Dilution Batch **Prepared Prep Type** Type Method Run Factor Number or Analyzed **Analyst** Lab Total/NA Analysis 20 285459 01/29/16 19:19 RRS TAL BUF 8260C

Client Sample ID: MW-13 Lab Sample ID: 480-94483-6

Date Collected: 01/28/16 09:20

Date Received: 01/29/16 01:00

Matrix: Water

Batch Batch Dilution Batch **Prepared** Method Factor **Prep Type** Type Run Number or Analyzed **Analyst** Lab TAL BUF 8260C Total/NA Analysis 500 285459 01/29/16 19:42 RRS

Lab Chronicle

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-94483-1 Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-1 Lab Sample ID: 480-94483-7

Date Collected: 01/28/16 09:30

Matrix: Water

Date Received: 01/29/16 01:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	285459	01/29/16 20:05	RRS	TAL BUF

Lab Sample ID: 480-94483-8 Client Sample ID: DUP-1 012816

Date Collected: 01/28/16 00:00

Matrix: Water

Date Received: 01/29/16 01:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	285459	01/29/16 20:29	RRS	TAL BUF

Lab Sample ID: 480-94483-9 Client Sample ID: TRIP BLANK

Date Collected: 01/28/16 00:00

Matrix: Water

Date Received: 01/29/16 01:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	285459	01/29/16 20:52	RRS	TAL BUF

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-94483-1

Project/Site: Crown Dykman - Glen Cove, NY

Laboratory: TestAmerica Buffalo
The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II GC/MS VOA SURROGATE RECOVERY

Lab Name:	TestAmerica Buffalo	Job No.:	480-94483-1
CDC Na .		_	

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-624 (60) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MW-23S	480-94483-1	92	91	88	97
MW-23D	480-94483-2	93	88	87	95
MW-1DD	480-94483-3	91	91	88	98
GM-9	480-94483-4	89	86	85	97
MW-1D	480-94483-5	93	87	88	97
MW-13	480-94483-6	94	89	90	97
MW-1	480-94483-7	91	88	86	96
DUP-1_012816	480-94483-8	94	88	86	98
TRIP BLANK	480-94483-9	92	89	88	97
	MB 480-285459/7	95	93	89	99
	MB 480-285817/7	89	85	86	97
	LCS 480-285459/52	90	97	88	95
	LCS 480-285817/5	88	87	85	94

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	66-137
TOL = Toluene-d8 (Surr)	71-126
BFB = 4-Bromofluorobenzene (Surr)	73-120

 $[\]ensuremath{\text{\#}}$ Column to be used to flag recovery values

Lab Name	ub Name: TestAmerica Buffalo		Job No.: 480-94483-1
SDG No.	:		
Matrix:	Water	Level: Low	Lab File ID: Q8807.D
Lab ID:	LCS 480-285459/52		Client ID:

	SPIKE	LCS	LCS	QC	
	ADDED	CONCENTRATION	용	LIMITS	#
COMPOUND	(ug/L)	(ug/L)	REC	REC	"
1,1,1-Trichloroethane	25.0	21.1	84		
1,1,2,2-Tetrachloroethane	25.0	22.4	90	70-126	
1,1,2-Trichloro-1,2,2-trifluor	25.0	15.6	62	52-148	
oethane					
1,1,2-Trichloroethane	25.0	22.4	90	76-122	
1,1-Dichloroethane	25.0	20.8	83	71-129	
1,1-Dichloroethene	25.0	19.7	79	58-121	
1,2,4-Trichlorobenzene	25.0	23.0	92	70-122	
1,2-Dibromo-3-Chloropropane	25.0	25.1	101	56-134	
1,2-Dibromoethane	25.0	23.8	95	77-120	
1,2-Dichlorobenzene	25.0	22.0	88	80-124	
1,2-Dichloroethane	25.0	23.2	93	75-127	
1,2-Dichloropropane	25.0	21.2	85	76-120	
1,3-Dichlorobenzene	25.0	22.4	90	77-120	
1,4-Dichlorobenzene	25.0	21.6	86		
2-Butanone (MEK)	125	73.0	58	57-140	
2-Hexanone	125	103	82	65-127	
4-Methyl-2-pentanone (MIBK)	125	103	83	71-125	
Acetone	125	107	86	56-142	
Benzene	25.0	20.9	83	71-124	
Bromodichloromethane	25.0	24.4	98	80-122	
Bromoform	25.0	25.4	102	52-132	
Bromomethane	25.0	32.8	131	55-144	
Carbon disulfide	25.0	19.1	77	59-134	
Carbon tetrachloride	25.0	21.4	86	72-134	
Chlorobenzene	25.0	22.0	88	72-120	
Chloroethane	25.0	30.5	122	69-136	
Chloroform	25.0	21.5	86	73-127	
Chloromethane	25.0	20.9	84	68-124	
cis-1,2-Dichloroethene	25.0	21.4	86	74-124	
cis-1,3-Dichloropropene	25.0	25.9	104	74-124	
Cyclohexane	25.0	16.1	64	59-135	
Dibromochloromethane	25.0	25.6	102	75-125	
Dichlorodifluoromethane	25.0	25.3	101	59-135	
Ethylbenzene	25.0	22.2	89	77-123	
Isopropylbenzene	25.0	22.2	89	77-122	
Methyl acetate	125	110	88	74-133	
Methyl tert-butyl ether	25.0	21.7	87	64-127	
Methylcyclohexane	25.0	18.3	73		
Methylene Chloride	25.0	20.1	80	57-132	
Styrene	25.0	22.6	90	70-130	
Tetrachloroethene	25.0	23.2	93	74-122	

 $[\]mbox{\#}$ Column to be used to flag recovery and RPD values FORM III $\mbox{8260C}$

Lab Nam	e: TestAmerica Buff	alo	Job No.: 480-94483-1
SDG No.	:		
Matrix:	Water	Level: Low	Lab File ID: Q8807.D
Lab ID:	LCS 480-285459/52		Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	21.5	86	80-122	
trans-1,2-Dichloroethene	25.0	20.8	83	73-127	
trans-1,3-Dichloropropene	25.0	23.9	95	72-123	
Trichloroethene	25.0	21.8	87	74-123	
Trichlorofluoromethane	25.0	27.8	111	62-152	
Vinyl chloride	25.0	23.4	94	65-133	
Xylenes, Total	50.0	43.0	86	76-122	

 $[\]mbox{\#}$ Column to be used to flag recovery and RPD values FORM III $\mbox{8260C}$

Lab Nam	ab Name: TestAmerica Buffalo		Job No.: 480-944	183-1
SDG No.	:			
Matrix:	Water	Level: Low	Lab File ID: Q88	368.D
Lab ID:	LCS 480-285817/5		Client ID:	

	SPIKE	LCS	LCS	QC	
	ADDED	CONCENTRATION	ુ	LIMITS	#
COMPOUND	(ug/L)	(ug/L)	REC	REC	
1,1,1-Trichloroethane	25.0	23.1	92	73-126	
1,1,2,2-Tetrachloroethane	25.0	22.4	90	70-126	
1,1,2-Trichloro-1,2,2-trifluor	25.0	18.3	73	52-148	
oethane					
1,1,2-Trichloroethane	25.0	23.0	92	76-122	
1,1-Dichloroethane	25.0	22.1	88		
1,1-Dichloroethene	25.0	21.6	86		
1,2,4-Trichlorobenzene	25.0	22.9	91	70-122	
1,2-Dibromo-3-Chloropropane	25.0	23.8	95		
1,2-Dibromoethane	25.0	24.9	99		
1,2-Dichlorobenzene	25.0	22.7	91	80-124	
1,2-Dichloroethane	25.0	24.7	99		
1,2-Dichloropropane	25.0	22.2	89	76-120	
1,3-Dichlorobenzene	25.0	22.7	91	77-120	
1,4-Dichlorobenzene	25.0	22.5	90		
2-Butanone (MEK)	125	100	80	57-140	
2-Hexanone	125	103	83	65-127	
4-Methyl-2-pentanone (MIBK)	125	104	83	71-125	
Acetone	125	53.9	43		*
Benzene	25.0	22.5	90	71-124	
Bromodichloromethane	25.0	25.8	103	80-122	
Bromoform	25.0	25.3	101	52-132	
Bromomethane	25.0	30.4	122	55-144	
Carbon disulfide	25.0	21.6	86	59-134	
Carbon tetrachloride	25.0	23.8	95	72-134	
Chlorobenzene	25.0	23.1	93	72-120	
Chloroethane	25.0	26.7	107	69-136	
Chloroform	25.0	23.5	94	73-127	
Chloromethane	25.0	20.9	84	68-124	
cis-1,2-Dichloroethene	25.0	22.9	92	74-124	
cis-1,3-Dichloropropene	25.0	26.7	107	74-124	
Cyclohexane	25.0	18.5	74	59-135	
Dibromochloromethane	25.0	25.5	102		
Dichlorodifluoromethane	25.0	29.1	116	59-135	
Ethylbenzene	25.0	23.2	93	77-123	
Isopropylbenzene	25.0	23.0	92	77-122	
Methyl acetate	125	97.6	78	74-133	
Methyl tert-butyl ether	25.0	22.8	91	64-127	
Methylcyclohexane	25.0	20.2	81	61-138	
Methylene Chloride	25.0	20.4	82	57-132	
Styrene	25.0	23.6	95	70-130	
Tetrachloroethene	25.0	22.9	91	74-122	

 $[\]mbox{\#}$ Column to be used to flag recovery and RPD values FORM III $\mbox{8260C}$

Lab Nam	ab Name: TestAmerica Buffalo		Job No.: 480-94483-1
SDG No.	:		
Matrix:	Water	Level: Low	Lab File ID: Q8868.D
Lab ID:	LCS 480-285817/5		Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	22.7	91	80-122	
trans-1,2-Dichloroethene	25.0	22.8	91	73-127	
trans-1,3-Dichloropropene	25.0	24.4	97	72-123	
Trichloroethene	25.0	23.4	94	74-123	
Trichlorofluoromethane	25.0	25.3	101	62-152	
Vinyl chloride	25.0	23.1	93	65-133	
Xylenes, Total	50.0	45.0	90	76-122	

 $[\]mbox{\#}$ Column to be used to flag recovery and RPD values FORM III $\mbox{8260C}$

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1
SDG No.:	
Lab File ID: Q8809.D	Lab Sample ID: MB 480-285459/7
Matrix: Water	Heated Purge: (Y/N) N
Instrument ID: HP5973Q	Date Analyzed: 01/29/2016 13:17
GC Column: ZB-624 (60) ID: 0.25(mm)	

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

		LAB	
CLIENT SAMPLE ID	LAB SAMPLE ID	FILE ID	DATE ANALYZED
	LCS 480-285459/52	Q8807.D	01/29/2016 12:16
MW-23S	480-94483-1	Q8820.D	01/29/2016 17:46
MW-23D	480-94483-2	Q8821.D	01/29/2016 18:09
MW-1DD	480-94483-3	Q8822.D	01/29/2016 18:33
MW-1D	480-94483-5	Q8824.D	01/29/2016 19:19
MW-13	480-94483-6	Q8825.D	01/29/2016 19:42
MW-1	480-94483-7	Q8826.D	01/29/2016 20:05
DUP-1_012816	480-94483-8	Q8827.D	01/29/2016 20:29
TRIP BLANK	480-94483-9	Q8828.D	01/29/2016 20:52

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1
SDG No.:	
Lab File ID: Q8870.D	Lab Sample ID: MB 480-285817/7
Matrix: Water	Heated Purge: (Y/N) N
Instrument ID: HP5973Q	Date Analyzed: 02/02/2016 12:09
GC Column: ZB-624 (60) ID: 0.25(mm)	

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

		LAB	
CLIENT SAMPLE ID	LAB SAMPLE ID	FILE ID	DATE ANALYZED
	LCS 480-285817/5	Q8868.D	02/02/2016 11:08
GM-9	480-94483-4	Q8871.D	02/02/2016 12:48

FORM V GC/MS VOA INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Lab File ID: Q8374.D BFB Injection Date: 01/11/2016

Instrument ID: HP5973Q BFB Injection Time: 15:13

Analysis Batch No.: 283036

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.2	
75	30.0 - 60.0 % of mass 95	48.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	88.6	
175	5.0 - 9.0 % of mass 174	7.3	(8.2) 1
176	95.0 - 101.0 % of mass 174	86.1	(97.2) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.2) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-283036/5	Q8376.D	01/11/2016	16:06
	IC 480-283036/6	Q8377.D	01/11/2016	16:29
	IC 480-283036/7	Q8378.D	01/11/2016	16:53
	IC 480-283036/8	Q8379.D	01/11/2016	17:17
	IC 480-283036/9	Q8380.D	01/11/2016	17:40
	ICIS 480-283036/10	Q8381.D	01/11/2016	18:03
	IC 480-283036/11	Q8382.D	01/11/2016	18:26
	IC 480-283036/12	Q8383.D	01/11/2016	18:50

FORM V GC/MS VOA INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Lab File ID: Q8803.D BFB Injection Date: 01/29/2016

Instrument ID: HP5973Q BFB Injection Time: 09:36

Analysis Batch No.: 285459

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.2	
75	30.0 - 60.0 % of mass 95	47.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	88.2	
175	5.0 - 9.0 % of mass 174	7.0	(7.9) 1
176	95.0 - 101.0 % of mass 174	84.9	(96.3) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-285459/3	Q8804.D	01/29/2016	10:02
	LCS 480-285459/52	Q8807.D	01/29/2016	12:16
	MB 480-285459/7	Q8809.D	01/29/2016	13:17
MW-23S	480-94483-1	Q8820.D	01/29/2016	17:46
MW-23D	480-94483-2	Q8821.D	01/29/2016	18:09
MW-1DD	480-94483-3	Q8822.D	01/29/2016	18:33
MW-1D	480-94483-5	Q8824.D	01/29/2016	19:19
MW-13	480-94483-6	Q8825.D	01/29/2016	19:42
MW-1	480-94483-7	Q8826.D	01/29/2016	20:05
DUP-1_012816	480-94483-8	Q8827.D	01/29/2016	20:29
TRIP BLANK	480-94483-9	Q8828.D	01/29/2016	20:52

FORM V GC/MS VOA INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Lab File ID: Q8865.D BFB Injection Date: 02/02/2016

Instrument ID: HP5973Q BFB Injection Time: 09:21

Analysis Batch No.: 285817

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.7	
75	30.0 - 60.0 % of mass 95	45.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.1	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	85.3	
175	5.0 - 9.0 % of mass 174	6.6	(7.8) 1
176	95.0 - 101.0 % of mass 174	85.0	(99.6) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
	CCVIS 480-285817/3	Q8866.D	02/02/2016	09:44	
	LCS 480-285817/5	Q8868.D	02/02/2016	11:08	
	MB 480-285817/7	Q8870.D	02/02/2016	12:09	
GM-9	480-94483-4	Q8871.D	02/02/2016	12:48	

FORM VIII GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Sample No.: ICIS 480-283036/10 Date Analyzed: 01/11/2016 18:03

Instrument ID: <u>HP5973Q</u> GC Column: ZB-624 (60) ID: 0.25(mm)

Lab File ID (Standard): Q8381.D Heated Purge: (Y/N) N

Calibration ID: 26041

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		114840	5.12	215084	7.41	232248	9.28
UPPER LIMIT		229680	5.62	430168	7.91	464496	9.78
LOWER LIMIT	LOWER LIMIT		4.62	107542	6.91	116124	8.78
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-285459/3		94908	5.12	187150	7.41	199422	9.28
CCVIS 480-285817/3		90847	5.12	174627	7.41	183771	9.28

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area RT Limit = \pm 0.5 minutes of internal standard RT

 $\ensuremath{\text{\#}}$ Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Sample No.: CCVIS 480-285459/3 Date Analyzed: 01/29/2016 10:02

Instrument ID: <u>HP5973Q</u> GC Column: <u>ZB-624</u> (60) ID: 0.25(mm)

Lab File ID (Standard): Q8804.D Heated Purge: (Y/N) N

Calibration ID: 26042

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		94908	5.12	187150	7.41	199422	9.28
UPPER LIMIT		189816	5.62	374300	7.91	398844	9.78
LOWER LIMIT		47454	4.62	93575	6.91	99711	8.78
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-285459/52		94743	5.12	182421	7.41	194784	9.28
MB 480-285459/7		86474	5.12	158646	7.41	188079	9.28
480-94483-1	MW-23S	85312	5.12	162413	7.41	187126	9.28
480-94483-2	MW-23D	85553	5.12	164718	7.41	185909	9.28
480-94483-3	MW-1DD	85113	5.12	162433	7.41	183986	9.28
480-94483-5	MW-1D	84161	5.12	161875	7.41	183285	9.28
480-94483-6	MW-13	82786	5.12	150012	7.41	173541	9.28
480-94483-7	MW-1	81785	5.12	157976	7.41	180907	9.28
480-94483-8	DUP-1_012816	83436	5.12	156038	7.41	177493	9.28
480-94483-9	TRIP BLANK	80453	5.12	151407	7.41	170348	9.28

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area RT Limit = \pm 0.5 minutes of internal standard RT

 $\ensuremath{\sharp}$ Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Sample No.: CCVIS 480-285817/3 Date Analyzed: 02/02/2016 09:44

Instrument ID: <u>HP5973Q</u> GC Column: ZB-624 (60) ID: 0.25(mm)

Lab File ID (Standard): Q8866.D Heated Purge: (Y/N) N

Calibration ID: 26042

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		90847	5.12	174627	7.41	183771	9.28
UPPER LIMIT		181694	5.62	349254	7.91	367542	9.78
LOWER LIMIT	LOWER LIMIT		4.62	87314	6.91	91886	8.78
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-285817/5		94854	5.12	182045	7.41	196598	9.28
MB 480-285817/7		86528	5.12	166349	7.41	189354	9.28
480-94483-4	GM-9	86553	5.12	170601	7.41	186189	9.28

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area RT Limit = \pm 0.5 minutes of internal standard RT

 $\ensuremath{\sharp}$ Column used to flag values outside QC limits

FORM VIII 8260C

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1
SDG No.:	
Client Sample ID: MW-23S	Lab Sample ID: 480-94483-1
Matrix: Water	Lab File ID: Q8820.D
Analysis Method: 8260C	Date Collected: 01/27/2016 15:50
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 17:46
Soil Aliquot Vol:	Dilution Factor: 10
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Batch No.: 285459	Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	ND		10	3.8
75-35-4	1,1-Dichloroethene	ND		10	2.9
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	270		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

SDG No.: Client Sample ID: MW-23S Lab Sample ID: 480-94483-1 Matrix: Water Lab File ID: Q8820.D Analysis Method: 8260C Date Collected: 01/27/2016 15:50 Date Analyzed: 01/29/2016 17:46 Sample wt/vol: 5(mL) Dilution Factor: 10

Soil Aliquot Vol:

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

Soil Extract Vol.: _____ GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>

Level: (low/med) Low % Moisture:

Analysis Batch No.: 285459 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	ND		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	210		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	88		10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-137
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
2037-26-5	Toluene-d8 (Surr)	88		71-126
1868-53-7	Dibromofluoromethane (Surr)	92		60-140

Report Date: 01-Feb-2016 08:44:16 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8820.D Lims ID: 480-94483-A-1 Lab Sample ID: 480-94483-1

Client ID: MW-23S

Sample Type: Client

Inject. Date: 29-Jan-2016 17:46:30 ALS Bottle#: 19 Worklist Smp#: 32

Purge Vol: 5.000 mL Dil. Factor: 10.0000

Sample Info: 480-94483-A-1 Misc. Info.: 480-0050272-032

Operator ID: RR Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:01-Feb-2016 08:44:15Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK051

First Level Reviewer: fortaing Date: 29-Jan-2016 20:00:11

First Level Reviewer: fortaing			D	ate:		29-Jan-201	6 20:00:11	
		RT	Adj RT	Dlt RT			OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.119	5.119	0.000	99	85312	25.0	
* 2 Chlorobenzene-d5	82	7.405	7.406	-0.001	84	162413	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.279	9.279	0.000	95	187126	25.0	
\$ 148 Dibromofluoromethane (Surr		4.645	4.639	0.006	94	103231	23.0	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.894	4.888	0.006	0	59609	22.8	
\$ 5 Toluene-d8 (Surr)	98	6.287	6.287	-0.001	92	337069	22.0	
\$ 6 4-Bromofluorobenzene (Surr	174	8.336	8.336	0.000	92	114373	24.3	
10 Dichlorodifluoromethane	85		1.432				ND	
12 Chloromethane	50		1.626				ND	
13 Vinyl chloride	62		1.712				ND	
14 Bromomethane	94		2.028				ND	
15 Chloroethane	64		2.119				ND	
17 Trichlorofluoromethane	101		2.320				ND	
22 1,1-Dichloroethene	96		2.800				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.806				ND	
23 Acetone	43		2.891				ND	
26 Carbon disulfide	76		2.983			I	ND	
27 Methyl acetate	43		3.159			I	ND	
30 Methylene Chloride	84		3.250			1	ND	
32 Methyl tert-butyl ether	73		3.451			İ	ND	
34 trans-1,2-Dichloroethene	96	3.459	3.459	-0.004	23	555	0.0931	
39 1,1-Dichloroethane	63		3.810			İ	ND	
45 cis-1,2-Dichloroethene	96	4.268	4.272	-0.004	78	178714	27.4	
43 2-Butanone (MEK)	43		4.284			ļ	ND	
50 Chloroform	83		4.521			I	ND	
51 1,1,1-Trichloroethane	97		4.631			I	ND	
52 Cyclohexane	56		4.655			I	ND	
55 Carbon tetrachloride	117		4.752			ļ	ND	
57 Benzene	78		4.910			ļ	ND	
58 1,2-Dichloroethane	62		4.953			ļ	ND	
62 Trichloroethene	95	5.393	5.391	0.002	96	52223	8.78	
			ь.	47 (056				,

Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\Cnromina\B	unalo\	ChromDa	(a\HP59	13012016	<u> </u>	02/2.b\Q8820	J.U	Data File: \\Cnromiva\buttaio\CnromData\HP5973Q\20160129-50272.b\Q8820.D							
0	Ci.	RT (mains)	Adj RT			D	OnCol Amt	Elemen							
Compound	Sig	(min.)	(min.)	(min.)	Q Q	Response	ug/L	Flags							
(4.84 11 1 1 1 1	0.0		F F0/				ND								
64 Methylcyclohexane	83		5.506				ND								
65 1,2-Dichloropropane	63		5.567				ND								
68 Dichlorobromomethane	83		5.786				ND								
77 trans-1,3-Dichloropropene	75 42		6.108				ND								
73 4-Methyl-2-pentanone (MIBK	43		6.200				ND								
74 Toluene	92		6.339				ND								
72 cis-1,3-Dichloropropene	75		6.528				ND								
79 1,1,2-Trichloroethane	83		6.674				ND								
81 Tetrachloroethene	166	6.755	6.753	0.002	96	122482	21.3								
80 2-Hexanone	43		6.832				ND								
83 Chlorodibromomethane	129		6.984				ND								
84 Ethylene Dibromide	107		7.069				ND								
87 Chlorobenzene	112		7.434				ND								
88 Ethylbenzene	91		7.495				ND								
90 m-Xylene & p-Xylene	106		7.586				ND								
91 o-Xylene	106		7.908				ND								
92 Styrene	104		7.921				ND								
95 Bromoform	173		8.109				ND								
94 Isopropylbenzene	105		8.188				ND								
97 1,1,2,2-Tetrachloroethane	83		8.468				ND								
111 1,3-Dichlorobenzene	146		9.222				ND								
113 1,4-Dichlorobenzene	146		9.301				ND								
116 1,2-Dichlorobenzene	146		9.611				ND								
117 1,2-Dibromo-3-Chloropropan	75		10.268				ND								
119 1,2,4-Trichlorobenzene	180		10.931				ND								
S 124 Xylenes, Total	1		30.000				ND								
Reagents:															
Q_8260_IS_00114		Amount	Added:	1.25		Units: uL	Run Reagei	nt							
Q_8260_SURR_00107			Added:			Units: uL	Run Reager								
<u> </u>		. arroarre		0		J	u								

Report Date: 01-Feb-2016 08:44:16 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

 Data File:
 \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8820.D

 Injection Date:
 29-Jan-2016 17:46:30
 Instrument ID:
 HP5973Q

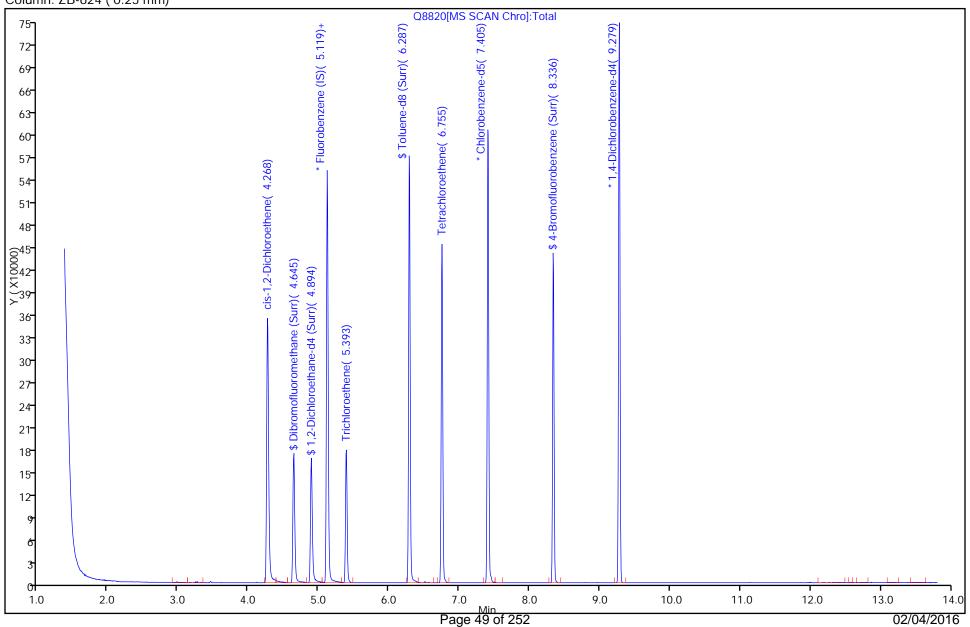
 Lims ID:
 480-94483-A-1
 Lab Sample ID:
 480-94483-1

Client ID: MW-23S

 Purge Vol:
 5.000 mL
 Dil. Factor:
 10.0000
 ALS Bottle#:
 19

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

Worklist Smp#:

RR

32

 Data File:
 \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8820.D

 Injection Date:
 29-Jan-2016 17:46:30
 Instrument ID:
 HP5973Q

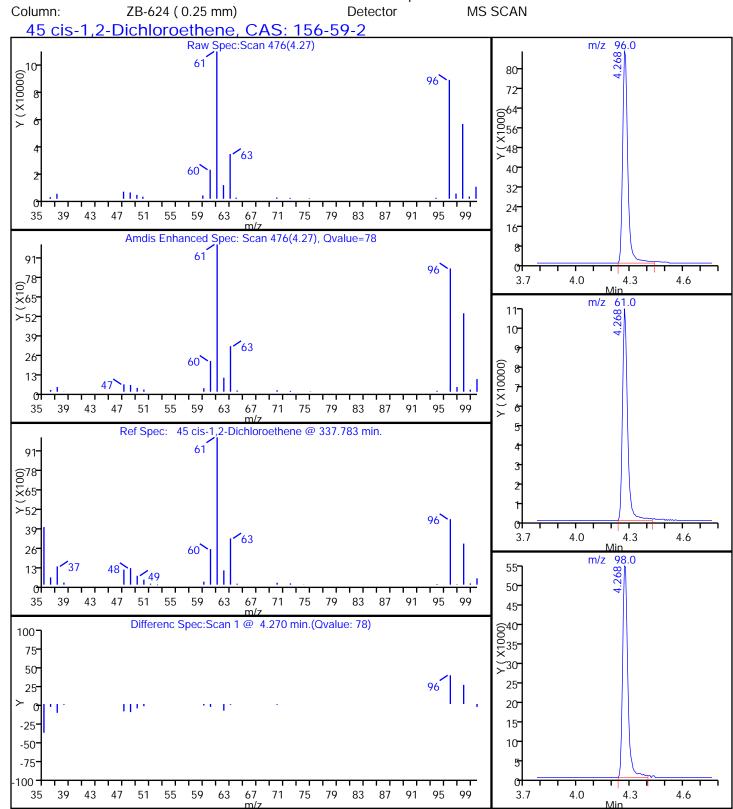
 Lims ID:
 480-94483-A-1
 Lab Sample ID:
 480-94483-1

Client ID: MW-23S

Operator ID: RR ALS Bottle#: 19 Worklist Smp#: 32

Purge Vol: 5.000 mL Dil. Factor: 10.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



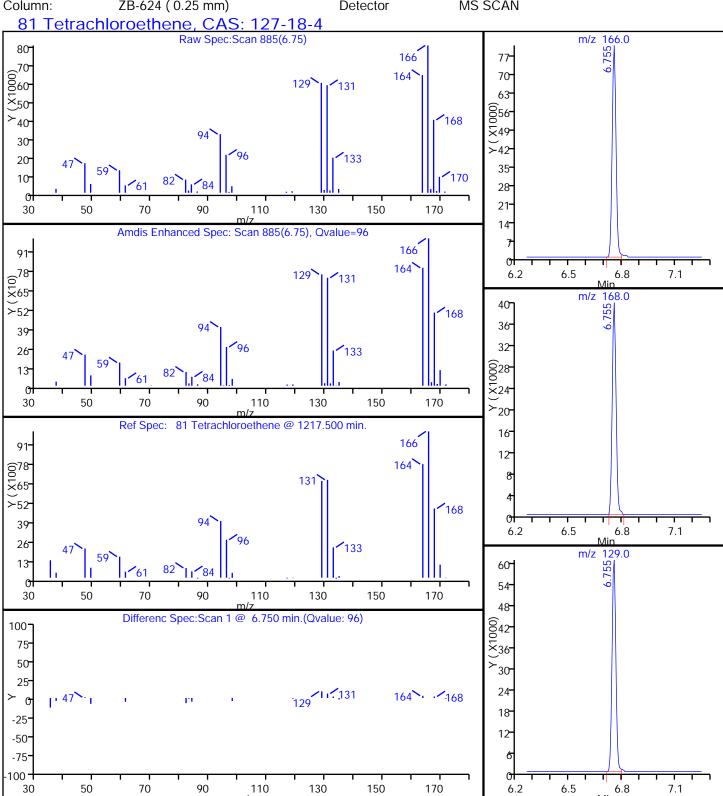
Data File: Injection Date: 29-Jan-2016 17:46:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-1 Lab Sample ID: 480-94483-1

Client ID: MW-23S

Operator ID: RR ALS Bottle#: 19 Worklist Smp#: 32

Purge Vol: 5.000 mL Dil. Factor: 10.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



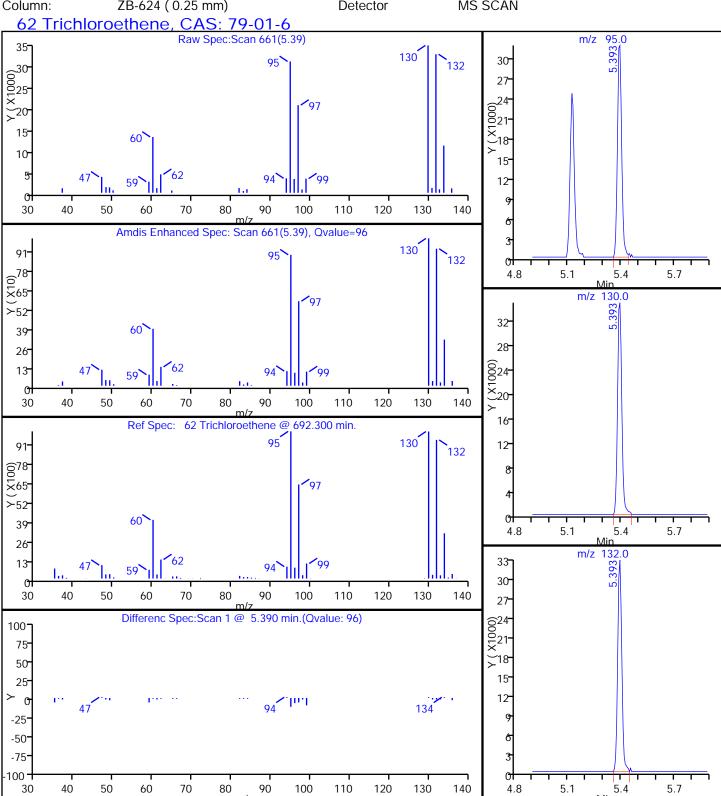
Data File: **Injection Date:** 29-Jan-2016 17:46:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-1 Lab Sample ID: 480-94483-1

Client ID: MW-23S

Operator ID: RR ALS Bottle#: 19 Worklist Smp#: 32

Purge Vol: 5.000 mL Dil. Factor: 10.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	JOD NO.: 480-94483-1
SDG No.:	
Client Sample ID: MW-23D	Lab Sample ID: 480-94483-2
Matrix: Water	Lab File ID: Q8821.D
Analysis Method: 8260C	Date Collected: 01/27/2016 15:50
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 18:09
Soil Aliquot Vol:	Dilution Factor: 8
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Ratch No · 285459	Imits• μα/Ι.

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		8.0	6.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		8.0	1.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		8.0	2.5
79-00-5	1,1,2-Trichloroethane	ND		8.0	1.8
75-34-3	1,1-Dichloroethane	ND		8.0	3.0
75-35-4	1,1-Dichloroethene	ND		8.0	2.3
120-82-1	1,2,4-Trichlorobenzene	ND		8.0	3.3
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	3.1
106-93-4	1,2-Dibromoethane	ND		8.0	5.8
95-50-1	1,2-Dichlorobenzene	ND		8.0	6.3
107-06-2	1,2-Dichloroethane	ND		8.0	1.7
78-87-5	1,2-Dichloropropane	ND		8.0	5.8
541-73-1	1,3-Dichlorobenzene	ND		8.0	6.2
106-46-7	1,4-Dichlorobenzene	ND		8.0	6.7
78-93-3	2-Butanone (MEK)	ND		80	11
591-78-6	2-Hexanone	ND		40	9.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	17
67-64-1	Acetone	ND		80	24
71-43-2	Benzene	ND		8.0	3.3
75-27-4	Bromodichloromethane	ND		8.0	3.1
75-25-2	Bromoform	ND		8.0	2.1
74-83-9	Bromomethane	ND		8.0	5.5
75-15-0	Carbon disulfide	ND		8.0	1.5
56-23-5	Carbon tetrachloride	ND		8.0	2.2
108-90-7	Chlorobenzene	ND		8.0	6.0
75-00-3	Chloroethane	ND		8.0	2.6
67-66-3	Chloroform	ND		8.0	2.7
74-87-3	Chloromethane	ND		8.0	2.8
156-59-2	cis-1,2-Dichloroethene	500		8.0	6.5
10061-01-5	cis-1,3-Dichloropropene	ND		8.0	2.9
110-82-7	Cyclohexane	ND		8.0	1.4
124-48-1	Dibromochloromethane	ND		8.0	2.6
75-71-8	Dichlorodifluoromethane	ND		8.0	5.4
100-41-4	Ethylbenzene	ND		8.0	5.9
98-82-8	Isopropylbenzene	ND		8.0	6.3

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

SDG No.:

Client Sample ID: MW-23D

Lab Sample ID: 480-94483-2

Matrix: Water

Lab File ID: Q8821.D

Analysis Method: 8260C

Date Collected: 01/27/2016 15:50

Sample wt/vol: 5(mL)

Date Analyzed: 01/29/2016 18:09

Soil Aliquot Vol:

Dilution Factor: 8

Soil Extract Vol.:

GC Column: ZB-624 (60)

ID: 0.25(mm)

% Moisture: _____ Level: (low/med) <u>Low</u>

Analysis Batch No.: 285459 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		20	10
1634-04-4	Methyl tert-butyl ether	ND		8.0	1.3
108-87-2	Methylcyclohexane	ND		8.0	1.3
75-09-2	Methylene Chloride	ND		8.0	3.5
100-42-5	Styrene	ND		8.0	5.8
127-18-4	Tetrachloroethene	560		8.0	2.9
108-88-3	Toluene	ND		8.0	4.1
156-60-5	trans-1,2-Dichloroethene	ND		8.0	7.2
10061-02-6	trans-1,3-Dichloropropene	ND		8.0	3.0
79-01-6	Trichloroethene	220		8.0	3.7
75-69-4	Trichlorofluoromethane	ND		8.0	7.0
75-01-4	Vinyl chloride	ND		8.0	7.2
1330-20-7	Xylenes, Total	ND		16	5.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		66-137
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
2037-26-5	Toluene-d8 (Surr)	87		71-126
1868-53-7	Dibromofluoromethane (Surr)	93		60-140

Report Date: 01-Feb-2016 08:50:14 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8821.D Lims ID: 480-94483-A-2 Lab Sample ID: 480-94483-2

Client ID: MW-23D Sample Type: Client

Inject. Date: 29-Jan-2016 18:09:30 ALS Bottle#: 20 Worklist Smp#: 33

Purge Vol: 5.000 mL Dil. Factor: 8.0000

Sample Info: 480-94483-A-2 Misc. Info.: 480-0050272-033

Operator ID: RR Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:01-Feb-2016 08:44:15Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK051

First Level Reviewer: fortaing Date: 29-Jan-2016 20:04:17

First Level Reviewer: fortaing			D	ate:		29-Jan-201	6 20:04:17	
		RT	Adj RT	Dlt RT			OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.117	5.119	-0.002	99	85553	25.0	
* 2 Chlorobenzene-d5	82	7.410	7.406	0.004	84	164718	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.279	-0.002	96	185909	25.0	
\$ 148 Dibromofluoromethane (Surr		4.643	4.639	0.004	93	104561	23.2	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.892	4.888	0.004	0	58101	22.1	
\$ 5 Toluene-d8 (Surr)	98	6.291	6.287	0.004	92	336379	21.7	
\$ 6 4-Bromofluorobenzene (Surr	174	8.340	8.336	0.004	93	113819	23.8	
10 Dichlorodifluoromethane	85		1.432				ND	
12 Chloromethane	50		1.626				ND	
13 Vinyl chloride	62		1.712				ND	
14 Bromomethane	94		2.028				ND	
15 Chloroethane	64		2.119				ND	
17 Trichlorofluoromethane	101		2.320				ND	
22 1,1-Dichloroethene	96		2.800				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.806				ND	
23 Acetone	43		2.891				ND	
26 Carbon disulfide	76		2.983				ND	
27 Methyl acetate	43		3.159				ND	
30 Methylene Chloride	84		3.250				ND	
32 Methyl tert-butyl ether	73		3.451				ND	
34 trans-1,2-Dichloroethene	96	3.463	3.463	0.000	94	2141	0.3580	
39 1,1-Dichloroethane	63		3.810				ND	
45 cis-1,2-Dichloroethene	96	4.272	4.272	0.000	78	411493	62.8	
43 2-Butanone (MEK)	43		4.284				ND	
50 Chloroform	83		4.521				ND	
51 1,1,1-Trichloroethane	97		4.631				ND	
52 Cyclohexane	56		4.655				ND	
55 Carbon tetrachloride	117		4.752			[ND	
57 Benzene	78		4.910			[ND	
58 1,2-Dichloroethane	62		4.953			[ND	
62 Trichloroethene	95	5.391	5.391	0.000	96	163083	27.4	
			-	(0-0				

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02/04/2016

Report Date: 01-Feb-2016 08:50:14 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8821.D

Data File. \\CIIIOIIINA\Di	uiiaiU\	CHIUHDA	ia inf 39	1301	20100	127-36	1212.UNQ0021	Data File. //CII/OHINA/Bullalo/CII/OHIData/IP5973Q/20100129-30272.b/Q6621.D							
		RT	Adj RT		lt RT			OnCol Amt							
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags						
64 Methylcyclohexane	83		5.506					ND							
65 1,2-Dichloropropane	63		5.567					ND							
68 Dichlorobromomethane	83		5.786					ND							
77 trans-1,3-Dichloropropene	75		6.108					ND							
73 4-Methyl-2-pentanone (MIBK	43		6.200					ND							
74 Toluene	92		6.339					ND							
72 cis-1,3-Dichloropropene	75		6.528					ND							
79 1,1,2-Trichloroethane	83		6.674					ND							
81 Tetrachloroethene	166	6.753	6.753	C	0.000	97	410948	70.3							
80 2-Hexanone	43		6.832					ND							
83 Chlorodibromomethane	129		6.984					ND							
84 Ethylene Dibromide	107		7.069				ND								
87 Chlorobenzene	112		7.434					ND							
88 Ethylbenzene	91		7.495					ND							
90 m-Xylene & p-Xylene	106		7.586					ND							
91 o-Xylene	106		7.908					ND							
92 Styrene	104		7.921					ND							
95 Bromoform	173		8.109					ND							
94 Isopropylbenzene	105		8.188					ND							
97 1,1,2,2-Tetrachloroethane	83		8.468					ND							
111 1,3-Dichlorobenzene	146		9.222					ND							
113 1,4-Dichlorobenzene	146		9.301					ND							
116 1,2-Dichlorobenzene	146		9.611					ND							
117 1,2-Dibromo-3-Chloropropan	75		10.268	}				ND							
119 1,2,4-Trichlorobenzene	180		10.931					ND							
S 124 Xylenes, Total	1		30.000)				ND							
Reagents:															
Q_8260_IS_00114		Amount	Added.	1.25	5	11	Inits: uL	Run Reager	nt						
Q_8260_SURR_00107			Added:				Inits: uL	Run Reager							
Q_0200_301(1_00101		Amount	Added.	1.20	,	U	iiii.3. UL	Run Reagei	11						

Report Date: 01-Feb-2016 08:50:14 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

 Data File:
 \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8821.D

 Injection Date:
 29-Jan-2016 18:09:30
 Instrument ID:
 HP5973Q

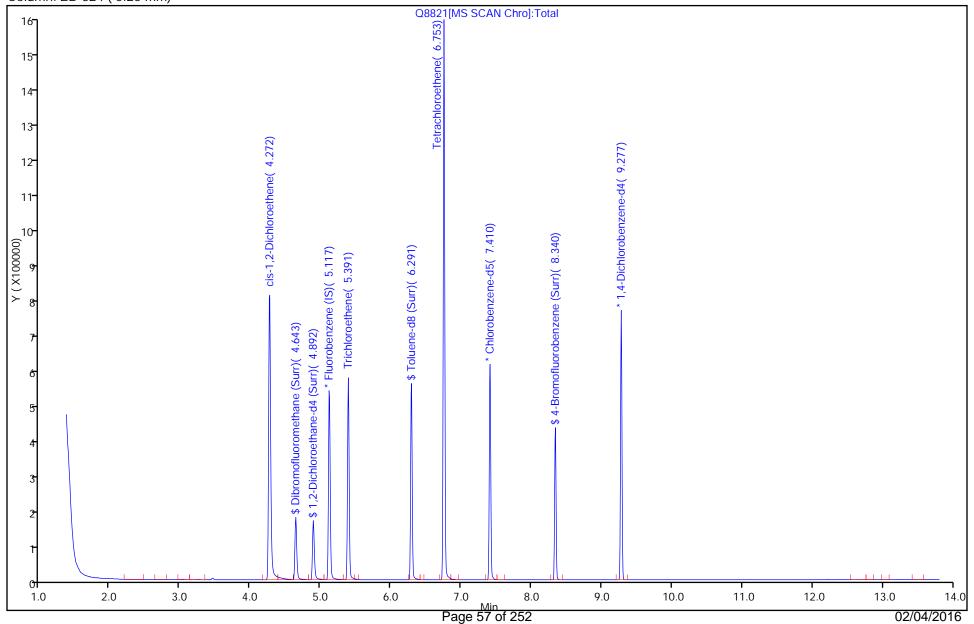
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 480-94483-A-2
 Lab Sample ID:
 480-94483-2

Client ID: MW-23D

Purge Vol: 5.000 mL Dil. Factor: 8.0000 ALS Bottle#: 20

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

Worklist Smp#:

RR

33

 Data File:
 \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8821.D

 Injection Date:
 29-Jan-2016 18:09:30
 Instrument ID:
 HP5973Q

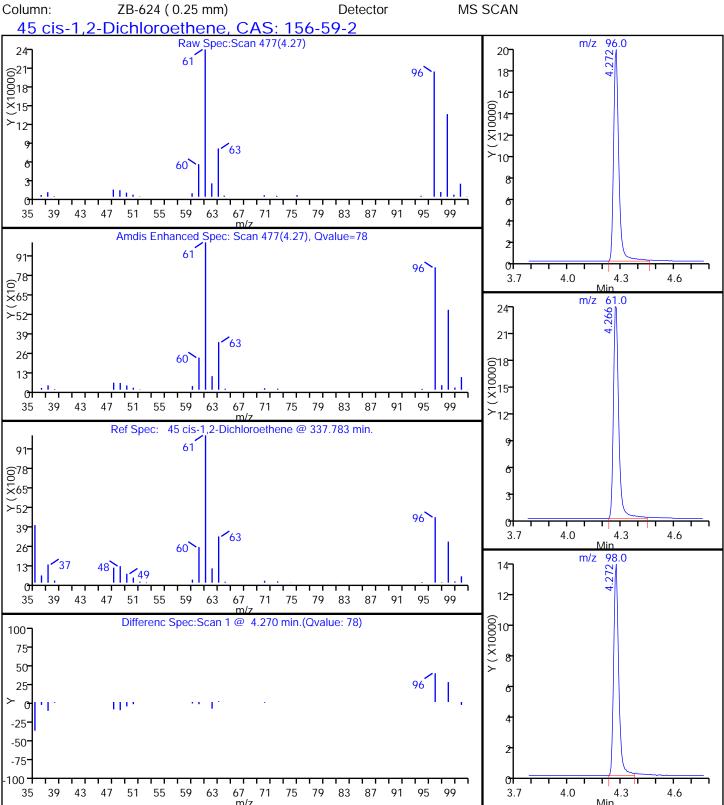
 Lims ID:
 480-94483-A-2
 Lab Sample ID:
 480-94483-2

Client ID: MW-23D

Operator ID: RR ALS Bottle#: 20 Worklist Smp#: 33

Purge Vol: 5.000 mL Dil. Factor: 8.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



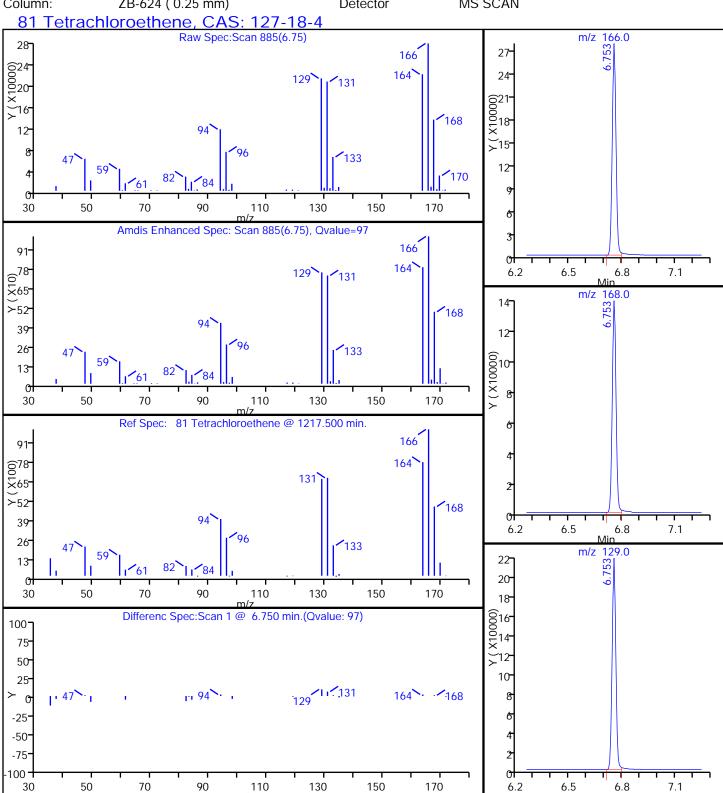
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Client ID: MW-23D

Operator ID: RR ALS Bottle#: 20 Worklist Smp#: 33

Purge Vol: 5.000 mL Dil. Factor: 8.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



 Data File:
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 Injection Date:
 29-Jan-2016 18:09:30
 Instrument ID:
 HP5973Q

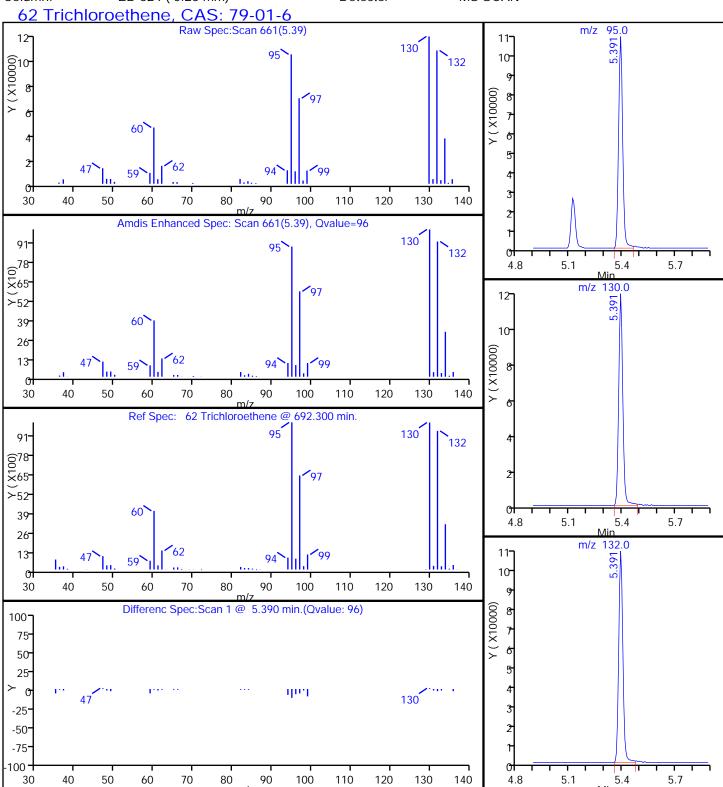
 Lims ID:
 480-94483-A-2
 Lab Sample ID:
 480-94483-2

Client ID: MW-23D

Operator ID: RR ALS Bottle#: 20 Worklist Smp#: 33

Purge Vol: 5.000 mL Dil. Factor: 8.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1
SDG No.:	
Client Sample ID: MW-1DD	Lab Sample ID: 480-94483-3
Matrix: Water	Lab File ID: Q8822.D
Analysis Method: 8260C	Date Collected: 01/28/2016 08:25
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 18:33
Soil Aliquot Vol:	Dilution Factor: 1
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Batch No.: 285459	Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	65		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

 Lab Name: TestAmerica Buffalo
 Job No.: 480-94483-1

 SDG No.:
 Client Sample ID: MW-1DD

 Lab Sample ID: 480-94483-3
 Lab File ID: Q8822.D

 Matrix: Water
 Lab File ID: Q8822.D

 Analysis Method: 8260C
 Date Collected: 01/28/2016 08:25

 Sample wt/vol: 5 (mL)
 Date Analyzed: 01/29/2016 18:33

 Soil Aliquot Vol:
 Dilution Factor: 1

 Soil Extract Vol.:
 GC Column: ZB-624 (60)
 ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) <u>Low</u>

Analysis Batch No.: 285459 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	0.39	J	1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	46		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	18		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-137
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
2037-26-5	Toluene-d8 (Surr)	88		71-126
1868-53-7	Dibromofluoromethane (Surr)	91		60-140

Report Date: 01-Feb-2016 08:50:50 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8822.D \\Lims ID: 480-94483-A-3 \\Lab Sample ID: 480-94483-3

Client ID: MW-1DD Sample Type: Client

Inject. Date: 29-Jan-2016 18:33:30 ALS Bottle#: 21 Worklist Smp#: 34

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: 480-94483-A-3 Misc. Info.: 480-0050272-034

Operator ID: RR Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:01-Feb-2016 08:44:15Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK051

First Level Reviewer: fortaing Date: 29-Jan-2016 20:07:05

First Level Reviewer: fortaing			D	ate:		29-Jan-2016 20:07:05			
		RT	Adj RT	Dlt RT			OnCol Amt		
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags	
* 147 Fluorobenzene (IS)	70	5.117	5.119	-0.002	99	85113	25.0		
* 2 Chlorobenzene-d5	82	7.410	7.406	0.004	84	162433	25.0		
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.279	-0.002	95	183986	25.0		
\$ 148 Dibromofluoromethane (Surr		4.643	4.639	0.004	93	102502	22.8		
\$ 41,2-Dichloroethane-d4 (Sur	67	4.892	4.888	0.004	0	59460	22.8		
\$ 5 Toluene-d8 (Surr)	98	6.291	6.287	0.004	93	338000	22.1		
\$ 6 4-Bromofluorobenzene (Surr	174	8.341	8.336	0.005	94	115356	24.5		
10 Dichlorodifluoromethane	85		1.432				ND		
12 Chloromethane	50		1.626				ND		
13 Vinyl chloride	62		1.712				ND		
14 Bromomethane	94		2.028				ND		
15 Chloroethane	64		2.119				ND		
17 Trichlorofluoromethane	101		2.320				ND		
22 1,1-Dichloroethene	96		2.800				ND		
21 1,1,2-Trichloro-1,2,2-trif	101		2.806				ND		
23 Acetone	43		2.891				ND		
26 Carbon disulfide	76		2.983				ND		
27 Methyl acetate	43		3.159				ND		
30 Methylene Chloride	84		3.250				ND		
32 Methyl tert-butyl ether	73	3.457	3.451	0.006	94	7494	0.3928		
34 trans-1,2-Dichloroethene	96	3.463	3.463	0.000	50	1033	0.1736		
39 1,1-Dichloroethane	63		3.810			I	ND		
45 cis-1,2-Dichloroethene	96	4.266	4.272	-0.006	78	422872	64.9		
43 2-Butanone (MEK)	43		4.284				ND		
50 Chloroform	83		4.521			ND			
51 1,1,1-Trichloroethane	97		4.631			ND			
52 Cyclohexane	56		4.655			ND			
55 Carbon tetrachloride	117		4.752			ND			
57 Benzene	78		4.910			ND			
58 1,2-Dichloroethane	62		4.953			[ND		
62 Trichloroethene	95	5.391	5.391	0.000	96	107180	18.1		
			-	00 (050				,	

Report Date: 01-Feb-2016 08:50:50 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8822.D

Data File. //CHIOHINA/Bullalo/CHIOHIData/HP39/3Q/20100129-302/2.b/Q8822.b											
		RT	Adj RT		RT		_	OnCol Amt			
Compound	Sig	(min.)	(min.)	(m	in.)	Q	Response	ug/L	Flags		
			·					ND			
64 Methylcyclohexane	83		5.506				ND				
65 1,2-Dichloropropane	63		5.567					ND			
68 Dichlorobromomethane	83		5.786					ND			
77 trans-1,3-Dichloropropene	75		6.108					ND			
73 4-Methyl-2-pentanone (MIBK	43		6.200					ND			
74 Toluene	92		6.339					ND			
72 cis-1,3-Dichloropropene	75		6.528					ND			
79 1,1,2-Trichloroethane	83		6.674					ND			
81 Tetrachloroethene	166	6.753	6.753	0.0	000	97	265459	46.1			
80 2-Hexanone	43		6.832					ND			
83 Chlorodibromomethane	129		6.984					ND			
84 Ethylene Dibromide	107		7.069					ND			
87 Chlorobenzene	112		7.434					ND			
88 Ethylbenzene	91		7.495					ND			
90 m-Xylene & p-Xylene	106		7.586					ND			
91 o-Xylene	106		7.908					ND			
92 Styrene	104		7.921					ND			
95 Bromoform	173		8.109					ND			
94 Isopropylbenzene	105		8.188					ND			
97 1,1,2,2-Tetrachloroethane	83		8.468					ND			
111 1,3-Dichlorobenzene	146		9.222					ND			
113 1,4-Dichlorobenzene	146		9.301					ND			
116 1,2-Dichlorobenzene	146		9.611					ND			
117 1,2-Dibromo-3-Chloropropan	75		10.268					ND			
119 1,2,4-Trichlorobenzene	180		10.931					ND			
S 124 Xylenes, Total	1		30.000					ND			
Reagents:											
Q_8260_IS_00114		Amount	Added:	1.25		11	Inits: uL	Run Reager	nt		
Q_8260_SURR_00107			Added:				Inits: uL	Run Reager			
Q_0200_001111_00101		, anount	, laaca.	1.25		C	into. uL	Turi Keager			

TestAmerica Buffalo

 Data File:
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 Injection Date:
 29-Jan-2016 18:33:30
 Instrument ID:
 HP5973Q

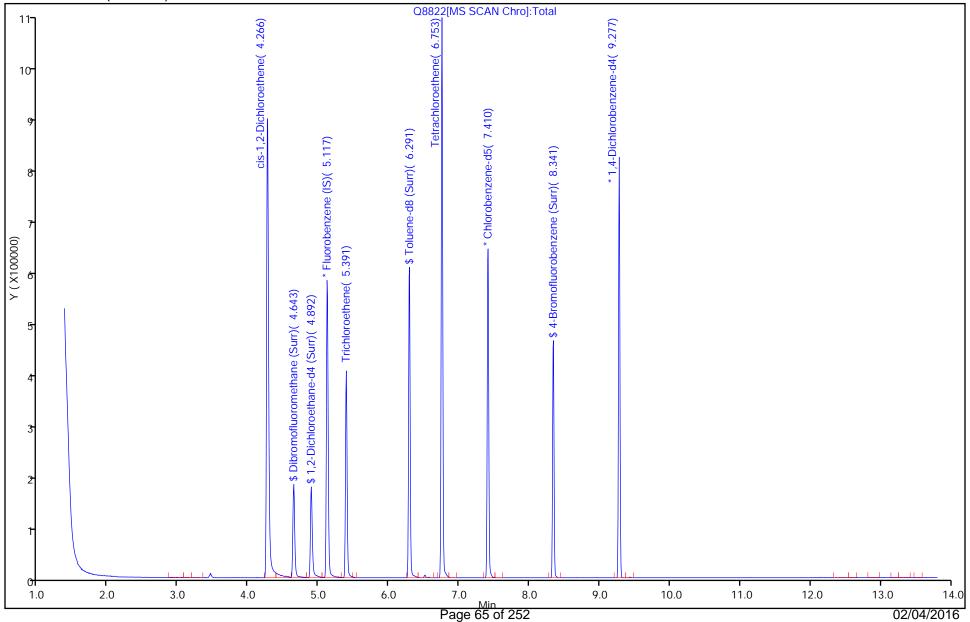
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 480-94483-A-3
 Lab Sample ID:
 480-94483-3

Client ID: MW-1DD

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#:

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

Worklist Smp#:

RR

34

21

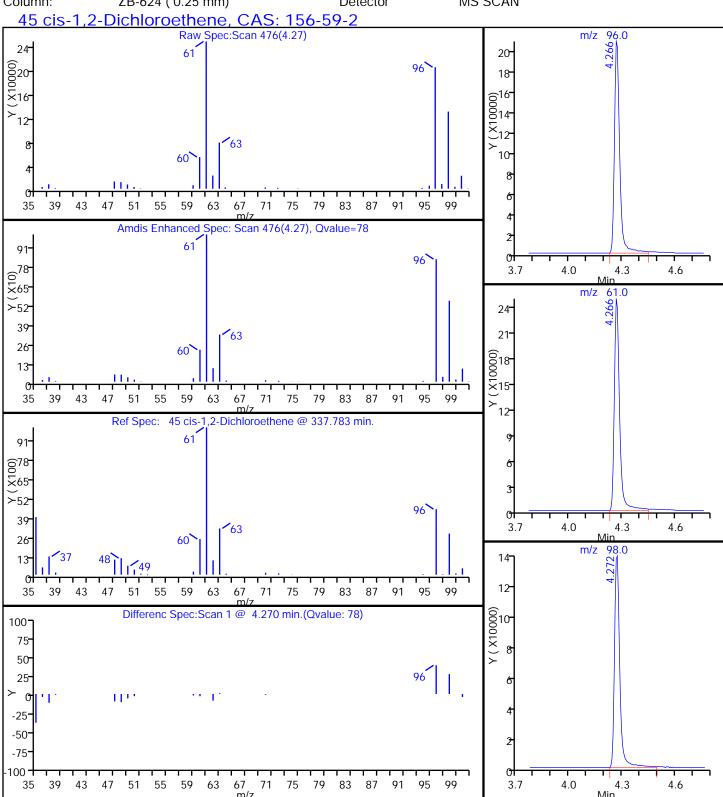
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Client ID: MW-1DD

Operator ID: RR ALS Bottle#: 21 Worklist Smp#: 34

Purge Vol: 5.000 mL Dil. Factor: 1.0000

MV - 8260C ICAL Method: Q-8260 Limit Group:



Report Date: 01-Feb-2016 08:50:50 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

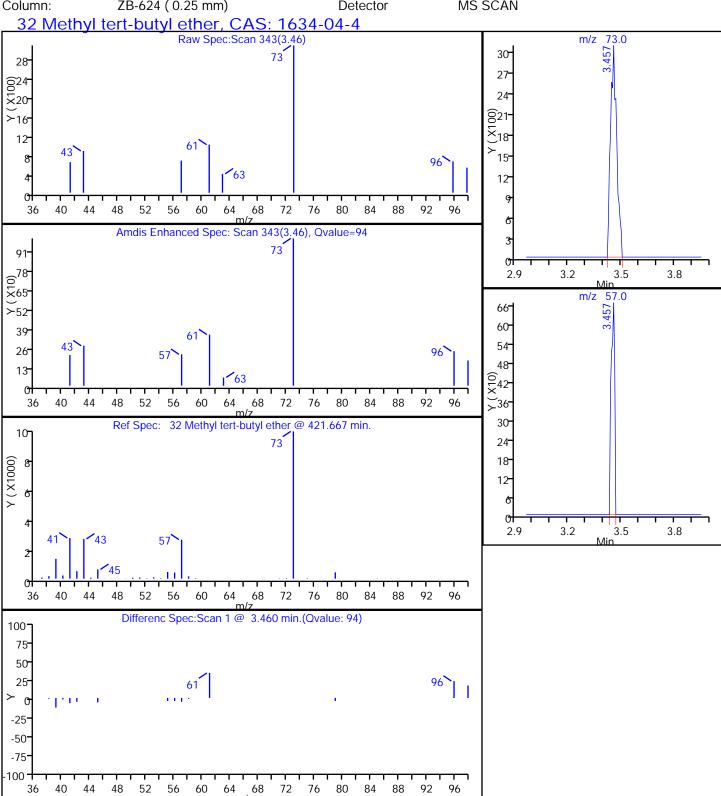
Data File: **Injection Date:** 29-Jan-2016 18:33:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-3 Lab Sample ID: 480-94483-3

Client ID: MW-1DD

Operator ID: RR ALS Bottle#: 21 Worklist Smp#: 34

5.000 mL Dil. Factor: Purge Vol: 1.0000

MV - 8260C ICAL Method: Q-8260 Limit Group:



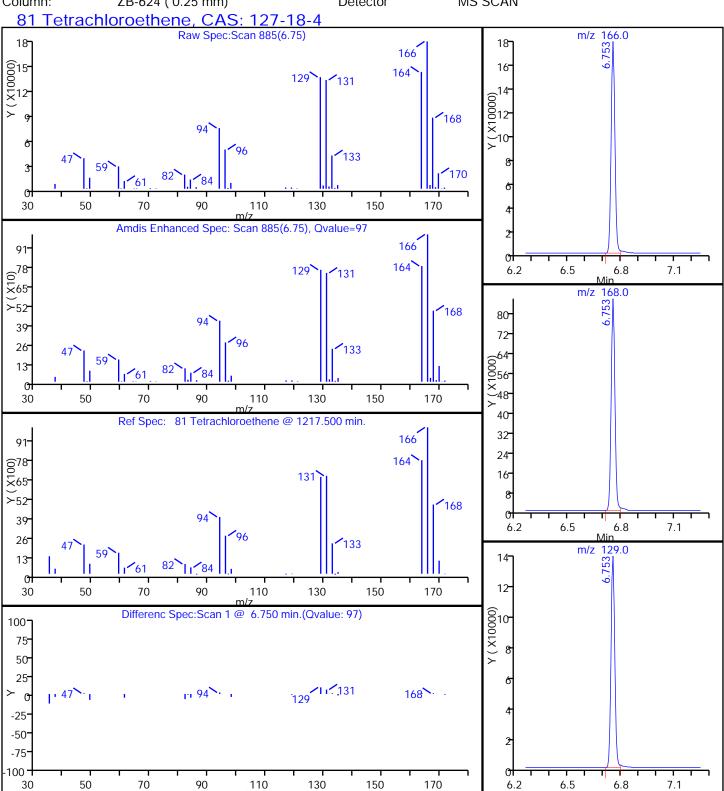
Data File: Injection Date: 29-Jan-2016 18:33:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-3 Lab Sample ID: 480-94483-3

Client ID: MW-1DD

Operator ID: RR ALS Bottle#: 21 Worklist Smp#: 34

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



 Data File:
 \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8822.D

 Injection Date:
 29-Jan-2016 18:33:30
 Instrument ID:
 HP5973Q

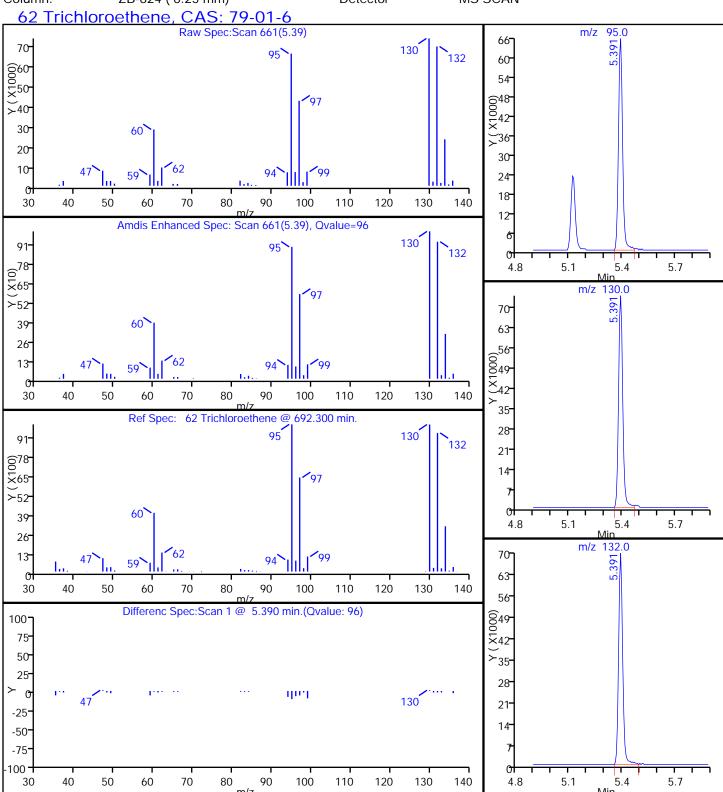
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 480-94483-A-3
 Lab Sample ID:
 480-94483-3

Client ID: MW-1DD

Operator ID: RR ALS Bottle#: 21 Worklist Smp#: 34

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1
SDG No.:	
Client Sample ID: GM-9	Lab Sample ID: 480-94483-4
Matrix: Water	Lab File ID: Q8871.D
Analysis Method: 8260C	Date Collected: 01/28/2016 08:20
Sample wt/vol: 1(uL)	Date Analyzed: 02/02/2016 12:48
Soil Aliquot Vol:	Dilution Factor: 2
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Ratch No · 285817	IInits: na/T.

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	ND		2.0	0.76
75-35-4	1,1-Dichloroethene	ND		2.0	0.58
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	0.42	J	2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND	*	20	6.0
71-43-2	Benzene	ND		2.0	0.82
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	89		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 SDG No.: Client Sample ID: GM-9 Lab Sample ID: 480-94483-4 Matrix: Water Lab File ID: Q8871.D Analysis Method: 8260C Date Collected: 01/28/2016 08:20 Date Analyzed: 02/02/2016 12:48 Sample wt/vol: 1(uL) Dilution Factor: 2 Soil Aliquot Vol: Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25 (mm) Level: (low/med) Low % Moisture:

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	1.6	J	2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	ND		2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	120		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	26		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	2.4		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		66-137
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
2037-26-5	Toluene-d8 (Surr)	85		71-126
1868-53-7	Dibromofluoromethane (Surr)	89		60-140

Analysis Batch No.: 285817

Report Date: 03-Feb-2016 08:26:28 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8871.D

Lims ID: 480-94483-B-4

Lab Sample ID: 480-94483-4

Client ID: GM-9

Sample Type: Client

Inject. Date: 02-Feb-2016 12:48:30 ALS Bottle#: 7 Worklist Smp#: 19

Purge Vol: 5.000 mL Dil. Factor: 2.0000

Sample Info: 480-94483-B-4 Misc. Info.: 480-0050332-019

Operator ID: RR Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:03-Feb-2016 08:26:27Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK035

First Level Reviewer: reiler Date: 03-Feb-2016 08:26:27

First Level Reviewer: reiler			D	ate:		03-Feb-2016 08:26:27			
		RT	Adj RT	Dlt RT			OnCol Amt		
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags	
* 147 Fluorobenzene (IS)	70	5.119	5.118	0.001	99	86553	25.0		
* 2 Chlorobenzene-d5	82	7.405	7.411	-0.006	84	170601	25.0		
* 3 1,4-Dichlorobenzene-d4	152	9.278	9.278	0.000	95	186189	25.0		
\$ 148 Dibromofluoromethane (Surr		4.644	4.638	0.006	94	101647	22.3		
\$ 41,2-Dichloroethane-d4 (Sur	67	4.894	4.893	0.001	0	56817	21.4		
\$ 5 Toluene-d8 (Surr)	98	6.286	6.286	0.000	93	340368	21.2		
\$ 6 4-Bromofluorobenzene (Surr	174	8.342	8.341	0.001	92	119719	24.2		
10 Dichlorodifluoromethane	85		1.433				ND		
12 Chloromethane	50		1.609				ND		
13 Vinyl chloride	62	1.713	1.707	0.006	93	6799	1.20		
14 Bromomethane	94		2.023				ND		
15 Chloroethane	64		2.126				ND		
17 Trichlorofluoromethane	101		2.303			ND			
22 1,1-Dichloroethene	96		2.789				ND		
21 1,1,2-Trichloro-1,2,2-trif	101		2.807				ND		
23 Acetone	43		2.886				ND		
26 Carbon disulfide	76		2.978				ND		
27 Methyl acetate	43		3.160				ND		
30 Methylene Chloride	84		3.245			1	ND		
32 Methyl tert-butyl ether	73	3.452	3.446	0.006	95	15698	0.8091		
34 trans-1,2-Dichloroethene	96	3.459	3.458	0.000	42	2004	0.3312		
39 1,1-Dichloroethane	63		3.811			I	ND		
45 cis-1,2-Dichloroethene	96	4.267	4.267	0.000	78	294612	44.5		
43 2-Butanone (MEK)	43		4.279			I	ND		
50 Chloroform	83		4.516			I	ND		
51 1,1,1-Trichloroethane	97		4.632			İ	ND		
52 Cyclohexane	56		4.650			I	ND		
55 Carbon tetrachloride	117		4.747			1	ND		
57 Benzene	78	4.912	4.912	0.000	91	5127	0.2339		
58 1,2-Dichloroethane	62	4.948	4.948	0.000	88	1682	0.2084		
62 Trichloroethene	95	5.392	5.392	0.000	94	78481	13.0		
			ъ	70 (050					

Page 72 of 252

Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\Cnromiva\buttalo\CnromData\HP5973Q\20160202-50332.b\Q8871.D								
Compound	Sig	RT (min.)	Adj RT			Dosponso	OnCol Amt	Flags
Compound	Sig	(min.)	(min.)	(min.)) Q	Response	ug/L	Flags
64 Mothyloydobovano	83		5.501				ND	
64 Methylcyclohexane 65 1,2-Dichloropropane	63	5.569	5.568	0.001	l 86	3101	0.5935	
68 Dichlorobromomethane	83	5.509	5.781	0.001	00		0.5935 ND	
77 trans-1,3-Dichloropropene	os 75		6.103				ND ND	
73 4-Methyl-2-pentanone (MIBK	43		6.201				ND	
73 4-Methyl-2-pentarione (MIBK	43 92		6.341				ND	
72 cis-1,3-Dichloropropene	75		6.529				ND	
· · ·	83		6.675				ND ND	
79 1,1,2-Trichloroethane		4 7 EE		0.001	. 07			
81 Tetrachloroethene	166	6.755	6.754	0.001	97	358305	59.2	
80 2-Hexanone	43		6.833				ND	
83 Chlorodibromomethane	129		6.985				ND	
84 Ethylene Dibromide	107		7.070				ND	
87 Chlorobenzene	112		7.429				ND	
88 Ethylbenzene	91		7.496				ND	
90 m-Xylene & p-Xylene	106		7.587				ND	
91 o-Xylene	106		7.904				ND	
92 Styrene	104		7.922				ND	
95 Bromoform	173		8.110				ND	
94 Isopropylbenzene	105		8.189				ND	
97 1,1,2,2-Tetrachloroethane	83		8.469				ND	
111 1,3-Dichlorobenzene	146		9.223				ND	
113 1,4-Dichlorobenzene	146		9.296				ND	
116 1,2-Dichlorobenzene	146		9.612				ND	
117 1,2-Dibromo-3-Chloropropan	75		10.269				ND	
119 1,2,4-Trichlorobenzene	180		10.932				ND	
S 124 Xylenes, Total	1		30.000				ND	
Reagents:								
Q_8260_IS_00114		Amount	Added:	1.25	ı	Units: uL	Run Reager	nt
Q_8260_SURR_00107		Amount	Added:	1.25	ı	Units: uL	Run Reager	
_ _							3 -	

Report Date: 03-Feb-2016 08:26:28 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

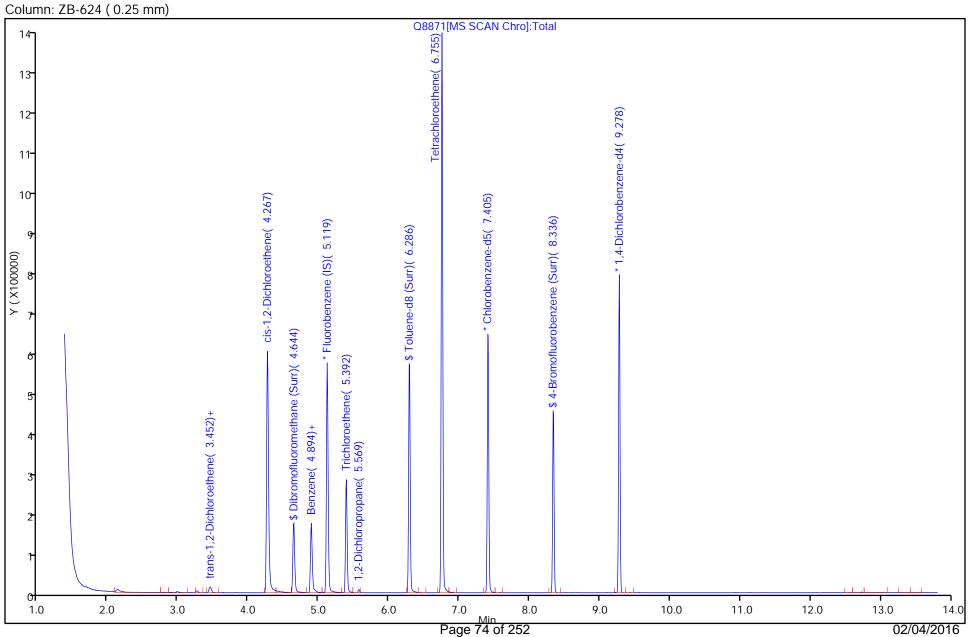
Data File: Injection Date: 02-Feb-2016 12:48:30 Instrument ID: HP5973Q Lab Sample ID: 480-94483-4

Lims ID: 480-94483-B-4 Client ID: GM-9

Purge Vol:

Dil. Factor: 5.000 mL

Q-8260 Limit Group: MV - 8260C ICAL Method:



2.0000

Operator ID:

ALS Bottle#:

Worklist Smp#:

RR

19

7

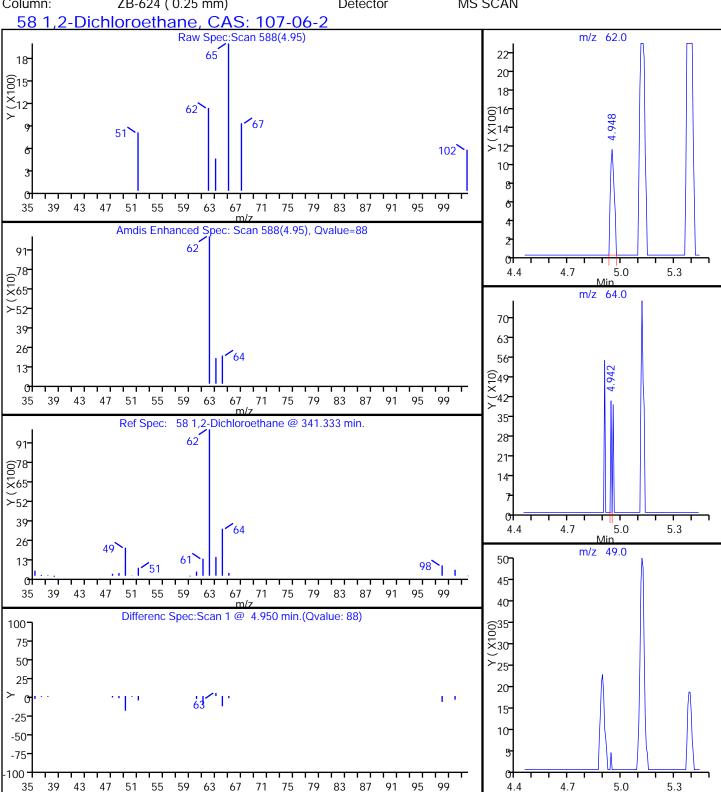
Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8871.D **Injection Date:** 02-Feb-2016 12:48:30 Instrument ID: HP5973Q Lims ID: 480-94483-B-4 Lab Sample ID: 480-94483-4

Client ID: GM-9

Operator ID: RR ALS Bottle#: 7 Worklist Smp#: 19

Purge Vol: 5.000 mL Dil. Factor: 2.0000

MV - 8260C ICAL Method: Q-8260 Limit Group:



 Data File:
 \\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8871.D

 Injection Date:
 02-Feb-2016 12:48:30
 Instrument ID:
 HP5973Q

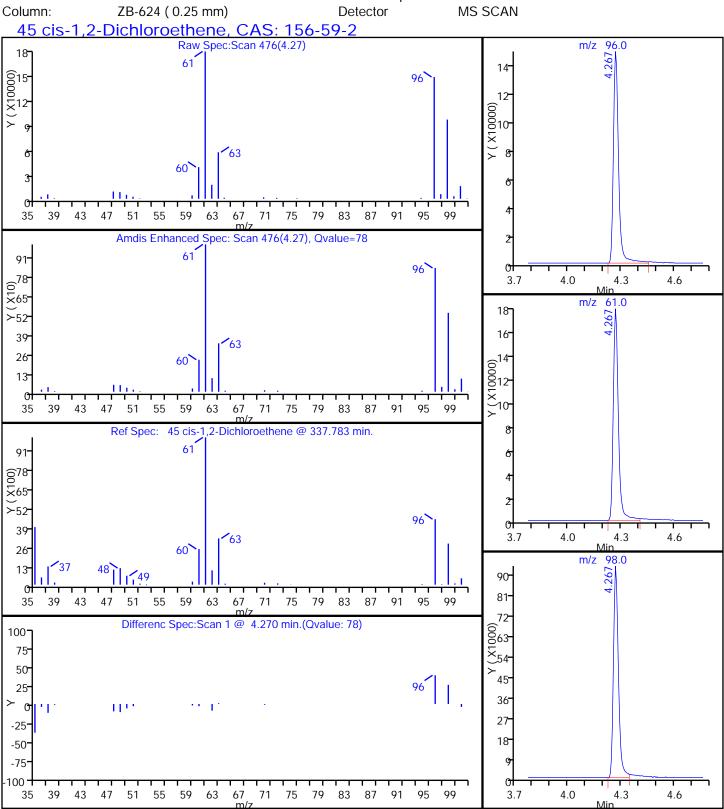
 Lims ID:
 480-94483-B-4
 Lab Sample ID:
 480-94483-4

Client ID: GM-9

Operator ID: RR ALS Bottle#: 7 Worklist Smp#: 19

Purge Vol: 5.000 mL Dil. Factor: 2.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



Report Date: 03-Feb-2016 08:26:28 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

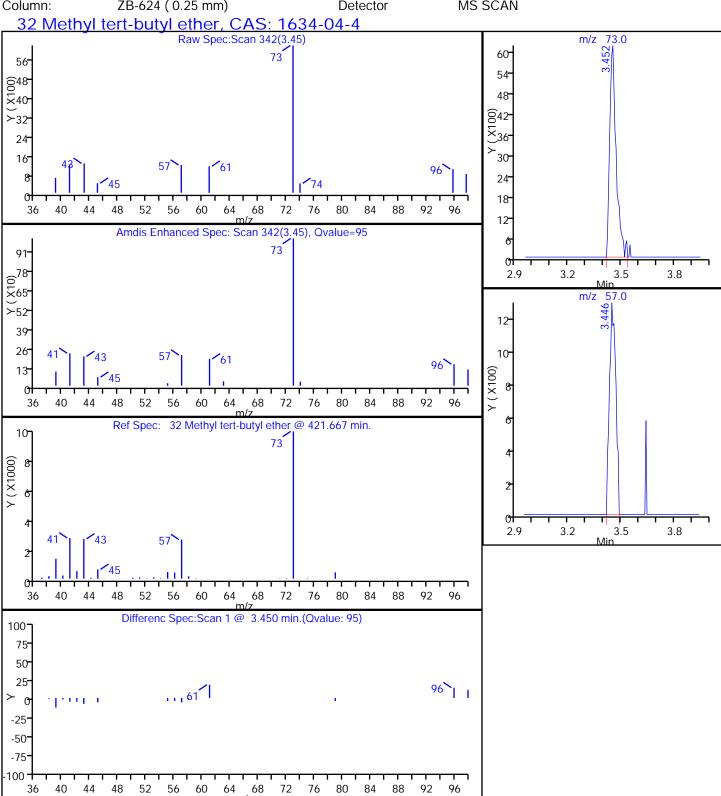
Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8871.D **Injection Date:** 02-Feb-2016 12:48:30 Instrument ID: HP5973Q Lims ID: 480-94483-B-4 Lab Sample ID: 480-94483-4

Client ID: GM-9

Operator ID: RR ALS Bottle#: 7 Worklist Smp#: 19

5.000 mL Dil. Factor: 2.0000 Purge Vol:

MV - 8260C ICAL Method: Q-8260 Limit Group:



Data File: Injection Date: 02-Feb-2016 12:48:30 Instrument ID: HP5973Q Lims ID: 480-94483-B-4 Lab Sample ID: 480-94483-4

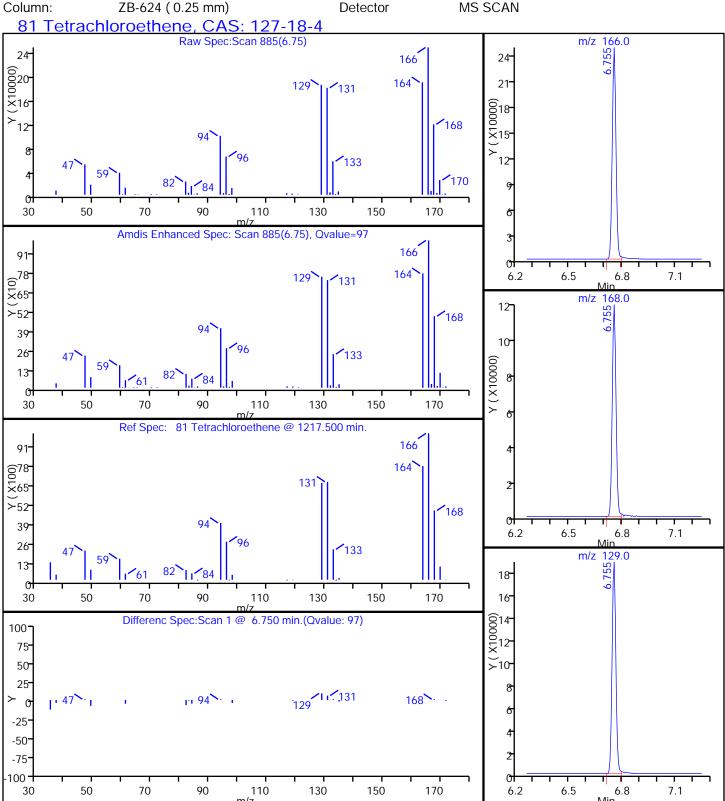
Client ID: GM-9

Operator ID: RR ALS Bottle#: 7 Worklist Smp#: 19

Purge Vol: 5.000 mL Dil. Factor: 2.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:

Detector



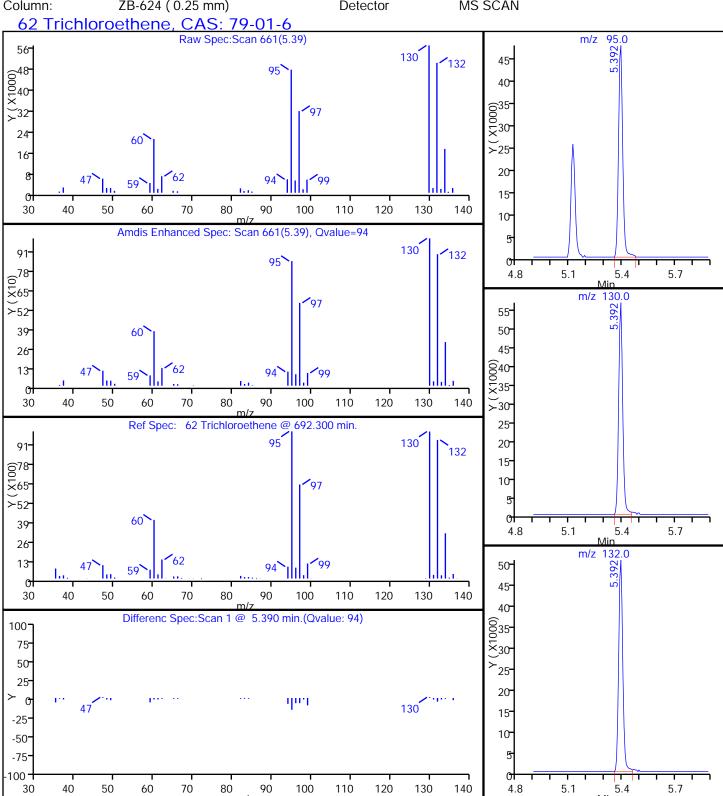
Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8871.D **Injection Date:** 02-Feb-2016 12:48:30 Instrument ID: HP5973Q Lims ID: 480-94483-B-4 Lab Sample ID: 480-94483-4

Client ID: GM-9

Operator ID: RR ALS Bottle#: 7 Worklist Smp#: 19

Purge Vol: 5.000 mL Dil. Factor: 2.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



Report Date: 03-Feb-2016 08:26:28 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: Injection Date: 02-Feb-2016 12:48:30 Instrument ID: HP5973Q Lims ID: 480-94483-B-4 Lab Sample ID: 480-94483-4

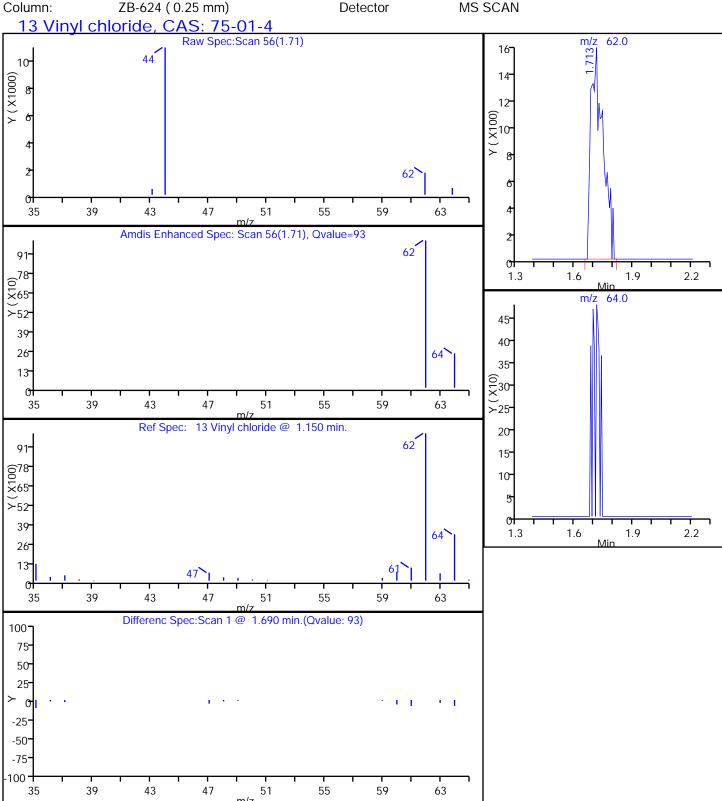
Client ID: GM-9

Operator ID: RR ALS Bottle#: 7 Worklist Smp#: 19

Purge Vol: 5.000 mL Dil. Factor: 2.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Detector MS SCAN



FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	JOD NO.: 48U-94483-1
SDG No.:	
Client Sample ID: MW-1D	Lab Sample ID: 480-94483-5
Matrix: Water	Lab File ID: Q8824.D
Analysis Method: 8260C	Date Collected: 01/28/2016 09:00
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 19:19
Soil Aliquot Vol:	Dilution Factor: 20
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Batch No · 285459	Ilnits: ua/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		20	16
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	4.2
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		20	6.2
79-00-5	1,1,2-Trichloroethane	ND		20	4.6
75-34-3	1,1-Dichloroethane	ND		20	7.6
75-35-4	1,1-Dichloroethene	ND		20	5.8
120-82-1	1,2,4-Trichlorobenzene	ND		20	8.2
96-12-8	1,2-Dibromo-3-Chloropropane	ND		20	7.8
106-93-4	1,2-Dibromoethane	ND		20	15
95-50-1	1,2-Dichlorobenzene	ND		20	16
107-06-2	1,2-Dichloroethane	ND		20	4.2
78-87-5	1,2-Dichloropropane	ND		20	14
541-73-1	1,3-Dichlorobenzene	ND		20	16
106-46-7	1,4-Dichlorobenzene	ND		20	17
78-93-3	2-Butanone (MEK)	ND		200	26
591-78-6	2-Hexanone	ND		100	25
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		100	42
67-64-1	Acetone	ND		200	60
71-43-2	Benzene	ND		20	8.2
75-27-4	Bromodichloromethane	ND		20	7.8
75-25-2	Bromoform	ND		20	5.2
74-83-9	Bromomethane	ND		20	14
75-15-0	Carbon disulfide	ND		20	3.8
56-23-5	Carbon tetrachloride	ND		20	5.4
108-90-7	Chlorobenzene	ND		20	15
75-00-3	Chloroethane	ND		20	6.4
67-66-3	Chloroform	ND		20	6.8
74-87-3	Chloromethane	ND		20	7.0
156-59-2	cis-1,2-Dichloroethene	1900		20	16
10061-01-5	cis-1,3-Dichloropropene	ND		20	7.2
110-82-7	Cyclohexane	ND		20	3.6
124-48-1	Dibromochloromethane	ND		20	6.4
75-71-8	Dichlorodifluoromethane	ND		20	14
100-41-4	Ethylbenzene	ND		20	15
98-82-8	Isopropylbenzene	ND		20	16

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

 Lab Name: TestAmerica Buffalo
 Job No.: 480-94483-1

 SDG No.:
 Client Sample ID: MW-1D
 Lab Sample ID: 480-94483-5

 Matrix: Water
 Lab File ID: Q8824.D

 Analysis Method: 8260C
 Date Collected: 01/28/2016 09:00

 Sample wt/vol: 5(mL)
 Date Analyzed: 01/29/2016 19:19

 Soil Aliquot Vol:
 Dilution Factor: 20

 Soil Extract Vol.:
 GC Column: ZB-624 (60) ID: 0.25 (mm)

 % Moisture:
 Level: (low/med) Low

Analysis Batch No.: 285459 Units: ug/L

GAG NO	COMPOUND NAME	DEGITE III	^	DI	MDI
CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		50	26
1634-04-4	Methyl tert-butyl ether	ND		20	3.2
108-87-2	Methylcyclohexane	ND		20	3.2
75-09-2	Methylene Chloride	ND		20	8.8
100-42-5	Styrene	ND		20	15
127-18-4	Tetrachloroethene	1700		20	7.2
108-88-3	Toluene	ND		20	10
156-60-5	trans-1,2-Dichloroethene	ND		20	18
10061-02-6	trans-1,3-Dichloropropene	ND		20	7.4
79-01-6	Trichloroethene	810		20	9.2
75-69-4	Trichlorofluoromethane	ND		20	18
75-01-4	Vinyl chloride	46		20	18
1330-20-7	Xylenes, Total	ND		40	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		66-137
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
2037-26-5	Toluene-d8 (Surr)	88		71-126
1868-53-7	Dibromofluoromethane (Surr)	93		60-140

Chrom Revision: 2.2 02-Dec-2015 11:51:48 Report Date: 01-Feb-2016 08:54:41

> TestAmerica Buffalo **Target Compound Quantitation Report**

Data File: Lab Sample ID: 480-94483-5

Lims ID: 480-94483-A-5

Client ID: MW-1D

Sample Type: Client

29-Jan-2016 19:19:30 Inject. Date: ALS Bottle#: 23 Worklist Smp#: 36

Purge Vol: 5.000 mL Dil. Factor: 20.0000

Sample Info: 480-94483-A-5 Misc. Info.: 480-0050272-036

Operator ID: RR Instrument ID: HP5973Q

Method:

Limit Group: MV - 8260C ICAL

Last Update: 01-Feb-2016 08:54:04 Calib Date: 11-Jan-2016 21:55:30 Integrator: **RTE** ID Type: **Deconvolution ID** Quant Method: Quant By: Internal Standard **Initial Calibration** Last ICal File:

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK051

First Level Reviewer: fortaing 29- Jan-2016 20:14:30 Date:

First Level Reviewer: fortaing		D	ate:	29-Jan-2016 20:14:30				
		RT	Adj RT	DIt RT			OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.118	5.119	-0.001	99	84161	25.0	
* 2 Chlorobenzene-d5	82	7.405	7.406	-0.001	84	161875	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.278	9.279	-0.001	95	183285	25.0	
\$ 148 Dibromofluoromethane (Surr		4.644	4.639	0.005	93	103075	23.2	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.893	4.888	0.005	0	55937	21.6	
\$ 5 Toluene-d8 (Surr)	98	6.286	6.287	-0.001	92	334882	22.0	
\$ 6 4-Bromofluorobenzene (Surr	174	8.342	8.336	0.006	94	113333	24.1	
10 Dichlorodifluoromethane	85		1.432				ND	
12 Chloromethane	50		1.626				ND	
13 Vinyl chloride	62	1.695	1.712	-0.017	95	12631	2.30	
14 Bromomethane	94		2.028				ND	
15 Chloroethane	64		2.119				ND	
17 Trichlorofluoromethane	101		2.320				ND	
22 1,1-Dichloroethene	96		2.800				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.806				ND	
23 Acetone	43		2.891				ND	
26 Carbon disulfide	76		2.983				ND	
27 Methyl acetate	43		3.159				ND	
30 Methylene Chloride	84		3.250				ND	
32 Methyl tert-butyl ether	73	0.474	3.451	0.004	00		ND	
34 trans-1,2-Dichloroethene	96	3.464	3.463	0.001	92	3717	0.6318	
39 1,1-Dichloroethane	63	4.0/7	3.810	0.005	70		ND	
45 cis-1,2-Dichloroethene	96	4.267	4.272	-0.005	78	598636	92.9	
43 2-Butanone (MEK)	43		4.284				ND	
50 Chloroform	83		4.521				ND	
51 1,1,1-Trichloroethane	97		4.631				ND	
52 Cyclohexane	56		4.655				ND	
55 Carbon tetrachloride	117		4.752				ND	
57 Benzene	78		4.910				ND	
58 1,2-Dichloroethane	62	F 000	4.953	0.004	0.4		ND	
62 Trichloroethene	95	5.392	5.391	0.001	96	238863	40.7	

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Report Date: 01-Feb-2016 08:54:41 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8824.D

Data File. (ICIIIOIIINA)DI	Data File. \(\(ICTITOTITYA\Builato\CTITOTIData\text{IP5973Q\text{\gamma\cutoff\c								
		RT	Adj RT		It RT			OnCol Amt	
Compound	Sig	(min.)	(min.)	1)	min.)	Q	Response	ug/L	Flags
	0.0		·					ND	
64 Methylcyclohexane	83		5.506					ND	
65 1,2-Dichloropropane	63		5.567					ND	
68 Dichlorobromomethane	83		5.786					ND	
77 trans-1,3-Dichloropropene	75		6.108					ND	
73 4-Methyl-2-pentanone (MIBK	43		6.200					ND	
74 Toluene	92		6.339					ND	
72 cis-1,3-Dichloropropene	75		6.528					ND	
79 1,1,2-Trichloroethane	83		6.674					ND	
81 Tetrachloroethene	166	6.754	6.753	0	.001	97	499643	87.0	
80 2-Hexanone	43		6.832					ND	
83 Chlorodibromomethane	129		6.984					ND	
84 Ethylene Dibromide	107		7.069					ND	
87 Chlorobenzene	112		7.434					ND	
88 Ethylbenzene	91		7.495					ND	
90 m-Xylene & p-Xylene	106		7.586					ND	
91 o-Xylene	106		7.908					ND	
92 Styrene	104		7.921					ND	
95 Bromoform	173		8.109					ND	
94 Isopropylbenzene	105		8.188					ND	
97 1,1,2,2-Tetrachloroethane	83		8.468					ND	
111 1,3-Dichlorobenzene	146		9.222					ND	
113 1,4-Dichlorobenzene	146		9.301					ND	
116 1,2-Dichlorobenzene	146		9.611					ND	
117 1,2-Dibromo-3-Chloropropan	75		10.268	}				ND	
119 1,2,4-Trichlorobenzene	180		10.931					ND	
S 124 Xylenes, Total	1		30.000)				ND	
Reagents:									
Q_8260_IS_00114		Amount	Added:	1.25		11	nits: uL	Run Reager	nt
Q_8260_SURR_00107			Added:				nits: uL	Run Reager	
@_0200_001ttt_00101		, anount	, laaca.	1.20	•	· ·		. turi i tougoi	

Report Date: 01-Feb-2016 08:54:41 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: Injection Date: 29-Jan-2016 19:19:30 Instrument ID: HP5973Q Lab Sample ID: 480-94483-5

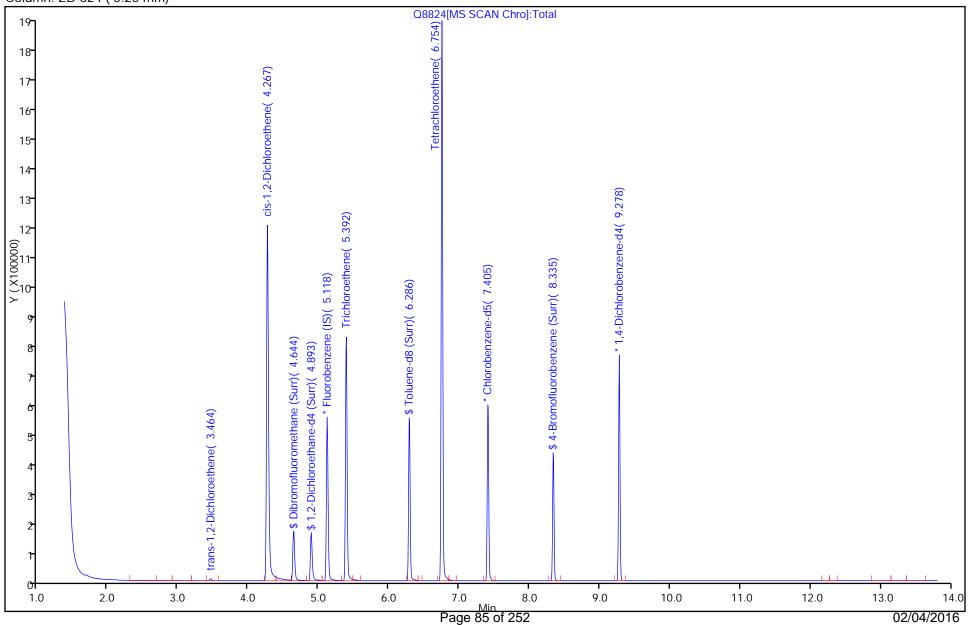
Lims ID: 480-94483-A-5

Client ID: MW-1D Purge Vol: 5.000 mL

Dil. Factor: 20.0000

Q-8260 Limit Group: MV - 8260C ICAL Method:

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

RR

36

23

Data File: **Injection Date:** 29-Jan-2016 19:19:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-5 Lab Sample ID: 480-94483-5

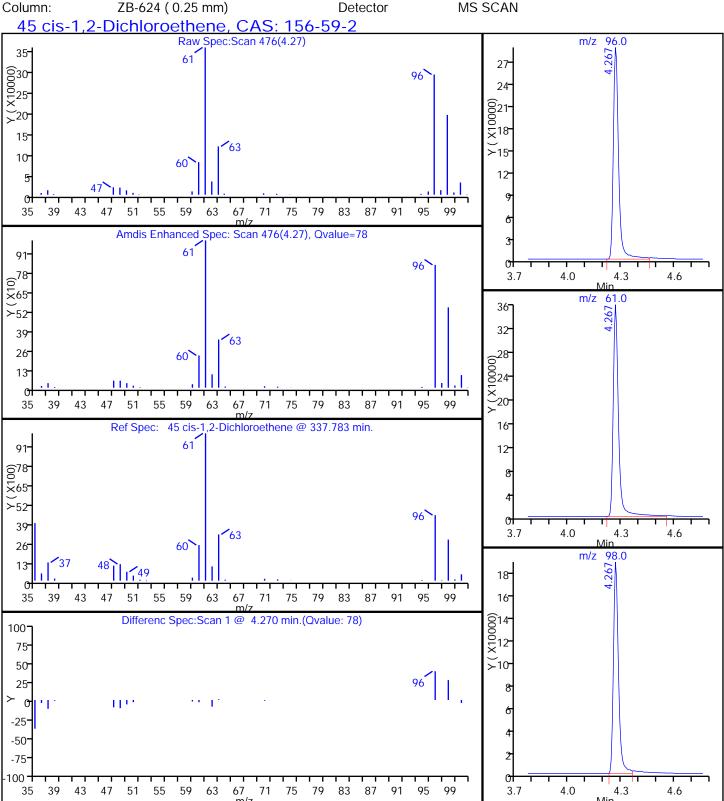
Client ID: MW-1D

Operator ID: RR ALS Bottle#: 23 Worklist Smp#: 36

Purge Vol: 5.000 mL Dil. Factor: 20.0000

MV - 8260C ICAL Method: Q-8260 Limit Group:

MS SCAN



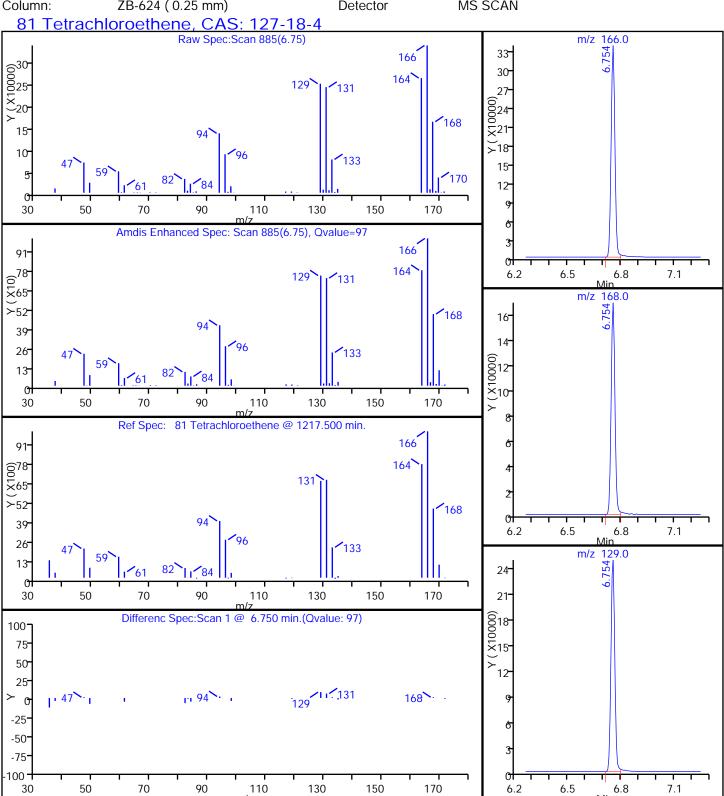
Data File: Injection Date: 29-Jan-2016 19:19:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-5 Lab Sample ID: 480-94483-5

Client ID: MW-1D

Operator ID: RR ALS Bottle#: 23 Worklist Smp#: 36

Purge Vol: 5.000 mL Dil. Factor: 20.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



 Data File:
 \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8824.D

 Injection Date:
 29-Jan-2016 19:19:30
 Instrument ID:
 HP5973Q

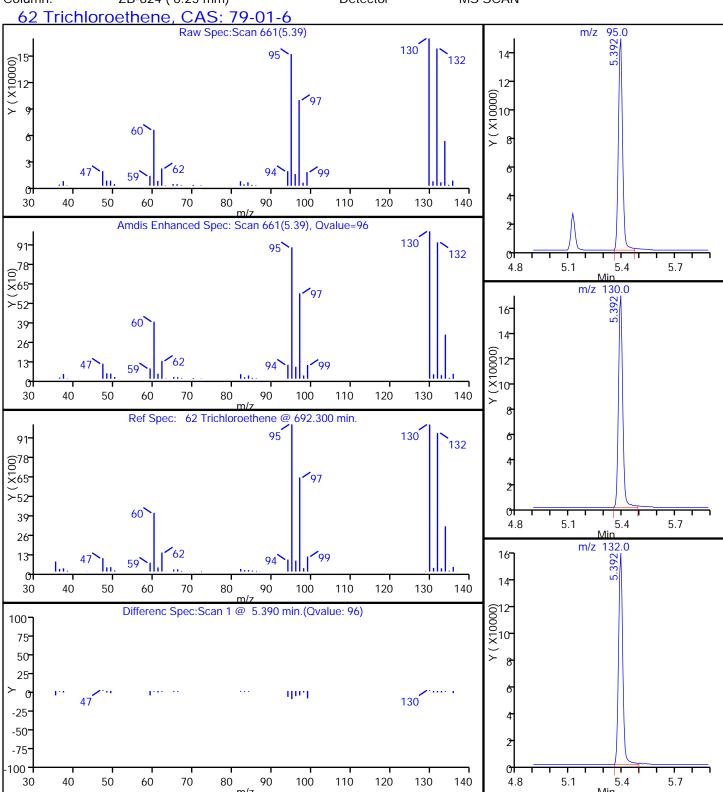
 Lims ID:
 480-94483-A-5
 Lab Sample ID:
 480-94483-5

Client ID: MW-1D

Operator ID: RR ALS Bottle#: 23 Worklist Smp#: 36

Purge Vol: 5.000 mL Dil. Factor: 20.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



Report Date: 01-Feb-2016 08:54:41 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

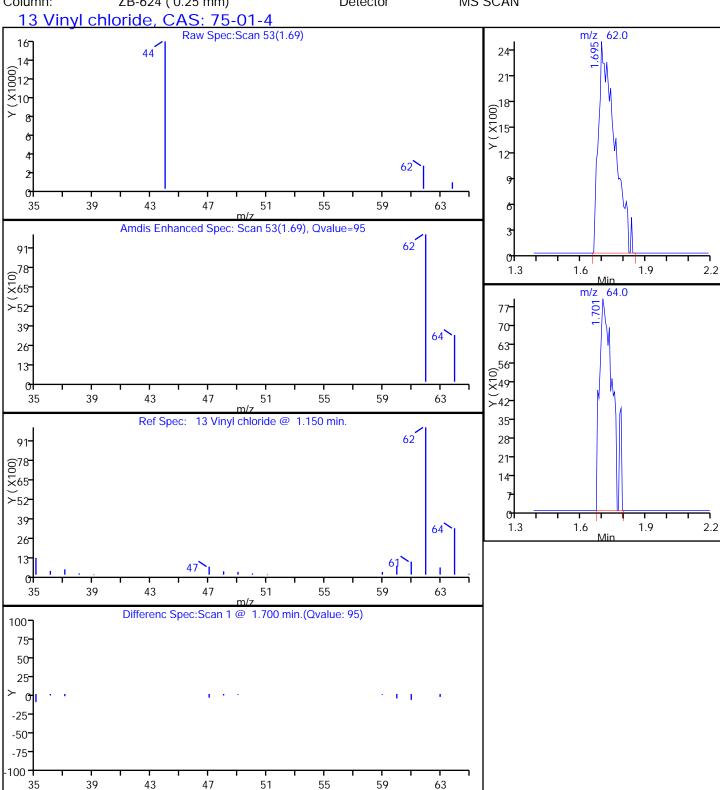
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Client ID: MW-1D

Operator ID: RR ALS Bottle#: 23 Worklist Smp#: 36

Purge Vol: 5.000 mL Dil. Factor: 20.0000

Method: Limit Group: MV - 8260C ICAL Q-8260



FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: <u>480-94483-1</u>
SDG No.:	
Client Sample ID: MW-13	Lab Sample ID: 480-94483-6
Matrix: Water	Lab File ID: Q8825.D
Analysis Method: 8260C	Date Collected: 01/28/2016 09:20
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 19:42
Soil Aliquot Vol:	Dilution Factor: 500
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Batch No.: 285459	Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		500	410
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	110
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		500	160
79-00-5	1,1,2-Trichloroethane	ND		500	120
75-34-3	1,1-Dichloroethane	ND		500	190
75-35-4	1,1-Dichloroethene	ND		500	150
120-82-1	1,2,4-Trichlorobenzene	ND		500	210
96-12-8	1,2-Dibromo-3-Chloropropane	ND		500	200
106-93-4	1,2-Dibromoethane	ND		500	370
95-50-1	1,2-Dichlorobenzene	ND		500	400
107-06-2	1,2-Dichloroethane	ND		500	110
78-87-5	1,2-Dichloropropane	ND		500	360
541-73-1	1,3-Dichlorobenzene	ND		500	390
106-46-7	1,4-Dichlorobenzene	ND		500	420
78-93-3	2-Butanone (MEK)	ND		5000	660
591-78-6	2-Hexanone	ND		2500	620
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		2500	1100
67-64-1	Acetone	ND		5000	1500
71-43-2	Benzene	ND		500	210
75-27-4	Bromodichloromethane	ND		500	200
75-25-2	Bromoform	ND		500	130
74-83-9	Bromomethane	ND		500	350
75-15-0	Carbon disulfide	ND		500	95
56-23-5	Carbon tetrachloride	ND		500	140
108-90-7	Chlorobenzene	ND		500	380
75-00-3	Chloroethane	ND		500	160
67-66-3	Chloroform	ND		500	170
74-87-3	Chloromethane	ND		500	180
156-59-2	cis-1,2-Dichloroethene	44000		500	410
10061-01-5	cis-1,3-Dichloropropene	ND		500	180
110-82-7	Cyclohexane	ND		500	90
124-48-1	Dibromochloromethane	ND		500	160
75-71-8	Dichlorodifluoromethane	ND		500	340
100-41-4	Ethylbenzene	ND		500	370
98-82-8	Isopropylbenzene	ND		500	400

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

 SDG No.:
 Lab Sample ID: 480-94483-6

 Client Sample ID: MW-13
 Lab Sample ID: 480-94483-6

 Matrix: Water
 Lab File ID: Q8825.D

 Analysis Method: 8260C
 Date Collected: 01/28/2016 09:20

 Sample wt/vol: 5 (mL)
 Date Analyzed: 01/29/2016 19:42

Soil Aliquot Vol: _____ Dilution Factor: 500

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

Soil Extract Vol.: _____ GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>

% Moisture: _____ Level: (low/med) <u>Low</u>

Analysis Batch No.: 285459 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		1300	650
1634-04-4	Methyl tert-butyl ether	ND		500	80
108-87-2	Methylcyclohexane	ND		500	80
75-09-2	Methylene Chloride	ND		500	220
100-42-5	Styrene	ND		500	370
127-18-4	Tetrachloroethene	4100		500	180
108-88-3	Toluene	ND		500	260
156-60-5	trans-1,2-Dichloroethene	ND		500	450
10061-02-6	trans-1,3-Dichloropropene	ND		500	190
79-01-6	Trichloroethene	2800		500	230
75-69-4	Trichlorofluoromethane	ND		500	440
75-01-4	Vinyl chloride	1200		500	450
1330-20-7	Xylenes, Total	ND		1000	330

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-137
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
2037-26-5	Toluene-d8 (Surr)	90		71-126
1868-53-7	Dibromofluoromethane (Surr)	94		60-140

Report Date: 01-Feb-2016 08:55:16 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8825.D Lims ID: 480-94483-A-6 Lab Sample ID: 480-94483-6

Lims ID: 480-94483 Client ID: MW-13

Sample Type: Client

Inject. Date: 29-Jan-2016 19:42:30 ALS Bottle#: 24 Worklist Smp#: 37

Purge Vol: 5.000 mL Dil. Factor: 500.0000

Sample Info: 480-94483-A-6 Misc. Info.: 480-0050272-037

Operator ID: RR Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 01-Feb-2016 08:54:04 Calib Date: 11-Jan-2016 21:55:30 Integrator: RTE ID Type: Deconvolution ID Quant Method: Internal Standard Quant By: Initial Calibration \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK051

First Level Reviewer: fortaing Date: 29-Jan-2016 20:15:08

First Level Reviewer: fortaing	Reviewer: fortaing Date: 29-Jan-2016 20:15:08					6 20:15:08			
		RT	Adj RT	Dlt RT			OnCol Amt		
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags	
* 147 Fluorobenzene (IS)	70	5.117	5.119	-0.002	99	82786	25.0		
* 2 Chlorobenzene-d5	82	7.410	7.406	0.004	84	150012	25.0		
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.279	-0.002	94	173541	25.0		
\$ 148 Dibromofluoromethane (Surr		4.643	4.639	0.004	94	102337	23.5		
\$ 41,2-Dichloroethane-d4 (Sur	67	4.892	4.888	0.004	0	56811	22.4		
\$ 5 Toluene-d8 (Surr)	98	6.291	6.287	0.004	92	318949	22.6		
\$ 6 4-Bromofluorobenzene (Surr	174	8.340	8.336	0.004	92	106034	24.4		
10 Dichlorodifluoromethane	85		1.432				ND		
12 Chloromethane	50		1.626				ND		
13 Vinyl chloride	62	1.699	1.712	-0.013	95	13117	2.42		
14 Bromomethane	94		2.028				ND		
15 Chloroethane	64		2.119				ND		
17 Trichlorofluoromethane	101		2.320				ND		
22 1,1-Dichloroethene	96		2.800				ND		
21 1,1,2-Trichloro-1,2,2-trif	101		2.806				ND		
23 Acetone	43		2.891				ND		
26 Carbon disulfide	76		2.983				ND		
27 Methyl acetate	43		3.159				ND		
30 Methylene Chloride	84		3.250				ND		
32 Methyl tert-butyl ether	73		3.451				ND		
34 trans-1,2-Dichloroethene	96	3.457	3.463	-0.006	93	1764	0.3048		
39 1,1-Dichloroethane	63		3.810				ND		
45 cis-1,2-Dichloroethene	96	4.272	4.272	0.000	78	559948	88.3		
43 2-Butanone (MEK)	43		4.284			I	ND		
50 Chloroform	83		4.521			I	ND		
51 1,1,1-Trichloroethane	97		4.631				ND		
52 Cyclohexane	56		4.655				ND		
55 Carbon tetrachloride	117		4.752				ND		
57 Benzene	78		4.910				ND		
58 1,2-Dichloroethane	62		4.953				ND		
62 Trichloroethene	95	5.391	5.391	0.000	96	32592	5.65		
			Б.	00 (050					

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02/04/2016

Report Date: 01-Feb-2016 08:55:16 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8825.D

Data File. (ICIIIOIIINA)DI	uiiaiU\	CHIUHDA	Data File. \(\(\text{ICTITOTITYA\Builato\CTITOTIData\text{IP5973Q\text{120100129-50272.b\Q8825.b\}}\)							
		RT	Adj RT		lt RT			OnCol Amt		
Compound	Sig	(min.)	(min.)	(1	min.)	Q	Response	ug/L	Flags	
	0.5							ND		
64 Methylcyclohexane	83		5.506					ND		
65 1,2-Dichloropropane	63		5.567					ND		
68 Dichlorobromomethane	83		5.786					ND		
77 trans-1,3-Dichloropropene	75		6.108					ND		
73 4-Methyl-2-pentanone (MIBK	43		6.200					ND		
74 Toluene	92		6.339					ND		
72 cis-1,3-Dichloropropene	75		6.528					ND		
79 1,1,2-Trichloroethane	83		6.674					ND		
81 Tetrachloroethene	166	6.753	6.753	0	0.000	97	43699	8.21		
80 2-Hexanone	43		6.832					ND		
83 Chlorodibromomethane	129		6.984					ND		
84 Ethylene Dibromide	107		7.069					ND		
87 Chlorobenzene	112		7.434					ND		
88 Ethylbenzene	91		7.495					ND		
90 m-Xylene & p-Xylene	106		7.586					ND		
91 o-Xylene	106		7.908					ND		
92 Styrene	104		7.921					ND		
95 Bromoform	173		8.109					ND		
94 Isopropylbenzene	105		8.188					ND		
97 1,1,2,2-Tetrachloroethane	83		8.468					ND		
111 1,3-Dichlorobenzene	146		9.222					ND		
113 1,4-Dichlorobenzene	146		9.301					ND		
116 1,2-Dichlorobenzene	146		9.611					ND		
117 1,2-Dibromo-3-Chloropropan	75		10.268	}				ND		
119 1,2,4-Trichlorobenzene	180		10.931					ND		
S 124 Xylenes, Total	1		30.000)				ND		
Reagents:										
Q_8260_IS_00114		Amount	Added.	1.25		U	nits: uL	Run Reager	nt	
Q_8260_SURR_00107			Added:				nits: uL	Run Reager		
				0	•					

Report Date: 01-Feb-2016 08:55:16 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

 Data File:
 \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8825.D

 Injection Date:
 29-Jan-2016 19:42:30
 Instrument ID:
 HP5973Q

 Lims ID:
 480-94483-A-6
 Lab Sample ID:
 480-94483-6

Lims ID: 480-94483-A-6 Client ID: MW-13

Purge Vol: 5.000 mL Method: Q-8260

5.000 mL Dil. Factor: Q-8260 Limit Group:

Dil. Factor: 500.0000 Limit Group: MV - 8260C ICAL Operator ID:

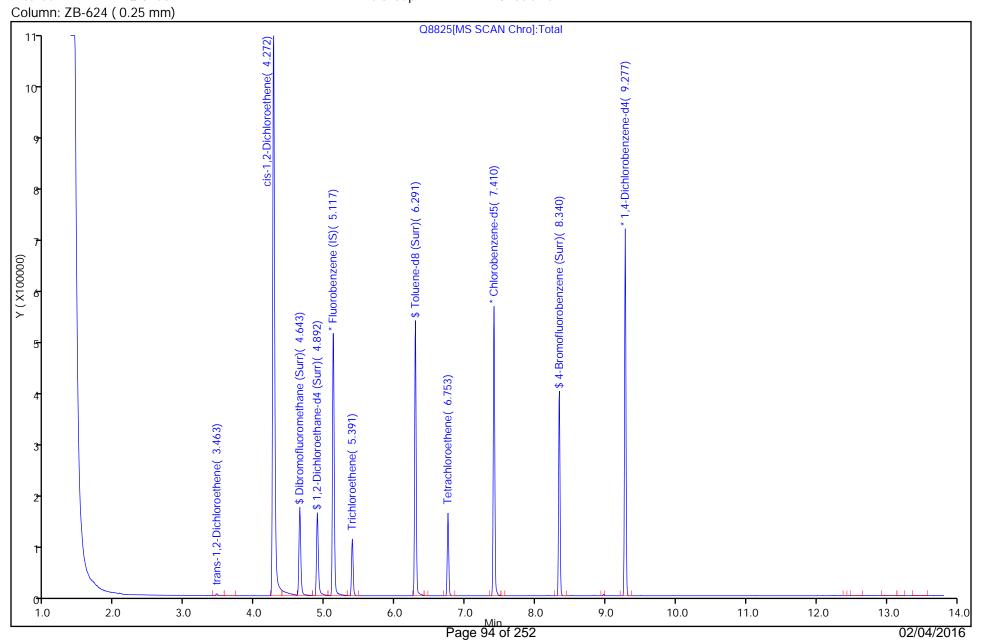
ALS Bottle#:

Worklist Smp#:

RR

37

24



 Data File:
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 Injection Date:
 29-Jan-2016 19:42:30
 Instrument ID:
 HP5973Q

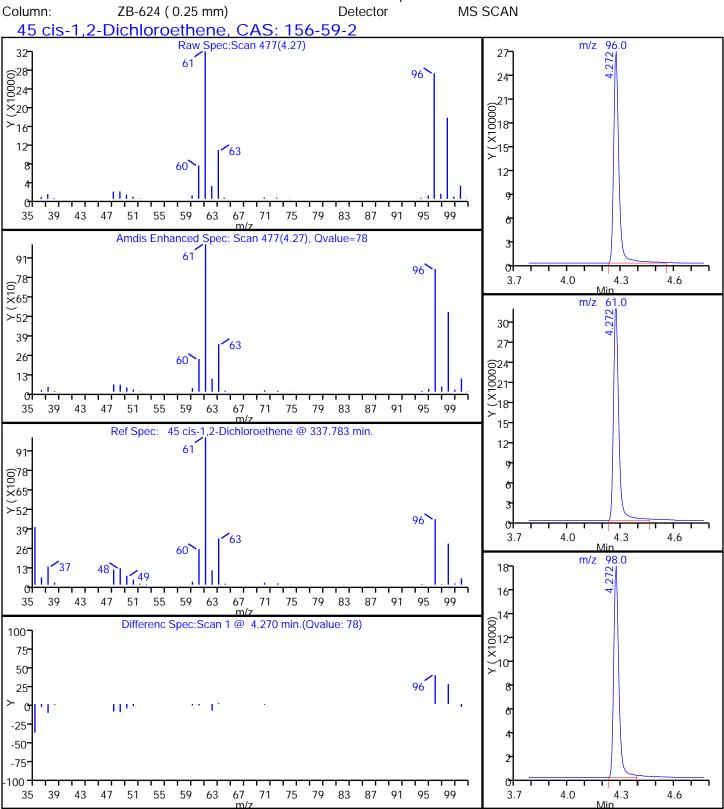
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 480-94483-A-6
 Lab Sample ID:
 480-94483-6

Client ID: MW-13

Operator ID: RR ALS Bottle#: 24 Worklist Smp#: 37

Purge Vol: 5.000 mL Dil. Factor: 500.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



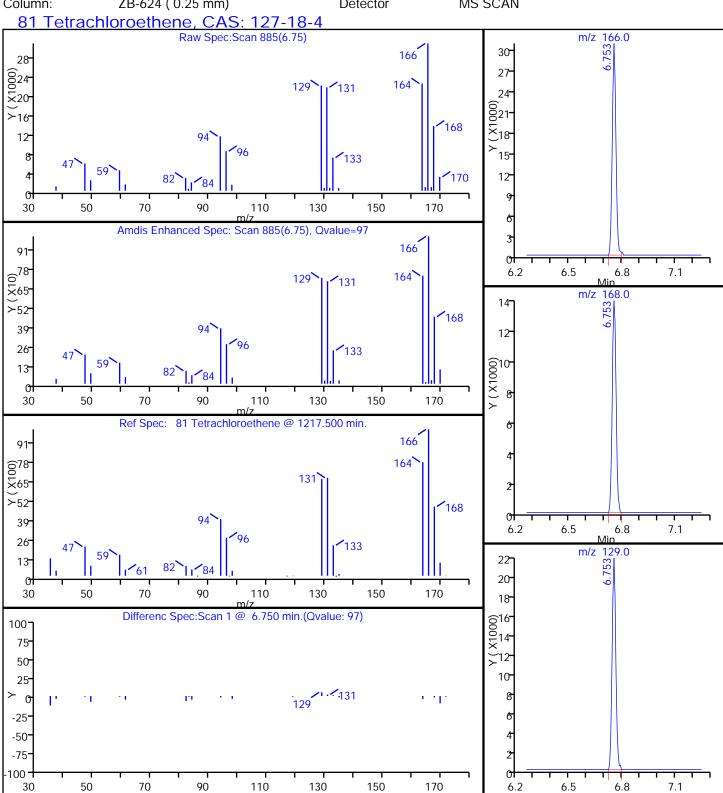
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Client ID: MW-13

Operator ID: RR ALS Bottle#: 24 Worklist Smp#: 37

Purge Vol: 5.000 mL Dil. Factor: 500.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



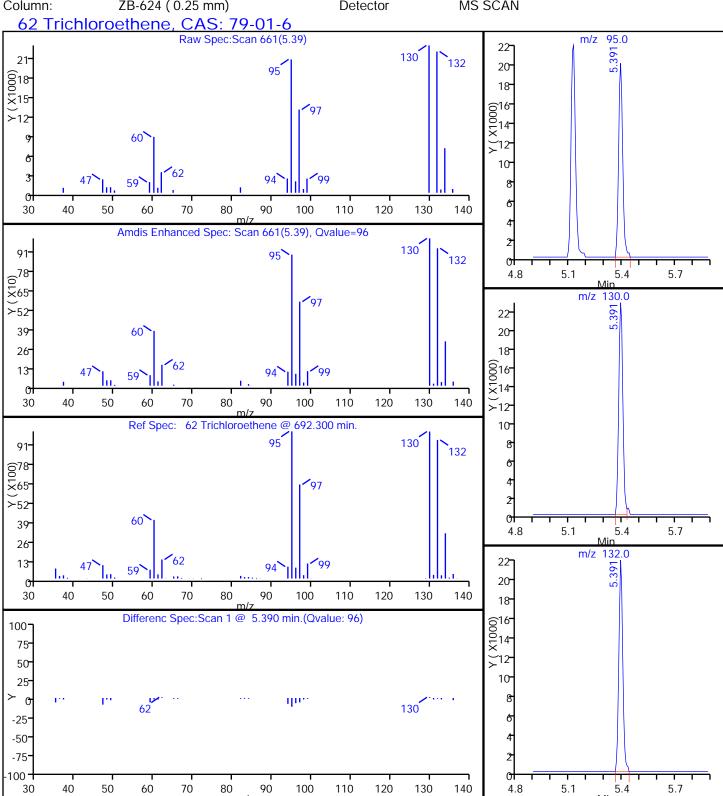
Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8825.D **Injection Date:** 29-Jan-2016 19:42:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-6 Lab Sample ID: 480-94483-6

Client ID: MW-13

Operator ID: RR ALS Bottle#: 24 Worklist Smp#: 37

Purge Vol: Dil. Factor: 5.000 mL 500.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



Report Date: 01-Feb-2016 08:55:16 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: Injection Date: 29-Jan-2016 19:42:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-6 Lab Sample ID: 480-94483-6

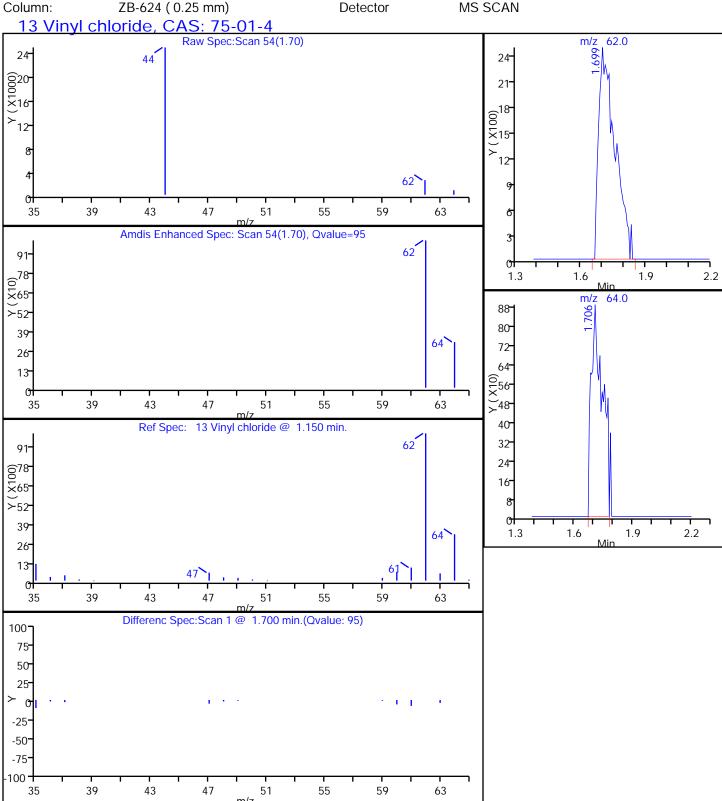
Client ID: MW-13

Operator ID: RR ALS Bottle#: 24 Worklist Smp#: 37

Purge Vol: 5.000 mL Dil. Factor: 500.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Detector MS SCAN



FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: <u>480-94483-1</u>
SDG No.:	
Client Sample ID: MW-1	Lab Sample ID: 480-94483-7
Matrix: Water	Lab File ID: Q8826.D
Analysis Method: 8260C	Date Collected: 01/28/2016 09:30
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 20:05
Soil Aliquot Vol:	Dilution Factor: 20
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analyzia Batch No · 205/50	Inita. ug/I

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		20	16
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	4.2
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan	ND		20	6.2
79-00-5	1,1,2-Trichloroethane	ND		20	4.6
75-34-3	1,1-Dichloroethane	ND		20	7.6
75-35-4	1,1-Dichloroethene	ND		20	5.8
120-82-1	1,2,4-Trichlorobenzene	ND		20	8.2
96-12-8	1,2-Dibromo-3-Chloropropane	ND		20	7.8
106-93-4	1,2-Dibromoethane	ND		20	15
95-50-1	1,2-Dichlorobenzene	ND		20	16
107-06-2	1,2-Dichloroethane	ND		20	4.2
78-87-5	1,2-Dichloropropane	ND		20	14
541-73-1	1,3-Dichlorobenzene	ND		20	16
106-46-7	1,4-Dichlorobenzene	ND		20	17
78-93-3	2-Butanone (MEK)	ND		200	26
591-78-6	2-Hexanone	ND		100	25
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		100	42
67-64-1	Acetone	ND		200	60
71-43-2	Benzene	ND		20	8.2
75-27-4	Bromodichloromethane	ND		20	7.8
75-25-2	Bromoform	ND		20	5.2
74-83-9	Bromomethane	ND		20	14
75-15-0	Carbon disulfide	ND		20	3.8
56-23-5	Carbon tetrachloride	ND		20	5.4
108-90-7	Chlorobenzene	ND		20	15
75-00-3	Chloroethane	ND		20	6.4
67-66-3	Chloroform	ND		20	6.8
74-87-3	Chloromethane	ND		20	7.0
156-59-2	cis-1,2-Dichloroethene	1200		20	16
10061-01-5	cis-1,3-Dichloropropene	ND		20	7.2
110-82-7	Cyclohexane	ND		20	3.6
124-48-1	Dibromochloromethane	ND		20	6.4
75-71-8	Dichlorodifluoromethane	ND		20	14
100-41-4	Ethylbenzene	ND		20	15
98-82-8	Isopropylbenzene	ND		20	16

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 SDG No.: Client Sample ID: MW-1 Lab Sample ID: 480-94483-7 Matrix: Water Lab File ID: Q8826.D Date Collected: 01/28/2016 09:30 Analysis Method: 8260C Date Analyzed: 01/29/2016 20:05 Sample wt/vol: 5(mL) Dilution Factor: 20 Soil Aliquot Vol: Soil Extract Vol.: _____ GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u> Level: (low/med) Low % Moisture: Analysis Batch No.: 285459 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		50	26
1634-04-4	Methyl tert-butyl ether	ND		20	3.2
108-87-2	Methylcyclohexane	ND		20	3.2
75-09-2	Methylene Chloride	ND		20	8.8
100-42-5	Styrene	ND		20	15
127-18-4	Tetrachloroethene	330		20	7.2
108-88-3	Toluene	ND		20	10
156-60-5	trans-1,2-Dichloroethene	ND		20	18
10061-02-6	trans-1,3-Dichloropropene	ND		20	7.4
79-01-6	Trichloroethene	180		20	9.2
75-69-4	Trichlorofluoromethane	ND		20	18
75-01-4	Vinyl chloride	ND		20	18
1330-20-7	Xylenes, Total	ND		40	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		66-137
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
2037-26-5	Toluene-d8 (Surr)	86		71-126
1868-53-7	Dibromofluoromethane (Surr)	91		60-140

Report Date: 01-Feb-2016 08:56:11 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8826.D Lims ID: 480-94483-A-7 Lab Sample ID: 480-94483-7

Lims ID: 480-94483-A-7 Client ID: MW-1

Sample Type: Client

Inject. Date: 29-Jan-2016 20:05:30 ALS Bottle#: 25 Worklist Smp#: 38

Purge Vol: 5.000 mL Dil. Factor: 20.0000

Sample Info: 480-94483-A-7 Misc. Info.: 480-0050272-038

Operator ID: RR Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 01-Feb-2016 08:54:04 Calib Date: 11-Jan-2016 21:55:30 Integrator: RTE ID Type: Deconvolution ID Quant Method: Internal Standard Quant By: Initial Calibration \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK051

First Level Reviewer: fortaing Date: 29-Jan-2016 20:21:47

First Level Reviewer: fortaing			D	ate:		29-Jan-201	6 20:21:47	
		RT	Adj RT	Dlt RT			OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.117	5.119	-0.002	99	81785	25.0	
* 2 Chlorobenzene-d5	82	7.410	7.406	0.004	84	157976	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.279	-0.002	95	180907	25.0	
\$ 148 Dibromofluoromethane (Surr		4.643	4.639	0.004	94	97927	22.7	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.892	4.888	0.004	0	55295	22.0	
\$ 5 Toluene-d8 (Surr)	98	6.291	6.287	0.004	93	321428	21.6	
\$ 6 4-Bromofluorobenzene (Surr	174	8.341	8.336	0.005	94	109586	23.9	
10 Dichlorodifluoromethane	85		1.432				ND	
12 Chloromethane	50		1.626				ND	
13 Vinyl chloride	62		1.712				ND	
14 Bromomethane	94		2.028				ND	
15 Chloroethane	64		2.119				ND	
17 Trichlorofluoromethane	101		2.320				ND	
22 1,1-Dichloroethene	96		2.800				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.806				ND	
23 Acetone	43		2.891				ND	
26 Carbon disulfide	76		2.983			I	ND	
27 Methyl acetate	43		3.159				ND	
30 Methylene Chloride	84		3.250			I	ND	
32 Methyl tert-butyl ether	73		3.451			1	ND	
34 trans-1,2-Dichloroethene	96	3.457	3.463	-0.006	92	2398	0.4194	
39 1,1-Dichloroethane	63		3.810			1	ND	
45 cis-1,2-Dichloroethene	96	4.266	4.272	-0.006	78	374635	59.8	
43 2-Butanone (MEK)	43		4.284			İ	ND	
50 Chloroform	83		4.521			ļ	ND	
51 1,1,1-Trichloroethane	97		4.631			I	ND	
52 Cyclohexane	56		4.655			1	ND	
55 Carbon tetrachloride	117		4.752			1	ND	
57 Benzene	78		4.910			I	ND	
58 1,2-Dichloroethane	62		4.953			I	ND	
62 Trichloroethene	95	5.391	5.391	0.000	97	50355	8.84	
			5	404 (05	_			

Report Date: 01-Feb-2016 08:56:11 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8826.D

Data File. \\CIIIOIIINA\Di	Data File: //CIIIOIIIVA/builalo/CIIIOIIData/IP59/3Q/20100129-302/2.b/Q6620.D								
		RT	Adj RT		RT			OnCol Amt	
Compound	Sig	(min.)	(min.)	(m	in.)	Q	Response	ug/L	Flags
			·					ND	
64 Methylcyclohexane	83		5.506					ND	
65 1,2-Dichloropropane	63		5.567					ND	
68 Dichlorobromomethane	83		5.786					ND	
77 trans-1,3-Dichloropropene	75		6.108					ND	
73 4-Methyl-2-pentanone (MIBK	43		6.200					ND	
74 Toluene	92		6.339					ND	
72 cis-1,3-Dichloropropene	75		6.528					ND	
79 1,1,2-Trichloroethane	83		6.674					ND	
81 Tetrachloroethene	166	6.753	6.753	0.0	000	97	92267	16.5	
80 2-Hexanone	43		6.832					ND	
83 Chlorodibromomethane	129		6.984					ND	
84 Ethylene Dibromide	107		7.069					ND	
87 Chlorobenzene	112		7.434					ND	
88 Ethylbenzene	91		7.495					ND	
90 m-Xylene & p-Xylene	106		7.586					ND	
91 o-Xylene	106		7.908					ND	
92 Styrene	104		7.921					ND	
95 Bromoform	173		8.109					ND	
94 Isopropylbenzene	105		8.188					ND	
97 1,1,2,2-Tetrachloroethane	83		8.468					ND	
111 1,3-Dichlorobenzene	146		9.222					ND	
113 1,4-Dichlorobenzene	146		9.301					ND	
116 1,2-Dichlorobenzene	146		9.611					ND	
117 1,2-Dibromo-3-Chloropropan	75		10.268					ND	
119 1,2,4-Trichlorobenzene	180		10.931					ND	
S 124 Xylenes, Total	1		30.000					ND	
Reagents:									
Q_8260_IS_00114		Amount	Added:	1.25		П	Inits: uL	Run Reager	nt
Q_8260_SURR_00107			Added:				Inits: uL	Run Reager	
Q_0200_001111_00101		, anount	, laaca.	1.23		u	into. uL	Turi Keager	

Report Date: 01-Feb-2016 08:56:11 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

 Data File:
 \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8826.D

 Injection Date:
 29-Jan-2016 20:05:30
 Instrument ID:
 HP5973Q

 Lims ID:
 480-94483-A-7
 Lab Sample ID:
 480-94483-7

Lims ID: 480-94483-A-7 Client ID: MW-1

Purge Vol: 5.000 mL

Dil. Factor: 20.0000

Operator ID:

ALS Bottle#:

Worklist Smp#:

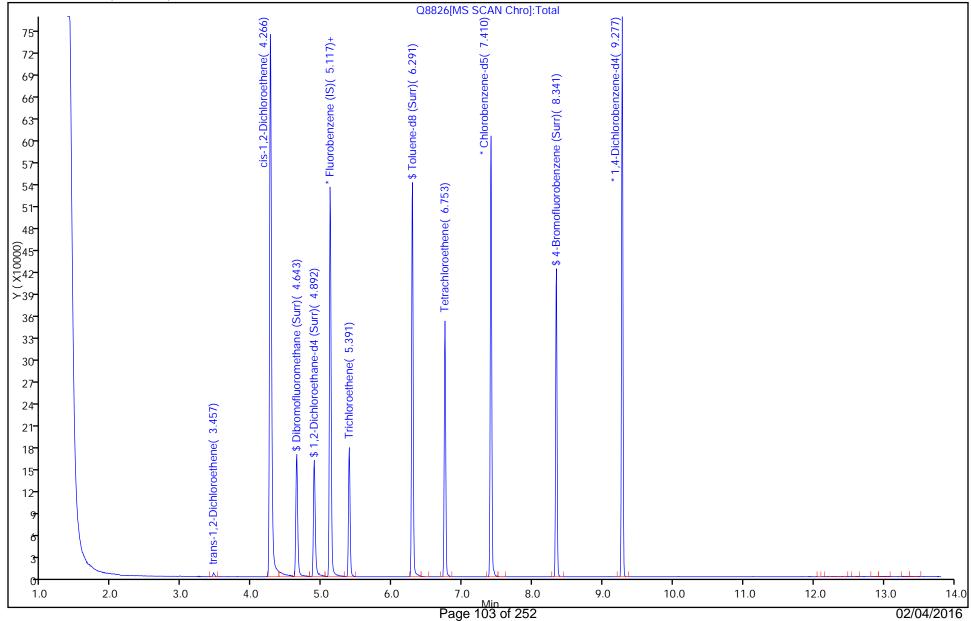
RR

38

25

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



 Data File:
 \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8826.D

 Injection Date:
 29-Jan-2016 20:05:30
 Instrument ID:
 HP5973Q

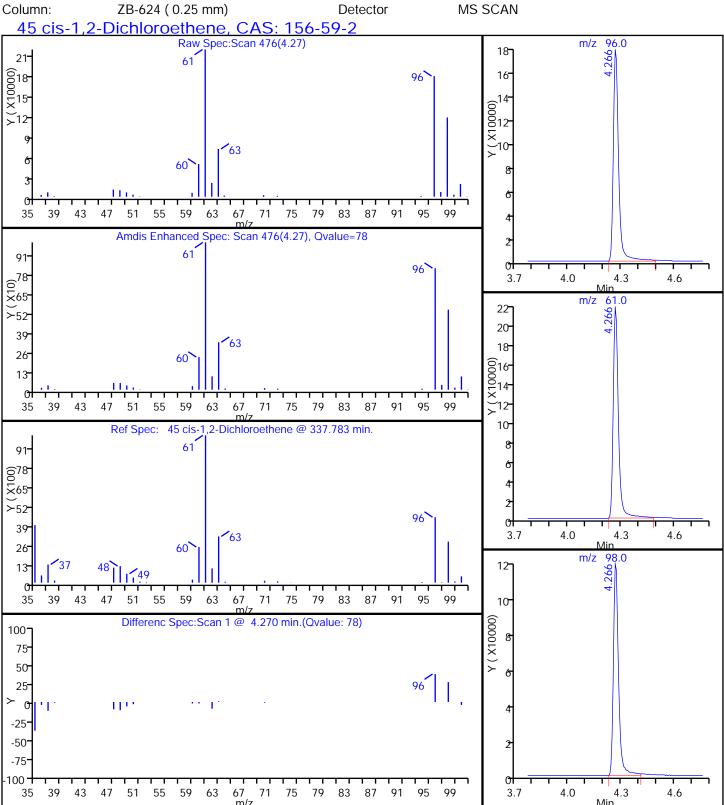
 Lims ID:
 480-94483-A-7
 Lab Sample ID:
 480-94483-7

Client ID: MW-1

Operator ID: RR ALS Bottle#: 25 Worklist Smp#: 38

Purge Vol: 5.000 mL Dil. Factor: 20.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



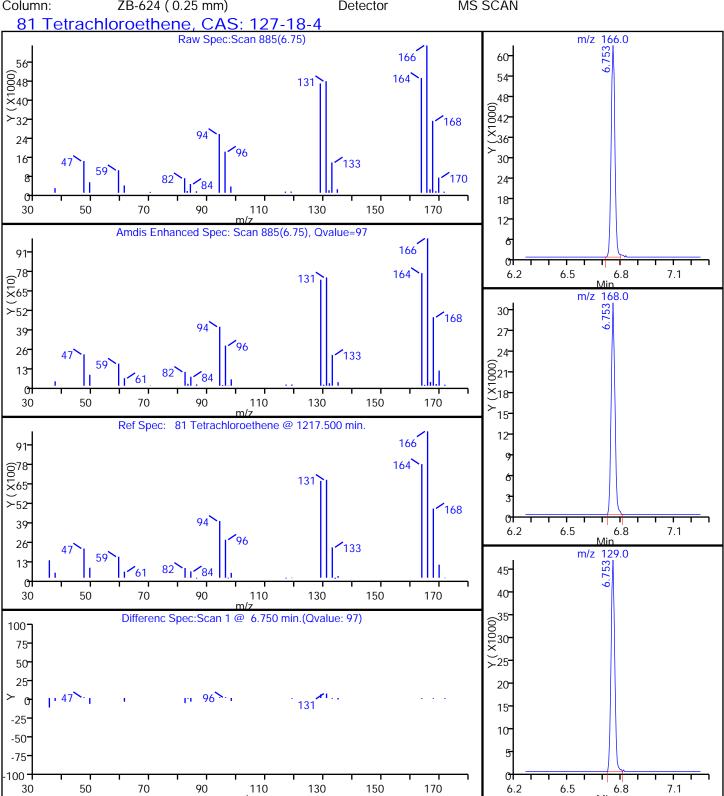
Data File: Injection Date: 29-Jan-2016 20:05:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-7 Lab Sample ID: 480-94483-7

Client ID: MW-1

Operator ID: RR ALS Bottle#: 25 Worklist Smp#: 38

Purge Vol: 5.000 mL Dil. Factor: 20.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



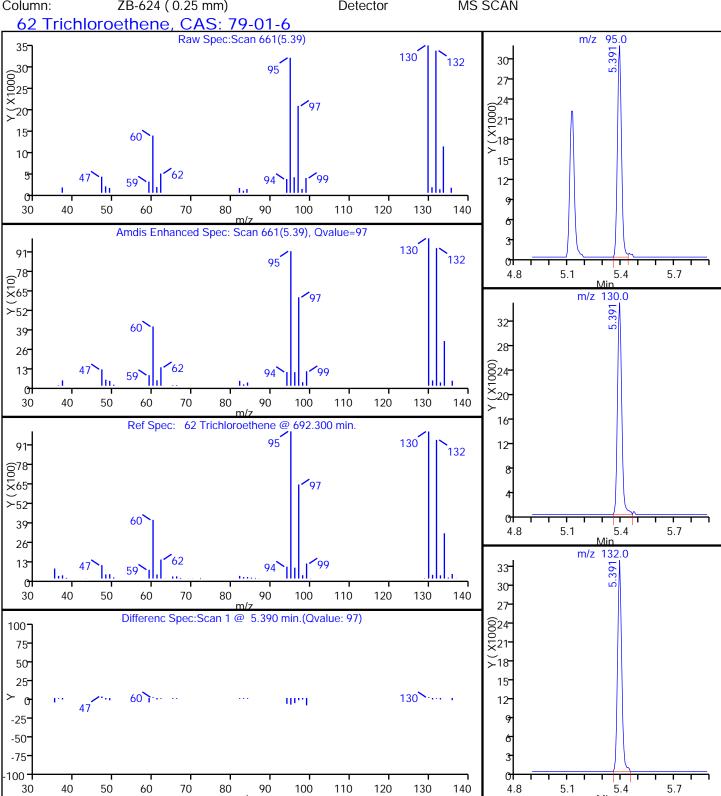
Data File: **Injection Date:** 29-Jan-2016 20:05:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-7 Lab Sample ID: 480-94483-7

Client ID: MW-1

Operator ID: RR ALS Bottle#: 25 Worklist Smp#: 38

Purge Vol: Dil. Factor: 5.000 mL 20.0000

MV - 8260C ICAL Method: Q-8260 Limit Group:



FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1
SDG No.:	
Client Sample ID: DUP-1_012816	Lab Sample ID: 480-94483-8
Matrix: Water	Lab File ID: Q8827.D
Analysis Method: 8260C	Date Collected: 01/28/2016 00:00
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 20:29
Soil Aliquot Vol:	Dilution Factor: 500
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Batch No.: 285459	Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		500	410
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	110
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		500	160
79-00-5	1,1,2-Trichloroethane	ND		500	120
75-34-3	1,1-Dichloroethane	ND		500	190
75-35-4	1,1-Dichloroethene	ND		500	150
120-82-1	1,2,4-Trichlorobenzene	ND		500	210
96-12-8	1,2-Dibromo-3-Chloropropane	ND		500	200
106-93-4	1,2-Dibromoethane	ND		500	370
95-50-1	1,2-Dichlorobenzene	ND		500	400
107-06-2	1,2-Dichloroethane	ND		500	110
78-87-5	1,2-Dichloropropane	ND		500	360
541-73-1	1,3-Dichlorobenzene	ND		500	390
106-46-7	1,4-Dichlorobenzene	ND		500	420
78-93-3	2-Butanone (MEK)	ND		5000	660
591-78-6	2-Hexanone	ND		2500	620
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		2500	1100
67-64-1	Acetone	ND		5000	1500
71-43-2	Benzene	ND		500	210
75-27-4	Bromodichloromethane	ND		500	200
75-25-2	Bromoform	ND		500	130
74-83-9	Bromomethane	ND		500	350
75-15-0	Carbon disulfide	ND		500	95
56-23-5	Carbon tetrachloride	ND		500	140
108-90-7	Chlorobenzene	ND		500	380
75-00-3	Chloroethane	ND		500	160
67-66-3	Chloroform	ND		500	170
74-87-3	Chloromethane	ND		500	180
156-59-2	cis-1,2-Dichloroethene	45000		500	410
10061-01-5	cis-1,3-Dichloropropene	ND		500	180
110-82-7	Cyclohexane	ND		500	90
124-48-1	Dibromochloromethane	ND		500	160
75-71-8	Dichlorodifluoromethane	ND		500	340
100-41-4	Ethylbenzene	ND		500	370
98-82-8	Isopropylbenzene	ND		500	400

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Analysis Method: 8260C Date Collected: 01/28/2016 00:00

Sample wt/vol: 5 (mL) Date Analyzed: 01/29/2016 20:29

Soil Aliquot Vol: Dilution Factor: 500

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

Soil Extract Vol.: _____ GC Column: <u>ZB-624 (60)</u> ID: <u>0.25(mm)</u>

% Moisture: _____ Level: (low/med) <u>Low</u>

Analysis Batch No.: 285459 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		1300	650
1634-04-4	Methyl tert-butyl ether	ND		500	80
108-87-2	Methylcyclohexane	ND		500	80
75-09-2	Methylene Chloride	ND		500	220
100-42-5	Styrene	ND		500	370
127-18-4	Tetrachloroethene	4400		500	180
108-88-3	Toluene	ND		500	260
156-60-5	trans-1,2-Dichloroethene	ND		500	450
10061-02-6	trans-1,3-Dichloropropene	ND		500	190
79-01-6	Trichloroethene	2800		500	230
75-69-4	Trichlorofluoromethane	ND		500	440
75-01-4	Vinyl chloride	1200		500	450
1330-20-7	Xylenes, Total	ND		1000	330

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		66-137
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
2037-26-5	Toluene-d8 (Surr)	86		71-126
1868-53-7	Dibromofluoromethane (Surr)	94		60-140

Report Date: 01-Feb-2016 08:57:12 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8827.D \\Lims ID: 480-94483-A-8 Lab Sample ID: 480-94483-8

Client ID: DUP-1_012816

Sample Type: Client

Inject. Date: 29-Jan-2016 20:29:30 ALS Bottle#: 26 Worklist Smp#: 39

Purge Vol: 5.000 mL Dil. Factor: 500.0000

Sample Info: 480-94483-A-8 Misc. Info.: 480-0050272-039

Operator ID: RR Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:01-Feb-2016 08:57:12Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK051

First Level Reviewer: fortaing Date: 29-Jan-2016 20:59:07

First Level Reviewer: fortaing			D.	ate:		29-Jan-201	6 20:59:07	
		RT	Adj RT	Dlt RT			OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.120	5.119	0.001	99	83436	25.0	
* 2 Chlorobenzene-d5	82	7.406	7.406	0.000	85	156038	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.279	9.279	0.000	95	177493	25.0	
\$ 148 Dibromofluoromethane (Surr		4.646	4.639	0.007	94	103354	23.5	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.889	4.888	0.001	0	56231	22.0	
\$ 5 Toluene-d8 (Surr)	98	6.287	6.287	0.000	93	317344	21.6	
\$ 6 4-Bromofluorobenzene (Surr	174	8.337	8.336	0.001	92	110412	24.4	
10 Dichlorodifluoromethane	85		1.432				ND	
12 Chloromethane	50		1.626				ND	
13 Vinyl chloride	62	1.702	1.712	-0.010	95	12630	2.32	
14 Bromomethane	94		2.028				ND	
15 Chloroethane	64		2.119				ND	
17 Trichlorofluoromethane	101		2.320				ND	
22 1,1-Dichloroethene	96		2.800				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.806				ND	
23 Acetone	43		2.891				ND	
26 Carbon disulfide	76		2.983			I	ND	
27 Methyl acetate	43		3.159			I	ND	
30 Methylene Chloride	84	3.253	3.253	0.003	1	671	0.1090	
32 Methyl tert-butyl ether	73		3.451			Ī	ND	
34 trans-1,2-Dichloroethene	96	3.460	3.463	-0.003	91	1742	0.2987	
39 1,1-Dichloroethane	63		3.810			Ī	ND	
45 cis-1,2-Dichloroethene	96	4.268	4.272	-0.004	78	570782	89.4	
43 2-Butanone (MEK)	43		4.284			Ī	ND	
50 Chloroform	83		4.521			Ī	ND	
51 1,1,1-Trichloroethane	97		4.631			I	ND	
52 Cyclohexane	56		4.655			I	ND	
55 Carbon tetrachloride	117		4.752			I	ND	
57 Benzene	78		4.910			I	ND	
58 1,2-Dichloroethane	62		4.953			1	ND	
62 Trichloroethene	95	5.394	5.391	0.003	96	32521	5.59	
			_	400 (05	_			_

Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\Cnromina\B	Data File: \\Cnrom\varable{\chi}\Chrom\varabla\tank\tank\tank\tank\tank\tank\tank\tan							
Common de	C:-	RT (min.)	Adj RT			D	OnCol Amt	Ela ma
Compound	Sig	(min.)	(min.)	(min.)) Q	Response	ug/L	Flags
	0.0		· ·				NB	
64 Methylcyclohexane	83		5.506				ND	
65 1,2-Dichloropropane	63		5.567				ND	
68 Dichlorobromomethane	83		5.786				ND	
77 trans-1,3-Dichloropropene	75		6.108				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.200				ND	
74 Toluene	92		6.339				ND	
72 cis-1,3-Dichloropropene	75		6.528				ND	
79 1,1,2-Trichloroethane	83		6.674				ND	
81 Tetrachloroethene	166	6.756	6.753	0.003	97	48726	8.80	
80 2-Hexanone	43		6.832				ND	
83 Chlorodibromomethane	129		6.984				ND	
84 Ethylene Dibromide	107		7.069				ND	
87 Chlorobenzene	112		7.434				ND	
88 Ethylbenzene	91		7.495				ND	
90 m-Xylene & p-Xylene	106		7.586				ND	
91 o-Xylene	106		7.908				ND	
92 Styrene	104		7.921				ND	
95 Bromoform	173		8.109				ND	
94 Isopropylbenzene	105		8.188				ND	
97 1,1,2,2-Tetrachloroethane	83		8.468				ND	
111 1,3-Dichlorobenzene	146		9.222				ND	
113 1,4-Dichlorobenzene	146		9.301				ND	
116 1,2-Dichlorobenzene	146		9.611				ND	
117 1,2-Dibromo-3-Chloropropan	75		10.268				ND	
119 1,2,4-Trichlorobenzene	180		10.931				ND	
S 124 Xylenes, Total	1		30.000				ND	
Reagents:								
Q_8260_IS_00114		Amount	Added:	1.25		Units: uL	Run Reage	nt
Q_8260_SURR_00107			Added:			Units: uL	Run Reage	
Q_0200_301(1_00101		ATTIOUTIL	, laucu.	1.20		OTINS, UL	Kuii Keagei	11

Report Date: 01-Feb-2016 08:57:12 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

 Data File:
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 Injection Date:
 29-Jan-2016 20:29:30
 Instrument ID:
 HP5973Q

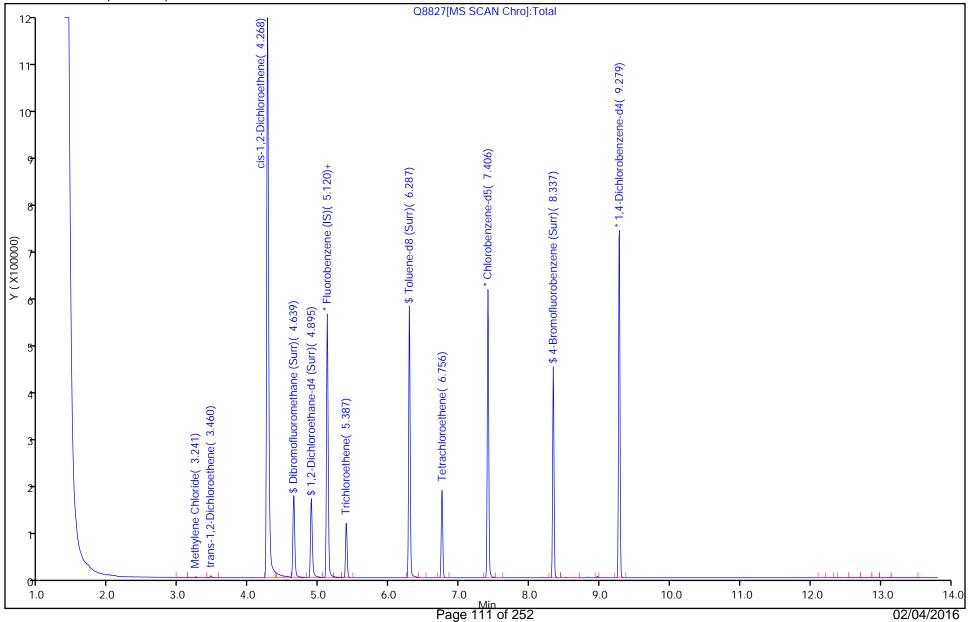
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 480-94483-A-8
 Lab Sample ID:
 480-94483-8

Client ID: DUP-1_012816

 Purge Vol:
 5.000 mL
 Dil. Factor:
 500.0000
 ALS Bottle#:
 26

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



RR

39

Operator ID:

Worklist Smp#:

 Data File:
 \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8827.D

 Injection Date:
 29-Jan-2016 20:29:30
 Instrument ID:
 HP5973Q

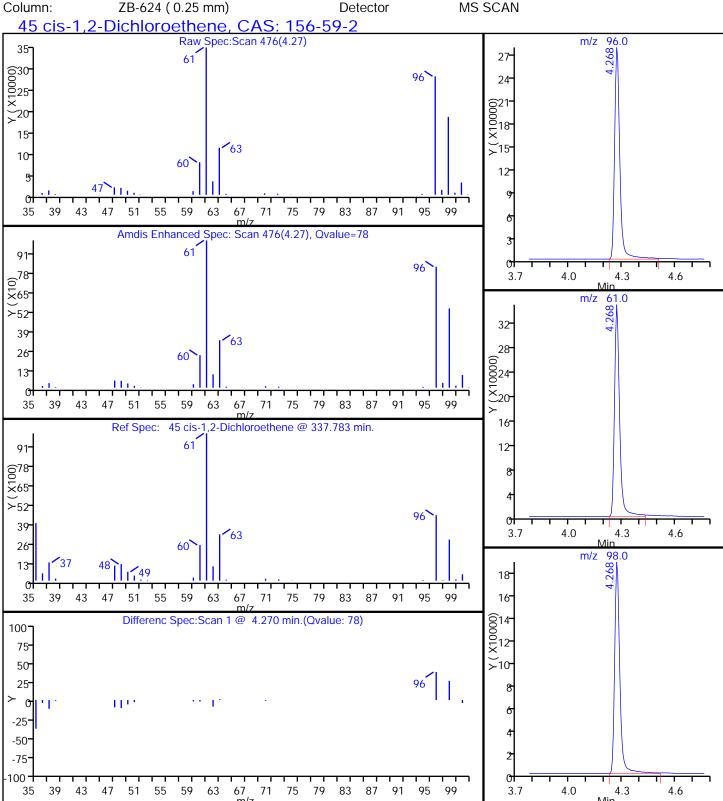
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 480-94483-A-8
 Lab Sample ID:
 480-94483-8

Client ID: DUP-1_012816

Operator ID: RR ALS Bottle#: 26 Worklist Smp#: 39

Purge Vol: 5.000 mL Dil. Factor: 500.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



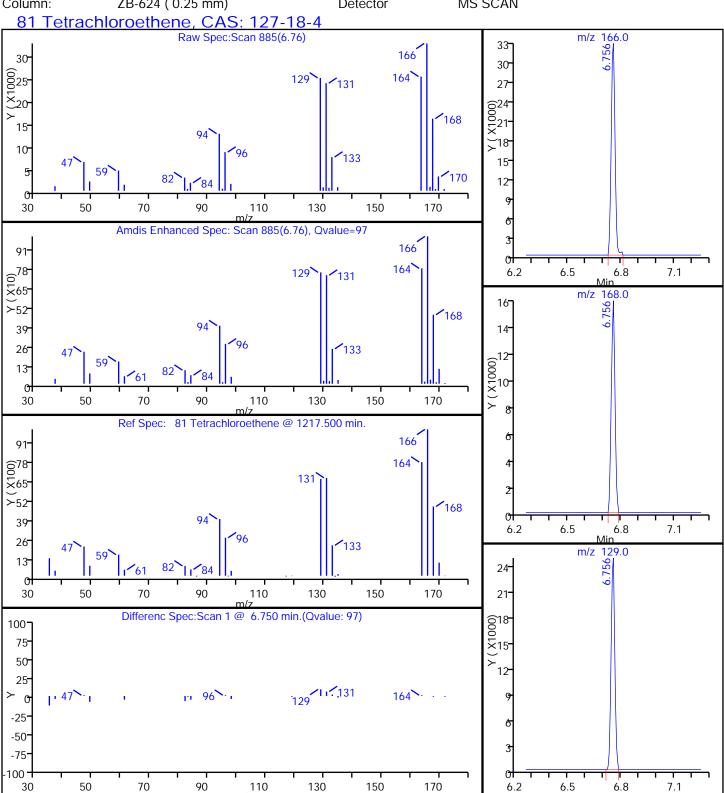
Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8827.D Injection Date: 29-Jan-2016 20:29:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-8 Lab Sample ID: 480-94483-8

Client ID: DUP-1_012816

Operator ID: ALS Bottle#: 26 Worklist Smp#: 39

Purge Vol: 5.000 mL Dil. Factor: 500.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



TestAmerica Buffalo

 Data File:
 \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8827.D

 Injection Date:
 29-Jan-2016 20:29:30
 Instrument ID:
 HP5973Q

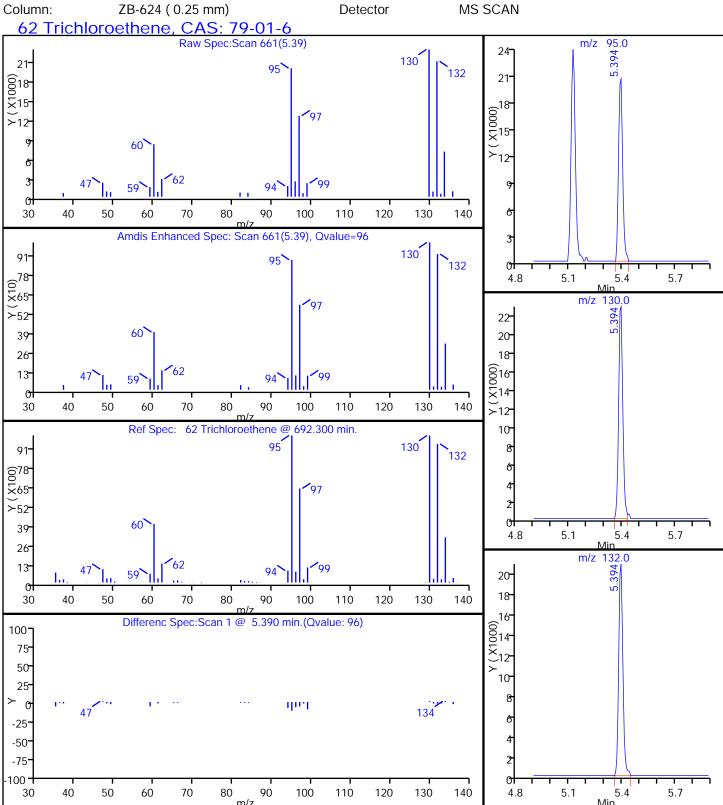
 Lims ID:
 480-94483-A-8
 Lab Sample ID:
 480-94483-8

Client ID: DUP-1_012816

Operator ID: RR ALS Bottle#: 26 Worklist Smp#: 39

Purge Vol: 5.000 mL Dil. Factor: 500.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL



Report Date: 01-Feb-2016 08:57:12 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

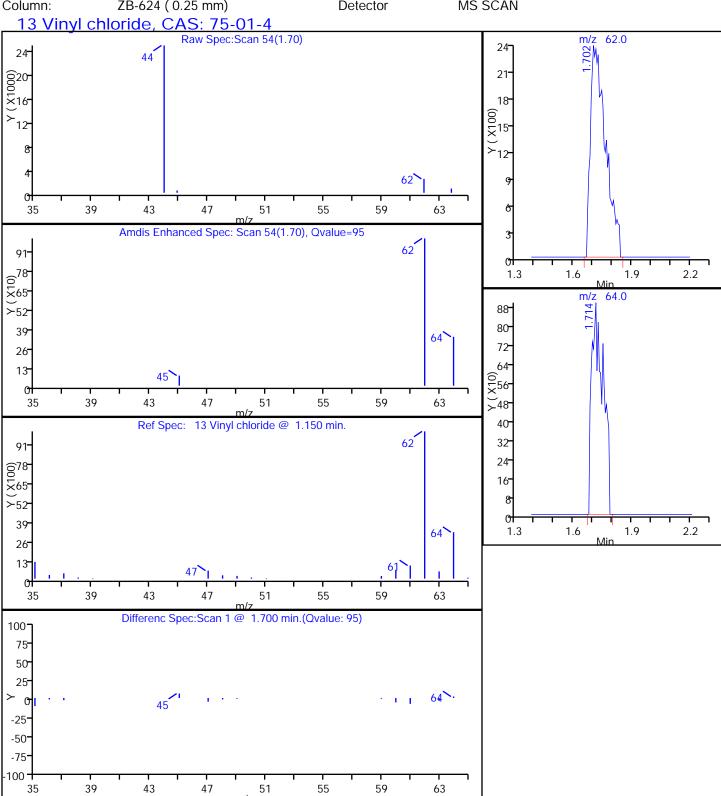
Data File: Injection Date: 29-Jan-2016 20:29:30 Instrument ID: HP5973Q Lims ID: 480-94483-A-8 Lab Sample ID: 480-94483-8

Client ID: DUP-1_012816

Operator ID: ALS Bottle#: 26 Worklist Smp#: 39

Purge Vol: 5.000 mL Dil. Factor: 500.0000

Method: MV - 8260C ICAL Q-8260 Limit Group:



FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1
SDG No.:	
Client Sample ID: TRIP BLANK	Lab Sample ID: 480-94483-9
Matrix: Water	Lab File ID: Q8828.D
Analysis Method: 8260C	Date Collected: 01/28/2016 00:00
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 20:52
Soil Aliquot Vol:	Dilution Factor: 1
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Batch No.: 285459	Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

 Lab Name: TestAmerica Buffalo
 Job No.: 480-94483-1

 SDG No.:
 Client Sample ID: TRIP BLANK
 Lab Sample ID: 480-94483-9

 Matrix: Water
 Lab File ID: Q8828.D

 Analysis Method: 8260C
 Date Collected: 01/28/2016 00:00

 Sample wt/vol: 5(mL)
 Date Analyzed: 01/29/2016 20:52

 Soil Aliquot Vol:
 Dilution Factor: 1

 Soil Extract Vol.:
 GC Column: ZB-624 (60) ID: 0.25 (mm)

 % Moisture:
 Level: (low/med) Low

Units: ug/L

Analysis Batch No.: 285459

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-137
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
2037-26-5	Toluene-d8 (Surr)	88		71-126
1868-53-7	Dibromofluoromethane (Surr)	92		60-140

Report Date: 01-Feb-2016 08:57:26 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8828.D Lims ID: 480-94483-A-9 Lab Sample ID: 480-94483-9

Client ID: TRIP BLANK

Sample Type: Client

Inject. Date: 29-Jan-2016 20:52:30 ALS Bottle#: 27 Worklist Smp#: 40

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: 480-94483-A-9 Misc. Info.: 480-0050272-040

Operator ID: RR Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:01-Feb-2016 08:57:12Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK051

First Level Reviewer: fortaing Date: 29-Jan-2016 21:10:58

First Level Reviewer: fortaing			Date:			29-Jan-2016 21:10:58			
		RT	Adj RT	Dlt RT			OnCol Amt		
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags	
* 147 Fluorobenzene (IS)	70	5.117	5.119	-0.002	99	80453	25.0		
* 2 Chlorobenzene-d5	82	7.410	7.406	0.004	84	151407	25.0		
* 3 1,4-Dichlorobenzene-d4	152	9.276	9.279	-0.003	95	170348	25.0		
\$ 148 Dibromofluoromethane (Surr		4.643	4.639	0.004	93	97459	23.0		
\$ 41,2-Dichloroethane-d4 (Sur	67	4.892	4.888	0.004	0	54998	22.3		
\$ 5 Toluene-d8 (Surr)	98	6.291	6.287	0.004	93	312139	21.9		
\$ 6 4-Bromofluorobenzene (Surr	174	8.340	8.336	0.004	92	106075	24.2		
10 Dichlorodifluoromethane	85		1.432			ND			
12 Chloromethane	50		1.626			ND			
13 Vinyl chloride	62		1.712			ND			
14 Bromomethane	94		2.028			ND			
15 Chloroethane	64		2.119			ND			
17 Trichlorofluoromethane	101		2.320			ND			
22 1,1-Dichloroethene	96		2.800			ND			
21 1,1,2-Trichloro-1,2,2-trif	101		2.806			ND			
23 Acetone	43		2.891			ND			
26 Carbon disulfide	76		2.983			ND			
27 Methyl acetate	43		3.159			ND			
30 Methylene Chloride	84		3.250			ND			
32 Methyl tert-butyl ether	73		3.451			ND			
34 trans-1,2-Dichloroethene	96		3.463			ND			
39 1,1-Dichloroethane	63		3.810			Ī	ND		
45 cis-1,2-Dichloroethene	96	4.272	4.272	0.000	73	2181	0.3541		
43 2-Butanone (MEK)	43		4.284			ND			
50 Chloroform	83		4.521			ND			
51 1,1,1-Trichloroethane	97		4.631			ND			
52 Cyclohexane	56		4.655			ND			
55 Carbon tetrachloride	117		4.752			ND			
57 Benzene	78		4.910			1	ND		
58 1,2-Dichloroethane	62		4.953			1	ND		
62 Trichloroethene	95		5.391			1	ND		
D 440 (050									

Report Date: 01-Feb-2016 08:57:26 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8828.D

Data File. \(\C\Ti\O\Ti\NA\D\)	uiiaiu\	CHIUHDA	ia\F59/3	2/201001	27-3L	1212.0140020	.U	
Campanind	C:	RT	Adj RT	Dlt RT		Deemana	OnCol Amt	Floor
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	Flags
64 Mothylcyclohovano	83		5.506				ND	
64 Methylcyclohexane	63		5.567				ND ND	
65 1,2-Dichloropropane 68 Dichlorobromomethane								
	83		5.786				ND	
77 trans-1,3-Dichloropropene	75 42		6.108				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.200				ND	
74 Toluene	92		6.339				ND	
72 cis-1,3-Dichloropropene	75		6.528				ND	
79 1,1,2-Trichloroethane	83		6.674				ND	
81 Tetrachloroethene	166		6.753				ND	
80 2-Hexanone	43		6.832				ND	
83 Chlorodibromomethane	129		6.984				ND	
84 Ethylene Dibromide	107		7.069				ND	
87 Chlorobenzene	112		7.434				ND	
88 Ethylbenzene	91		7.495				ND	
90 m-Xylene & p-Xylene	106		7.586				ND	
91 o-Xylene	106		7.908				ND	
92 Styrene	104		7.921				ND	
95 Bromoform	173		8.109				ND	
94 Isopropylbenzene	105		8.188				ND	
97 1,1,2,2-Tetrachloroethane	83		8.468				ND	
111 1,3-Dichlorobenzene	146		9.222				ND	
113 1,4-Dichlorobenzene	146		9.301				ND	
116 1,2-Dichlorobenzene	146		9.611				ND	
117 1,2-Dibromo-3-Chloropropan	75		10.268				ND	
119 1,2,4-Trichlorobenzene	180		10.931				ND	
S 124 Xylenes, Total	1		30.000				ND	
Reagents:								
Q_8260_IS_00114		Amount	Added: 1	.25	11	nits: uL	Run Reager	nt
Q_8260_SURR_00107			Added: 1			nits: uL	Run Reager	
@_0200_001((_00107		, arroant	,	0	U	into. aL	. tarr reager	

Report Date: 01-Feb-2016 08:57:26 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: Injection Date: 29-Jan-2016 20:52:30 Instrument ID: HP5973Q Lab Sample ID: 480-94483-9

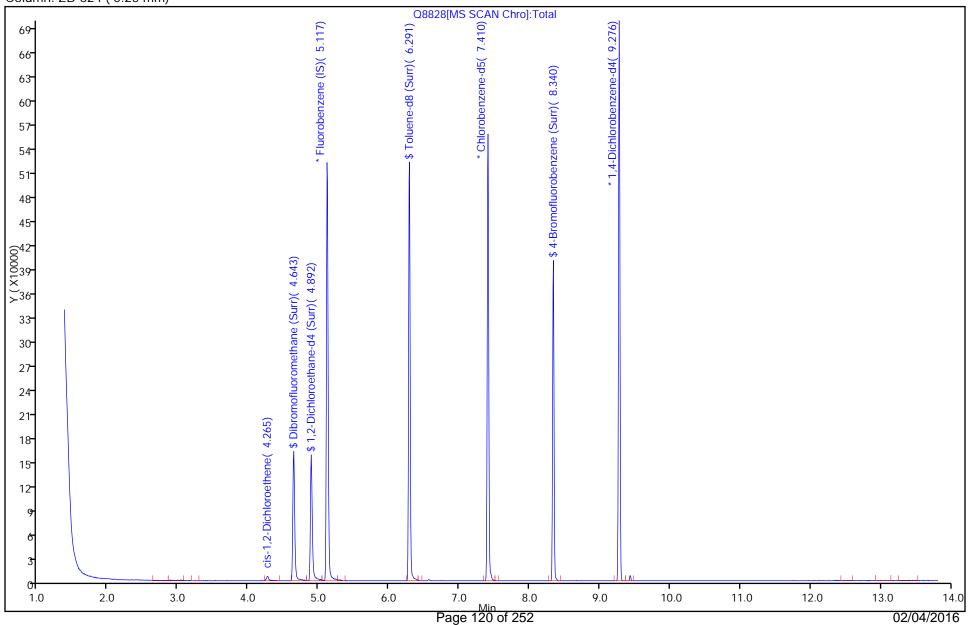
Lims ID: 480-94483-A-9 Client ID: TRIP BLANK

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Q-8260 Limit Group: MV - 8260C ICAL Method:

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

RR

40

27

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: HP5973Q GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/11/2016 16:06 Calibration End Date: 01/11/2016 18:50 Calibration ID: 26041

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-283036/5	Q8376.D
Level 2	IC 480-283036/6	Q8377.D
Level 3	IC 480-283036/7	Q8378.D
Level 4	IC 480-283036/8	Q8379.D
Level 5	IC 480-283036/9	Q8380.D
Level 6	ICIS 480-283036/10	Q8381.D
Level 7	IC 480-283036/11	Q8382.D
Level 8	IC 480-283036/12	Q8383.D

ANALYTE			RRF			CURVE		COEFFICIE	NT #	MIN RRF	%RSD	#	MAX	R^2	#	MIN R^2
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	TYPE	В	M1	M2				%RSD	OR COD		OR COD
	LVL 6	LVL 7	LVL 8													
Dichlorodifluoromethane	+++++	1.4552	1.3715	1.1932	1.2132	Ave		1.3186		0.1000	7.3		20.0			
	1.3877															
Chloromethane	1.8342			1.7795	1.8438	Ave		1.7953		0.1000	12.5		20.0			
	1.7685	1.5749														
Vinyl chloride	+++++			1.5923	1.6720	Ave		1.6345		0.1000	6.9		20.0			
	1.7277	1.5726	1.4376													
Butadiene	+++++	1.3936	1.6146	1.4859	1.5017	Ave		1.4466			8.6		20.0			
	1.5239	1.3785	1.2284													
Bromomethane	+++++	0.5808	0.7687	0.6935	0.6973	Ave		0.7611		0.1000	16.6		20.0			
	0.9252	0.9262	0.7357													
Chloroethane	+++++	0.5986	0.7110	0.6426	0.7153	Ave		0.7110		0.1000	13.0		20.0			
	0.8126	0.8495	0.6472													ļ
Trichlorofluoromethane	++++	1.9303	2.1304	1.9685	2.1504	Ave		2.0628		0.1000	6.6		20.0			
	2.2768	2.0845	1.8987													
Dichlorofluoromethane	+++++	2.1361	2.4507	2.2273	2.4172	Ave		2.3131			5.9		20.0			
	2.4798	2.2944	2.1860													ļ
Ethyl ether	+++++	1.6215	1.3958	1.3997	1.5725	Ave		1.4309			9.8		20.0			
	1.4958	1.2917	1.2392													ļ
Acrolein	+++++	0.3871	0.3823	0.3668	0.4012	Ave		0.3746			5.5		20.0			
	0.3863	0.3567	0.3419													ļ
1,1-Dichloroethene	+++++	1.8726	1.5170	1.6030	1.6533	Ave		1.5853		0.1000	10.7		20.0			
	1.6543	1.4499	1.3468													ļ
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	1.7078	1.4162	1.5499	1.5978	Ave		1.4524		0.1000	13.7		20.0			
	1.4894	1.2871	1.1186													ļ
Acetone	+++++	1.0584	0.9965	0.9210	0.9812	Ave		0.8920		0.1000	14.9		20.0			
	0.8330	0.7128	0.7414													ļ
Iodomethane	+++++	3.4595	2.9262	3.0108	3.1832	Ave		3.0070			9.8		20.0			
	3.1471	2.7629	2.5590													

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: HP5973Q GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N

ANALYTE			RRF			CURVE		COEFFICIE	ENT #	MIN RRF	%RSD	 MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	TYPE	В	M1	M2			*KSD	OR COD		OR COD
Carbon disulfide	+++++ 5.3497	5.9589 4.7484		5.0985	5.2854	Ave		5.0976		0.1000	10.6	20.0			
Allyl chloride	+++++ 2.6613	3.0857 2.2647	2.7346	2.6022	2.7471	Ave		2.5813			14.0	20.0			
Methyl acetate	1.7268 2.1151	2.4816 1.9054		2.1099	2.2158	Ave		2.0662		0.1000	13.6	20.0			
Methylene Chloride	1.9259 1.8221	2.3457		1.8352	1.8828			1.8447		0.1000	13.7	20.0			
2-Methyl-2-propanol	+++++ 0.4303	0.5829 0.3425		0.5244	0.5703	Ave		0.4927			18.1	20.0			
Methyl tert-butyl ether	++++ 5.7724			5.5980	5.9524	Ave		5.6044		0.1000	10.9	20.0			
trans-1,2-Dichloroethene	+++++ 1.8241	2.0747 1.5999		1.7759	1.8237	Ave		1.7476		0.1000	11.8	20.0			
Acrylonitrile	0.7946 1.0598	1.2143		1.0393	1.1069	Ave		1.0165			14.2	20.0			
Hexane	+++++ 2.3972	2.7491 2.2143		2.4358	2.3494	Ave		2.3616			9.9	20.0			
1,1-Dichloroethane	++++ 3.0927	3.4574 2.6995		3.0242	3.1870	Ave		2.9989		0.2000	10.0	20.0			
Vinyl acetate	+++++ 4.1413	4.5381 3.7679		4.1346	4.3270	Ave		4.0612			9.3	20.0			
2,2-Dichloropropane	+++++ 2.2831	2.6062 1.8956		2.2264	2.2352	Ave		2.1495			14.3	20.0			
cis-1,2-Dichloroethene	+++++ 1.9937		1.8893 1.6039	1.9317	2.0285	Ave		1.9140		0.1000	10.3	20.0			
2-Butanone (MEK)	+++++ 1.3242	1.5847 1.2317	1.1678					1.3588		0.1000	10.2	20.0			
Chlorobromomethane	+++++ 1.0361	1.1172 0.9377				Ave		1.0020			8.2	20.0			
Tetrahydrofuran	+++++ 0.9834	1.1252 0.9030		0.9996	1.0195	Ave		0.9902			8.6	20.0			
Chloroform	+++++ 2.9830	3.4812 2.6151	2.4328		2.9510			2.8882		0.2000	11.4	20.0			
1,1,1-Trichloroethane	+++++ 2.5569	2.7057 2.2829	2.0842	2.4253				2.4149		0.1000	8.4	20.0			
Cyclohexane	+++++ 3.0603	3.4321	2.9400	3.0100	3.0270	Ave		2.9097		0.1000	12.7	20.0			
Carbon tetrachloride	+++++ 2.2666		1.9072 1.9697	2.0415	2.1211	Ave		2.0932		0.1000	6.2	20.0			

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: HP5973Q GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

ANALYTE			RRF			CURVE		COEFFICIE	ENT	# MIN RRF	%RSD		MAX	R^2	# 1	MIN R^2
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	TYPE	В	M1	M2			1 1	RSD	OR COD		OR COD
	LVL 6	LVL 7	LVL 8													
1,1-Dichloropropene	++++	2.6342	2.2140	2.2932	2.2770	Ave		2.2667			8.8		20.0			
	2.3301	2.1298														
Isobutyl alcohol	+++++	0.2214		0.1940	0.2176	Ave		0.1865			17.5		20.0			
	0.1688	0.1311														
Benzene	++++	7.5685		6.4807	6.5322	Ave		6.3315		0.5000	11.4		20.0			
	6.4135															
1,2-Dichloroethane	2.1785	2.7403		2.3746	2.4241	Ave		2.3311		0.1000	9.3		20.0			
	2.4032	2.1535														
n-Heptane	++++			2.0693	1.9250	Ave		2.0770			11.9		20.0			
	2.1896	2.2094														
Trichloroethene	+++++	2.0448		1.7320	1.7493	Ave		1.7421		0.2000	8.9		20.0			
	1.7893			0 5005	0.0100	_				0.1000			000			
Methylcyclohexane	+++++	3.1939		2.7987	2.8480	Ave		2.7985		0.1000	8.4		20.0			
	2.8874	2.6427		1 1010	1 5006	_		1 5000		0.1000			000			
1,2-Dichloropropane	+++++			1.4943	1.5086	Ave		1.5093		0.1000	8.0		20.0			
71	1.5540			1 0 6 4 1	1 1 1 2 2	_		1 1005		0 1000	6 0		000			
Dibromomethane	+++++	1.2346		1.0641	1.1433	Ave		1.1025		0.1000	6.8		20.0			
1,4-Dioxane	1.1451			0.0173	0.0170			0.0144			15.5		20.0			
1,4-Dioxane	0.0131	0.0137		0.01/3	0.0170	Ave		0.0144			15.5		20.0			
Bromodichloromethane	+++++			1.8911	1.9997	7770		1.9508		0.2000	6.0		20.0			
BIOMODICHIOIOMECHANE	2.0969			1.0911	1.3331	Ave		1.9500		0.2000	0.0		20.0			
2-Chloroethyl vinyl ether	++++	1.0365		0.9289	0.9531	Δττο		0.9896			8.4		20.0			
Z chiolocchyl vinyl cenel	1.0097			0.5205	0.3331	2100		0.3030			0.1		20.0			
trans-1,3-Dichloropropene	+++++			1 1617	1.2777	Ave		1.2418		0.1000	5.0		20.0			
crans 1,3 Brentoropropene	1.2860			1.1017	1.2///	1110		1.2110		0.1000	0.0		20.0			
4-Methyl-2-pentanone (MIBK)	+++++	1.5575		1.3614	1.4280	Ave		1.3049		0.1000	16.3		20.0			
,	1.3032															
Toluene	++++	2.4289		1.9662	2.0687	Ave		2.0333		0.4000	9.5		20.0			
	1.9914															
cis-1,3-Dichloropropene	+++++			1.8233	1.9171	Ave		1.9655		0.2000	10.1		20.0			
, , , ,	2.0527	2.0853	2.1475													
Ethyl methacrylate	+++++	1.1394		1.0969	1.1434	Ave		1.1024			4.9		20.0			
	1.1333															
1,1,2-Trichloroethane	+++++	0.7208		0.5694	0.6200	Ave		0.6086		0.1000	8.6		20.0			
	0.5982	0.5977	0.5798													
Tetrachloroethene	+++++	1.0444	0.8720	0.8756	0.8909	Ave		0.8866		0.2000	8.4		20.0			
	0.8728	0.8411	0.8096													
1,3-Dichloropropane	+++++			1.1972	1.2621	Ave		1.2366			4.8		20.0			
	1.2184	1.2348	1.1973			1										

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: HP5973Q GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/11/2016 16:06 Calibration End Date: 01/11/2016 18:50 Calibration ID: 26041

ANALYTE			RRF			CURVE		COEFFICIE	NT #	MIN RRF	%RSD		AX SD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	TIPE	В	M1	M2			1 61	SD	OR COD		OR COD
	LVL 6	LVL 7	LVL 8												Ш	
2-Hexanone	++++	1.1424	1.0058	0.9721	0.9686	Ave		0.9232		0.1000	16.1	2	0.0			
	0.8717	0.8273														
Dibromochloromethane	++++	0.7997		0.7601	0.8463	Ave		0.8266		0.1000	8.6	2	0.0		П	
	0.8752														\perp	
1,2-Dibromoethane	+++++	0.8859		0.7824	0.8166	Ave		0.8131			4.8	2	0.0			
	0.8105	0.8209	0.8158												\vdash	
Chlorobenzene	+++++	2.6702		2.2293	2.2789	Ave		2.2636		0.5000	8.6	2	0.0		1	
7.1	2.2141	2.1677		0 7105	2 0010	_		2 6761		0 1000	11 0				\vdash	
Ethylbenzene	+++++			3.7125	3.8019	Ave		3.6761		0.1000	11.3	2	0.0		1	
1,1,1,2-Tetrachloroethane	3.6603	3.4480 0.8949		0.8241	0.8902	7		0.8484			5.7	H -	0.0		\vdash	
1,1,1,2-Tetrachioroethane	0.8965			0.8241	0.8902	Ave		0.8484			3.7	2	0.0		1	
m,p-Xylene	+++++	1.7904		1.4918	1.5464	7.170		1.5303		0.1000	8.5	2	0.0		\vdash	
m, p-xyrene	1.5156			1.4910	1.3404	Ave		1.3303		0.1000	0.5		0.0		1	
o-Xylene	+++++			1.5187	1.6275	Δττο		1.5525		0.3000	9.2	2	0.0		\vdash	
o Ayrene	1.5604			1.0107	1.02/3	2100		1.3323		0.3000	7.2	-	0.0			
Styrene	+++++	2.6931		2.3511	2.4362	Ave		2.3607		0.3000	7.9	2	0.0		$\overline{}$	
	2.4074	2.2890													1	
Bromoform	++++	0.4709		0.4448	0.5134	Ave		0.5094		0.1000	12.0	2	0.0			
	0.5426	0.5796	0.5809												1	
Isopropylbenzene	++++	4.0541	3.4837	3.4950	3.7591	Ave		3.5867		0.1000	7.8	2	0.0			
	3.6749	3.4840	3.1561												1	
Bromobenzene	++++	1.0782		0.8944	0.9472	Ave		0.9295			7.5	2	0.0			
	0.9154														1	
1,1,2,2-Tetrachloroethane	++++	1.2031		1.0525	1.1885	Ave		1.1071		0.3000	6.0	2	0.0			
	1.1089	1.0963														
1,2,3-Trichloropropane	++++			0.3590	0.3931	Ave		0.3896			9.9	2	0.0		1	
	0.3815														\vdash	
trans-1,4-Dichloro-2-butene	++++	0.2938		0.2637	0.2915	Ave		0.2869			7.2	2	0.0			
	0.2876	0.3127		0.000	4 4 5 6 5	_					0 0				\vdash	
N-Propylbenzene	+++++	4.6208		3.8808	4.1727	Ave		3.9932			9.8	2	0.0		1	
0.011	4.0625	3.8309		0.0621	0 0110			0.0000			4 0		0 0		\vdash	
2-Chlorotoluene	++++ 0.8999			0.8631	0.9112	AVE		0.8883			4.9	2	0.0			
1,3,5-Trimethylbenzene	0.8999	3.3923		2.9176	3.1675	7110		3.0308			7.5	2	0.0		\vdash	
1, 3, 3-111MeCHYIDeHZeHe	3.1485	2.9718		2.91/0	3.10/3	Ave		3.0300			/.5	2	0.0			
4-Chlorotoluene	3.1403	1.0474		0 8666	0.9045	Δττο		0.8970			7.7	7	0.0		\vdash	
- OUTOLOCOLUCIIC	0.8887	0.8718	0.8448	0.0000	0.3043	Ave		0.03/0			'.'	^	0.0			
tert-Butylbenzene	+++++	0.7225		0.6410	0.6998	Ave		0.6778			5.6	2	0.0		\vdash	
Joseph Dacy Local Delice	0.7129			0.0410	0.0000	1100		0.07,0			3.0	^				
	0.7123	3.0300	3.0000		1						1					

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: HP5973Q GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

ANALYTE			RRF			CURVE		COEFFICI	ENT	# N	MIN RRF	%RSD		R^2	# MIN R^2
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	TYPE	В	M1	М2				%RSD	OR COD	OR COD
	LVL 6	LVL 7	LVL 8												
1,2,4-Trimethylbenzene	+++++	3.4875	3.1174	3.0493	3.2822	Δττ		3.1242				7.5	20.	n I	
1,2,4 IIImconyibenzene	3.1783	3.0211	2.7336	3.0433	3.2022	2100		3.12.12				7.5	20.	°	
sec-Butylbenzene	+++++	4.1245		3.6091	3.8940	Ave		3.7049				7.8	20.	0	
	3.8430	3.6477													
4-Isopropyltoluene	+++++	3.7461	3.2901	3.2890	3.5457	Ave		3.3508				8.7	20.	0	
1 11	3.4970	3.2609	2.8268												
1,3-Dichlorobenzene	+++++	2.0540	1.7998	1.7098	1.8325	Ave		1.7551			0.6000	9.6	20.	0	
	1.7304		1.5104												
1,4-Dichlorobenzene	++++	2.1359		1.7265	1.8670	Ave		1.8102			0.5000	9.2	20.	0	
	1.7656		1.6119												
n-Butylbenzene	++++	3.0743		2.7319	2.8964	Ave		2.7862				7.3	20.	0	
	2.8821	2.7085													
1,2-Dichlorobenzene	+++++		1.8437	1.7318	1.8758	Ave		1.7981			0.4000	8.3	20.	0	
	1.7891	1.6880													
1,2-Dibromo-3-Chloropropane	+++++		0.2389	0.2442	0.2833	Ave		0.2712			0.0500	10.8	20.	0	
	0.2979	0.2986													
1,2,4-Trichlorobenzene	+++++		1.3495	1.2921	1.4298	Ave		1.3311			0.2000	6.4	20.	0	
	1.3840	1.2691		0 10.65				0.1511							
Hexachlorobutadiene	+++++	0.4795		0.4367	0.4657	Ave		0.4514				5.2	20.	0	
M h h . l	0.4689		0.4104	4 2700	F 000F	3 -		4 4706				0 -	20	_	
Naphthalene	+++++	4.6279		4.3792	5.0295	Ave		4.4706				9.5	20.	0	
1,2,3-Trichlorobenzene	4.7645	4.3095 1.3531		1 2260	1.3799	7		1.2762				6.6	20.	0	
1,2,3-Trichioropenzene	1.3109	1.2082		1.2360	1.3/99	Ave		1.2/02				0.0	20.	⁰	
Dibromofluoromethane (Surr)	1.2888	1.3293		1 2010	1.3703	7110		1.3178				5.2	20.	0	
DIDIOMOTIUOIOMECHANE (SUII)	1.3860	1.2483		1.3040	1.3703	Ave		1.31/0				J.2	20.	9	
1,2-Dichloroethane-d4 (Surr)	0.7728	0.7755		0 8059	0.8015	λπο		0.7676				5.7	20.	n	
1,2 Didniolocchane di (Sull)	0.7871	0.7248		0.0039	0.0013	1110		0.7076				J. /	20.	<u> </u>	
Toluene-d8 (Surr)	2.3459	2.3443		2.4050	2.4147	Ave		2.3557				1.8	20.	0	
	2.3529	2.3041			/							0		-	
4-Bromofluorobenzene (Surr)	0.7380	0.7428		0.7353	0.7178	Ave		0.7250				2.2	20.	0	
, , , , , , , , , , , , , , , , , , , ,	0.7143		0.7044												

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: HP5973Q GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/11/2016 16:06 Calibration End Date: 01/11/2016 18:50 Calibration ID: 26041

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-283036/5	Q8376.D
Level 2	IC 480-283036/6	Q8377.D
Level 3	IC 480-283036/7	Q8378.D
Level 4	IC 480-283036/8	Q8379.D
Level 5	IC 480-283036/9	Q8380.D
Level 6	ICIS 480-283036/10	Q8381.D
Level 7	IC 480-283036/11	Q8382.D
Level 8	IC 480-283036/12	Q8383.D

ANALYTE	IS	CURVE			RESPONSE				CONCE	NTRATION (UG/L)	
	REF	TYPE	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	++++ 159358	6965 346203	12643 697024	27077	55315	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	4423 203095	10067 407881	18806 776434	40383	84065	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	++++ 198406	7945 407299	16405 787118	36134	76231	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	++++ 174999	6670 357011	14884 672566	33721	68467	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Bromomethane	FB	Ave	++++ 106250	2780 239883	7086 402794	15738	31794	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Chloroethane	FB	Ave	++++ 93322	2865 220015	6554 354342	14583	32612	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	+++++ 261464	9239 539874	19639 1039569	44673	98042	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	+++++ 284775	10224 594237	22592 1196838	50544	110206	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Ethyl ether	FB	Ave	+++++ 171777	7761 334552	12867 678470	31764	71696	+++++ 25.0	1.00	2.00	5.00	10.0
Acrolein	FB	Ave	+++++ 221788	9263 461921	17623 935860	41616	91461	+++++ 125	5.00 250	10.0 500	25.0	50.0
1,1-Dichloroethene	FB	Ave	++++ 189982	8963 375506	13985 737400	36377	75380	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroetha	FB	Ave	++++ 171045	8174 333357	13055 612441	35172	72850	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	++++ 478283	25329 923075	45934 2029627	104504	223675	+++++ 125	5.00 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	+++++ 361411	16558 715581	26976 1401071	68326	145131	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	++++ 614363	28521 1229803	46334 2308570	115703	240974	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: $\underline{\text{HP5973Q}}$ GC Column: $\underline{\text{ZB-624}}$ (60) ID: $\underline{\text{0.25}}$ (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/11/2016 16:06 Calibration End Date: 01/11/2016 18:50 Calibration ID: 26041

ANALYTE	IS	CURVE			RESPONSE				CONCE	NTRATION (U	JG/L)	
	REF	TYPE	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	+++++ 305620	14769 586547	25209 1080683	59053	125247	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Methyl acetate	FB	Ave	20820 1214469	59389 2467365	106262 4569841	239400	505129	2.50 125	5.00 250	10.0 500	25.0	50.0
Methylene Chloride	FB	Ave	4644 209251	11227 413984	17166 813042	41648	85844	0.500 25.0	1.00 50.0	2.00	5.00	10.0
2-Methyl-2-propanol	FB	Ave	++++ 494122	27900 886988	51175 2428953	119013	260024	+++++ 250	10.0 500	20.0	50.0	100
Methyl tert-butyl ether	FB	Ave	++++ 662906	31206 1322958	52404 2515922	127037	271387	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	+++++ 209477	9930 414350	15916 771100	40301	83149	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Acrylonitrile	FB	Ave	19160 1217047	58120 2492507	103441 4560123	235846	504663	5.00 250	10.0 500	20.0	50.0	100
Hexane	FB	Ave	+++++ 275296	13158 573476	22220 1081421	55276	107118	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,1-Dichloroethane	FB	Ave	+++++ 355170	16548 699156	27386 1401849	68630	145303	+++++ 25.0	1.00	2.00	5.00	10.0
Vinyl acetate	FB	Ave	+++++ 951184	43441 1951689	76250 3705149	187655	394564	+++++	2.00	4.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	+++++ 262192	12474 490943	19914 898003	50524	101910	+++++ 25.0	1.00	2.00	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	+++++ 228955	10576 450972	17417 878152	43836	92487	+++++ 25.0	1.00	2.00	5.00	10.0
2-Butanone (MEK)	FB	Ave	+++++ 760327	37924 1595059	65880 3196810	152373	326218	++++ 125	5.00 250	10.0	25.0	50.0
Chlorobromomethane	FB	Ave	+++++ 118991	5347 242854	8838 480953	22990	48901	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Tetrahydrofuran	FB	Ave	+++++ 225877	10771 467734	19064 949291	45370	92962	++++ 50.0	2.00	4.00	10.0	20.0
Chloroform	FB	Ave	++++ 342571	16662 677287	26304 1331996	65836	134543	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	++++ 293638	12950 591249	21511 1141127	55039	114702	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Cyclohexane	FB	Ave	+++++ 351442	16427 683107	27103 1237910	68308	138008	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Carbon tetrachloride	FB	Ave	+++++ 260294	10652 549299	17582 1078436	46329	96708	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	+++++ 267594	12608 551594	20410 1088672	52040	103814	+++++ 25.0	1.00	2.00	5.00	10.0
Isobutyl alcohol	FB	Ave	++++ 484760	26488 848954	47404 2287637	110063	248028	++++ 625	25.0 1250	50.0 2500	125	250

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: HP5973Q GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/11/2016 16:06 Calibration End Date: 01/11/2016 18:50 Calibration ID: 26041

ANALYTE	IS	CURVE			RESPONSE				CONCE	NTRATION (U	JG/L)	
	REF	TYPE	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	+++++ 736530	36225 1491783	58278 2870992	147069	297821	++++ 25.0	1.00	2.00	5.00	10.0
1,2-Dichloroethane	FB	Ave	5253 275981	13116 557728	21659 1109065	53887	110520	0.500 25.0	1.00	2.00	5.00	10.0
n-Heptane	FB	Ave	+++++ 251448	11975 572216	17165 975600	46960	87767	+++++ 25.0	1.00	2.00	5.00	10.0
Trichloroethene	FB	Ave	+++++ 205482	9787 420436	15706 849956	39305	79757	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Methylcyclohexane	FB	Ave	+++++ 331592	15287 684451	25790 1325594	63511	129849	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,2-Dichloropropane	FB	Ave	+++++ 178465	8395 372122	13094 764722	33910	68783	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Dibromomethane	FB	Ave	++++ 131499	5909 273366	9761 556467	24147	52125	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,4-Dioxane	CBZ	Ave	+++++ 56278	2460 114875	5132 250181	14480	27827	++++ 500	20.0 1000	40.0	100	200
Bromodichloromethane	FB	Ave	+++++ 240811	9743 507540	15981 1061820	42916	91171	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 115953	4961 272039	7862 599962	21081	43454	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
trans-1,3-Dichloropropene	CBZ	Ave	+++++ 276595	11352 614015	18568 1311120	48485	104405	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	+++++ 1401461	69771 2810072	114454 4638328	284108	583409	+++++ 125	5.00 250	10.0	25.0	50.0
Toluene	CBZ	Ave	+++++ 428308	21761 918365	33237 1865893	82062	169036	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	+++++ 235737	10184 540072	14793 1175767	41377	87408	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Ethyl methacrylate	CBZ	Ave	+++++ 243758	10208 539870	16170 1111358	45779	93433	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,1,2-Trichloroethane	CBZ	Ave	+++++ 128668	6458 285217	9351 597054	23766	50660	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Tetrachloroethene	CBZ	Ave	+++++ 187726	9357 401345	14199 833798	36543	72794	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,3-Dichloropropane	CBZ	Ave	+++++ 262055	12177 589219	19328 1233020	49968	103129	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
2-Hexanone	CBZ	Ave	+++++ 937475	51174 1973761	81886 3471747	202862	395725	++++ 125	5.00 250	10.0	25.0	50.0
Dibromochloromethane	CBZ	Ave	+++++ 188238	7165 428843	11617 919677	31724	69153	+++++ 25.0	1.00	2.00	5.00	10.0
1,2-Dibromoethane	CBZ	Ave	+++++ 174324	7937 391710	12371 840193	32656	66727	+++++ 25.0	1.00	2.00	5.00	10.0

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: HP5973Q GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/11/2016 16:06 Calibration End Date: 01/11/2016 18:50 Calibration ID: 26041

ANALYTE	IS	CURVE			RESPONSE				CONCE	NTRATION (U	JG/L)	
	REF	TYPE	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBZ	Ave	++++ 476216	23923 1034383	36454 2107490	93041	186213	++++ 25.0	1.00	2.00	5.00	10.0
Ethylbenzene	CBZ	Ave	+++++ 787270	39231 1645318	60967 3075886	154948	310657	+++++ 25.0	1.00	2.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	+++++ 192818	8018 408549	12736 818219	34397	72738	+++++ 25.0	1.00	2.00	5.00	10.0
m,p-Xylene	CBZ	Ave	+++++ 325984	16041 697389	25036 1409233	62264	126357	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
o-Xylene	CBZ	Ave	+++++ 335616	16119 697659	25436 1377281	63387	132985	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Styrene	CBZ	Ave	++++ 517793	24128 1092267	36861 2146754	98125	199069	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Bromoform	CBZ	Ave	+++++ 116697	4219 276585	7061 598241	18565	41947	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Isopropylbenzene	DCB	Ave	+++++ 853489	40340 1773995	64064 3362022	165202	335807	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Bromobenzene	DCB	Ave	+++++ 212599	10728 454157	16723 926548	42278	84618	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,1,2,2-Tetrachloroethane	DCB	Ave	+++++ 257546	11971 558227	19643 1099429	49750	106169	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,2,3-Trichloropropane	DCB	Ave	+++++ 88611	4694 193103	7078 381052	16968	35113	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 66788	2923 159223	4696 323715	12466	26036	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
N-Propylbenzene	DCB	Ave	+++++ 943503	45978 1950654	74648 3542243	183439	372755	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
2-Chlorotoluene	DCB	Ave	+++++ 208996	9654 445468	15781 895544	40799	81398	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,3,5-Trimethylbenzene	DCB	Ave	+++++ 731238	33754 1513226	53949 2858995	137908	282960	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
4-Chlorotoluene	DCB	Ave	+++++ 206393	10422 443936	15729 899942	40962	80799	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
tert-Butylbenzene	DCB	Ave	++++ 165579	7189 351629	11523 693355	30301	62518	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,2,4-Trimethylbenzene	DCB	Ave	+++++ 738163	34702 1538297	57327 2911986	144135	293206	+++++ 25.0	1.00	2.00	5.00	10.0
sec-Butylbenzene	DCB	Ave	+++++ 892524	41040 1857374	66503 3408636	170597	347856	+++++ 25.0	1.00	2.00	5.00	10.0
4-Isopropyltoluene	DCB	Ave	+++++ 812172	37275 1660394	60503 3011218	155464	316742	+++++ 25.0	1.00	2.00	5.00	10.0
1,3-Dichlorobenzene	DCB	Ave	+++++ 401883	20438 839681	33098 1608953	80818	163697	+++++ 25.0	1.00	2.00	5.00	10.0

GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1 Analy Batch No.: 283036

SDG No.:

Instrument ID: HP5973Q GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N

ANALYTE	IS	CURVE			RESPONSE				CONCE	NTRATION (UG/L)	
	REF	TYPE -	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCB	Ave	++++ 410053	21253 873513	34002 1717054	81607	166778	+++++ 25.0	1.00	2.00	5.00	10.0
n-Butylbenzene	DCB	Ave	+++++ 669372	30590 1379137	51267 2580321	129131	258736	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCB	Ave	+++++ 415515	20503 859498	33905 1701652	81861	167566	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	+++++ 69176	2368 152027	4393 317178	11543	25311	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCB	Ave	+++++ 321440	13964 646208	24816 1267241	61074	127730	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Hexachlorobutadiene	DCB	Ave	+++++ 108892	4771 224684	8413 437135	20644	41606	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
Naphthalene	DCB	Ave	+++++ 1106557	46049 2194372	82714 3926183	206994	449295	+++++ 25.0	1.00 50.0	2.00	5.00	10.0
1,2,3-Trichlorobenzene	DCB	Ave	+++++ 304465	13464 615215	23969 1216472	58422	123271	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	155388 159167	159066 161646	154363 163699	157043	156189	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	93179 90396	92792 93857	91359 93102	91448	91352	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBZ	Ave	535601 506068	525073 549724	484594 591513	501883	493281	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	168505 153624	166379 168647	150687 181343	153434	146634	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8376.D

Lims ID: IC

Client ID:

Sample Type: IC Calib Level: 1

Inject. Date: 11-Jan-2016 16:06:30 ALS Bottle#: 36 Worklist Smp#: 5

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: IC

Misc. Info.: 480-0049854-005

Operator ID: LH Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:12-Jan-2016 14:25:47Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK010

First Level Reviewer: HillL Date: 12-Jan-2016 12:53:46

First Level Reviewer: HillL			D	ate:		12-Jan-201	6 12:53:46		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.118	5.118	0.000	99	120567	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.405	7.411	-0.006	85	228313	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.278	9.278	0.000	95	248654	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr		4.638	4.643	-0.005	93	155388	25.0	24.5	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.887	4.892	-0.005	0	93179	25.0	25.2	
\$ 5 Toluene-d8 (Surr)	98	6.286	6.291	-0.005	92	535601	25.0	24.9	
\$ 6 4-Bromofluorobenzene (Surr	174	8.341	8.340	0.001	93	168505	25.0	25.5	
10 Dichlorodifluoromethane	85		1.432				ND	ND	
12 Chloromethane	50	1.585	1.608	-0.023	37	4423	0.5000	0.5108	
13 Vinyl chloride	62	1.707	1.706	0.001	48	2919	0.5000	0.3703	
144 Butadiene	54	1.713	1.730	-0.017	77	2904	0.5000	0.4162	
14 Bromomethane	94		2.022				ND	ND	
15 Chloroethane	64		2.113				ND	ND	
17 Trichlorofluoromethane	101	2.309	2.308	0.001	70	3090	0.5000	0.3106	
16 Dichlorofluoromethane	67	2.327	2.332	-0.005	89	3169	0.5000	0.2841	
18 Ethyl ether	59	2.588	2.593	-0.005	89	2512	0.5000	0.3640	
20 Acrolein	56	2.734	2.745	-0.011	1	3407	2.50	1.89	M
22 1,1-Dichloroethene	96	2.783	2.788	-0.005	93	2243	0.5000	0.2934	
21 1,1,2-Trichloro-1,2,2-trif	101	2.801	2.812	-0.011	67	1852	0.5000	0.2644	
23 Acetone	43	2.886	2.885	0.001	98	8701	2.50	2.02	
25 Iodomethane	142	2.923	2.934	-0.011	95	5334	0.5000	0.3678	
26 Carbon disulfide	76	2.971	2.977	-0.006	99	9971	0.5000	0.4056	
28 3-Chloro-1-propene	41	3.123	3.122	0.001	92	5008	0.5000	0.4023	
27 Methyl acetate	43	3.154	3.159	-0.005	98	20820	2.50	2.09	
30 Methylene Chloride	84	3.239	3.244	-0.005	88	4644	0.5000	0.5220	
31 2-Methyl-2-propanol	59	3.379	3.439	-0.060	99	10138	5.00	4.27	
32 Methyl tert-butyl ether	73	3.440	3.445	-0.005	94	10815	0.5000	0.4001	
34 trans-1,2-Dichloroethene	96	3.452	3.457	-0.005	59	3182	0.5000	0.3775	
33 Acrylonitrile	53	3.476	3.475	0.001	97	19160	5.00	3.91	
35 Hexane	57	3.634	3.639	-0.005	93	3974	0.5000	0.3489	
			_		_				

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8376.D

Data File: \\Cnromina\\B	ullaiu				111-4	7004.D\Q0370.			
C	C	RT	Adj RT	Dlt RT		Decree	Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L Fl	ags
20.1.1 Diablaraathana	42	2 005	2.010	0.005	1	E204	0.5000	0.2442	
39 1,1-Dichloroethane	63	3.805	3.810	-0.005	1	5296	0.5000	0.3662	
37 Vinyl acetate	43	3.847	3.846	0.001	97 25	15302	1.00	0.7813	
44 2,2-Dichloropropane	77	4.242	4.248	-0.006	25	3730	0.5000	0.3598	
45 cis-1,2-Dichloroethene	96	4.261	4.266	-0.005	74	3387	0.5000	0.3669	
43 2-Butanone (MEK)	43	4.285	4.278	0.007	100	13609	2.50	2.08	
48 Chlorobromomethane	128	4.455	4.460	-0.005	83	1760	0.5000	0.3642	
49 Tetrahydrofuran	42	4.486	4.479	0.007	87	4060	1.00	0.8502	
50 Chloroform	83	4.516	4.515	0.001	94	5665	0.5000	0.4067	
51 1,1,1-Trichloroethane	97	4.632	4.631	0.001	35	4007	0.5000	0.3441	
52 Cyclohexane	56	4.650	4.649	0.001	91	5094	0.5000	0.3630	
55 Carbon tetrachloride	117	4.747	4.746	0.001	82	3100	0.5000	0.3071	
54 1,1-Dichloropropene	75	4.747	4.752	-0.005	91	3984	0.5000	0.3645	
53 Isobutyl alcohol	43	4.875	4.874	0.001	30	8726	12.5	9.70	
57 Benzene	78	4.911	4.910	0.001	90	12808	0.5000	0.4195	
58 1,2-Dichloroethane	62	4.948	4.947	0.001	96	5253	0.5000	0.4672	
59 n-Heptane	43	5.057	5.056	0.001	93	4105	0.5000	0.4098	
62 Trichloroethene	95	5.392	5.391	0.001	88	3212	0.5000	0.3823	
64 Methylcyclohexane	83	5.501	5.500	0.001	59	4440	0.5000	0.3290	
65 1,2-Dichloropropane	63	5.568	5.567	0.001	88	2864	0.5000	0.3935	
67 Dibromomethane	93	5.672	5.671	0.001	95	1940	0.5000	0.3649	
66 1,4-Dioxane	88		5.671					ND	
68 Dichlorobromomethane	83	5.781	5.786	-0.005	93	3169	0.5000	0.3368	
69 2-Chloroethyl vinyl ether	63	5.982	5.987	-0.005	11	1779	0.5000	0.3728	
77 trans-1,3-Dichloropropene	75	6.103	6.102	0.001	89	4056	0.5000	0.3576	
73 4-Methyl-2-pentanone (MIBK	43	6.207	6.200	0.007	96	24908	2.50	2.09	
74 Toluene	92	6.341	6.339	0.001	98	7783	0.5000	0.4191	
72 cis-1,3-Dichloropropene	75	6.523	6.528	-0.005	95	3251	0.5000	0.3430	
75 Ethyl methacrylate	69	6.559	6.552	0.007	86	3571	0.5000	0.3547	
79 1,1,2-Trichloroethane	83	6.675	6.674	0.001	87	2145	0.5000	0.3859	
81 Tetrachloroethene	166	6.754	6.753	0.001	92	2700	0.5000	0.3335	
82 1,3-Dichloropropane	76	6.797	6.802	-0.005	88	4501	0.5000	0.3986	
80 2-Hexanone	43	6.833	6.832	0.001	97	18401	2.50	2.18	
83 Chlorodibromomethane	129	6.979	6.984	-0.005	82	2249	0.5000	0.2979	
84 Ethylene Dibromide	107	7.070	7.069	0.001	92	2857	0.5000	0.3847	
87 Chlorobenzene	112	7.435	7.434	0.001	95	8461	0.5000	0.4093	
89 1,1,1,2-Tetrachloroethane	131	7.496	7.495	0.001	43	2604	0.5000	0.3361	
88 Ethylbenzene	91	7.496	7.495	0.001	97	13446	0.5000	0.4005	
90 m-Xylene & p-Xylene	106	7.587	7.586	0.001	0	5827	0.5000	0.4170	
91 o-Xylene	106	7.903	7.902	0.001	94	5245	0.5000	0.3699	
92 Styrene	104	7.922	7.921	0.001	92	7690	0.5000	0.3567	
95 Bromoform	173	8.110	8.109	0.001	88	1510	0.5000	0.3246	
94 Isopropylbenzene	105	8.189	8.188	0.001	94	12999	0.5000	0.3644	
101 Bromobenzene	156	8.469	8.468	0.001	87	3548	0.5000	0.3838	
97 1,1,2,2-Tetrachloroethane	83	8.469	8.468	0.001	81	3876	0.5000	0.3520	
98 trans-1,4-Dichloro-2-buten	53	8.512	8.504	0.001	68	876	0.5000	0.3070	
100 1,2,3-Trichloropropane	110	8.505	8.504	0.000	86	1285	0.5000	0.3316	
99 N-Propylbenzene	91	8.518	8.517	0.001	98	15678	0.5000	0.3947	
103 2-Chlorotoluene	126	8.609	8.608	0.001	96 96	3280	0.5000	0.3712	
	105	8.658	8.656	0.001	96 95	3260 10876	0.5000	0.3608	
102 1,3,5-Trimethylbenzene									
105 4-Chlorotoluene	126	8.700	8.699	0.001	95 01	3515	0.5000	0.3940	
106 tert-Butylbenzene	134	8.925	8.924	0.001	91	2161	0.5000	0.3206	
107 1,2,4-Trimethylbenzene	105	8.968	8.967	0.001	96	11344	0.5000	0.3651	

Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\ChromNA\B	uffalo\	ChromDa	ta\HP5973	3Q\20160	111-49	9854.b\Q8376.	D		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
109 sec-Butylbenzene	105	9.101	9.100	0.001	92	13179	0.5000	0.3576	
110 4-Isopropyltoluene	119	9.217	9.216	0.001	96	11373	0.5000	0.3413	
111 1,3-Dichlorobenzene	146	9.223	9.222	0.001	95	7261	0.5000	0.4159	
113 1,4-Dichlorobenzene	146	9.296	9.295	0.001	94	7536	0.5000	0.4186	
115 n-Butylbenzene	91	9.558	9.557	0.001	97	10126	0.5000	0.3654	
116 1,2-Dichlorobenzene	146	9.606	9.611	-0.005	95	7179	0.5000	0.4014	
117 1,2-Dibromo-3-Chloropropan	75	10.269	10.268	0.001	73	867	0.5000	0.3214	
119 1,2,4-Trichlorobenzene	180	10.932	10.931	0.001	89	5069	0.5000	0.3829	
120 Hexachlorobutadiene	225	11.047	11.046	0.001	82	1287	0.5000	0.2866	
121 Naphthalene	128	11.139	11.138	0.001	95	15413	0.5000	0.3466	
122 1,2,3-Trichlorobenzene	180	11.327	11.326	0.001	92	4334	0.5000	0.3414	
S 123 Total BTEX	1				0			2.03	
S 124 Xylenes, Total	1				0			0.7869	
S 125 1,2-Dichloroethene, Total	1				0			0.7445	
S 126 1,3-Dichloropropene, Total	1				0			0.7006	
QC Flag Legend Processing Flags ND - Not Detected or Marked N Review Flags M - Manually Integrated	D								

M - Manually Integrated

Reagents:

8260 CORP mix_00063	Amount Added: 0.5	0 Units: uL	
GAS CORP mix_00130	Amount Added: 0.5	0 Units: uL	
Q_8260_IS_00114	Amount Added: 1.2	5 Units: uL	Run Reagent
Q_8260_SURR_00106	Amount Added: 1.2	5 Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8376.D Injection Date: 11-Jan-2016 16:06:30 Instrument ID: HP5973Q

Lims ID: IC

Client ID: Purge Vol:

1.0000

Dil. Factor:

Operator ID:

ALS Bottle#:

Worklist Smp#:

LH

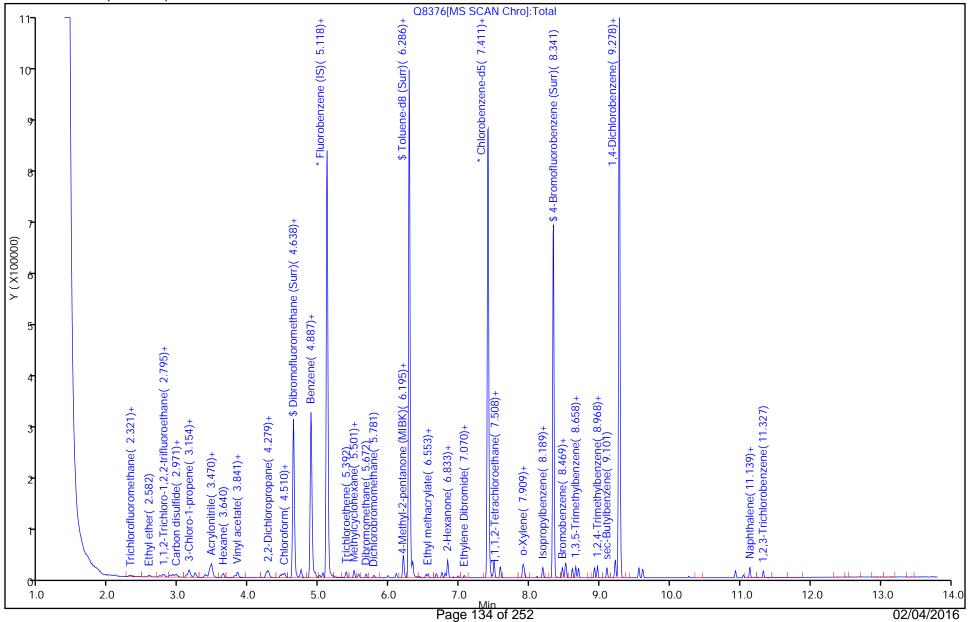
5

36

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

5.000 mL



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8376.D Injection Date: 11-Jan-2016 16:06:30 Instrument ID: HP5973Q

Lims ID: IC

Client ID:

Operator ID: LH ALS Bottle#: 36 Worklist Smp#: 5

Purge Vol: 5.000 mL Dil. Factor: 1.0000

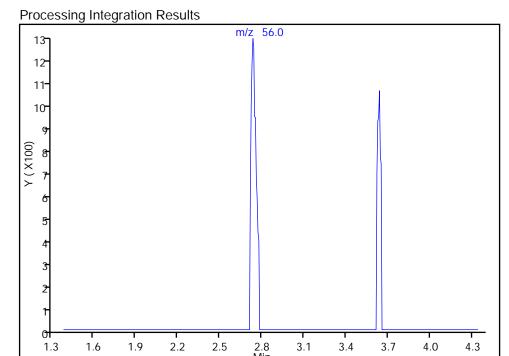
Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN

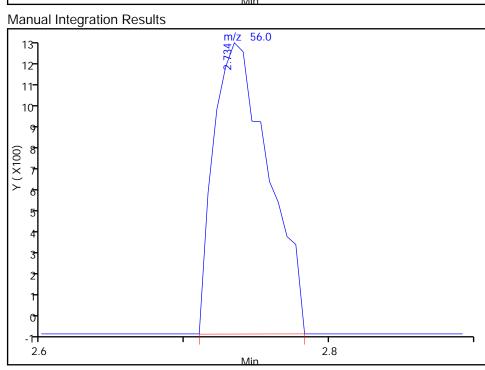
20 Acrolein, CAS: 107-02-8

Not Detected

Expected RT: 2.75



RT: 2.73 Area: 3407 Amount: 1.885891 Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 12:53:46 Audit Action: Manually Integrated Audit Reason: Missed Peak

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8377.D

Lims ID: IC 2

Client ID:

Sample Type: IC Calib Level: 2

Inject. Date: 11-Jan-2016 16:29:30 ALS Bottle#: 37 Worklist Smp#: 6

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: IC 2

Misc. Info.: 480-0049854-006

Operator ID: LH Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 12-Jan-2016 14:25:48 Calib Date: 11-Jan-2016 21:55:30 Integrator: RTE ID Type: Deconvolution ID Quant Method: Internal Standard Quant By: Initial Calibration \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK010

First Level Reviewer: reiler Date: 12-Jan-2016 09:33:53

First Level Reviewer: reiler			D	ate:		12-Jan-201	6 09:33:53		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
				-					
* 147 Fluorobenzene (IS)	70	5.113	5.118	-0.005	99	119657	25.0	25.0	
2 Chlorobenzene-d5	82	7.406	7.411	-0.005	85	223981	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.279	9.278	0.001	94	248758	25.0	25.0	
\$ 148 Dibromofluoromethane (Suri	113	4.639	4.643	-0.004	94	159066	25.0	25.2	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.888	4.892	-0.004	0	92792	25.0	25.3	
\$ 5 Toluene-d8 (Surr)	98	6.287	6.291	-0.004	92	525073	25.0	24.9	
\$ 6 4-Bromofluorobenzene (Surr	174	8.342	8.340	0.002	93	166379	25.0	25.6	
10 Dichlorodifluoromethane	85	1.434	1.432	0.002	28	6965	1.00	1.10	M
12 Chloromethane	50	1.592	1.608	-0.016	96	10067	1.00	1.17	
13 Vinyl chloride	62	1.696	1.706	-0.010	95	7945	1.00	1.02	
144 Butadiene	54	1.714	1.730	-0.016	90	6670	1.00	0.9633	
14 Bromomethane	94	1.993	2.022	-0.029	6	2780	1.00	0.7632	M
15 Chloroethane	64	2.103	2.113	-0.010	6	2865	1.00	0.8419	
17 Trichlorofluoromethane	101	2.285	2.308	-0.023	94	9239	1.00	0.9358	
16 Dichlorofluoromethane	67	2.334	2.332	0.002	93	10224	1.00	0.9235	
18 Ethyl ether	59	2.583	2.593	-0.010	89	7761	1.00	1.13	
20 Acrolein	56	2.735	2.745	-0.010	97	9263	5.00	5.17	
22 1,1-Dichloroethene	96	2.784	2.788	-0.004	98	8963	1.00	1.18	
21 1,1,2-Trichloro-1,2,2-trif	101	2.790	2.812	-0.022	48	8174	1.00	1.18	
23 Acetone	43	2.881	2.885	-0.004	99	25329	5.00	5.93	
25 Iodomethane	142	2.930	2.934	-0.004	99	16558	1.00	1.15	
26 Carbon disulfide	76	2.973	2.977	-0.004	99	28521	1.00	1.17	
28 3-Chloro-1-propene	41	3.125	3.122	0.003	90	14769	1.00	1.20	
27 Methyl acetate	43	3.155	3.159	-0.004	98	59389	5.00	6.01	
30 Methylene Chloride	84	3.240	3.244	-0.004	94	11227	1.00	1.27	
31 2-Methyl-2-propanol	59	3.380	3.439	-0.059	100	27900	10.0	11.8	M
32 Methyl tert-butyl ether	73	3.441	3.445	-0.004	94	31206	1.00	1.16	
34 trans-1,2-Dichloroethene	96	3.447	3.457	-0.010	60	9930	1.00	1.19	
33 Acrylonitrile	53	3.471	3.475	-0.004	99	58120	10.0	11.9	
35 Hexane	57	3.635	3.639	-0.004	92	13158	1.00	1.16	

Page 136 of 252

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8377.D

Data File: \\Cnromina\\B	ullalo				111-4	9854.D\Q8377.			
Comment	C:-	RT	Adj RT	Dlt RT		D	Cal Amt	OnCol Amt	Поло
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
20.1.1 Diablaraathana	4.2	2 004	2.010	0.004	OE	14540	1.00	1 1 5	
39 1,1-Dichloroethane	63	3.806	3.810	-0.004	95	16548	1.00	1.15	
37 Vinyl acetate	43	3.842	3.846	-0.004	97	43441	2.00	2.23	
44 2,2-Dichloropropane	77	4.244	4.248	-0.004	88	12474	1.00	1.21	
45 cis-1,2-Dichloroethene	96	4.262	4.266	-0.004	80	10576	1.00	1.15	
43 2-Butanone (MEK)	43	4.280	4.278	0.002	99	37924	5.00	5.83	
48 Chlorobromomethane	128	4.456	4.460	-0.004	90	5347	1.00	1.11	
49 Tetrahydrofuran	42	4.481	4.479	0.002	85	10771	2.00	2.27	
50 Chloroform	83	4.511	4.515	-0.004	93	16662	1.00	1.21	
51 1,1,1-Trichloroethane	97	4.627	4.631	-0.004	36	12950	1.00	1.12	
52 Cyclohexane	56	4.651	4.649	0.002	91	16427	1.00	1.18	
55 Carbon tetrachloride	117	4.742	4.746	-0.004	80	10652	1.00	1.06	
54 1,1-Dichloropropene	75	4.748	4.752	-0.004	92	12608	1.00	1.16	
53 Isobutyl alcohol	43	4.876	4.874	0.002	95	26488	25.0	29.7	
57 Benzene	78	4.913	4.910	0.003	95	36225	1.00	1.20	
58 1,2-Dichloroethane	62	4.949	4.947	0.002	96	13116	1.00	1.18	
59 n-Heptane	43	5.052	5.056	-0.004	92	11975	1.00	1.20	
62 Trichloroethene	95	5.387	5.391	-0.004	96	9787	1.00	1.17	
64 Methylcyclohexane	83	5.502	5.500	0.002	91	15287	1.00	1.14	
65 1,2-Dichloropropane	63	5.563	5.567	-0.004	93	8395	1.00	1.16	
67 Dibromomethane	93	5.667	5.671	-0.004	92	5909	1.00	1.12	
66 1,4-Dioxane	88	5.673	5.671	0.002	1	2460	20.0	19.0	M
68 Dichlorobromomethane	83	5.782	5.786	-0.004	97	9743	1.00	1.04	
69 2-Chloroethyl vinyl ether	63	5.983	5.987	-0.004	90	4961	1.00	1.05	
77 trans-1,3-Dichloropropene	75	6.104	6.102	0.002	94	11352	1.00	1.02	
73 4-Methyl-2-pentanone (MIBK	43	6.202	6.200	0.002	97	69771	5.00	5.97	
74 Toluene	92	6.342	6.339	0.003	99	21761	1.00	1.19	
72 cis-1,3-Dichloropropene	75	6.524	6.528	-0.004	98	10184	1.00	1.08	
75 Ethyl methacrylate	69	6.554	6.552	0.002	92	10208	1.00	1.03	
79 1,1,2-Trichloroethane	83	6.670	6.674	-0.004	88	6458	1.00	1.18	
81 Tetrachloroethene	166	6.749	6.753	-0.004	95	9357	1.00	1.18	
82 1,3-Dichloropropane	76	6.798	6.802	-0.004	91	12177	1.00	1.10	
80 2-Hexanone	43	6.834	6.832	0.002	97	51174	5.00	6.19	
83 Chlorodibromomethane	129	6.980	6.984	-0.004	88	7165	1.00	0.9674	
84 Ethylene Dibromide	107	7.071	7.069	0.004	97	7937	1.00	1.09	
87 Chlorobenzene	112	7.430	7.434	-0.004	95	23923	1.00	1.09	
89 1,1,1,2-Tetrachloroethane	131	7.430 7.497	7.434 7.495	0.004	95 45	23923 8018	1.00	1.16	
88 Ethylbenzene	91	7.497	7.495	0.002	98	39231	1.00	1.19	
90 m-Xylene & p-Xylene	106	7.582	7.586	-0.004	0	16041	1.00	1.17	
91 o-Xylene	106	7.905	7.902	0.003	95	16119	1.00	1.16	
92 Styrene	104	7.923	7.921	0.002	94	24128	1.00	1.14	
95 Bromoform	173	8.105	8.109	-0.004	93	4219	1.00	0.9244	
94 Isopropylbenzene	105	8.190	8.188	0.002	95	40340	1.00	1.13	
101 Bromobenzene	156	8.470	8.468	0.002	93	10728	1.00	1.16	
97 1,1,2,2-Tetrachloroethane	83	8.470	8.468	0.002	93	11971	1.00	1.09	
98 trans-1,4-Dichloro-2-buten	53	8.507	8.504	0.003	68	2923	1.00	1.02	
100 1,2,3-Trichloropropane	110	8.513	8.504	0.009	86	4694	1.00	1.21	
99 N-Propylbenzene	91	8.519	8.517	0.002	99	45978	1.00	1.16	
103 2-Chlorotoluene	126	8.610	8.608	0.002	97	9654	1.00	1.09	
102 1,3,5-Trimethylbenzene	105	8.659	8.656	0.003	96	33754	1.00	1.12	
105 4-Chlorotoluene	126	8.695	8.699	-0.004	96	10422	1.00	1.17	
106 tert-Butylbenzene	134	8.926	8.924	0.002	92	7189	1.00	1.07	
107 1,2,4-Trimethylbenzene	105	8.969	8.967	0.002	96	34702	1.00	1.12	
			-	-			•		

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8377.D

Data File: \\Cnromina\B									
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
109 sec-Butylbenzene	105	9.103	9.100	0.003	94	41040	1.00	1.11	
110 4-Isopropyltoluene	119	9.218	9.216	0.002	97	37275	1.00	1.12	
111 1,3-Dichlorobenzene	146	9.224	9.222	0.002	97	20438	1.00	1.17	
113 1,4-Dichlorobenzene	146	9.297	9.295	0.002	95	21253	1.00	1.18	
115 n-Butylbenzene	91	9.559	9.557	0.002	98	30590	1.00	1.10	
116 1,2-Dichlorobenzene	146	9.613	9.611	0.002	97	20503	1.00	1.15	
117 1,2-Dibromo-3-Chloropropan	75	10.270	10.268	0.002	81	2368	1.00	0.8774	
119 1,2,4-Trichlorobenzene	180	10.933	10.931	0.002	94	13964	1.00	1.05	
120 Hexachlorobutadiene	225	11.049	11.046	0.003	93	4771	1.00	1.06	
121 Naphthalene	128	11.140	11.138	0.002	96	46049	1.00	1.04	
122 1,2,3-Trichlorobenzene	180	11.328	11.326	0.002	96	13464	1.00	1.06	
S 123 Total BTEX	1				0			5.91	
S 124 Xylenes, Total	1				0			2.33	
S 125 1,2-Dichloroethene, Total	1				0			2.34	
S 126 1,3-Dichloropropene, Total	1				0			2.10	
00 Flam Lamand									
QC Flag Legend Review Flags									
M - Manually Integrated									
, ,									
Reagents:									
GAS CORP mix_00130		Amount	Added: 1	.00	Į	Jnits: uL			

GAS CORP mix_00130	Amount Added: 1.00	Units: uL	
8260 CORP mix_00063	Amount Added: 1.00	Units: uL	
Q_8260_IS_00114	Amount Added: 1.25	Units: uL	Run Reagent
Q_8260_SURR_00106	Amount Added: 1.25	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8377.D Injection Date: 11-Jan-2016 16:29:30 Instrument ID: HP5973Q

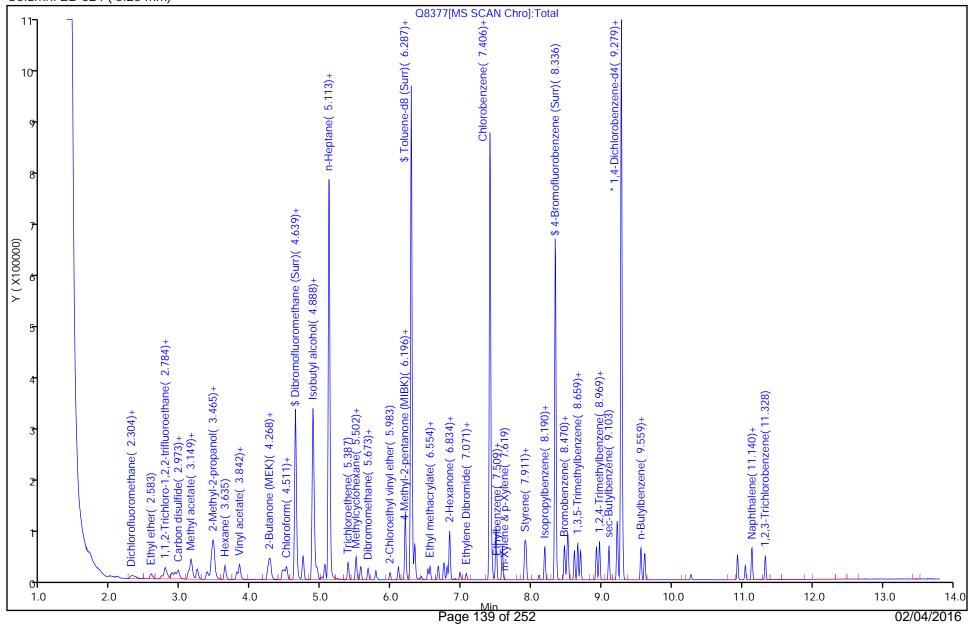
Lims ID: IC 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

LH

6

37

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8377.D Injection Date: 11-Jan-2016 16:29:30 Instrument ID: HP5973Q

Lims ID: IC 2

Client ID:

Operator ID: LH ALS Bottle#: 37 Worklist Smp#: 6

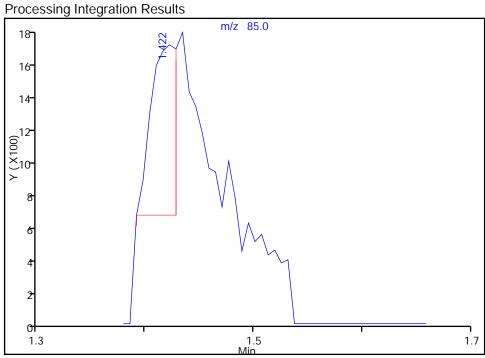
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

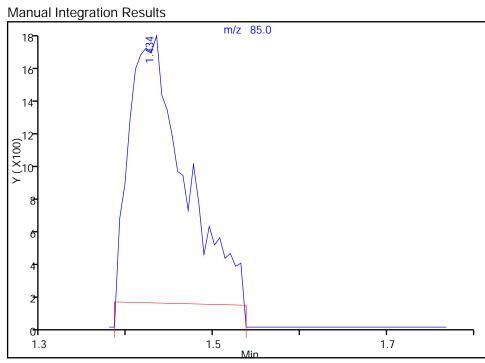
Column: ZB-624 (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

RT: 1.42 Area: 1717 Amount: 0.405411 Amount Units: ug/L



RT: 1.43
Area: 6965
Amount: 1.103556
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 12:57:18 Audit Action: Manually Integrated Audit Reason: Poor chromatography

02/04/2016

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8377.D Injection Date: 11-Jan-2016 16:29:30 Instrument ID: HP5973Q

Lims ID: IC 2

Client ID:

Operator ID: LH ALS Bottle#: 37 Worklist Smp#: 6

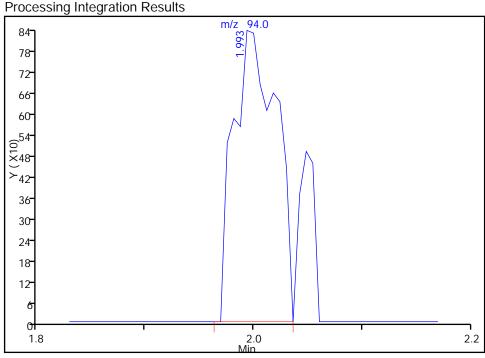
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

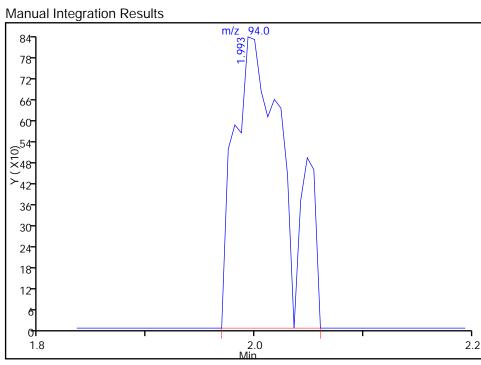
Column: ZB-624 (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

RT: 1.99
Area: 2303
Amount: 0.688392
Amount Units: ug/L



RT: 1.99
Area: 2780
Amount: 0.763179
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 12:57:18 Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8377.D Injection Date: 11-Jan-2016 16:29:30 Instrument ID: HP5973Q

Lims ID: IC 2

Client ID:

Operator ID: LH ALS Bottle#: 37 Worklist Smp#: 6

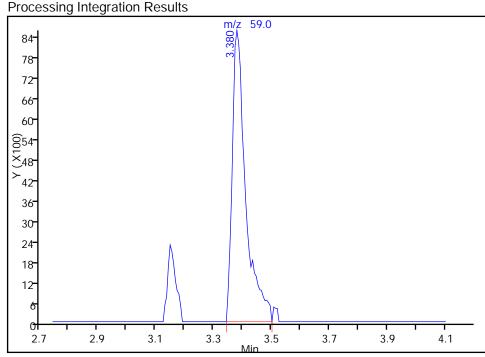
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

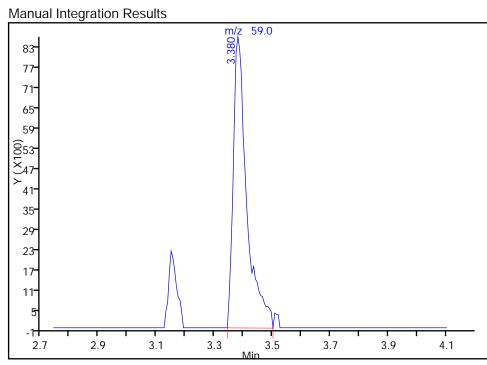
Column: ZB-624 (0.25 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

RT: 3.38
Area: 27836
Amount: 13.104583
Amount Units: ug/L



RT: 3.38
Area: 27900
Amount: 11.830096
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 14:05:58 Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8377.D Injection Date: 11-Jan-2016 16:29:30 Instrument ID: HP5973Q

Lims ID: IC 2

Client ID:

Operator ID: LH ALS Bottle#: 37 Worklist Smp#: 6

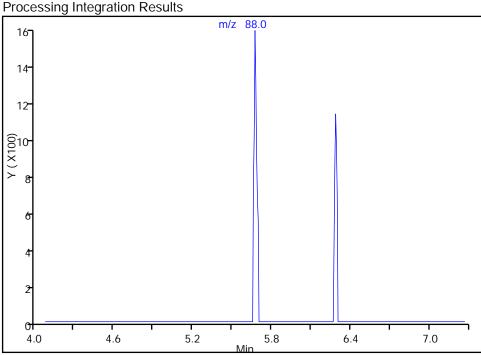
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN

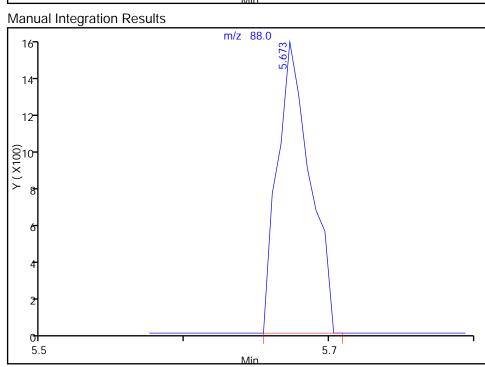
66 1,4-Dioxane, CAS: 123-91-1

Not Detected Expected RT: 5.67



RT: 5.67 Area: 2460 Amount: 19.005799

Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 13:02:12 Audit Action: Manually Integrated Audit Reason: Missed Peak

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8378.D

Lims ID: IC 3

Client ID:

Sample Type: IC Calib Level: 3

Inject. Date: 11-Jan-2016 16:53:30 ALS Bottle#: 38 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: IC 3

Misc. Info.: 480-0049854-007

Operator ID: LH Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:12-Jan-2016 14:25:50Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK010

First Level Reviewer: reiler Date: 12-Jan-2016 09:46:48

First Level Reviewer: relier			D	ate:		12-Jan-201	6 09:46:48		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
									_
* 147 Fluorobenzene (IS)	70	5.117	5.118	-0.001	99	115233	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.410	7.411	-0.001	85	203530	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.278	-0.001	94	229869	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.643	4.643	0.000	94	154363	25.0	25.4	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.892	4.892	0.000	0	91359	25.0	25.8	
\$ 5 Toluene-d8 (Surr)	98	6.291	6.291	0.000	93	484594	25.0	25.3	
\$ 6 4-Bromofluorobenzene (Surr	174	8.340	8.340	0.000	91	150687	25.0	25.5	
10 Dichlorodifluoromethane	85	1.420	1.432	-0.012	89	12643	2.00	2.08	M
12 Chloromethane	50	1.608	1.608	0.000	98	18806	2.00	2.27	
13 Vinyl chloride	62	1.711	1.706	0.005	95	16405	2.00	2.18	
144 Butadiene	54	1.730	1.730	0.000	94	14884	2.00	2.23	
14 Bromomethane	94	2.003	2.022	-0.019	77	7086	2.00	2.02	M
15 Chloroethane	64	2.101	2.113	-0.012	42	6554	2.00	2.00	
17 Trichlorofluoromethane	101	2.301	2.308	-0.007	97	19639	2.00	2.07	
16 Dichlorofluoromethane	67	2.332	2.332	0.000	95	22592	2.00	2.12	M
18 Ethyl ether	59	2.587	2.593	-0.006	89	12867	2.00	1.95	
20 Acrolein	56	2.739	2.745	-0.006	98	17623	10.0	10.2	
22 1,1-Dichloroethene	96	2.788	2.788	0.000	97	13985	2.00	1.91	
21 1,1,2-Trichloro-1,2,2-trif	101	2.818	2.812	0.006	88	13055	2.00	1.95	
23 Acetone	43	2.891	2.885	0.006	100	45934	10.0	11.2	
25 Iodomethane	142	2.934	2.934	0.000	99	26976	2.00	1.95	
26 Carbon disulfide	76	2.970	2.977	-0.007	99	46334	2.00	1.97	
28 3-Chloro-1-propene	41	3.122	3.122	0.000	90	25209	2.00	2.12	
27 Methyl acetate	43	3.159	3.159	0.000	98	106262	10.0	11.2	
30 Methylene Chloride	84	3.244	3.244	0.000	94	17166	2.00	2.02	
31 2-Methyl-2-propanol	59	3.390	3.439	-0.049	99	51175	20.0	22.5	M
32 Methyl tert-butyl ether	73	3.451	3.445	0.006	95	52404	2.00	2.03	
34 trans-1,2-Dichloroethene	96	3.457	3.457	0.000	96	15916	2.00	1.98	
33 Acrylonitrile	53	3.475	3.475	0.000	99	103441	20.0	22.1	
35 Hexane	57	3.639	3.639	0.000	90	22220	2.00	2.04	
			Page	1// of 25	2			02/0	4/2016

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8378.D

Data File: \\Cnromina\B	ullaio\(111-4	9854.D\Q8378.			
Commonwell	Cie	RT	Adj RT	Dlt RT		Doonage	Cal Amt	OnCol Amt	Flores
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
39 1,1-Dichloroethane	63	3.810	3.810	0.000	95	27386	2.00	1.98	
37 Vinyl acetate	43	3.846	3.846	0.000	97	76250	4.00	4.07	
44 2,2-Dichloropropane	43 77	4.247	4.248	-0.001	88	19914	2.00	2.01	
45 cis-1,2-Dichloroethene	96	4.247	4.246	0.006	81	17417	2.00	1.97	
43 2-Butanone (MEK)	43	4.272	4.278	0.006	100	65880	10.0	10.5	
48 Chlorobromomethane	128	4.460	4.460	0.000	92	8838	2.00	1.91	
49 Tetrahydrofuran	42	4.485	4.479	0.006	92	19064	4.00	4.18	
50 Chloroform	83	4.515	4.515	0.000	94	26304	2.00	1.98	
51 1,1,1-Trichloroethane	97	4.631	4.631	-0.001	98	21511	2.00	1.93	
52 Cyclohexane	56	4.655	4.649	0.006	90 92	27103	2.00	2.02	
55 Carbon tetrachloride	117	4.033	4.746	0.000	92 80	17582	2.00	1.82	
54 1,1-Dichloropropene	75	4.740	4.740	0.000	95	20410	2.00	1.02	
	43	4.732	4.752	0.006	95 95	47404	50.0	55.1	
53 Isobutyl alcohol 57 Benzene	43 78	4.000	4.674 4.910	0.000	93 93	58278	2.00	2.00	
		4.910	4.910	0.000	93 97	21659	2.00		
58 1,2-Dichloroethane	62 43	4.947 5.062	4.947 5.056	0.006		17165		2.02 1.79	
59 n-Heptane	43 95	5.391			89 97	15706	2.00 2.00		
62 Trichloroethene	95 83		5.391 5.500	0.000 0.006	97 89	25790	2.00	1.96 2.00	
64 Methylcyclohexane		5.506 5.567		0.000	92	13094	2.00		
65 1,2-Dichloropropane	63		5.567					1.88	
67 Dibromomethane	93	5.670	5.671	-0.001	94	9761	2.00	1.92	
66 1,4-Dioxane	88	5.683	5.671	0.012	44	5132	40.0	43.6	
68 Dichlorobromomethane	83	5.786	5.786	0.000	98	15981	2.00	1.78	
69 2-Chloroethyl vinyl ether	63	5.987	5.987	0.000	93	7862	2.00	1.72	
77 trans-1,3-Dichloropropene	75	6.102	6.102	0.000	95	18568	2.00	1.84	
73 4-Methyl-2-pentanone (MIBK	43	6.199	6.200	-0.001	96	114454	10.0	10.8	
74 Toluene	92	6.339	6.339	0.000	98	33237	2.00	2.01	
72 cis-1,3-Dichloropropene	75	6.528	6.528	0.000	96	14793	2.00	1.63	
75 Ethyl methacrylate	69	6.558	6.552	0.006	90	16170	2.00	1.80	
79 1,1,2-Trichloroethane	83	6.674	6.674	0.000	88	9351	2.00	1.89	
81 Tetrachloroethene	166	6.753	6.753	0.000	96	14199	2.00	1.97	
82 1,3-Dichloropropane	76	6.802	6.802	0.000	90	19328	2.00	1.92	
80 2-Hexanone	43	6.832	6.832	0.000	96	81886	10.0	10.9	
83 Chlorodibromomethane	129	6.984	6.984	0.000	90	11617	2.00	1.73	
84 Ethylene Dibromide	107	7.069	7.069	0.000	97	12371	2.00	1.87	
87 Chlorobenzene	112	7.434	7.434	0.000	96	36454	2.00	1.98	
89 1,1,1,2-Tetrachloroethane	131	7.495	7.495	0.000	45	12736	2.00	1.84	
88 Ethylbenzene	91	7.495	7.495	0.000	98	60967	2.00	2.04	
90 m-Xylene & p-Xylene	106	7.586	7.586	0.000	0	25036	2.00	2.01	
91 o-Xylene	106	7.908	7.902	0.006	96	25436	2.00	2.01	
92 Styrene	104	7.921	7.921	-0.001	94	36861	2.00	1.92	
95 Bromoform	173	8.109	8.109	0.000	94	7061	2.00	1.70	
94 Isopropylbenzene	105	8.188	8.188	0.000	96	64064	2.00	1.94	
101 Bromobenzene	156	8.468	8.468	0.000	91	16723	2.00	1.96	
97 1,1,2,2-Tetrachloroethane	83	8.474	8.468	0.006	96	19643	2.00	1.93	
98 trans-1,4-Dichloro-2-buten	53	8.510	8.504	0.006	70	4696	2.00	1.78	
100 1,2,3-Trichloropropane	110	8.510	8.504	0.006	87	7078	2.00	1.98	
99 N-Propylbenzene	91	8.523	8.517	0.006	99	74648	2.00	2.03	
103 2-Chlorotoluene	126	8.614	8.608	0.006	98	15781	2.00	1.93	
102 1,3,5-Trimethylbenzene	105	8.656	8.656	0.000	95	53949	2.00	1.94	
105 4-Chlorotoluene	126	8.699	8.699	0.000	97	15729	2.00	1.91	
106 tert-Butylbenzene	134	8.924	8.924	0.000	93	11523	2.00	1.85	
107 1,2,4-Trimethylbenzene	105	8.967	8.967	-0.001	97	57327	2.00	2.00	
107 1,2,4-11IIIIellTylbelizelle	103	0.707	0.707	-U.UU I	71	3/32/	2.00	2.00	

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8378.D

Data File: \\Cnromina\B	unalov	Chromba	(a\HP5973	34/20160	111-4	9854.D\Q8378.	ט		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
109 sec-Butylbenzene	105	9.100	9.100	0.000	94	66503	2.00	1.95	
110 4-Isopropyltoluene	119	9.216	9.216	0.000	98	60503	2.00	1.96	
111 1,3-Dichlorobenzene	146	9.228	9.222	0.006	98	33098	2.00	2.05	
113 1,4-Dichlorobenzene	146	9.301	9.295	0.006	95	34002	2.00	2.04	
115 n-Butylbenzene	91	9.556	9.557	-0.001	98	51267	2.00	2.00	
116 1,2-Dichlorobenzene	146	9.611	9.611	0.000	98	33905	2.00	2.05	
117 1,2-Dibromo-3-Chloropropan	75	10.268	10.268	0.000	84	4393	2.00	1.76	
119 1,2,4-Trichlorobenzene	180	10.937	10.931	0.006	94	24816	2.00	2.03	
120 Hexachlorobutadiene	225	11.046	11.046	0.000	96	8413	2.00	2.03	
121 Naphthalene	128	11.138	11.138	0.000	97	82714	2.00	2.01	
122 1,2,3-Trichlorobenzene	180	11.326	11.326	0.000	94	23969	2.00	2.04	
S 123 Total BTEX	1				0			10.1	
S 124 Xylenes, Total	1				0			4.02	
S 125 1,2-Dichloroethene, Total	1				0			3.95	
S 126 1,3-Dichloropropene, Total	1				0			3.47	
OC Flag Legend Review Flags M - Manually Integrated Reagents:									
8260 CORP mix 00063		Amount	Added: 2	2.00	l	Jnits: uL			

8260 CORP mix_00063	Amount Added: 2.00	Units: uL	
GAS CORP mix_00130	Amount Added: 2.00	Units: uL	
Q_8260_IS_00114	Amount Added: 1.25	Units: uL	Run Reagent
Q_8260_SURR_00106	Amount Added: 1.25	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8378.D Injection Date: 11-Jan-2016 16:53:30 Instrument ID: HP5973Q

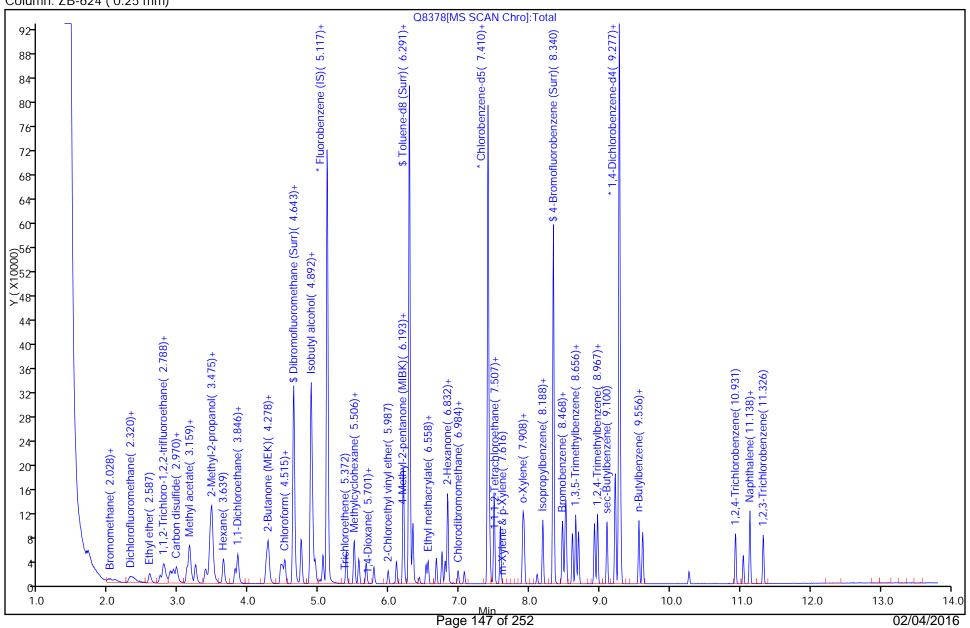
Lims ID: IC 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

LH

7

38

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8378.D Injection Date: 11-Jan-2016 16:53:30 Instrument ID: HP5973Q

Lims ID: IC 3

Client ID:

Operator ID: LH ALS Bottle#: 38 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

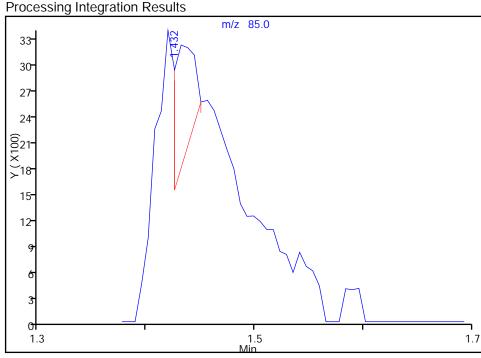
Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN

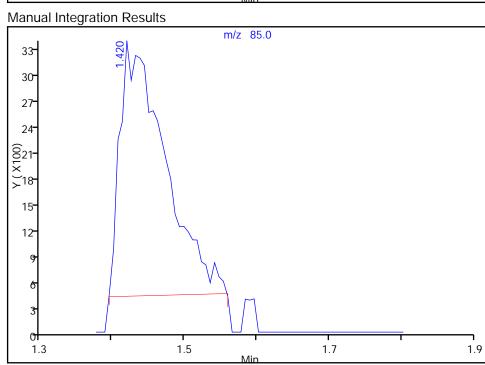
10 Dichlorodifluoromethane, CAS: 75-71-8

RT: 1.43 Area: 1713 Amount: 0.363666

Amount Units: ug/L



RT: 1.42
Area: 12643
Amount: 2.080103
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 13:02:59 Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8378.D Injection Date: 11-Jan-2016 16:53:30 Instrument ID: HP5973Q

Lims ID: IC 3

Client ID:

Operator ID: LH ALS Bottle#: 38 Worklist Smp#: 7

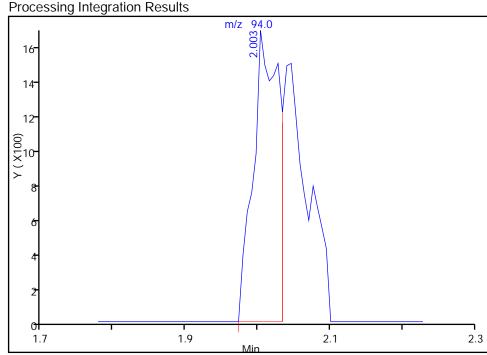
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

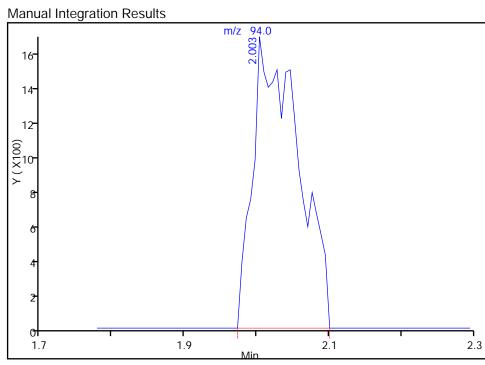
Column: ZB-624 (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

RT: 2.00 Area: 3998 Amount: 1.216155 Amount Units: ug/L



RT: 2.00 Area: 7086 Amount: 2.019965 Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 13:02:59 Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8378.D Injection Date: 11-Jan-2016 16:53:30 Instrument ID: HP5973Q

Lims ID: IC 3

Client ID:

Operator ID: LH ALS Bottle#: 38 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

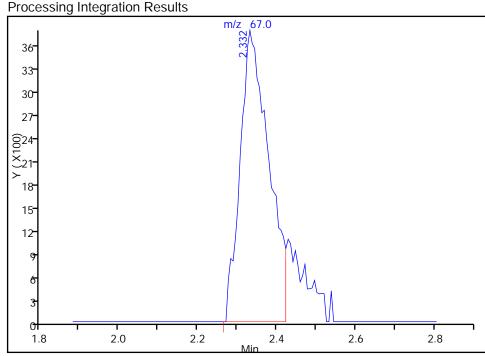
Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN

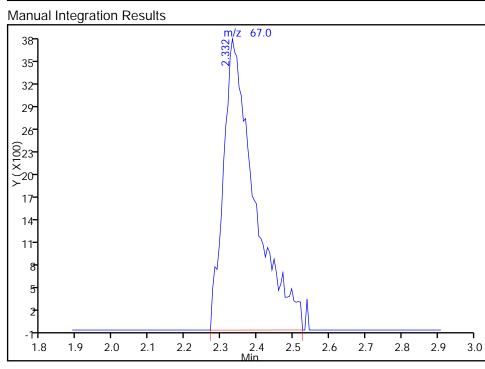
16 Dichlorofluoromethane, CAS: 75-43-4

RT: 2.33 Area: 19083 Amount: 1.969096

Amount Units: ug/L



RT: 2.33
Area: 22592
Amount: 2.119007
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 13:04:52 Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8378.D Injection Date: 11-Jan-2016 16:53:30 Instrument ID: HP5973Q

Lims ID: IC 3

Client ID:

Operator ID: LH ALS Bottle#: 38 Worklist Smp#: 7

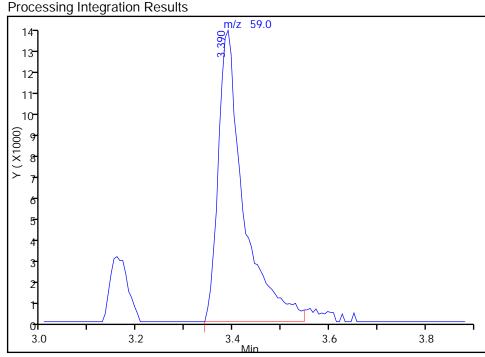
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

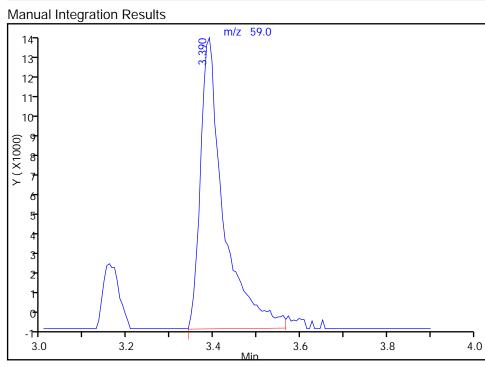
Column: ZB-624 (0.25 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

RT: 3.39
Area: 50653
Amount: 25.324716
Amount Units: ug/L



RT: 3.39
Area: 51175
Amount: 22.532178
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 14:06:12 Audit Action: Manually Integrated Audit Reason: Poor chromatography

02/04/2016

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8379.D

Lims ID: IC 4

Client ID:

Sample Type: IC Calib Level: 4

Inject. Date: 11-Jan-2016 17:17:30 ALS Bottle#: 39 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: IC 4

Misc. Info.: 480-0049854-008

Operator ID: LH Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 12-Jan-2016 14:25:51 Calib Date: 11-Jan-2016 21:55:30 Integrator: RTE ID Type: Deconvolution ID Quant Method: Internal Standard Quant By: Initial Calibration \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK010

First Level Reviewer: reiler Date: 12-Jan-2016 09:59:06

First Level Reviewer: relier			υυ	ate:		12-Jan-201	6 09:59:06		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.120	5.118	0.002	99	113467	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.406	7.411	-0.005	85	208682	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.279	9.278	0.001	94	236340	25.0	25.0	
\$ 148 Dibromofluoromethane (Suri		4.639	4.643	-0.004	95	157043	25.0	26.3	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.889	4.892	-0.003	0	91448	25.0	26.2	
\$ 5 Toluene-d8 (Surr)	98	6.287	6.291	-0.004	93	501883	25.0	25.5	
\$ 6 4-Bromofluorobenzene (Surr	174	8.337	8.340	-0.003	91	153434	25.0	25.4	
10 Dichlorodifluoromethane	85	1.422	1.432	-0.010	96	27077	5.00	4.52	M
12 Chloromethane	50	1.593	1.608	-0.015	99	40383	5.00	4.96	
13 Vinyl chloride	62	1.696	1.706	-0.010	98	36134	5.00	4.87	
144 Butadiene	54	1.720	1.730	-0.010	90	33721	5.00	5.14	
14 Bromomethane	94	2.000	2.022	-0.022	93	15738	5.00	4.56	
15 Chloroethane	64	2.103	2.113	-0.010	98	14583	5.00	4.52	
17 Trichlorofluoromethane	101	2.298	2.308	-0.010	96	44673	5.00	4.77	
16 Dichlorofluoromethane	67	2.328	2.332	-0.004	97	50544	5.00	4.81	M
18 Ethyl ether	59	2.590	2.593	-0.003	92	31764	5.00	4.89	
20 Acrolein	56	2.736	2.745	-0.009	99	41616	25.0	24.5	
22 1,1-Dichloroethene	96	2.784	2.788	-0.004	98	36377	5.00	5.06	
21 1,1,2-Trichloro-1,2,2-trif	101	2.809	2.812	-0.003	91	35172	5.00	5.34	
23 Acetone	43	2.882	2.885	-0.003	100	104504	25.0	25.8	
25 Iodomethane	142	2.930	2.934	-0.004	99	68326	5.00	5.01	
26 Carbon disulfide	76	2.967	2.977	-0.010	99	115703	5.00	5.00	
28 3-Chloro-1-propene	41	3.119	3.122	-0.003	91	59053	5.00	5.04	
27 Methyl acetate	43	3.155	3.159	-0.004	98	239400	25.0	25.5	
30 Methylene Chloride	84	3.241	3.244	-0.003	93	41648	5.00	4.97	
31 2-Methyl-2-propanol	59	3.380	3.439	-0.059	100	119013	50.0	53.2	M
32 Methyl tert-butyl ether	73	3.441	3.445	-0.004	94	127037	5.00	4.99	
34 trans-1,2-Dichloroethene	96	3.453	3.457	-0.004	98	40301	5.00	5.08	
33 Acrylonitrile	53	3.472	3.475	-0.003	99	235846	50.0	51.1	
35 Hexane	57	3.636	3.639	-0.003	91	55276	5.00	5.16	
Page 152 of 252							02/0	1/2016	

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8379.D

Data File: \\Cnromina\\B	unalu\			1	111-4	7004.D\Q0379.			
C	C	RT	Adj RT	Dlt RT		Decree	Cal Amt	OnCol Amt	П
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
20.1.1 Diablaraathana	42	2.004	2.010	0.004	0.4	40420	E 00	E 04	
39 1,1-Dichloroethane	63	3.806	3.810	-0.004	96	68630	5.00	5.04	
37 Vinyl acetate	43	3.843	3.846	-0.003	97 01	187655	10.0	10.2	
44 2,2-Dichloropropane	77	4.244	4.248	-0.004	91	50524	5.00	5.18	
45 cis-1,2-Dichloroethene	96	4.262	4.266	-0.004	81	43836	5.00	5.05	
43 2-Butanone (MEK)	43	4.280	4.278	0.002	100	152373	25.0	24.7	
48 Chlorobromomethane	128	4.457	4.460	-0.003	93	22990	5.00	5.06	
49 Tetrahydrofuran	42	4.481	4.479	0.002	89	45370	10.0	10.1	
50 Chloroform	83	4.518	4.515	0.003	94	65836	5.00	5.02	
51 1,1,1-Trichloroethane	97	4.627	4.631	-0.004	99	55039	5.00	5.02	
52 Cyclohexane	56	4.645	4.649	-0.004	92	68308	5.00	5.17	
55 Carbon tetrachloride	117	4.749	4.746	0.003	96	46329	5.00	4.88	
54 1,1-Dichloropropene	75	4.749	4.752	-0.003	97	52040	5.00	5.06	
53 Isobutyl alcohol	43	4.876	4.874	0.002	95	110063	125.0	130.0	
57 Benzene	78	4.913	4.910	0.003	94	147069	5.00	5.12	
58 1,2-Dichloroethane	62	4.943	4.947	-0.004	97	53887	5.00	5.09	
59 n-Heptane	43	5.059	5.056	0.003	92	46960	5.00	4.98	
62 Trichloroethene	95	5.387	5.391	-0.004	96	39305	5.00	4.97	
64 Methylcyclohexane	83	5.503	5.500	0.003	91	63511	5.00	5.00	
65 1,2-Dichloropropane	63	5.570	5.567	0.003	95	33910	5.00	4.95	
67 Dibromomethane	93	5.673	5.671	0.002	93	24147	5.00	4.83	
66 1,4-Dioxane	88	5.673	5.671	0.002	44	14480	100.0	120.1	
68 Dichlorobromomethane	83	5.783	5.786	-0.003	99	42916	5.00	4.85	
69 2-Chloroethyl vinyl ether	63	5.983	5.987	-0.004	92	21081	5.00	4.69	
77 trans-1,3-Dichloropropene	75	6.105	6.102	0.003	93	48485	5.00	4.68	
73 4-Methyl-2-pentanone (MIBK	43	6.202	6.200	0.002	97	284108	25.0	26.1	
74 Toluene	92	6.336	6.339	-0.003	98	82062	5.00	4.84	
72 cis-1,3-Dichloropropene	75	6.525	6.528	-0.004	97	41377	5.00	4.64	
75 Ethyl methacrylate	69	6.555	6.552	0.003	89	45779	5.00	4.97	
79 1,1,2-Trichloroethane	83	6.670	6.674	-0.004	91	23766	5.00	4.68	
81 Tetrachloroethene	166	6.756	6.753	0.003	97	36543	5.00	4.94	
82 1,3-Dichloropropane	76	6.798	6.802	-0.004	88	49968	5.00	4.84	
80 2-Hexanone	43	6.829	6.832	-0.003	97	202862	25.0	26.3	
83 Chlorodibromomethane	129	6.981	6.984	-0.003	90	31724	5.00	4.60	
84 Ethylene Dibromide	107	7.072	7.069	0.003	98	32656	5.00	4.81	
87 Chlorobenzene	112	7.431	7.434	-0.003	97	93041	5.00	4.92	
89 1,1,1,2-Tetrachloroethane	131	7.498	7.495	0.003	45	34397	5.00	4.86	
88 Ethylbenzene	91	7.498	7.495	0.003	98	154948	5.00	5.05	
90 m-Xylene & p-Xylene	106	7.583	7.586	-0.003	0	62264	5.00	4.87	
91 o-Xylene	106	7.905	7.902	0.003	96	63387	5.00	4.89	
92 Styrene	104	7.923	7.921	0.002	95	98125	5.00	4.98	
95 Bromoform	173	8.106	8.109	-0.003	95	18565	5.00	4.37	
94 Isopropylbenzene	105	8.191	8.188	0.003	95	165202	5.00	4.87	
101 Bromobenzene	156	8.464	8.468	-0.004	92	42278	5.00	4.81	
97 1,1,2,2-Tetrachloroethane	83	8.471	8.468	0.003	95	49750	5.00	4.75	
98 trans-1,4-Dichloro-2-buten	53	8.507	8.504	0.003	73 72	12466	5.00	4.60	
100 1,2,3-Trichloropropane	110	8.507	8.504	0.003	86	16968	5.00	4.61	
99 N-Propylbenzene	91	8.519	8.517	0.003	99	183439	5.00	4.86	
103 2-Chlorotoluene	126	8.610	8.608	0.002	99 97	40799	5.00	4.86	
102 1,3,5-Trimethylbenzene	105	8.659	8.656	0.002	97 95	137908	5.00	4.80 4.81	
5									
105 4-Chlorotoluene	126	8.696	8.699	-0.003	96	40962	5.00 5.00	4.83	
106 tert-Butylbenzene	134	8.927	8.924	0.003	92	30301	5.00	4.73	
107 1,2,4-Trimethylbenzene	105	8.969	8.967	0.002	96	144135	5.00	4.88	

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8379.D

Q_8260_SURR_00106

Data File. //Ciliothiva/bullato/CiliothiData/tiff 537/3Q/20100111-47034.b/Q0373.b/									
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
109 sec-Butylbenzene	105	9.103	9.100	0.003	94	170597	5.00	4.87	
110 4-Isopropyltoluene	119	9.219	9.216	0.003	97	155464	5.00	4.91	
111 1,3-Dichlorobenzene	146	9.225	9.222	0.003	97	80818	5.00	4.87	
113 1,4-Dichlorobenzene	146	9.298	9.295	0.003	96	81607	5.00	4.77	
115 n-Butylbenzene	91	9.559	9.557	0.002	97	129131	5.00	4.90	
116 1,2-Dichlorobenzene	146	9.614	9.611	0.003	98	81861	5.00	4.82	
117 1,2-Dibromo-3-Chloropropan	75	10.271	10.268	0.003	86	11543	5.00	4.50	
119 1,2,4-Trichlorobenzene	180	10.933	10.931	0.002	95	61074	5.00	4.85	
120 Hexachlorobutadiene	225	11.043	11.046	-0.003	96	20644	5.00	4.84	
121 Naphthalene	128	11.134	11.138	-0.004	97	206994	5.00	4.90	
122 1,2,3-Trichlorobenzene	180	11.329	11.326	0.003	96	58422	5.00	4.84	
S 123 Total BTEX	1				0			24.8	
S 124 Xylenes, Total	1				0			9.77	
S 125 1,2-Dichloroethene, Total	1				0			10.1	
S 126 1,3-Dichloropropene, Total	1				0			9.32	
QC Flag Legend Review Flags M - Manually Integrated Reagents:									
8260 CORP mix_00063 GAS CORP mix_00130		Amount Amount	Added: 5	5.00		Units: uL Units: uL	Dun Doors	nt	
Q_8260_IS_00114		Amount	Added:	1.25		Units: uL	Run Reage	TIL	

Amount Added: 1.25

Run Reagent

Units: uL

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8379.D Injection Date: 11-Jan-2016 17:17:30 Instrument ID: HP5973Q

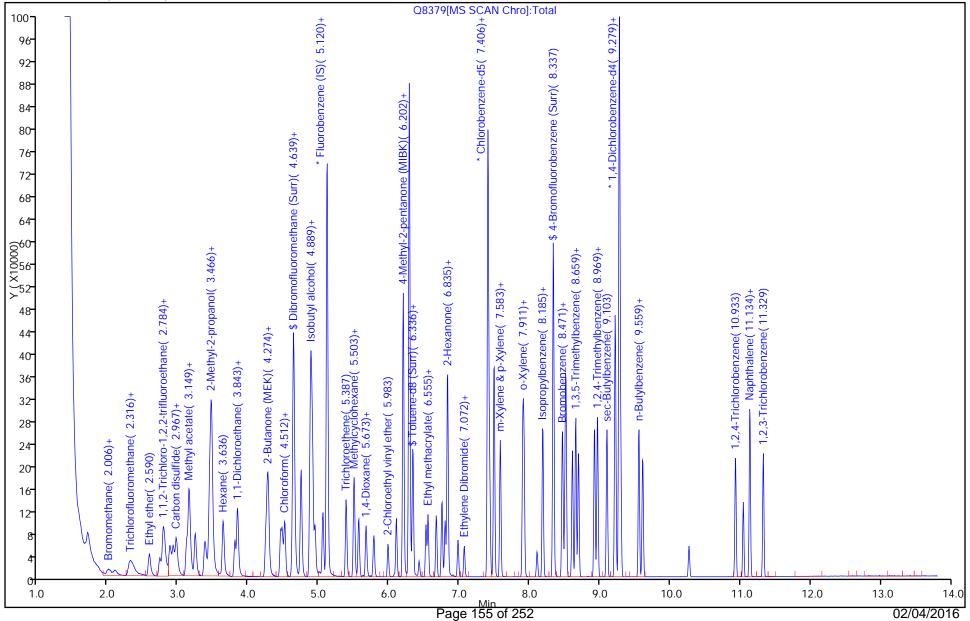
Lims ID: IC 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

LH

8

39

Report Date: 12-Jan-2016 14:25:52 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8379.D Injection Date: 11-Jan-2016 17:17:30 Instrument ID: HP5973Q

Lims ID: IC 4

Client ID:

Operator ID: LH ALS Bottle#: 39 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

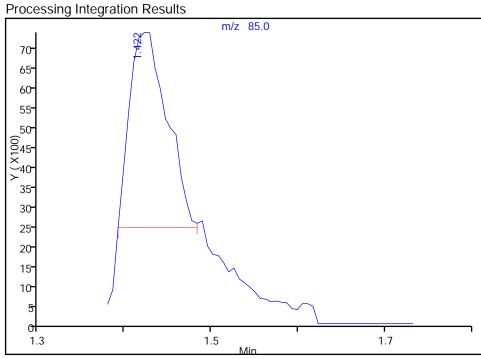
Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN

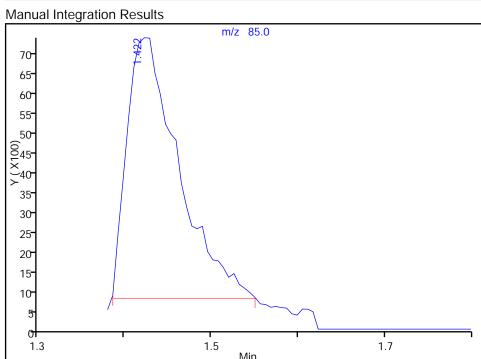
10 Dichlorodifluoromethane, CAS: 75-71-8

RT: 1.42 Area: 14754 Amount: 2.708255

Amount Units: ug/L



RT: 1.42
Area: 27077
Amount: 4.524207
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 13:05:48 Audit Action: Manually Integrated Audit Reason: Poor chromatography Report Date: 12-Jan-2016 14:25:52 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8379.D Injection Date: 11-Jan-2016 17:17:30 Instrument ID: HP5973Q

Lims ID: IC 4

Client ID:

Operator ID: LH ALS Bottle#: 39 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

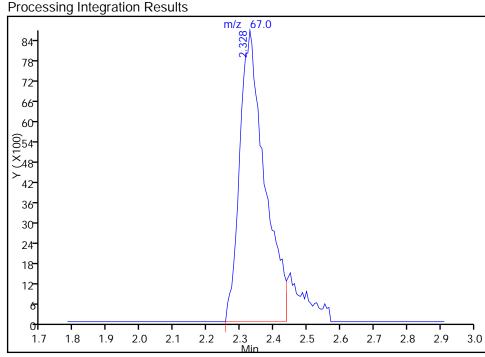
Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN

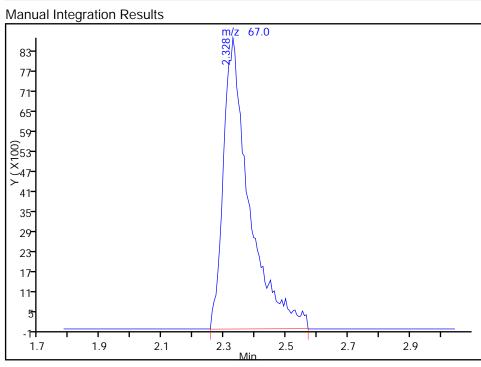
16 Dichlorofluoromethane, CAS: 75-43-4

RT: 2.33 Area: 45060 Amount: 4.477295

Amount Units: ug/L



RT: 2.33 Area: 50544 Amount: 4.814539 Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 13:05:48 Audit Action: Manually Integrated Audit Reason: Poor chromatography Report Date: 12-Jan-2016 14:25:52 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8379.D Injection Date: 11-Jan-2016 17:17:30 Instrument ID: HP5973Q

Lims ID: IC 4

Client ID:

Operator ID: LH ALS Bottle#: 39 Worklist Smp#: 8

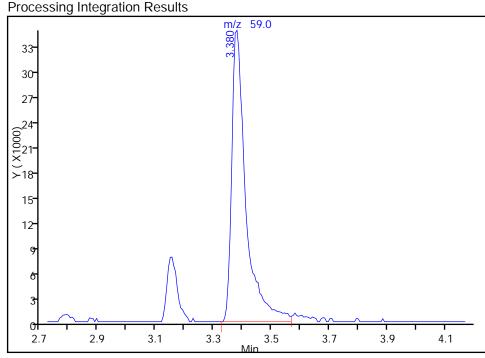
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

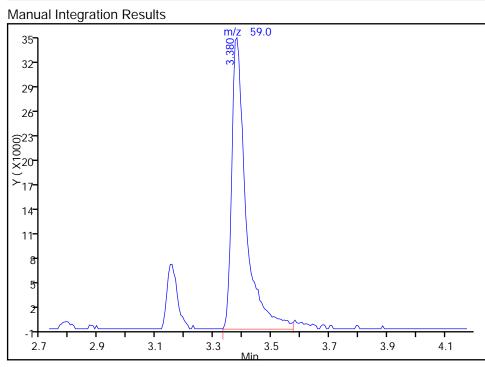
Column: ZB-624 (0.25 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

RT: 3.38
Area: 118160
Amount: 61.967264
Amount Units: ug/L



RT: 3.38
Area: 119013
Amount: 53.216588
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 14:06:27 Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8380.D

Lims ID: IC 5

Client ID:

Sample Type: IC Calib Level: 5

Inject. Date: 11-Jan-2016 17:40:30 ALS Bottle#: 40 Worklist Smp#: 9

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: IC 5

Misc. Info.: 480-0049854-009

Operator ID: LH Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:12-Jan-2016 14:25:53Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK010

First Level Reviewer: reiler Date: 12-Jan-2016 10:10:56

First Level Reviewer: relier			D	ate:		12-Jan-201	6 10:10:56		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.115	5.115	0.000	99	113982	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.407	7.407	0.000	85	204279	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.280	9.280	0.000	94	223329	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.640	4.640	0.000	94	156189	25.0	26.0	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.890	4.890	0.000	0	91352	25.0	26.1	
\$ 5 Toluene-d8 (Surr)	98	6.288	6.288	0.000	92	493281	25.0	25.6	
\$ 6 4-Bromofluorobenzene (Surr	174	8.338	8.338	0.000	91	146634	25.0	24.8	
10 Dichlorodifluoromethane	85	1.423	1.423	0.000	99	55315	10.0	9.20	M
12 Chloromethane	50	1.593	1.593	0.000	99	84065	10.0	10.3	
13 Vinyl chloride	62	1.691	1.691	0.000	98	76231	10.0	10.2	
144 Butadiene	54	1.721	1.721	0.000	90	68467	10.0	10.4	
14 Bromomethane	94	2.013	2.013	0.000	88	31794	10.0	9.16	
15 Chloroethane	64	2.110	2.110	0.000	99	32612	10.0	10.1	
17 Trichlorofluoromethane	101	2.305	2.305	0.000	98	98042	10.0	10.4	
16 Dichlorofluoromethane	67	2.317	2.317	0.000	98	110206	10.0	10.5	
18 Ethyl ether	59	2.585	2.585	0.000	92	71696	10.0	11.0	
20 Acrolein	56	2.731	2.731	0.000	99	91461	50.0	53.6	
22 1,1-Dichloroethene	96	2.785	2.785	0.000	98	75380	10.0	10.4	
21 1,1,2-Trichloro-1,2,2-trif	101	2.804	2.804	0.000	91	72850	10.0	11.0	
23 Acetone	43	2.883	2.883	0.000	100	223675	50.0	55.0	
25 Iodomethane	142	2.931	2.931	0.000	100	145131	10.0	10.6	
26 Carbon disulfide	76	2.974	2.974	0.000	99	240974	10.0	10.4	
28 3-Chloro-1-propene	41	3.120	3.120	0.000	91	125247	10.0	10.6	
27 Methyl acetate	43	3.150	3.150	0.000	98	505129	50.0	53.6	
30 Methylene Chloride	84	3.241	3.241	0.000	93	85844	10.0	10.2	
31 2-Methyl-2-propanol	59	3.381	3.381	0.000	100	260024	100.0	115.7	M
32 Methyl tert-butyl ether	73	3.442	3.442	0.000	95	271387	10.0	10.6	
34 trans-1,2-Dichloroethene	96	3.454	3.454	0.000	98	83149	10.0	10.4	
33 Acrylonitrile	53	3.473	3.473	0.000	99	504663	100.0	108.9	
35 Hexane	57	3.637	3.637	0.000	91	107118	10.0	9.95	
			Dage	150 of 25	2			02/0	1/2016

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8380.D

Data File: \\Cnromina\\B	unalu\			1	111-4	9854.D\Q8380. T			
Compound	Ci~	RT (min.)	Adj RT	Dlt RT		Doctores	Cal Amt	OnCol Amt	Elogo
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
39 1,1-Dichloroethane	63	3.807	3.807	0.000	96	145303	10.0	10.6	
37 Vinyl acetate	43	3.844	3.844	0.000	97	394564	20.0	21.3	
44 2,2-Dichloropropane	77	4.245	4.245	0.000	90	101910	10.0	10.4	
45 cis-1,2-Dichloroethene	96	4.263	4.263	0.000	81	92487	10.0	10.4	
43 2-Butanone (MEK)	43	4.281	4.281	0.000	100	326218	50.0	52.7	
48 Chlorobromomethane	128	4.458	4.458	0.000	94	48901	10.0	10.7	
49 Tetrahydrofuran	42	4.476	4.476	0.000	87	92962	20.0	20.6	
50 Chloroform	83	4.512	4.512	0.000	93	134543	10.0	10.2	
51 1,1,1-Trichloroethane	97	4.628	4.628	0.000	93 98	114702	10.0	10.2	
	56	4.652	4.652	0.000	90 91	138008	10.0	10.4	
52 Cyclohexane55 Carbon tetrachloride	117	4.032	4.032	0.000	96	96708	10.0	10.4	
	75	4.744	4.744	0.000	96	103814	10.0	10.1	
54 1,1-Dichloropropene 53 Isobutyl alcohol	43	4.750	4.730 4.871	0.000	96 95	248028	250.0	291.6	
57 Benzene	43 78	4.908	4.671	0.000	93 97	297821	10.0	10.3	
	62	4.906 4.944	4.906 4.944	0.000	97 96	110520	10.0	10.3	
58 1,2-Dichloroethane		5.060		0.000	90 92	87767	10.0	9.27	
59 n-Heptane	43 05		5.060						
62 Trichloroethene	95	5.388	5.388	0.000	96 89	79757 129849	10.0	10.0	
64 Methylcyclohexane	83	5.504	5.504	0.000	95		10.0	10.2	
65 1,2-Dichloropropane	63	5.571	5.571	0.000		68783	10.0	10.0	
67 Dibromomethane	93	5.674	5.674	0.000	95	52125	10.0	10.4	
66 1,4-Dioxane	88	5.668	5.668	0.000	46	27827	200.0	235.7	
68 Dichlorobromomethane	83	5.784	5.784	0.000	99	91171	10.0	10.3	
69 2-Chloroethyl vinyl ether	63	5.984	5.984	0.000	93	43454	10.0	9.63	
77 trans-1,3-Dichloropropene	75	6.106	6.106	0.000	94	104405	10.0	10.3	
73 4-Methyl-2-pentanone (MIBK	43	6.203	6.203	0.000	96	583409	50.0	54.7	
74 Toluene	92	6.337	6.337	0.000	99	169036	10.0	10.2	
72 cis-1,3-Dichloropropene	75	6.525	6.525	0.000	97	87408	10.0	9.75	
75 Ethyl methacrylate	69	6.556	6.556	0.000	91	93433	10.0	10.4	
79 1,1,2-Trichloroethane	83	6.671	6.671	0.000	91	50660	10.0	10.2	
81 Tetrachloroethene	166	6.757	6.757	0.000	97	72794	10.0	10.0	
82 1,3-Dichloropropane	76	6.799	6.799	0.000	86	103129	10.0	10.2	
80 2-Hexanone	43	6.829	6.829	0.000	97	395725	50.0	52.5	
83 Chlorodibromomethane	129	6.982	6.982	0.000	90	69153	10.0	10.2	
84 Ethylene Dibromide	107	7.073	7.073	0.000	99	66727	10.0	10.0	
87 Chlorobenzene	112	7.432	7.432	0.000	96	186213	10.0	10.1	
89 1,1,1,2-Tetrachloroethane	131	7.498	7.498	0.000	46	72738	10.0	10.5	
88 Ethylbenzene	91	7.492	7.492	0.000	98	310657	10.0	10.3	
90 m-Xylene & p-Xylene	106	7.584	7.584	0.000	0	126357	10.0	10.1	
91 o-Xylene	106	7.906	7.906	0.000	96	132985	10.0	10.5	
92 Styrene	104	7.918	7.918	0.000	96	199069	10.0	10.3	
95 Bromoform	173	8.107	8.107	0.000	97	41947	10.0	10.1	
94 Isopropylbenzene	105	8.186	8.186	0.000	95	335807	10.0	10.5	
101 Bromobenzene	156	8.465	8.465	0.000	94	84618	10.0	10.2	
97 1,1,2,2-Tetrachloroethane	83	8.471	8.471	0.000	95	106169	10.0	10.7	
98 trans-1,4-Dichloro-2-buten	53	8.508	8.508	0.000	73	26036	10.0	10.2	
100 1,2,3-Trichloropropane	110	8.508	8.508	0.000	86	35113	10.0	10.1	
99 N-Propylbenzene	91	8.520	8.520	0.000	99	372755	10.0	10.4	
103 2-Chlorotoluene	126	8.611	8.611	0.000	97	81398	10.0	10.3	
102 1,3,5-Trimethylbenzene	105	8.660	8.660	0.000	95	282960	10.0	10.5	
105 4-Chlorotoluene	126	8.696	8.696	0.000	97	80799	10.0	10.3	
106 tert-Butylbenzene	134	8.921	8.921	0.000	92	62518	10.0	10.1	
-	105	8.970		0.000	96	293206	10.0		
107 1,2,4-Trimethylbenzene	UD	0.970	8.970	0.000	90	Z93ZU0	10.0	10.5	

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8380.D

Data File: \\Cnromina\B	unaiov	Chromba	la\HP5973	3Q\20160	111-4	9854.D\Q838U.	ט		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
									<u>,</u>
109 sec-Butylbenzene	105	9.104	9.104	0.000	94	347856	10.0	10.5	
110 4-Isopropyltoluene	119	9.219	9.219	0.000	98	316742	10.0	10.6	
111 1,3-Dichlorobenzene	146	9.226	9.226	0.000	98	163697	10.0	10.4	
113 1,4-Dichlorobenzene	146	9.299	9.299	0.000	95	166778	10.0	10.3	
115 n-Butylbenzene	91	9.554	9.554	0.000	97	258736	10.0	10.4	
116 1,2-Dichlorobenzene	146	9.609	9.609	0.000	98	167566	10.0	10.4	
117 1,2-Dibromo-3-Chloropropan	75	10.272	10.272	0.000	88	25311	10.0	10.4	
119 1,2,4-Trichlorobenzene	180	10.934	10.934	0.000	94	127730	10.0	10.7	
120 Hexachlorobutadiene	225	11.044	11.044	0.000	98	41606	10.0	10.3	
121 Naphthalene	128	11.135	11.135	0.000	97	449295	10.0	11.3	
122 1,2,3-Trichlorobenzene	180	11.330	11.330	0.000	96	123271	10.0	10.8	
S 123 Total BTEX	1				0			51.4	
S 124 Xylenes, Total	1				0			20.6	
S 125 1,2-Dichloroethene, Total	1				0			21.0	
S 126 1,3-Dichloropropene, Total	1				0			20.0	
00 Flan Landad									
QC Flag Legend									
Review Flags									
M - Manually Integrated									
Reagents:									
8260 CORP mix_00063		Amount	Added: 5	5.00	l	Jnits: uL			

8260 CORP mix_00063	Amount Added: 5.00	Units: uL	
GAS CORP mix_00130	Amount Added: 5.00	Units: uL	
Q_8260_IS_00114	Amount Added: 1.25	Units: uL	Run Reagent
Q_8260_SURR_00106	Amount Added: 1.25	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8380.D Injection Date: 11-Jan-2016 17:40:30 Instrument ID: HP5973Q

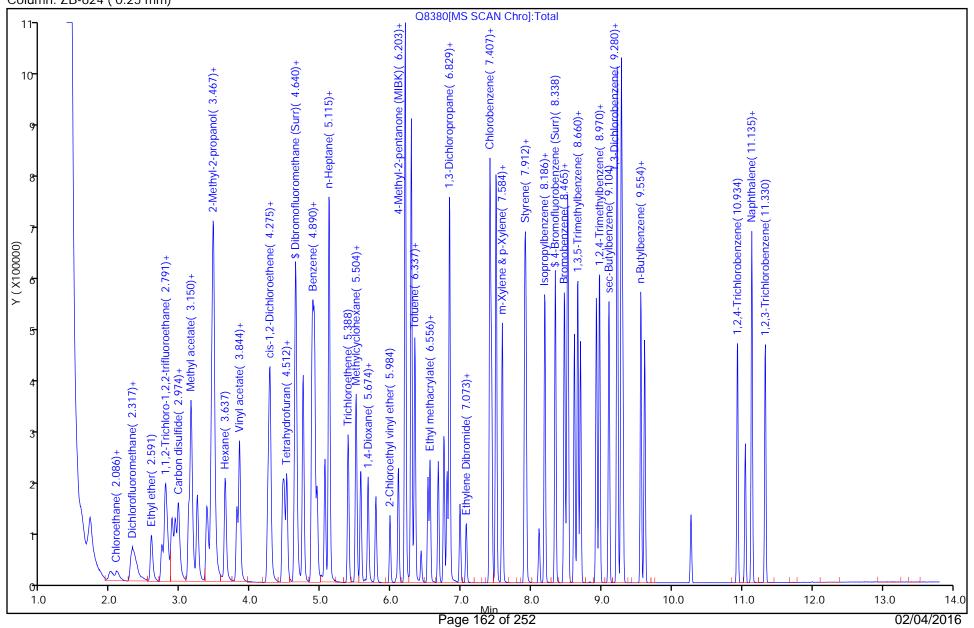
Lims ID: IC 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

LH

9

40

Report Date: 12-Jan-2016 14:25:53 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8380.D Injection Date: 11-Jan-2016 17:40:30 Instrument ID: HP5973Q

Lims ID: IC 5

Client ID:

Operator ID: LH ALS Bottle#: 40 Worklist Smp#: 9

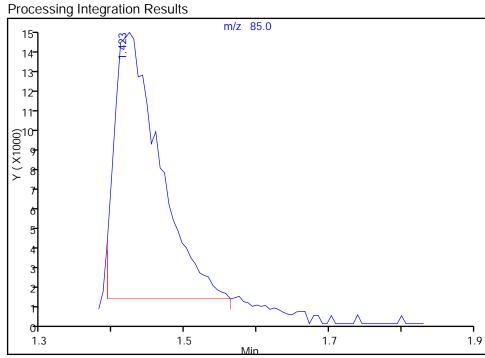
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

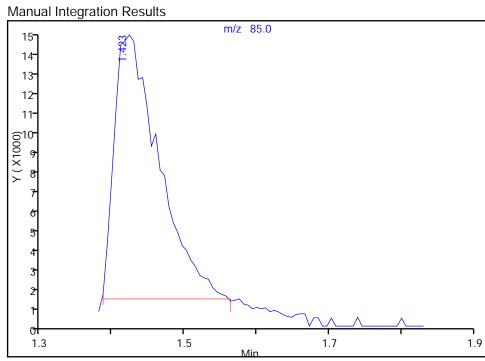
Column: ZB-624 (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

RT: 1.42 Area: 56394 Amount: 9.575102 Amount Units: ug/L



RT: 1.42 Area: 55315 Amount: 9.200643 Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 13:08:23 Audit Action: Manually Integrated Audit Reason: Poor chromatography

02/04/2016

Report Date: 12-Jan-2016 14:25:53 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8380.D Injection Date: 11-Jan-2016 17:40:30 Instrument ID: HP5973Q

Lims ID: IC 5

Client ID:

Operator ID: LH ALS Bottle#: 40 Worklist Smp#: 9

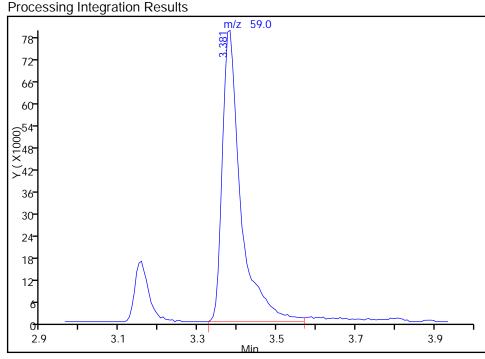
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

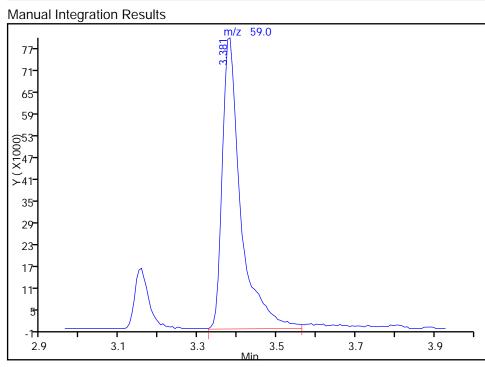
Column: ZB-624 (0.25 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

RT: 3.38
Area: 259566
Amount: 138.7105
Amount Units: ug/L



RT: 3.38
Area: 260024
Amount: 115.7442
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 14:06:42 Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8381.D

Lims ID: ICIS 6

Client ID:

Sample Type: ICIS Calib Level: 6

Inject. Date: 11-Jan-2016 18:03:30 ALS Bottle#: 41 Worklist Smp#: 10

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: ICIS 6

Misc. Info.: 480-0049854-010

Operator ID: LH Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:12-Jan-2016 14:33:03Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK010

First Level Reviewer: reiler Date: 12-Jan-2016 10:21:32

First Level Reviewer: reiler			D.	ate:		12-Jan-201	6 10:21:32		
		RT	Adj RT	DIt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.117	5.117	0.000	98	114840	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.410	7.410	0.000	83	215084	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.277	0.000	74	232248	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr		4.643	4.643	0.000	59	159167	25.0	26.3	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.892	4.892	0.000	0	90396	25.0	25.6	
\$ 5 Toluene-d8 (Surr)	98	6.291	6.291	0.000	81	506068	25.0	25.0	
\$ 6 4-Bromofluorobenzene (Surr	174	8.340	8.340	0.000	91	153624	25.0	24.6	
10 Dichlorodifluoromethane	85	1.432	1.432	0.000	86	159358	25.0	26.3	
12 Chloromethane	50	1.608	1.608	0.000	89	203095	25.0	24.6	
13 Vinyl chloride	62	1.706	1.706	0.000	66	198406	25.0	26.4	
144 Butadiene	54	1.730	1.730	0.000	63	174999	25.0	26.3	
14 Bromomethane	94	2.022	2.022	0.000	87	106250	25.0	30.4	
15 Chloroethane	64	2.113	2.113	0.000	93	93322	25.0	28.6	
17 Trichlorofluoromethane	101	2.308	2.308	0.000	84	261464	25.0	27.6	
16 Dichlorofluoromethane	67	2.332	2.332	0.000	80	284775	25.0	26.8	
18 Ethyl ether	59	2.593	2.593	0.000	89	171777	25.0	26.1	
20 Acrolein	56	2.745	2.745	0.000	93	221788	125.0	128.9	
22 1,1-Dichloroethene	96	2.788	2.788	0.000	90	189982	25.0	26.1	
21 1,1,2-Trichloro-1,2,2-trif	101	2.812	2.812	0.000	67	171045	25.0	25.6	
23 Acetone	43	2.885	2.885	0.000	97	478283	125.0	116.7	
25 Iodomethane	142	2.934	2.934	0.000	98	361411	25.0	26.2	
26 Carbon disulfide	76	2.977	2.977	0.000	98	614363	25.0	26.2	
28 3-Chloro-1-propene	41	3.122	3.122	0.000	90	305620	25.0	25.8	
27 Methyl acetate	43	3.159	3.159	0.000	98	1214469	125.0	128.0	
30 Methylene Chloride	84	3.244	3.244	0.000	84	209251	25.0	24.7	
31 2-Methyl-2-propanol	59	3.439	3.439	0.000	97	494122	250.0	218.3	M
32 Methyl tert-butyl ether	73	3.445	3.445	0.000	90	662906	25.0	25.7	
34 trans-1,2-Dichloroethene	96	3.457	3.457	0.000	75	209477	25.0	26.1	
33 Acrylonitrile	53	3.475	3.475	0.000	99	1217047	250.0	260.6	
35 Hexane	57	3.639	3.639	0.000	89	275296	25.0	25.4	
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Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8381.D

Data File: \\Cnromina\B	ullaio\(111-4	9854.D\Q8381. T			
Common d	Cie	RT (min.)	Adj RT	Dlt RT		Doonages	Cal Amt	OnCol Amt	Floris
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
20.1.1 Diablaraathana	4.2	2.010	2.010	0.000	O.E.	255170	25.0	25.0	
39 1,1-Dichloroethane	63	3.810	3.810	0.000	85 97	355170	25.0	25.8	
37 Vinyl acetate	43	3.846	3.846	0.000		951184	50.0	51.0	
44 2,2-Dichloropropane	77 04	4.248	4.248	0.000	88	262192	25.0 25.0	26.6 26.0	
45 cis-1,2-Dichloroethene	96 42	4.266	4.266	0.000	69 07	228955			
43 2-Butanone (MEK)	43	4.278	4.278	0.000	97	760327	125.0	121.8	
48 Chlorobromomethane	128	4.460	4.460	0.000	89	118991	25.0	25.9	
49 Tetrahydrofuran	42	4.479 4.515	4.479	0.000	87	225877	50.0	49.7	
50 Chloroform	83		4.515	0.000	69	342571	25.0	25.8	
51 1,1,1-Trichloroethane	97 57	4.631	4.631	0.000	90	293638	25.0	26.5	
52 Cyclohexane	56	4.649	4.649	0.000	91	351442	25.0	26.3	
55 Carbon tetrachloride	117	4.746	4.746	0.000	73	260294	25.0	27.1	
54 1,1-Dichloropropene	75 42	4.752	4.752	0.000	92	267594	25.0	25.7	
53 Isobutyl alcohol	43	4.874	4.874	0.000	94	484760	625.0	565.7	
57 Benzene	78	4.910	4.910	0.000	96	736530	25.0	25.3	
58 1,2-Dichloroethane	62	4.947	4.947	0.000	83	275981	25.0	25.8	
59 n-Heptane	43	5.056	5.056	0.000	91	251448	25.0	26.4	
62 Trichloroethene	95	5.391	5.391	0.000	91	205482	25.0	25.7	
64 Methylcyclohexane	83	5.500	5.500	0.000	90	331592	25.0	25.8	
65 1,2-Dichloropropane	63	5.567	5.567	0.000	91	178465	25.0	25.7	
66 1,4-Dioxane	88	5.671	5.671	0.000	39	56278	500.0	452.8	
67 Dibromomethane	93	5.671	5.671	0.000	92	131499	25.0	26.0	
68 Dichlorobromomethane	83	5.786	5.786	0.000	91	240811	25.0	26.9	
69 2-Chloroethyl vinyl ether	63	5.987	5.987	0.000	92	115953	25.0	25.5	
77 trans-1,3-Dichloropropene	75	6.102	6.102	0.000	90	276595	25.0	25.9	
73 4-Methyl-2-pentanone (MIBK	43	6.200	6.200	0.000	96	1401461	125.0	124.8	
74 Toluene	92	6.339	6.339	0.000	89	428308	25.0	24.5	
72 cis-1,3-Dichloropropene	75	6.528	6.528	0.000	89	235737	25.0	26.1	
75 Ethyl methacrylate	69	6.552	6.552	0.000	84	243758	25.0	25.7	
79 1,1,2-Trichloroethane	83	6.674	6.674	0.000	86	128668	25.0	24.6	
81 Tetrachloroethene	166	6.753	6.753	0.000	91	187726	25.0	24.6	
82 1,3-Dichloropropane	76	6.802	6.802	0.000	86	262055	25.0	24.6	
80 2-Hexanone	43	6.832	6.832	0.000	96	937475	125.0	118.0	
83 Chlorodibromomethane	129	6.984	6.984	0.000	83	188238	25.0	26.5	
84 Ethylene Dibromide	107	7.069	7.069	0.000	98	174324	25.0	24.9	
87 Chlorobenzene	112	7.434	7.434	0.000	95	476216	25.0	24.5	
88 Ethylbenzene	91	7.495	7.495	0.000	98	787270	25.0	24.9	
89 1,1,1,2-Tetrachloroethane	131	7.495	7.495	0.000	41	192818	25.0	26.4	
90 m-Xylene & p-Xylene	106	7.586	7.586	0.000	0	325984	25.0	24.8	
91 o-Xylene	106	7.902	7.902	0.000	96	335616	25.0	25.1	
92 Styrene	104	7.921	7.921	0.000	95	517793	25.0	25.5	
95 Bromoform	173	8.109	8.109	0.000	96	116697	25.0	26.6	
94 Isopropylbenzene	105	8.188	8.188	0.000	95	853489	25.0	25.6	
101 Bromobenzene	156	8.468	8.468	0.000	89	212599	25.0	24.6	
97 1,1,2,2-Tetrachloroethane	83	8.468	8.468	0.000	83	257546	25.0	25.0	
98 trans-1,4-Dichloro-2-buten	53	8.504	8.504	0.000	36	66788	25.0	25.1	
100 1,2,3-Trichloropropane	110	8.504	8.504	0.000	46	88611	25.0	24.5	
99 N-Propylbenzene	91	8.517	8.517	0.000	87	943503	25.0	25.4	
103 2-Chlorotoluene	126	8.608	8.608	0.000	97	208996	25.0	25.3	
102 1,3,5-Trimethylbenzene	105	8.656	8.656	0.000	61	731238	25.0	26.0	
105 4-Chlorotoluene	126	8.699	8.699	0.000	78	206393	25.0	24.8	
106 tert-Butylbenzene	134	8.924	8.924	0.000	85	165579	25.0	26.3	
_									
107 1,2,4-Trimethylbenzene	105	8.967	8.967	0.000	61	738163	25.0	25.4	

Data File:

Compound	Sig	RT (min.)	Adj RT (min.)	DIt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
·									
109 sec-Butylbenzene	105	9.100	9.100	0.000	94	892524	25.0	25.9	
110 4-Isopropyltoluene	119	9.216	9.216	0.000	95	812172	25.0	26.1	
111 1,3-Dichlorobenzene	146	9.222	9.222	0.000	74	401883	25.0	24.6	
113 1,4-Dichlorobenzene	146	9.295	9.295	0.000	94	410053	25.0	24.4	
115 n-Butylbenzene	91	9.557	9.557	0.000	95	669372	25.0	25.9	
116 1,2-Dichlorobenzene	146	9.611	9.611	0.000	96	415515	25.0	24.9	
117 1,2-Dibromo-3-Chloropropan	75	10.268	10.268	0.000	84	69176	25.0	27.5	
119 1,2,4-Trichlorobenzene	180	10.931	10.931	0.000	90	321440	25.0	26.0	
120 Hexachlorobutadiene	225	11.046	11.046	0.000	94	108892	25.0	26.0	
121 Naphthalene	128	11.138	11.138	0.000	97	1106557	25.0	26.6	
122 1,2,3-Trichlorobenzene	180	11.326	11.326	0.000	93	304465	25.0	25.7	

QC Flag Legend Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00063	Amount Added: 12.50	Units: uL	
GAS CORP mix_00130	Amount Added: 12.50	Units: uL	
Q_8260_IS_00114	Amount Added: 1.25	Units: uL	Run Reagent
Q_8260_SURR_00106	Amount Added: 1.25	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8381.D Injection Date: 11-Jan-2016 18:03:30

HP5973Q Instrument ID:

Lims ID: ICIS 6 Operator ID: Worklist Smp#:

ALS Bottle#:

LH

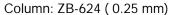
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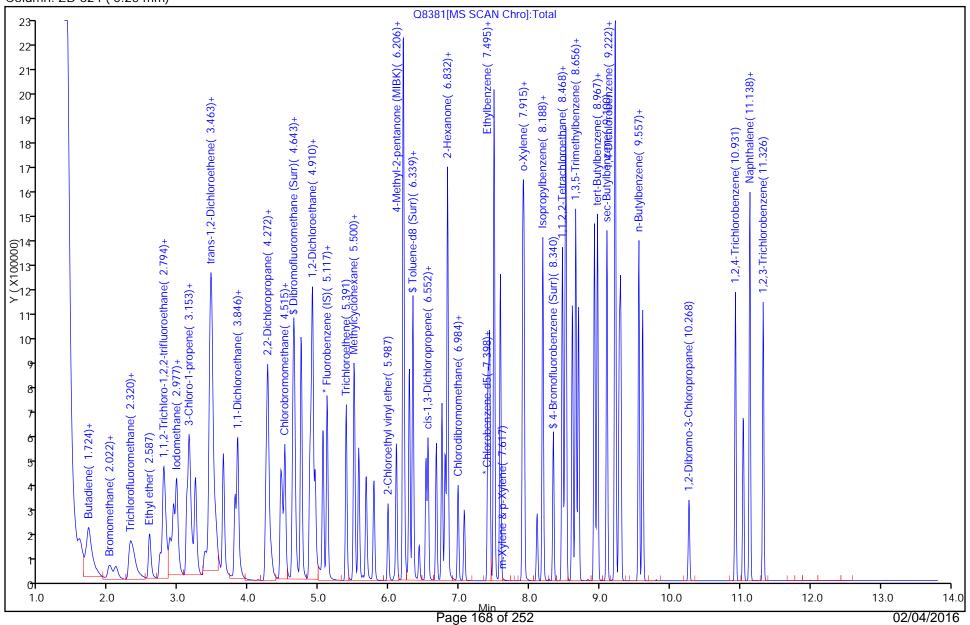
41

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Limit Group: MV - 8260C ICAL Method: Q-8260





Report Date: 12-Jan-2016 14:33:05 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: Injection Date: 11-Jan-2016 18:03:30 Instrument ID: HP5973Q

Lims ID: ICIS 6

Client ID:

Operator ID: ALS Bottle#: LH 41 Worklist Smp#: 10

Purge Vol: 5.000 mL Dil. Factor: 1.0000

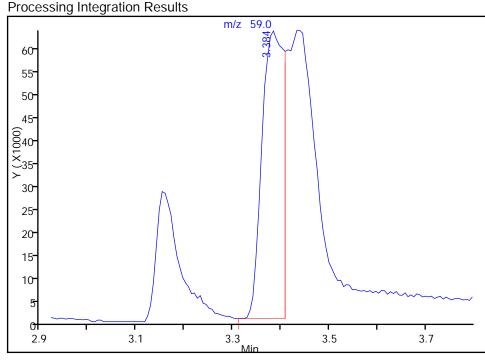
Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN

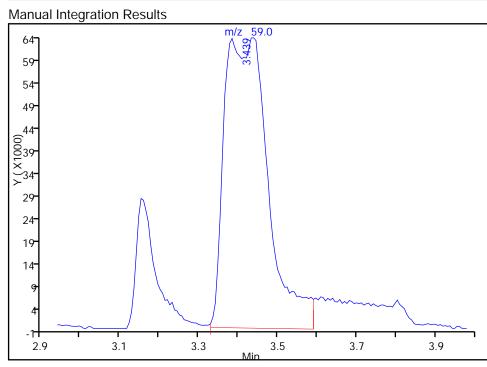
31 2-Methyl-2-propanol, CAS: 75-65-0

RT: 3.38 Area: 201992 Amount: 111.9953

Amount Units: ug/L



RT: 3.44 494122 Area: Amount: 218.3048 Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 14:06:53 Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8382.D

Lims ID: IC 7

Client ID:

Sample Type: IC Calib Level: 7

Inject. Date: 11-Jan-2016 18:26:30 ALS Bottle#: 42 Worklist Smp#: 11

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: IC 7

Misc. Info.: 480-0049854-011

Operator ID: LH Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 12-Jan-2016 14:25:56 Calib Date: 11-Jan-2016 21:55:30 Integrator: RTE ID Type: Deconvolution ID Quant Method: Internal Standard Quant By: Initial Calibration \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK010

First Level Reviewer: reiler Date: 12-Jan-2016 10:45:00

First Level Reviewer: reiler			D.	ate:		12-Jan-201	6 10:45:00		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.123	5.117	0.006	99	129496	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.410	7.410	0.000	83	238589	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.277	0.000	94	254595	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr		4.643	4.643	0.000	93	161646	25.0	23.7	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.892	4.892	0.000	0	93857	25.0	23.6	
\$ 5 Toluene-d8 (Surr)	98	6.291	6.291	0.000	92	549724	25.0	24.5	
\$ 6 4-Bromofluorobenzene (Surr	174	8.340	8.340	0.000	91	168647	25.0	24.4	
10 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	346203	50.0	50.7	
12 Chloromethane	50	1.608	1.608	0.000	99	407881	50.0	43.9	
13 Vinyl chloride	62	1.705	1.706	-0.001	98	407299	50.0	48.1	
144 Butadiene	54	1.742	1.730	0.012	88	357011	50.0	47.6	
14 Bromomethane	94	2.034	2.022	0.012	91	239883	50.0	60.9	
15 Chloroethane	64	2.125	2.113	0.012	100	220015	50.0	59.7	
17 Trichlorofluoromethane	101	2.313	2.308	0.005	99	539874	50.0	50.5	
16 Dichlorofluoromethane	67	2.332	2.332	0.000	97	594237	50.0	49.6	
18 Ethyl ether	59	2.593	2.593	0.000	91	334552	50.0	45.1	
20 Acrolein	56	2.739	2.745	-0.006	99	461921	250.0	238.1	
22 1,1-Dichloroethene	96	2.794	2.788	0.006	98	375506	50.0	45.7	
21 1,1,2-Trichloro-1,2,2-trif	101	2.824	2.812	0.012	93	333357	50.0	44.3	
23 Acetone	43	2.885	2.885	0.000	100	923075	250.0	199.8	
25 lodomethane	142	2.934	2.934	0.000	99	715581	50.0	45.9	
26 Carbon disulfide	76	2.976	2.977	-0.001	99	1229803	50.0	46.6	
28 3-Chloro-1-propene	41	3.128	3.122	0.006	92	586547	50.0	43.9	
27 Methyl acetate	43	3.159	3.159	0.000	98	2467365	250.0	230.5	
30 Methylene Chloride	84	3.250	3.244	0.006	93	413984	50.0	43.3	
31 2-Methyl-2-propanol	59	3.402	3.439	-0.037	97	886988	500.0	347.5	M
32 Methyl tert-butyl ether	73	3.445	3.445	0.000	94	1322958	50.0	45.6	
34 trans-1,2-Dichloroethene	96	3.457	3.457	0.000	99	414350	50.0	45.8	
33 Acrylonitrile	53	3.481	3.475	0.006	99	2492507	500.0	473.4	
35 Hexane	57	3.645	3.639	0.006	91	573476	50.0	46.9	

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8382.D

Data File: \\Cnromina\B	unalu\			1	111-4	9854.D\Q8382. T			
C	C	RT	Adj RT	Dlt RT		Desire	Cal Amt	OnCol Amt	БІ
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
20.1.1 Diablers of hone	/ 2	2 000	2.010	0.001	07	/0015/	F0.0	45.0	
39 1,1-Dichloroethane	63	3.809	3.810	-0.001	96	699156	50.0	45.0	
37 Vinyl acetate	43	3.846	3.846	0.000	97	1951689	100.0	92.8	
44 2,2-Dichloropropane	77	4.247	4.248	-0.001	87	490943	50.0	44.1	
45 cis-1,2-Dichloroethene	96	4.272	4.266	0.006	81	450972	50.0	45.5	
43 2-Butanone (MEK)	43	4.284	4.278	0.006	100	1595059	250.0	226.6	
48 Chlorobromomethane	128	4.460	4.460	0.000	93	242854	50.0	46.8	
49 Tetrahydrofuran	42	4.478	4.479	-0.001	88	467734	100.0	91.2	
50 Chloroform	83	4.515	4.515	0.000	93	677287	50.0	45.3	
51 1,1,1-Trichloroethane	97	4.630	4.631	-0.001	98	591249	50.0	47.3	
52 Cyclohexane	56	4.649	4.649	0.000	91	683107	50.0	45.3	
55 Carbon tetrachloride	117	4.746	4.746	0.000	97	549299	50.0	50.7	
54 1,1-Dichloropropene	75	4.752	4.752	0.000	97	551594	50.0	47.0	
53 Isobutyl alcohol	43	4.874	4.874	0.000	95	848954	1250.0	878.6	
57 Benzene	78	4.910	4.910	0.000	97	1491783	50.0	45.5	
58 1,2-Dichloroethane	62	4.947	4.947	0.000	97	557728	50.0	46.2	
59 n-Heptane	43	5.062	5.056	0.006	92	572216	50.0	53.2	
62 Trichloroethene	95	5.391	5.391	0.000	96	420436	50.0	46.6	
64 Methylcyclohexane	83	5.506	5.500	0.006	89	684451	50.0	47.2	
65 1,2-Dichloropropane	63	5.567	5.567	0.000	95	372122	50.0	47.6	
66 1,4-Dioxane	88	5.670	5.671	-0.001	95	114875	1000.0	833.2	
67 Dibromomethane	93	5.676	5.671	0.005	96	273366	50.0	47.9	
68 Dichlorobromomethane	83	5.786	5.786	0.000	99	507540	50.0	50.2	
69 2-Chloroethyl vinyl ether	63	5.987	5.987	0.000	93	272039	50.0	53.1	
77 trans-1,3-Dichloropropene	75	6.108	6.102	0.006	94	614015	50.0	51.8	
73 4-Methyl-2-pentanone (MIBK	43	6.205	6.200	0.005	94	2810072	250.0	225.6	
74 Toluene	92	6.339	6.339	0.000	99	918365	50.0	47.3	
72 cis-1,3-Dichloropropene	75	6.528	6.528	0.000	97	540072	50.0	53.0	
75 Ethyl methacrylate	69	6.558	6.552	0.006	89	539870	50.0	51.3	
79 1,1,2-Trichloroethane	83	6.674	6.674	0.000	91	285217	50.0	49.1	
81 Tetrachloroethene	166	6.753	6.753	0.000	97	401345	50.0	47.4	
82 1,3-Dichloropropane	76	6.801	6.802	-0.001	88	589219	50.0	49.9	
80 2-Hexanone	43	6.832	6.832	0.000	95	1973761	250.0	224.0	
83 Chlorodibromomethane	129	6.984	6.984	0.000	90	428843	50.0	54.4	
84 Ethylene Dibromide	107	7.069	7.069	0.000	98	391710	50.0	50.5	
87 Chlorobenzene	112	7.434	7.434	0.000	96	1034383	50.0	47.9	
88 Ethylbenzene	91	7.495	7.495	0.000	98	1645318	50.0	46.9	
89 1,1,1,2-Tetrachloroethane	131	7.495	7.495	0.000	46	408549	50.0	50.5	
90 m-Xylene & p-Xylene	106	7.586	7.586	0.000	0	697389	50.0	47.8	
91 o-Xylene	106	7.902	7.902	0.000	96	697659	50.0	47.1	
92 Styrene	104	7.920	7.921	-0.001	95	1092267	50.0	48.5	
95 Bromoform	173	8.109	8.109	0.000	97	276585	50.0	56.9	
94 Isopropylbenzene	105	8.188	8.188	0.000	95	1773995	50.0	48.6	
101 Bromobenzene	156	8.468	8.468	0.000	94	454157	50.0	48.0	
97 1,1,2,2-Tetrachloroethane	83	8.468	8.468	0.000	94	558227	50.0	49.5	
98 trans-1,4-Dichloro-2-buten	53	8.510	8.504	0.006	74	159223	50.0	54.5	
100 1,2,3-Trichloropropane	110	8.510	8.504	0.006	86	193103	50.0	48.7	
99 N-Propylbenzene	91	8.522	8.517	0.005	98	1950654	50.0	48.0	
103 2-Chlorotoluene	126	8.614	8.608	0.005	90 97	445468	50.0	46.0 49.2	
102 1,3,5-Trimethylbenzene	105	8.656	8.656	0.000	97 95	1513226	50.0	49.2 49.0	
•									
105 4-Chlorotoluene	126	8.699	8.699	0.000	96	443936	50.0	48.6	
106 tert-Butylbenzene	134	8.924	8.924	0.000	92	351629	50.0	50.9	
107 1,2,4-Trimethylbenzene	105	8.966	8.967	-0.001	96	1538297	50.0	48.3	

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8382.D

Q_8260_IS_00114

Q_8260_SURR_00106

Data File: \\C\\\C\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ullalo	CHIOHDa	1a1P3973	00/20100	1 1 1-4	19834.D\Q838Z.	ט		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
109 sec-Butylbenzene	105	9.100	9.100	0.000	94	1857374	50.0	49.2	
110 4-Isopropyltoluene	119	9.216	9.216	0.000	97	1660394	50.0	48.7	
111 1,3-Dichlorobenzene	146	9.228	9.222	0.006	98	839681	50.0	47.0	
113 1,4-Dichlorobenzene	146	9.301	9.295	0.006	95	873513	50.0	47.4	
115 n-Butylbenzene	91	9.556	9.557	-0.001	97	1379137	50.0	48.6	
116 1,2-Dichlorobenzene	146	9.611	9.611	0.000	98	859498	50.0	46.9	
117 1,2-Dibromo-3-Chloropropan	75	10.268	10.268	0.000	90	152027	50.0	55.0	
119 1,2,4-Trichlorobenzene	180	10.931	10.931	0.000	94	646208	50.0	47.7	
120 Hexachlorobutadiene	225	11.046	11.046	0.000	98	224684	50.0	48.9	
121 Naphthalene	128	11.137	11.138	-0.001	97	2194372	50.0	48.2	
122 1,2,3-Trichlorobenzene	180	11.332	11.326	0.006	96	615215	50.0	47.3	
S 123 Total BTEX	1				0			234.6	
S 124 Xylenes, Total	1				0			94.8	
S 125 1,2-Dichloroethene, Total	1				0			91.3	
S 126 1,3-Dichloropropene, Total	1				0			104.9	
OC Flori Lorend									
QC Flag Legend Review Flags									
M - Manually Integrated									
, ,									
Reagents:									
8260 CORP mix_00063			Added: 2			Units: uL			
GAS CORP mix_00130		Amount	Added: 2	5.00		Units: uL			

Amount Added: 1.25

Amount Added: 1.25

Run Reagent

Run Reagent

Units: uL

Units: uL

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8382.D Injection Date: 11-Jan-2016 18:26:30 Instrument ID: HP5973Q

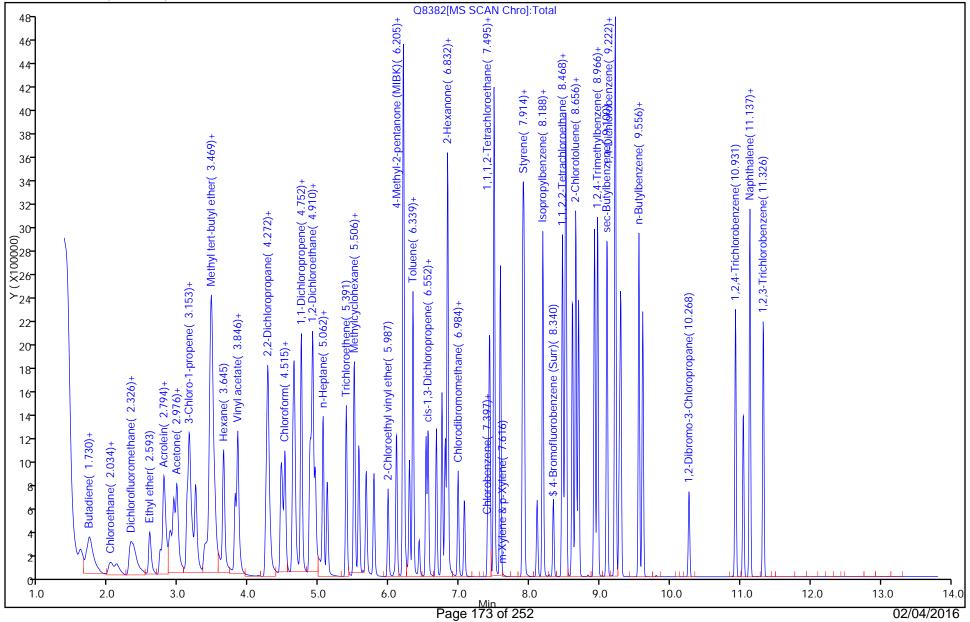
Lims ID: IC 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

LH

11

42

Report Date: 12-Jan-2016 14:25:56 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8382.D Injection Date: 11-Jan-2016 18:26:30 Instrument ID: HP5973Q

Lims ID: IC 7

Client ID:

Operator ID: LH ALS Bottle#: 42 Worklist Smp#: 11

Purge Vol: 5.000 mL Dil. Factor: 1.0000

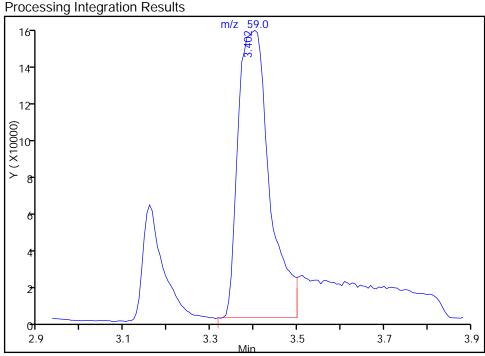
Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN

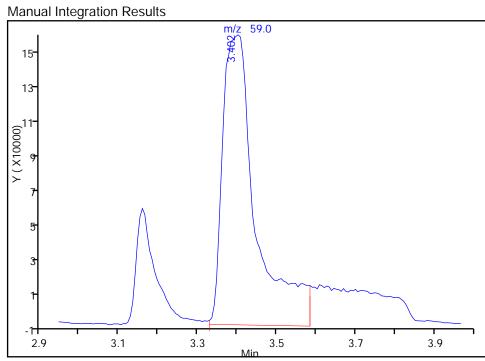
31 2-Methyl-2-propanol, CAS: 75-65-0

RT: 3.40 Area: 750390 Amount: 362.8258

Amount Units: ug/L



RT: 3.40
Area: 886988
Amount: 347.5230
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 14:07:05 Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8383.D

Lims ID: IC 8

Client ID:

Sample Type: IC Calib Level: 8

Inject. Date: 11-Jan-2016 18:50:30 ALS Bottle#: 43 Worklist Smp#: 12

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: IC 8

Misc. Info.: 480-0049854-012

Operator ID: LH Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Limit Group: MV - 8260C ICAL

Last Update: 12-Jan-2016 14:25:57 Calib Date: 11-Jan-2016 21:55:30 Integrator: RTE ID Type: Deconvolution ID Quant Method: Internal Standard Quant By: Initial Calibration \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK010

First Level Reviewer: reiler Date: 12-Jan-2016 11:05:11

First Level Reviewer: reiler			D	ate:		12-Jan-201	6 11:05:11		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.119	5.117	0.002	99	136878	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.411	7.410	0.001	83	257460	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.278	9.277	0.001	93	266312	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr		4.644	4.643	0.001	93	163699	25.0	22.7	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.894	4.892	0.002	0	93102	25.0	22.2	
\$ 5 Toluene-d8 (Surr)	98	6.292	6.291	0.001	92	591513	25.0	24.4	
\$ 6 4-Bromofluorobenzene (Surr	174	8.342	8.340	0.002	91	181343	25.0	24.3	
10 Dichlorodifluoromethane	85	1.433	1.432	0.001	99	697024	100.0	96.5	
12 Chloromethane	50	1.622	1.608	0.014	99	776434	100.0	79.0	M
13 Vinyl chloride	62	1.707	1.706	0.001	98	787118	100.0	88.0	
144 Butadiene	54	1.744	1.730	0.014	87	672566	100.0	84.9	
14 Bromomethane	94	2.042	2.022	0.020	91	402794	100.0	96.7	
15 Chloroethane	64	2.139	2.113	0.026	100	354342	100.0	91.0	
17 Trichlorofluoromethane	101	2.309	2.308	0.001	98	1039569	100.0	92.0	
16 Dichlorofluoromethane	67	2.340	2.332	0.008	97	1196838	100.0	94.5	
18 Ethyl ether	59	2.595	2.593	0.002	90	678470	100.0	86.6	
20 Acrolein	56	2.747	2.745	0.002	99	935860	500.0	456.3	
22 1,1-Dichloroethene	96	2.796	2.788	0.008	99	737400	100.0	85.0	M
21 1,1,2-Trichloro-1,2,2-trif	101	2.832	2.812	0.020	92	612441	100.0	77.0	
23 Acetone	43	2.893	2.885	0.008	100	2029627	500.0	415.6	
25 Iodomethane	142	2.936	2.934	0.002	99	1401071	100.0	85.1	
26 Carbon disulfide	76	2.978	2.977	0.001	99	2308570	100.0	82.7	
28 3-Chloro-1-propene	41	3.130	3.122	0.008	92	1080683	100.0	76.5	
27 Methyl acetate	43	3.161	3.159	0.001	97	4569841	500.0	404.0	
30 Methylene Chloride	84	3.246	3.244	0.002	92	813042	100.0	80.5	
31 2-Methyl-2-propanol	59	3.392	3.439	-0.047	100	2428953	1000.0	900.3	M
32 Methyl tert-butyl ether	73	3.446	3.445	0.001	94	2515922	100.0	82.0	
34 trans-1,2-Dichloroethene	96	3.459	3.457	0.001	98	771100	100.0	80.6	
33 Acrylonitrile	53	3.483	3.475	0.008	98	4560123	1000.0	819.3	
35 Hexane	57	3.647	3.639	0.008	91	1081421	100.0	83.6	
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Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8383.D

Data File: \\Cnromina\B	unaiu\			1	111-4	9854.D\Q8383. T			
Compound	Ci~	RT	Adj RT	Dlt RT		Doonaras	Cal Amt	OnCol Amt	Elece
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
39 1,1-Dichloroethane	63	3.811	3.810	0.001	96	1401849	100.0	85.4	
37 Vinyl acetate	43	3.848	3.846	0.001	97	3705149	200.0	166.6	
44 2,2-Dichloropropane	43 77	4.249	4.248	0.002	97 87	898003	100.0	76.3	
45 cis-1,2-Dichloroethene	96	4.249	4.246	0.001	79	878152	100.0	83.8	
43 2-Butanone (MEK)	43	4.286	4.278	0.001	99	3196810	500.0	429.7	
48 Chlorobromomethane	43 128	4.462	4.276	0.008	99 92	480953	100.0	429.7 87.7	
	42	4.480	4.479	0.002	92 88	949291	200.0	175.1	
49 Tetrahydrofuran 50 Chloroform	83	4.460		0.001	93	1331996	100.0	84.2	
	os 97	4.632	4.515 4.631	0.002	93 98	1331990		86.3	
51 1,1,1-Trichloroethane	56	4.652 4.650	4.649	0.001	90 90		100.0 100.0	60.3 77.7	
52 Cyclohexane		4.050 4.748		0.001	90 97	1237910	100.0		
55 Carbon tetrachloride	117		4.746			1078436		94.1 87.7	
54 1,1-Dichloropropene	75	4.754	4.752	0.002	97 04	1088672 2287637	100.0		
53 Isobutyl alcohol	43	4.882	4.874	0.008	94		2500.0	2239.9	
57 Benzene	78 73	4.912	4.910	0.002	97 07	2870992	100.0	82.8	
58 1,2-Dichloroethane	62	4.948	4.947	0.001	97	1109065	100.0	86.9	
59 n-Heptane	43	5.058	5.056	0.002	91	975600	100.0	85.8	
62 Trichloroethene	95	5.392	5.391	0.001	96	849956	100.0	89.1	
64 Methylcyclohexane	83	5.502	5.500	0.002	89	1325594	100.0	86.5	
65 1,2-Dichloropropane	63	5.569	5.567	0.002	96	764722	100.0	92.5	
66 1,4-Dioxane	88	5.672	5.671	0.001	94	250181	2000.0	1681.5	
67 Dibromomethane	93	5.672	5.671	0.001	95	556467	100.0	92.2	
68 Dichlorobromomethane	83	5.788	5.786	0.002	99	1061820	100.0	99.4	
69 2-Chloroethyl vinyl ether	63	5.988	5.987	0.001	93	599962	100.0	110.7	
77 trans-1,3-Dichloropropene	75	6.104	6.102	0.002	94	1311120	100.0	102.5	
73 4-Methyl-2-pentanone (MIBK	43	6.207	6.200	0.007	89	4638328	500.0	345.1	
74 Toluene	92	6.341	6.339	0.002	98	1865893	100.0	89.1	
72 cis-1,3-Dichloropropene	75	6.530	6.528	0.002	98	1175767	100.0	109.3	
75 Ethyl methacrylate	69	6.560	6.552	0.008	88	1111358	100.0	97.9	
79 1,1,2-Trichloroethane	83	6.676	6.674	0.002	91	597054	100.0	95.3	
81 Tetrachloroethene	166	6.755	6.753	0.002	97	833798	100.0	91.3	
82 1,3-Dichloropropane	76	6.797	6.802	-0.005	88	1233020	100.0	96.8	
80 2-Hexanone	43	6.834	6.832	0.002	92	3471747	500.0	365.2	
83 Chlorodibromomethane	129	6.986	6.984	0.002	90	919677	100.0	108.0	
84 Ethylene Dibromide	107	7.071	7.069	0.002	99	840193	100.0	100.3	
87 Chlorobenzene	112	7.430	7.434	-0.004	95	2107490	100.0	90.4	
88 Ethylbenzene	91	7.497	7.495	0.001	98	3075886	100.0	81.2	
89 1,1,1,2-Tetrachloroethane	131	7.497	7.495	0.001	56	818219	100.0	93.7	
90 m-Xylene & p-Xylene	106	7.588	7.586	0.002	0	1409233	100.0	89.4	
91 o-Xylene	106	7.904	7.902	0.002	95	1377281	100.0	86.1	
92 Styrene	104	7.922	7.921	0.001	94	2146754	100.0	88.3	
95 Bromoform	173	8.111	8.109	0.002	97	598241	100.0	114.0	
94 Isopropylbenzene	105	8.190	8.188	0.002	96	3362022	100.0	88.0	
101 Bromobenzene	156	8.470	8.468	0.002	93	926548	100.0	93.6	
97 1,1,2,2-Tetrachloroethane	83	8.470	8.468	0.002	95	1099429	100.0	93.2	
98 trans-1,4-Dichloro-2-buten	53	8.512	8.504	0.008	77	323715	100.0	105.9	
100 1,2,3-Trichloropropane	110	8.506	8.504	0.002	85	381052	100.0	91.8	
99 N-Propylbenzene	91	8.524	8.517	0.007	97	3542243	100.0	83.3	
103 2-Chlorotoluene	126	8.615	8.608	0.007	98	895544	100.0	94.6	
102 1,3,5-Trimethylbenzene	105	8.658	8.656	0.007	96	2858995	100.0	88.6	
105 4-Chlorotoluene	126	8.701	8.699	0.002	96	899942	100.0	94.2	
106 tert-Butylbenzene	134	8.926	8.924	0.002	90 92	693355	100.0	94.2 96.0	
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107 1,2,4-Trimethylbenzene	105	8.968	8.967	0.001	96	2911986	100.0	87.5	

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		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
109 sec-Butylbenzene	105	9.102	9.100	0.002	95	3408636	100.0	86.4	
110 4-Isopropyltoluene	119	9.218	9.216	0.002	96	3011218	100.0	84.4	
111 1,3-Dichlorobenzene	146	9.230	9.222	0.008	98	1608953	100.0	86.1	
113 1,4-Dichlorobenzene	146	9.303	9.295	0.008	94	1717054	100.0	89.0	
115 n-Butylbenzene	91	9.558	9.557	0.001	96	2580321	100.0	86.9	
116 1,2-Dichlorobenzene	146	9.613	9.611	0.002	97	1701652	100.0	88.8	
117 1,2-Dibromo-3-Chloropropan	75	10.270	10.268	0.002	91	317178	100.0	109.8	
119 1,2,4-Trichlorobenzene	180	10.932	10.931	0.001	95	1267241	100.0	89.4	
120 Hexachlorobutadiene	225	11.048	11.046	0.002	97	437135	100.0	90.9	
121 Naphthalene	128	11.139	11.138	0.001	98	3926183	100.0	82.4	
122 1,2,3-Trichlorobenzene	180	11.328	11.326	0.002	96	1216472	100.0	89.5	
S 123 Total BTEX	1				0			428.7	
S 124 Xylenes, Total	1				0			175.6	
S 125 1,2-Dichloroethene, Total	1				0			164.4	
S 126 1,3-Dichloropropene, Total	1				0			211.8	
OC Flori Lorond									
QC Flag Legend Review Flags									
M - Manually Integrated									
Reagents:									
8260 CORP mix_00063			Added: 5			Units: uL			
GAS CORP mix_00130		Amount	Added: 5	0.00		Units: uL			

Amount Added: 1.25

Amount Added: 1.25

Q_8260_IS_00114

Q_8260_SURR_00106

Run Reagent

Run Reagent

Units: uL

Units: uL

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8383.D Injection Date: 11-Jan-2016 18:50:30 Instrument ID: HP5973Q

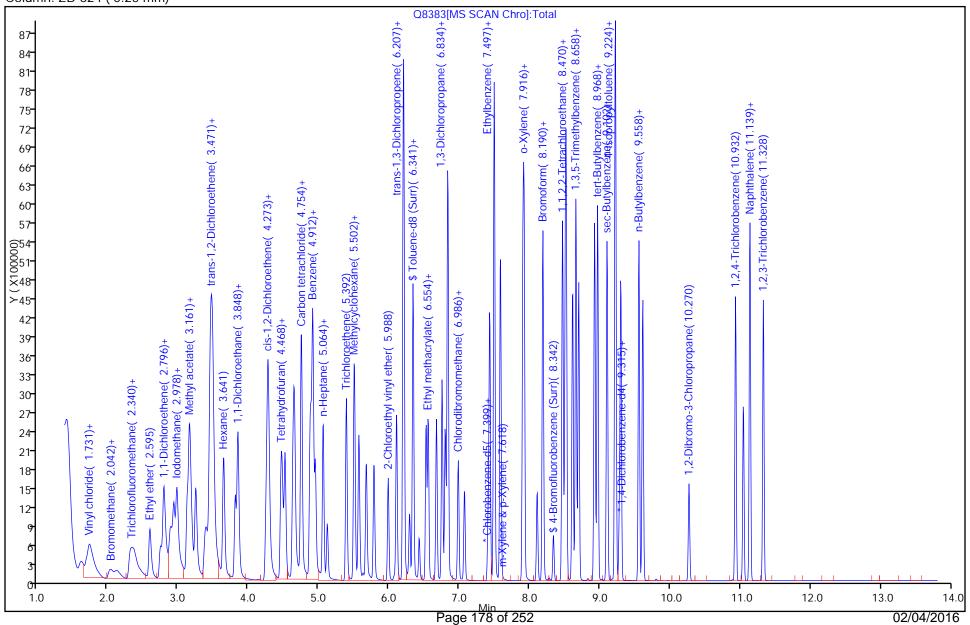
Lims ID: IC 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

LH

12

43

Report Date: 12-Jan-2016 14:25:58 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8383.D Injection Date: 11-Jan-2016 18:50:30 Instrument ID: HP5973Q

Lims ID: IC 8

Client ID:

Operator ID: LH ALS Bottle#: 43 Worklist Smp#: 12

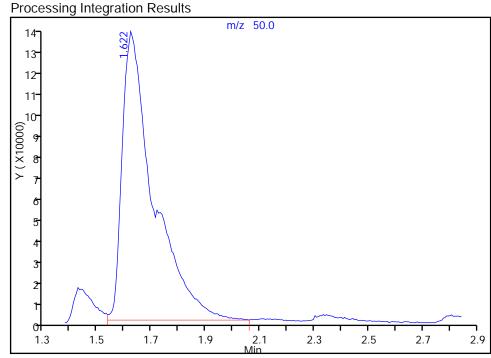
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

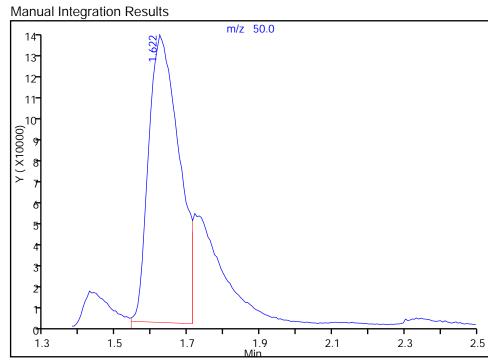
Column: ZB-624 (0.25 mm) Detector MS SCAN

12 Chloromethane, CAS: 74-87-3

RT: 1.62 Area: 1066661 Amount: 104.6541 Amount Units: ug/L



RT: 1.62 Area: 776434 Amount: 78.990470 Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 13:12:42 Audit Action: Manually Integrated Audit Reason: Poor chromatography Report Date: 12-Jan-2016 14:25:58 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8383.D Injection Date: 11-Jan-2016 18:50:30 Instrument ID: HP5973Q

Lims ID: IC 8

Client ID:

Operator ID: LH ALS Bottle#: 43 Worklist Smp#: 12

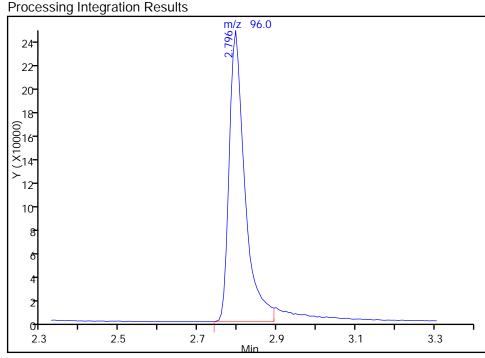
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN

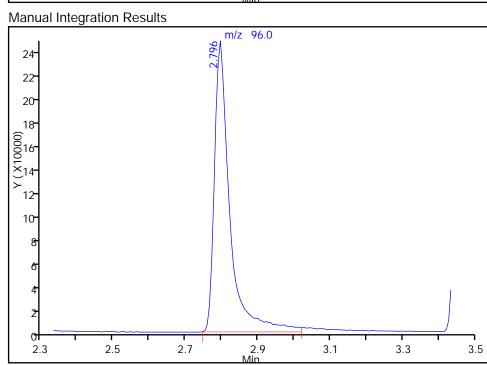
22 1,1-Dichloroethene, CAS: 75-35-4

RT: 2.80 Area: 689345 Amount: 84.362560 Amount Units: ug/L



RT: 2.80 Area: 737400 Amount: 84.957532

Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 13:14:16 Audit Action: Manually Integrated

Audit Reason: Peak Tail

Report Date: 12-Jan-2016 14:25:58 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8383.D Injection Date: 11-Jan-2016 18:50:30 Instrument ID: HP5973Q

Lims ID: IC 8

Client ID:

Operator ID: LH ALS Bottle#: 43 Worklist Smp#: 12

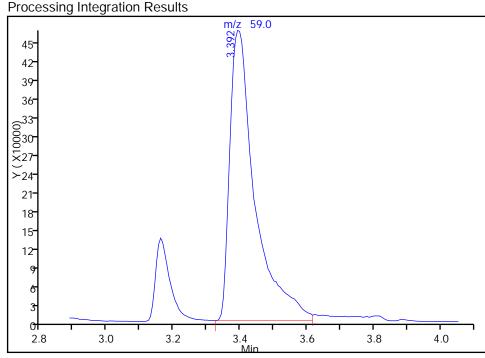
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

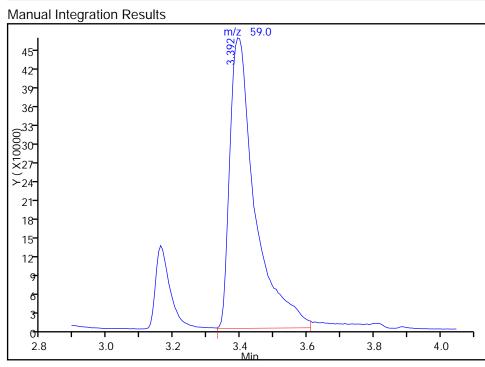
Column: ZB-624 (0.25 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

RT: 3.39 Area: 2427094 Amount: 1115.4182 Amount Units: ug/L



RT: 3.39
Area: 2428953
Amount: 900.3423
Amount Units: ug/L



Reviewer: HillL, 12-Jan-2016 14:07:51 Audit Action: Manually Integrated Audit Reason: Poor chromatography

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Lab Sample ID: CCVIS 480-285459/3 Calibration Date: 01/29/2016 10:02

Instrument ID: HP5973Q Calib Start Date: 01/11/2016 16:06

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 01/11/2016 18:50

Lab File ID: Q8804.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.319	1.166	0.1000	22.1	25.0	-11.6	50.0
Chloromethane	Ave	1.795	1.934	0.1000	26.9	25.0	7.7	20.0
Vinyl chloride	Ave	1.635	1.429	0.1000	21.9	25.0	-12.6	20.0
Butadiene	Ave	1.447	1.114		19.3	25.0	-23.0*	20.0
Bromomethane	Ave	0.7611	0.9740	0.1000	32.0	25.0	28.0	50.0
Chloroethane	Ave	0.7110	0.8254	0.1000	29.0	25.0	16.1	50.0
Trichlorofluoromethane	Ave	2.063	2.083	0.1000	25.2	25.0	1.0	20.0
Dichlorofluoromethane	Ave	2.313	2.205		23.8	25.0	-4.7	20.0
Ethyl ether	Ave	1.431	1.324		23.1	25.0	-7.5	20.0
Acrolein	Ave	0.3746	0.1616		53.9	125	-56.9*	50.0
1,1-Dichloroethene	Ave	1.585	1.222	0.1000	19.3	25.0	-22.9*	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	1.452	0.8899	0.1000	15.3	25.0	-38.7*	20.0
Acetone	Ave	0.8920	0.8637	0.1000	121	125	-3.2	50.0
Iodomethane	Ave	3.007	2.492		20.7	25.0	-17.1	20.0
Carbon disulfide	Ave	5.098	3.775	0.1000	18.5	25.0	-25.9*	20.0
Allyl chloride	Ave	2.581	2.008		19.4	25.0	-22.2*	20.0
Methyl acetate	Ave	2.066	1.764	0.1000	107	125	-14.6	50.0
Methylene Chloride	Ave	1.845	1.476	0.1000	20.0	25.0	-20.0	20.0
2-Methyl-2-propanol	Ave	0.4927	0.4357		221	250	-11.6	50.0
Methyl tert-butyl ether	Ave	5.604	4.868	0.1000	21.7	25.0	-13.1	20.0
trans-1,2-Dichloroethene	Ave	1.748	1.457	0.1000	20.8	25.0	-16.6	20.0
Acrylonitrile	Ave	1.017	0.9042		222	250	-11.1	20.0
Hexane	Ave	2.362	1.539		16.3	25.0	-34.8*	20.0
1,1-Dichloroethane	Ave	2.999	2.514	0.2000	21.0	25.0	-16.2	20.0
Vinyl acetate	Ave	4.061	3.520		43.3	50.0	-13.3	20.0
2,2-Dichloropropane	Ave	2.150	1.645		19.1	25.0	-23.5*	20.0
cis-1,2-Dichloroethene	Ave	1.914	1.639	0.1000	21.4	25.0	-14.4	20.0
2-Butanone (MEK)	Ave	1.359	1.286	0.1000	118	125	-5.4	20.0
Chlorobromomethane	Ave	1.002	0.8802		22.0	25.0	-12.1	20.0
Tetrahydrofuran	Ave	0.9902	0.8818		44.5	50.0	-10.9	20.0
Chloroform	Ave	2.888	2.585	0.2000	22.4	25.0	-10.5	20.0
1,1,1-Trichloroethane	Ave	2.415	2.025	0.1000	21.0	25.0	-16.1	20.0
Cyclohexane	Ave	2.910	1.957	0.1000	16.8	25.0	-32.7*	20.0
1,1-Dichloropropene	Ave	2.267	1.920		21.2	25.0	-15.3	20.0
Carbon tetrachloride	Ave	2.093	1.748	0.1000	20.9	25.0	-16.5	20.0
Isobutyl alcohol	Ave	0.1865	0.1561		523	625	-16.3	50.0
Benzene	Ave	6.331	5.463	0.5000	21.6	25.0	-13.7	20.0
1,2-Dichloroethane	Ave	2.331	2.196	0.1000	23.6	25.0	-5.8	20.0
n-Heptane	Ave	2.077	1.490		17.9	25.0	-28.2*	20.0
Trichloroethene	Ave	1.742	1.547	0.2000	22.2	25.0	-11.2	20.0

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Lab Sample ID: CCVIS 480-285459/3 Calibration Date: 01/29/2016 10:02

Instrument ID: HP5973Q Calib Start Date: 01/11/2016 16:06

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 01/11/2016 18:50

Lab File ID: Q8804.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.798	2.106	0.1000	18.8	25.0	-24.8*	20.0
1,2-Dichloropropane	Ave	1.509	1.333	0.1000	22.1	25.0	-11.7	20.0
1,4-Dioxane	Ave	0.0144	0.0120		415	500	-16.9	50.0
Dibromomethane	Ave	1.103	1.038	0.1000	23.5	25.0	-5.8	20.0
Bromodichloromethane	Ave	1.951	1.902	0.2000	24.4	25.0	-2.5	20.0
2-Chloroethyl vinyl ether	Ave	0.9896	1.058		26.7	25.0	6.9	20.0
trans-1,3-Dichloropropene	Ave	1.242	1.158	0.1000	23.3	25.0	-6.7	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.305	1.169	0.1000	112	125	-10.4	20.0
Toluene	Ave	2.033	1.764	0.4000	21.7	25.0	-13.3	20.0
cis-1,3-Dichloropropene	Ave	1.965	2.112	0.2000	26.9	25.0	7.5	20.0
Ethyl methacrylate	Ave	1.102	1.074		24.3	25.0	-2.6	20.0
1,1,2-Trichloroethane	Ave	0.6086	0.5572	0.1000	22.9	25.0	-8.4	20.0
Tetrachloroethene	Ave	0.8866	0.7643	0.2000	21.6	25.0	-13.8	20.0
1,3-Dichloropropane	Ave	1.237	1.161		23.5	25.0	-6.1	20.0
2-Hexanone	Ave	0.9232	0.8874	0.1000	120	125	-3.9	20.0
Dibromochloromethane	Ave	0.8266	0.8088	0.1000	24.5	25.0	-2.2	20.0
1,2-Dibromoethane	Ave	0.8131	0.8047		24.7	25.0	-1.0	20.0
Chlorobenzene	Ave	2.264	2.010	0.5000	22.2	25.0	-11.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8484	0.7371		21.7	25.0	-13.1	20.0
Ethylbenzene	Ave	3.676	3.246	0.1000	22.1	25.0	-11.7	20.0
m,p-Xylene	Ave	1.530	1.320	0.1000	21.6	25.0	-13.8	20.0
o-Xylene	Ave	1.552	1.331	0.3000	21.4	25.0	-14.3	20.0
Styrene	Ave	2.361	2.176	0.3000	23.0	25.0	-7.8	20.0
Bromoform	Ave	0.5094	0.5010	0.1000	24.6	25.0	-1.7	50.0
Isopropylbenzene	Ave	3.587	3.163	0.1000	22.0	25.0	-11.8	20.0
1,1,2,2-Tetrachloroethane	Ave	1.107	1.006	0.3000	22.7	25.0	-9.2	20.0
Bromobenzene	Ave	0.9295	0.8516		22.9	25.0	-8.4	20.0
1,2,3-Trichloropropane	Ave	0.3896	0.3655		23.5	25.0	-6.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2869	0.2731		23.8	25.0	-4.8	50.0
N-Propylbenzene	Ave	3.993	3.543		22.2	25.0	-11.3	20.0
2-Chlorotoluene	Ave	0.8883	0.7913		22.3	25.0	-10.9	20.0
1,3,5-Trimethylbenzene	Ave	3.031	2.729		22.5	25.0	-10.0	20.0
4-Chlorotoluene	Ave	0.8970	0.8107		22.6	25.0	-9.6	20.0
tert-Butylbenzene	Ave	0.6778	0.5956		22.0	25.0	-12.1	20.0
1,2,4-Trimethylbenzene	Ave	3.124	2.804		22.4	25.0	-10.2	20.0
sec-Butylbenzene	Ave	3.705	3.218		21.7	25.0	-13.1	20.0
4-Isopropyltoluene	Ave	3.351	2.931		21.9	25.0	-12.5	20.0
1,3-Dichlorobenzene	Ave	1.755	1.554	0.6000	22.1	25.0	-11.4	20.0
1,4-Dichlorobenzene	Ave	1.810	1.596	0.5000	22.0	25.0	-11.8	20.0
n-Butylbenzene	Ave	2.786	2.366		21.2	25.0	-15.1	20.0
1,2-Dichlorobenzene	Ave	1.798	1.579	0.4000	22.0	25.0	-12.2	20.0

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Lab Sample ID: CCVIS 480-285459/3 Calibration Date: 01/29/2016 10:02

Instrument ID: HP5973Q Calib Start Date: 01/11/2016 16:06

GC Column: $\underline{\text{ZB-624 (60)}}$ ID: $\underline{\text{0.25 (mm)}}$ Calib End Date: $\underline{\text{01/11/2016}}$ 18:50

Lab File ID: Q8804.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2712	0.2688	0.0500	24.8	25.0	-0.9	50.0
1,2,4-Trichlorobenzene	Ave	1.331	1.181	0.2000	22.2	25.0	-11.3	20.0
Hexachlorobutadiene	Ave	0.4514	0.3794		21.0	25.0	-15.9	20.0
Naphthalene	Ave	4.471	4.146		23.2	25.0	-7.3	20.0
1,2,3-Trichlorobenzene	Ave	1.276	1.126		22.1	25.0	-11.8	20.0
Dibromofluoromethane (Surr)	Ave	1.318	1.181		22.4	25.0	-10.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.7676	0.6896		22.5	25.0	-10.2	20.0
Toluene-d8 (Surr)	Ave	2.356	2.049		21.7	25.0	-13.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.7250	0.6766		23.3	25.0	-6.7	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8804.D

Lims ID: CCVIS

Client ID:

Sample Type: CCVIS

Inject. Date: 29-Jan-2016 10:02:30 ALS Bottle#: 3 Worklist Smp#: 3

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: CCVIS

Misc. Info.: 480-0050272-003

Operator ID: RR Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 29-Jan-2016 11:11:41 Calib Date: 11-Jan-2016 21:55:30 Integrator: RTE ID Type: Deconvolution ID Quant Method: Internal Standard Quant By: Initial Calibration \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK014

First Level Reviewer: reiler Date: 29-Jan-2016 11:11:41

First Level Reviewer: reiler			D	ate:		29-Jan-201	6 11:11:41		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
		_							
* 147 Fluorobenzene (IS)	70	5.117	5.117	0.000	99	94908	25.0	25.0	
2 Chlorobenzene-d5	82	7.410	7.410	0.000	84	187150	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.277	0.000	94	199422	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.643	4.643	0.000	93	112042	25.0	22.4	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.892	4.892	0.000	0	65445	25.0	22.5	
\$ 5 Toluene-d8 (Surr)	98	6.291	6.291	0.000	92	383465	25.0	21.7	
\$ 6 4-Bromofluorobenzene (Surr	174	8.340	8.340	0.000	92	126628	25.0	23.3	
10 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	110674	25.0	22.1	
12 Chloromethane	50	1.626	1.626	0.000	99	183538	25.0	26.9	
13 Vinyl chloride	62	1.712	1.712	0.000	98	135604	25.0	21.9	
144 Butadiene	54	1.724	1.724	0.000	88	105725	25.0	19.3	
14 Bromomethane	94	2.028	2.028	0.000	92	92437	25.0	32.0	
15 Chloroethane	64	2.119	2.119	0.000	99	78336	25.0	29.0	
17 Trichlorofluoromethane	101	2.320	2.320	0.000	97	197692	25.0	25.2	
16 Dichlorofluoromethane	67	2.326	2.326	0.000	93	209286	25.0	23.8	
18 Ethyl ether	59	2.599	2.599	0.000	90	125661	25.0	23.1	
20 Acrolein	56	2.745	2.745	0.000	99	76666	125.0	53.9	
22 1,1-Dichloroethene	96	2.800	2.800	0.000	98	116021	25.0	19.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.806	2.806	0.000	91	84455	25.0	15.3	
23 Acetone	43	2.891	2.891	0.000	99	409872	125.0	121.0	
25 Iodomethane	142	2.940	2.940	0.000	100	236486	25.0	20.7	
26 Carbon disulfide	76	2.983	2.983	0.000	99	358266	25.0	18.5	
28 3-Chloro-1-propene	41	3.129	3.129	0.000	90	190597	25.0	19.4	
27 Methyl acetate	43	3.159	3.159	0.000	97	836949	125.0	106.7	
30 Methylene Chloride	84	3.250	3.250	0.000	92	140084	25.0	20.0	
31 2-Methyl-2-propanol	59	3.378	3.378	0.000	100	413468	250.0	221.0	
32 Methyl tert-butyl ether	73	3.451	3.451	0.000	94	462022	25.0	21.7	
34 trans-1,2-Dichloroethene	96	3.463	3.463	0.000	98	138312	25.0	20.8	
33 Acrylonitrile	53	3.481	3.481	0.000	98	858149	250.0	222.4	
35 Hexane	57	3.645	3.645	0.000	92	146033	25.0	16.3	

Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\Cnromina\\B	unalu\				127-3	0272.D\Q8804. T			
Compound	Ci~	RT (min.)	Adj RT	Dlt RT		Doonaras	Cal Amt	OnCol Amt	Elogo
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
39 1,1-Dichloroethane	63	3.810	3.810	0.000	96	238624	25.0	21.0	
37 Vinyl acetate	43	3.846	3.846	0.000	97	668151	50.0	43.3	
44 2,2-Dichloropropane	77	4.254	4.254	0.000	87	156158	25.0	19.1	
45 cis-1,2-Dichloroethene	96	4.272	4.272	0.000	80	155584	25.0	21.4	
43 2-Butanone (MEK)	43	4.284	4.284	0.000	100	610242	125.0	118.3	
48 Chlorobromomethane	128	4.460	4.460	0.000	91	83542	25.0	22.0	
49 Tetrahydrofuran	42	4.479	4.479	0.000	86	167386	50.0	44.5	
50 Chloroform	83	4.521	4.521	0.000	93	245361	25.0	22.4	
51 1,1,1-Trichloroethane	97	4.631	4.631	0.000	98	192180	25.0	21.0	
52 Cyclohexane	56	4.655	4.655	0.000	92	185738	25.0	16.8	
55 Carbon tetrachloride	117	4.752	4.752	0.000	97	165878	25.0	20.9	
54 1,1-Dichloropropene	75	4.752	4.752	0.000	98	182243	25.0	21.2	
53 Isobutyl alcohol	43	4.874	4.732	0.000	94	370390	625.0	523.0	
57 Benzene	78	4.910	4.910	0.000	97	518435	25.0	21.6	
58 1,2-Dichloroethane	62	4.953	4.910	0.000	98	208431	25.0	23.6	
59 n-Heptane	43	5.062	5.062	0.000	94	141450	25.0	23.0 17.9	
62 Trichloroethene	43 95	5.391	5.391	0.000	94 96	146820	25.0	22.2	
64 Methylcyclohexane	83	5.506	5.506	0.000	90 89	199843	25.0	18.8	
3 3	63	5.567	5.567	0.000	94	126466	25.0	22.1	
65 1,2-Dichloropropane 66 1,4-Dioxane	88	5.677	5.677	0.000	94 38	44934	500.0	415.5	
		5.677							
67 Dibromomethane	93		5.677	0.000	94	98537	25.0	23.5	
68 Dichlorobromomethane	83	5.786	5.786	0.000	99	180520	25.0	24.4	
69 2-Chloroethyl vinyl ether	63	5.987	5.987	0.000	93	100430	25.0	26.7	
77 trans-1,3-Dichloropropene	75 42	6.108	6.108	0.000	94	216777	25.0	23.3	
73 4-Methyl-2-pentanone (MIBK	43	6.200	6.200	0.000	96	1093985	125.0	112.0	
74 Toluene	92	6.339	6.339	0.000	98	330050	25.0	21.7	
72 cis-1,3-Dichloropropene	75	6.528	6.528	0.000	98	200492	25.0	26.9	
75 Ethyl methacrylate	69	6.558	6.558	0.000	88	200917	25.0	24.3	
79 1,1,2-Trichloroethane	83	6.674	6.674	0.000	92	104286	25.0	22.9	
81 Tetrachloroethene	166	6.753	6.753	0.000	97	143040	25.0	21.6	
82 1,3-Dichloropropane	76	6.802	6.802	0.000	87	217318	25.0	23.5	
80 2-Hexanone	43	6.832	6.832	0.000	96	830421	125.0	120.2	
83 Chlorodibromomethane	129	6.984	6.984	0.000	89	151366	25.0	24.5	
84 Ethylene Dibromide	107	7.069	7.069	0.000	99	150590	25.0	24.7	
87 Chlorobenzene	112	7.434	7.434	0.000	96	376087	25.0	22.2	
88 Ethylbenzene	91	7.495	7.495	0.000	98	607497	25.0	22.1	
89 1,1,1,2-Tetrachloroethane	131	7.495	7.495	0.000	45	137954	25.0	21.7	
90 m-Xylene & p-Xylene	106	7.586	7.586	0.000	0	246982	25.0	21.6	
91 o-Xylene	106	7.908	7.908	0.000	96	249096	25.0	21.4	
92 Styrene	104	7.921	7.921	0.000	94	407282	25.0	23.0	
95 Bromoform	173	8.109	8.109	0.000	97	93753	25.0	24.6	
94 Isopropylbenzene	105	8.188	8.188	0.000	95	630681	25.0	22.0	
101 Bromobenzene	156	8.468	8.468	0.000	94	169831	25.0	22.9	
97 1,1,2,2-Tetrachloroethane	83	8.468	8.468	0.000	95	200573	25.0	22.7	
100 1,2,3-Trichloropropane	110	8.504	8.504	0.000	88	72891	25.0	23.5	
98 trans-1,4-Dichloro-2-buten	53	8.511	8.511	0.000	75	54454	25.0	23.8	
99 N-Propylbenzene	91	8.517	8.517	0.000	99	706463	25.0	22.2	
103 2-Chlorotoluene	126	8.608	8.608	0.000	97	157793	25.0	22.3	
102 1,3,5-Trimethylbenzene	105	8.656	8.656	0.000	94	544252	25.0	22.5	
105 4-Chlorotoluene	126	8.699	8.699	0.000	97	161661	25.0	22.6	
106 tert-Butylbenzene	134	8.924	8.924	0.000	92	118771	25.0	22.0	
107 1,2,4-Trimethylbenzene	105	8.967	8.967	0.000	97	559200	25.0	22.4	
101 1,2,4-11iiilettiyibetizetle	100	0.707	0.907	0.000	71	557200	25.0	ZZ.4	

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8804.D

Data File. ((Officiality))		0111 0111 B G			, _	3272.B1Q0004.			
Compound	Sig	RT (min.)	Adj RT (min.)	DIt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.100	9.100	0.000	94	641752	25.0	21.7	
110 4-Isopropyltoluene	119	9.216	9.216	0.000	97	584464	25.0	21.9	
111 1,3-Dichlorobenzene	146	9.222	9.222	0.000	98	309981	25.0	22.1	
113 1,4-Dichlorobenzene	146	9.301	9.301	0.000	95	318218	25.0	22.0	
115 n-Butylbenzene	91	9.557	9.557	0.000	98	471889	25.0	21.2	
116 1,2-Dichlorobenzene	146	9.611	9.611	0.000	98	314835	25.0	22.0	
117 1,2-Dibromo-3-Chloropropan	75	10.268	10.268	0.000	90	53606	25.0	24.8	
119 1,2,4-Trichlorobenzene	180	10.931	10.931	0.000	95	235423	25.0	22.2	
120 Hexachlorobutadiene	225	11.046	11.046	0.000	97	75669	25.0	21.0	
121 Naphthalene	128	11.138	11.138	0.000	97	826704	25.0	23.2	
122 1,2,3-Trichlorobenzene	180	11.326	11.326	0.000	96	224481	25.0	22.1	
Reagents:									
8260 CORP mix_00063		Amount	Added: 1	2.50	l	Jnits: uL			
GAS CORP mix_00132		Amount	Added: 1	2.50	l	Jnits: uL			
Q_8260_IS_00114		Amount	Added: 1	.25	Į	Jnits: uL	Run Reage	nt	
Q_8260_SURR_00107		Amount	Added: 1	.25	ι	Jnits: uL	Run Reage		

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8804.D Injection Date: 29-Jan-2016 10:02:30 Instrument ID: HP5973Q

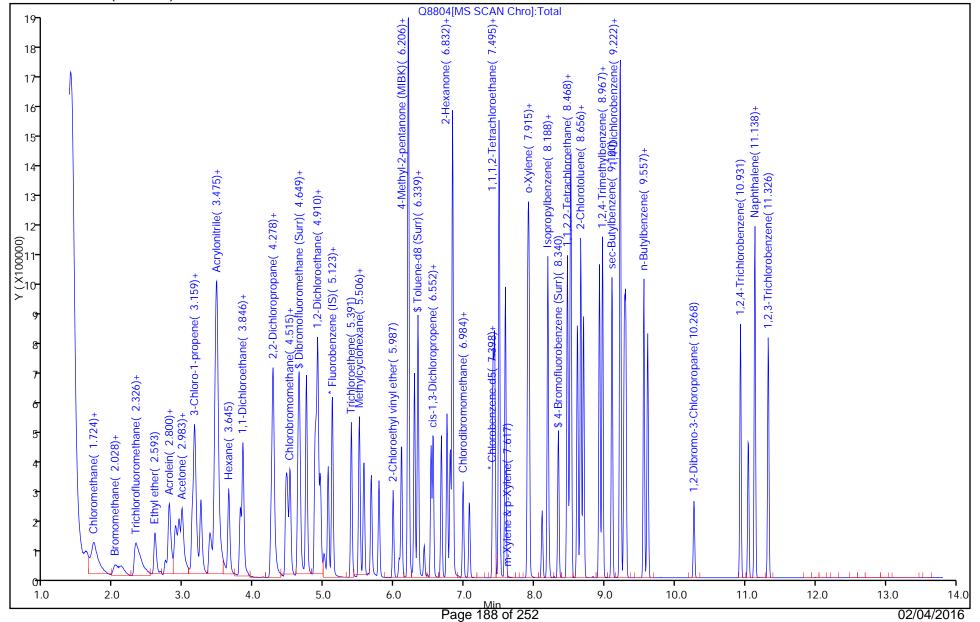
Lims ID: CCVIS

Client ID:

Purge Vol: 5.000 mL Method: Q-8260 Dil. Factor: 1.0000

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



RR

3

3

Operator ID:

ALS Bottle#:

Worklist Smp#:

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Lab Sample ID: CCVIS 480-285817/3 Calibration Date: 02/02/2016 09:44

Instrument ID: HP5973Q Calib Start Date: 01/11/2016 16:06

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 01/11/2016 18:50

Lab File ID: Q8866.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.319	1.385	0.1000	26.3	25.0	5.0	50.0
Chloromethane	Ave	1.795	1.628	0.1000	22.7	25.0	-9.3	20.0
Vinyl chloride	Ave	1.635	1.596	0.1000	24.4	25.0	-2.4	20.0
Butadiene	Ave	1.447	1.386		24.0	25.0	-4.2	20.0
Bromomethane	Ave	0.7611	0.9474	0.1000	31.1	25.0	24.5	50.0
Chloroethane	Ave	0.7110	0.8418	0.1000	29.6	25.0	18.4	50.0
Trichlorofluoromethane	Ave	2.063	2.335	0.1000	28.3	25.0	13.2	20.0
Dichlorofluoromethane	Ave	2.313	2.322		25.1	25.0	0.4	20.0
Ethyl ether	Ave	1.431	1.248		21.8	25.0	-12.7	20.0
Acrolein	Ave	0.3746	0.1898		63.3	125	-49.3	50.0
1,1-Dichloroethene	Ave	1.585	1.401	0.1000	22.1	25.0	-11.6	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	1.452	1.174	0.1000	20.2	25.0	-19.2	20.0
Acetone	Ave	0.8920	0.7239	0.1000	101	125	-18.9	50.0
Iodomethane	Ave	3.007	2.811		23.4	25.0	-6.5	20.0
Carbon disulfide	Ave	5.098	4.561	0.1000	22.4	25.0	-10.5	20.0
Allyl chloride	Ave	2.581	2.104		20.4	25.0	-18.5	20.0
Methyl acetate	Ave	2.066	1.661	0.1000	101	125	-19.6	50.0
Methylene Chloride	Ave	1.845	1.565	0.1000	21.2	25.0	-15.1	20.0
2-Methyl-2-propanol	Ave	0.4927	0.3567		181	250	-27.6	50.0
Methyl tert-butyl ether	Ave	5.604	5.190	0.1000	23.2	25.0	-7.4	20.0
trans-1,2-Dichloroethene	Ave	1.748	1.616	0.1000	23.1	25.0	-7.5	20.0
Acrylonitrile	Ave	1.017	0.8280		204	250	-18.5	20.0
Hexane	Ave	2.362	1.842		19.5	25.0	-22.0*	20.0
1,1-Dichloroethane	Ave	2.999	2.614	0.2000	21.8	25.0	-12.8	20.0
Vinyl acetate	Ave	4.061	3.482		42.9	50.0	-14.3	20.0
2,2-Dichloropropane	Ave	2.150	2.047		23.8	25.0	-4.8	20.0
cis-1,2-Dichloroethene	Ave	1.914	1.739	0.1000	22.7	25.0	-9.1	20.0
2-Butanone (MEK)	Ave	1.359	1.090	0.1000	100	125	-19.8	20.0
Chlorobromomethane	Ave	1.002	0.9536		23.8	25.0	-4.8	20.0
Tetrahydrofuran	Ave	0.9902	0.7814		39.5	50.0	-21.1*	20.0
Chloroform	Ave	2.888	2.674	0.2000	23.1	25.0	-7.4	20.0
1,1,1-Trichloroethane	Ave	2.415	2.321	0.1000	24.0	25.0	-3.9	20.0
Cyclohexane	Ave	2.910	2.293	0.1000	19.7	25.0	-21.2*	20.0
1,1-Dichloropropene	Ave	2.267	2.091		23.1	25.0	-7.7	20.0
Carbon tetrachloride	Ave	2.093	2.016	0.1000	24.1	25.0	-3.7	20.0
Isobutyl alcohol	Ave	0.1865	0.1201		402	625	-35.6	50.0
Benzene	Ave	6.331	5.670	0.5000	22.4	25.0	-10.5	20.0
1,2-Dichloroethane	Ave	2.331	2.283	0.1000	24.5	25.0	-2.1	20.0
n-Heptane	Ave	2.077	1.756		21.1	25.0	-15.5	20.0
Trichloroethene	Ave	1.742	1.586	0.2000	22.8	25.0	-9.0	20.0

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Lab Sample ID: CCVIS 480-285817/3 Calibration Date: 02/02/2016 09:44

Instrument ID: HP5973Q Calib Start Date: 01/11/2016 16:06

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 01/11/2016 18:50

Lab File ID: Q8866.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.798	2.366	0.1000	21.1	25.0	-15.4	20.0
1,2-Dichloropropane	Ave	1.509	1.321	0.1000	21.9	25.0	-12.5	20.0
1,4-Dioxane	Ave	0.0144	0.0092		319	500	-36.3	50.0
Dibromomethane	Ave	1.103	1.041	0.1000	23.6	25.0	-5.5	20.0
Bromodichloromethane	Ave	1.951	1.982	0.2000	25.4	25.0	1.6	20.0
2-Chloroethyl vinyl ether	Ave	0.9896	0.9463		23.9	25.0	-4.4	20.0
trans-1,3-Dichloropropene	Ave	1.242	1.172	0.1000	23.6	25.0	-5.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.305	1.073	0.1000	103	125	-17.8	20.0
Toluene	Ave	2.033	1.811	0.4000	22.3	25.0	-10.9	20.0
cis-1,3-Dichloropropene	Ave	1.965	2.011	0.2000	25.6	25.0	2.3	20.0
Ethyl methacrylate	Ave	1.102	1.015		23.0	25.0	-8.0	20.0
1,1,2-Trichloroethane	Ave	0.6086	0.5489	0.1000	22.5	25.0	-9.8	20.0
Tetrachloroethene	Ave	0.8866	0.8022	0.2000	22.6	25.0	-9.5	20.0
1,3-Dichloropropane	Ave	1.237	1.122		22.7	25.0	-9.3	20.0
2-Hexanone	Ave	0.9232	0.7349	0.1000	99.5	125	-20.4*	20.0
Dibromochloromethane	Ave	0.8266	0.8366	0.1000	25.3	25.0	1.2	20.0
1,2-Dibromoethane	Ave	0.8131	0.7785		23.9	25.0	-4.3	20.0
Chlorobenzene	Ave	2.264	2.036	0.5000	22.5	25.0	-10.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8484	0.8147		24.0	25.0	-4.0	20.0
Ethylbenzene	Ave	3.676	3.318	0.1000	22.6	25.0	-9.7	20.0
m,p-Xylene	Ave	1.530	1.347	0.1000	22.0	25.0	-12.0	20.0
o-Xylene	Ave	1.552	1.379	0.3000	22.2	25.0	-11.2	20.0
Styrene	Ave	2.361	2.171	0.3000	23.0	25.0	-8.0	20.0
Bromoform	Ave	0.5094	0.5105	0.1000	25.1	25.0	0.2	50.0
Isopropylbenzene	Ave	3.587	3.347	0.1000	23.3	25.0	-6.7	20.0
1,1,2,2-Tetrachloroethane	Ave	1.107	0.9830	0.3000	22.2	25.0	-11.2	20.0
Bromobenzene	Ave	0.9295	0.8704		23.4	25.0	-6.4	20.0
1,2,3-Trichloropropane	Ave	0.3896	0.3570		22.9	25.0	-8.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2869	0.2410		21.0	25.0	-16.0	50.0
N-Propylbenzene	Ave	3.993	3.655		22.9	25.0	-8.5	20.0
2-Chlorotoluene	Ave	0.8883	0.8282		23.3	25.0	-6.8	20.0
1,3,5-Trimethylbenzene	Ave	3.031	2.864		23.6	25.0	-5.5	20.0
4-Chlorotoluene	Ave	0.8970	0.8185		22.8	25.0	-8.8	20.0
tert-Butylbenzene	Ave	0.6778	0.6353		23.4	25.0	-6.3	20.0
1,2,4-Trimethylbenzene	Ave	3.124	2.906		23.3	25.0	-7.0	20.0
sec-Butylbenzene	Ave	3.705	3.356		22.6	25.0	-9.4	20.0
4-Isopropyltoluene	Ave	3.351	3.101		23.1	25.0	-7.5	20.0
1,3-Dichlorobenzene	Ave	1.755	1.597	0.6000	22.7	25.0	-9.0	20.0
1,4-Dichlorobenzene	Ave	1.810	1.630	0.5000	22.5	25.0	-10.0	20.0
n-Butylbenzene	Ave	2.786	2.491		22.4	25.0	-10.6	20.0
1,2-Dichlorobenzene	Ave	1.798	1.663	0.4000	23.1	25.0	-7.5	20.0

FORM VII GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-94483-1

SDG No.:

Lab Sample ID: CCVIS 480-285817/3 Calibration Date: 02/02/2016 09:44

Instrument ID: <u>HP5973Q</u> Calib Start Date: 01/11/2016 16:06

GC Column: $\underline{\text{ZB-624 (60)}}$ ID: $\underline{\text{0.25 (mm)}}$ Calib End Date: $\underline{\text{01/11/2016 18:50}}$

Lab File ID: Q8866.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2712	0.2597	0.0500	23.9	25.0	-4.3	50.0
1,2,4-Trichlorobenzene	Ave	1.331	1.252	0.2000	23.5	25.0	-5.9	20.0
Hexachlorobutadiene	Ave	0.4514	0.4186		23.2	25.0	-7.3	20.0
Naphthalene	Ave	4.471	4.298		24.0	25.0	-3.9	20.0
1,2,3-Trichlorobenzene	Ave	1.276	1.179		23.1	25.0	-7.6	20.0
Dibromofluoromethane (Surr)	Ave	1.318	1.187		22.5	25.0	-9.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.7676	0.6749		22.0	25.0	-12.1	20.0
Toluene-d8 (Surr)	Ave	2.356	2.038		21.6	25.0	-13.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.7250	0.6873		23.7	25.0	-5.2	20.0

Report Date: 02-Feb-2016 11:42:04 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8866.D

Lims ID: CCVIS

Client ID:

Sample Type: CCVIS

Inject. Date: 02-Feb-2016 09:44:30 ALS Bottle#: 2 Worklist Smp#: 3

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: CCVIS

Misc. Info.: 480-0050332-003

Operator ID: RR Instrument ID: HP5973Q

Sublist: chrom-Q-8260*sub5

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:02-Feb-2016 11:42:03Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK032

First Level Reviewer: reiler Date: 02-Feb-2016 11:42:03

First Level Reviewer: reiler			D.	ate:		02-Feb-2016 11:42:03			
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.118	5.118	0.000	99	90847	25.0	25.0	
2 Chlorobenzene-d5	82	7.411	7.411	0.000	84	174627	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.278	9.278	0.000	94	183771	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.638	4.638	0.000	93	107845	25.0	22.5	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.893	4.893	0.000	0	61311	25.0	22.0	
\$ 5 Toluene-d8 (Surr)	98	6.286	6.286	0.000	92	355870	25.0	21.6	
\$ 6 4-Bromofluorobenzene (Surr	174	8.341	8.341	0.000	92	120020	25.0	23.7	
10 Dichlorodifluoromethane	85	1.433	1.433	0.000	99	125801	25.0	26.3	
12 Chloromethane	50	1.609	1.609	0.000	99	147924	25.0	22.7	
13 Vinyl chloride	62	1.707	1.707	0.000	98	145000	25.0	24.4	
144 Butadiene	54	1.737	1.737	0.000	88	125949	25.0	24.0	
14 Bromomethane	94	2.023	2.023	0.000	93	86068	25.0	31.1	
15 Chloroethane	64	2.126	2.126	0.000	100	76471	25.0	29.6	
17 Trichlorofluoromethane	101	2.303	2.303	0.000	99	212153	25.0	28.3	
16 Dichlorofluoromethane	67	2.333	2.333	0.000	97	210990	25.0	25.1	
18 Ethyl ether	59	2.588	2.588	0.000	90	113422	25.0	21.8	
20 Acrolein	56	2.741	2.741	0.000	99	86195	125.0	63.3	
22 1,1-Dichloroethene	96	2.789	2.789	0.000	98	127298	25.0	22.1	
21 1,1,2-Trichloro-1,2,2-trif	101	2.807	2.807	0.000	92	106627	25.0	20.2	
23 Acetone	43	2.886	2.886	0.000	99	328801	125.0	101.4	
25 Iodomethane	142	2.935	2.935	0.000	100	255377	25.0	23.4	
26 Carbon disulfide	76	2.978	2.978	0.000	99	414346	25.0	22.4	
28 3-Chloro-1-propene	41	3.124	3.124	0.000	90	191163	25.0	20.4	
27 Methyl acetate	43	3.160	3.160	0.000	97	754655	125.0	100.5	
30 Methylene Chloride	84	3.245	3.245	0.000	91	142213	25.0	21.2	
31 2-Methyl-2-propanol	59	3.385	3.385	0.000	100	324072	250.0	181.0	M
32 Methyl tert-butyl ether	73	3.446	3.446	0.000	94	471474	25.0	23.2	
34 trans-1,2-Dichloroethene	96	3.458	3.458	0.000	98	146808	25.0	23.1	
33 Acrylonitrile	53	3.476	3.476	0.000	99	752251	250.0	203.6	
35 Hexane	57	3.641	3.641	0.000	91	167329	25.0	19.5	

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Report Date: 02-Feb-2016 11:42:04 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8866.D

Data File: \\Cnromiva\B	unalu\				ZUZ-31	U332.D\Q8866.			
Compound	Ci~	RT (min.)	Adj RT	Dlt RT		Doctores	Cal Amt	OnCol Amt	Elogo
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
39 1,1-Dichloroethane	63	3.811	3.811	0.000	96	237437	25.0	21.8	
37 Vinyl acetate	43	3.847	3.847	0.000	97	632589	50.0	42.9	
44 2,2-Dichloropropane	77	4.249	4.249	0.000	87	185988	25.0	23.8	
45 cis-1,2-Dichloroethene	96	4.267	4.267	0.000	81	158016	25.0	22.7	
43 2-Butanone (MEK)	43	4.279	4.279	0.000	100	495108	125.0	100.3	
48 Chlorobromomethane	128	4.462	4.462	0.000	89	86628	25.0	23.8	
49 Tetrahydrofuran	42	4.480	4.480	0.000	85	141978	50.0	39.5	
50 Chloroform	83	4.516	4.516	0.000	93	242934	25.0	23.1	
51 1,1,1-Trichloroethane	97	4.632	4.632	0.000	98	210827	25.0	24.0	
52 Cyclohexane	56	4.650	4.650	0.000	92	208293	25.0	19.7	
55 Carbon tetrachloride	117	4.747	4.747	0.000	97	183186	25.0	24.1	
54 1,1-Dichloropropene	75	4.747	4.747	0.000	97	189969	25.0	23.1	
53 Isobutyl alcohol	43	4.875	4.875	0.000	94	272715	625.0	402.3	
57 Benzene	78	4.912	4.912	0.000	96	515080	25.0	22.4	
58 1,2-Dichloroethane	62	4.912	4.912	0.000	98	207408	25.0	24.5	
59 n-Heptane	43	5.058	5.058	0.000	90	159489	25.0	21.1	
62 Trichloroethene	43 95	5.392	5.392	0.000	96	144051	25.0	22.8	
64 Methylcyclohexane	83	5.501	5.501	0.000	90 88	214976	25.0	21.1	
65 1,2-Dichloropropane	63	5.568	5.568	0.000	93	120026	25.0 25.0	21.1	
67 Dibromomethane	93	5.672	5.672	0.000	93 93	94606	25.0 25.0	23.6	
66 1,4-Dioxane	88	5.672	5.672	0.000	38	32146	500.0	318.6	
68 Dichlorobromomethane	83	5.781	5.781	0.000	99	180056	25.0	25.4	
69 2-Chloroethyl vinyl ether	63	5.988	5.988	0.000	93	85971	25.0	23.9	
77 trans-1,3-Dichloropropene	75 42	6.103	6.103	0.000	94	204692	25.0	23.6	
73 4-Methyl-2-pentanone (MIBK	43	6.201	6.201	0.000	95	936984	125.0	102.8	
74 Toluene	92	6.341	6.341	0.000	99	316281	25.0	22.3	
72 cis-1,3-Dichloropropene	75	6.529	6.529	0.000	98	182656	25.0	25.6	
75 Ethyl methacrylate	69	6.554	6.554	0.000	88	177162	25.0	23.0	
79 1,1,2-Trichloroethane	83	6.675	6.675	0.000	92	95854	25.0	22.5	
81 Tetrachloroethene	166	6.754	6.754	0.000	96	140084	25.0	22.6	
82 1,3-Dichloropropane	76	6.797	6.797	0.000	88	195939	25.0	22.7	
80 2-Hexanone	43	6.833	6.833	0.000	96	641671	125.0	99.5	
83 Chlorodibromomethane	129	6.985	6.985	0.000	90	146092	25.0	25.3	
84 Ethylene Dibromide	107	7.070	7.070	0.000	99	135940	25.0	23.9	
87 Chlorobenzene	112	7.429	7.429	0.000	96	355496	25.0	22.5	
89 1,1,1,2-Tetrachloroethane	131	7.496	7.496	0.000	46	142266	25.0	24.0	
88 Ethylbenzene	91	7.496	7.496	0.000	98	579436	25.0	22.6	
90 m-Xylene & p-Xylene	106	7.587	7.587	0.000	0	235136	25.0	22.0	
91 o-Xylene	106	7.904	7.904	0.000	96	240782	25.0	22.2	
92 Styrene	104	7.922	7.922	0.000	95	379064	25.0	23.0	
95 Bromoform	173	8.110	8.110	0.000	97	89141	25.0	25.1	
94 Isopropylbenzene	105	8.189	8.189	0.000	95	615070	25.0	23.3	
101 Bromobenzene	156	8.469	8.469	0.000	95	159957	25.0	23.4	
97 1,1,2,2-Tetrachloroethane	83	8.469	8.469	0.000	95	180637	25.0	22.2	
100 1,2,3-Trichloropropane	110	8.506	8.506	0.000	87	65601	25.0	22.9	
98 trans-1,4-Dichloro-2-buten	53	8.506	8.506	0.000	74	44294	25.0	21.0	
99 N-Propylbenzene	91	8.518	8.518	0.000	99	671728	25.0	22.9	
103 2-Chlorotoluene	126	8.609	8.609	0.000	97	152191	25.0	23.3	
102 1,3,5-Trimethylbenzene	105	8.658	8.658	0.000	95	526292	25.0	23.6	
105 4-Chlorotoluene	126	8.700	8.700	0.000	97	150422	25.0	22.8	
106 tert-Butylbenzene	134	8.925	8.925	0.000	92	116746	25.0	23.4	
107 1,2,4-Trimethylbenzene	105	8.968	8.968	0.000	97	534049	25.0	23.3	
101 1,2,4-11iiilettiyibetizetle	103	0.700	0.700	0.000	71	554049	25.0	23.3	

Chrom Revision: 2.2 02-Dec-2015 11:51:48 Report Date: 02-Feb-2016 11:42:04

Data File:

Commound	Cia	RT (min.)	Adj RT	Dlt RT		Doonomoo	Cal Amt	OnCol Amt	Floor
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
109 sec-Butylbenzene	105	9.102	9.102	0.000	94	616666	25.0	22.6	
110 4-Isopropyltoluene	119	9.217	9.217	0.000	97	569823	25.0	23.1	
111 1,3-Dichlorobenzene	146	9.223	9.223	0.000	98	293510	25.0	22.7	
113 1,4-Dichlorobenzene	146	9.296	9.296	0.000	95	299493	25.0	22.5	
115 n-Butylbenzene	91	9.558	9.558	0.000	97	457864	25.0	22.4	
116 1,2-Dichlorobenzene	146	9.612	9.612	0.000	98	305539	25.0	23.1	
117 1,2-Dibromo-3-Chloropropan	75	10.269	10.269	0.000	90	47725	25.0	23.9	
119 1,2,4-Trichlorobenzene	180	10.932	10.932	0.000	94	230082	25.0	23.5	
120 Hexachlorobutadiene	225	11.048	11.048	0.000	97	76919	25.0	23.2	
121 Naphthalene	128	11.139	11.139	0.000	97	789843	25.0	24.0	
122 1,2,3-Trichlorobenzene	180	11.327	11.327	0.000	96	216732	25.0	23.1	
00 Flori Lorend									

OC Flag Legend Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00133	Amount Added: 12.50	Units: uL	
8260 CORP mix_00064	Amount Added: 12.50	Units: uL	
Q_8260_IS_00114	Amount Added: 1.25	Units: uL	Run Reagent
Q_8260_SURR_00107	Amount Added: 1.25	Units: uL	Run Reagent

Report Date: 02-Feb-2016 11:42:04 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8866.D Injection Date: \02-Feb-2016 09:44:30 Instrument ID: HP5973Q

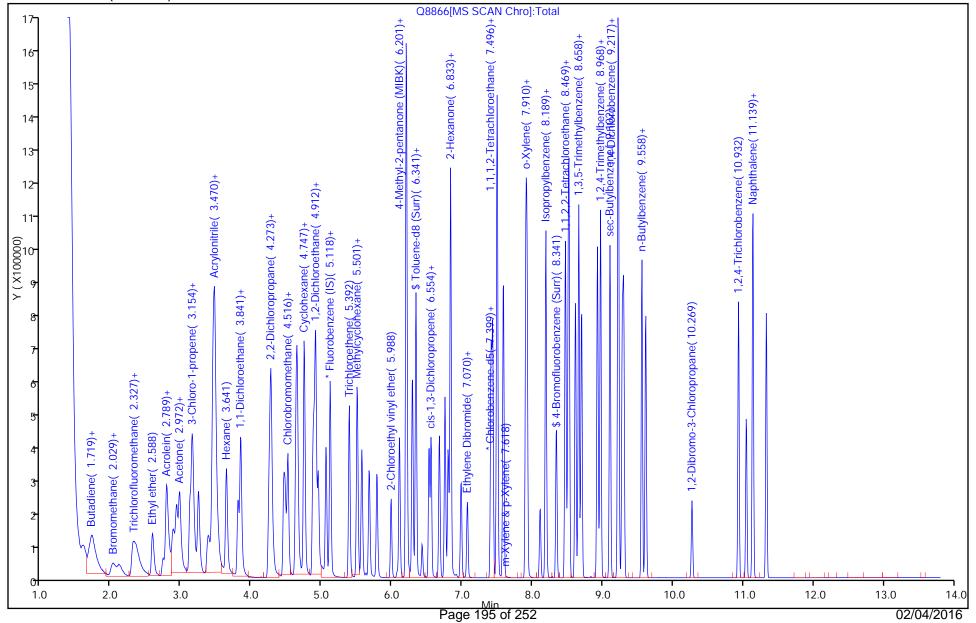
Injection Date: 02-Feb-2016 09:44:30 Instrument ID: HP5973Q Lims ID: CCVIS

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



RR

3

2

Operator ID:

ALS Bottle#:

Worklist Smp#:

TestAmerica Buffalo

Data File: Injection Date: 02-Feb-2016 09:44:30 Instrument ID: HP5973Q

Lims ID: **CCVIS**

Client ID:

Operator ID: ALS Bottle#: 2 RR Worklist Smp#: 3

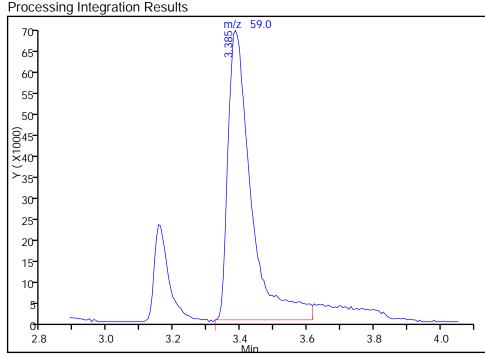
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

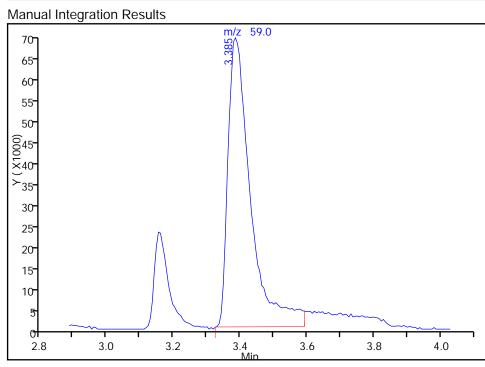
Column: ZB-624 (0.25 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

RT: 3.39 Area: 331180 Amount: 184.9591 Amount Units: ug/L



RT: 3.39 324072 Area: Amount: 180.9894 Amount Units: ug/L



Reviewer: reiler, 02-Feb-2016 11:42:03 Audit Action: Manually Integrated Audit Reason: Poor chromatography

Report Date: 12-Jan-2016 14:25:59 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8374.D

Lims ID: BFB

Client ID:

Sample Type: BFB

Inject. Date: 11-Jan-2016 15:13:30 ALS Bottle#: 34 Worklist Smp#: 3

Injection Vol: 1.0 uL Dil. Factor: 1.0000

Sample Info: BFB

Misc. Info.: 480-0049854-003

Operator ID: LH Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 12-Jan-2016 14:25:58 Calib Date: 11-Jan-2016 21:55:30 Integrator: RTE ID Type: Deconvolution ID Quant Method: Internal Standard Quant By: Initial Calibration \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK010

First Level Reviewer: HillL Date: 11-Jan-2016 15:22:48

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
_	\$ 61 BFB	95	4.253	4.253	0.000	0	80505	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_WRK_00050 Amount Added: 1.00 Units: uL

Report Date: 12-Jan-2016 14:25:59 Chrom Revision: 2.2 02-Dec-2015 11:51:48

MS Tune Report

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8374.D Injection Date: 11-Jan-2016 15:13:30 Instrument ID: HP5973Q

Lims ID: BFB

Client ID:

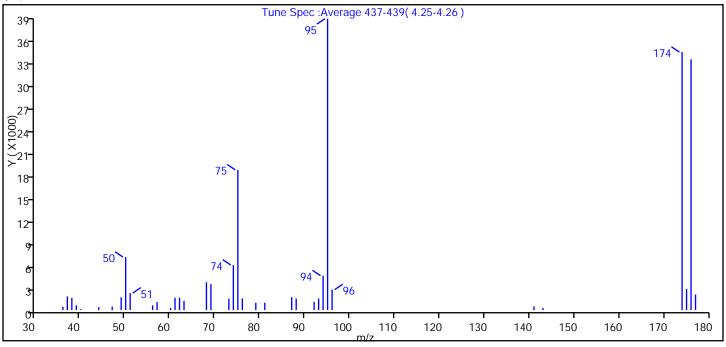
Operator ID: LH ALS Bottle#: 34 Worklist Smp#: 3

Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Tune Method: BFB Method 8260

\$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.2
75	30 to 60% of m/z 95	48.2
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	88.6
175	5 to 9% of m/z 174	7.3 (8.2)
176	Greater than 95% but less than 101% of m/z 174	86.1 (97.2)
177	5 to 9% of m/z 176	5.3 (6.2)

Report Date: 12-Jan-2016 14:25:59 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8374.D\Q-8260.rslt\spectra.d

Injection Date: 11-Jan-2016 15:13:30

Spectrum: Tune Spec :Average 437-439(4.25-4.26)

Base Peak: 95.00 Minimum % Base Peak: 0 Number of Points: 37

m/z	Υ	m/z	Υ	m/z	Υ	m/z	Υ
36.00	430	56.00	619	75.00	18544	96.00	2710
37.00	1804	57.00	1054	76.00	1542	141.00	485
38.00	1603	60.00	289	79.00	965	143.00	276
39.00	626	61.00	1628	81.00	982	174.00	34104
40.00	123	62.00	1642	87.00	1708	175.00	2804
44.00	379	63.00	1206	88.00	1533	176.00	33152
47.00	461	68.00	3672	92.00	1094	177.00	2051
49.00	1689	69.00	3428	93.00	1529		
50.00	7005	73.00	1503	94.00	4552		
51.00	2262	74.00	5960	95.00	38512		

Report Date: 29-Jan-2016 09:46:58 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8803.D

Lims ID: BFB

Client ID:

Sample Type: BFB

Inject. Date: 29-Jan-2016 09:36:30 ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 uL Dil. Factor: 1.0000

Sample Info: BFB

Misc. Info.: 480-0050272-002

Operator ID: RR Instrument ID: HP5973Q

Method: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 29-Jan-2016 09:46:58 Calib Date: 11-Jan-2016 21:55:30

Integrator: RTE ID Type: RT Order ID

Quant Method: Internal Standard Quant By: Initial Calibration

Last ICal File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK014

First Level Reviewer: reiler Date: 29-Jan-2016 09:46:58

Compound	Sig	RT (min.)	Adj RT (min.)		Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 61 BFB	95	4.300	4.300	0.000	0	56783	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_WRK_00050 Amount Added: 1.00 Units: uL

Report Date: 29-Jan-2016 09:46:58 Chrom Revision: 2.2 02-Dec-2015 11:51:48

MS Tune Report

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8803.D Injection Date: 29-Jan-2016 09:36:30 Instrument ID: HP5973Q

Lims ID: BFB

Client ID:

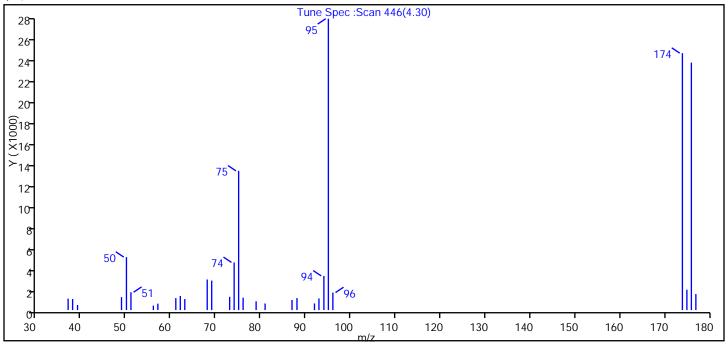
Operator ID: RR ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Tune Method: BFB Method 8260

\$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.2
75	30 to 60% of m/z 95	47.8
96	5 to 9% of m/z 95	6.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	88.2
175	5 to 9% of m/z 174	7.0 (7.9)
176	Greater than 95% but less than 101% of m/z 174	84.9 (96.3)
177	5 to 9% of m/z 176	5.5 (6.5)

Report Date: 29-Jan-2016 09:46:58 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8803.D\Q-8260.rslt\spectra.d

Injection Date: 29-Jan-2016 09:36:30 Spectrum: Tune Spec :Scan 446(4.30)

Base Peak: 94.95 Minimum % Base Peak: 0 Number of Points: 30

m/z	Υ	m/z	Υ	m/z	Υ	m/z	Υ
36.95	1096	60.95	1148	75.95	1187	94.95	27904
37.95	1061	61.95	1353	78.85	845	95.95	1679
39.05	489	62.95	1054	80.85	630	173.85	24608
48.85	1240	67.95	2930	86.85	963	174.85	1951
49.95	5073	68.95	2823	87.95	1149	175.85	23704
50.95	1712	72.95	1273	91.85	634	176.85	1536
55.95	425	73.95	4564	92.85	1114		
56.95	617	74.95	13332	93.95	3272		

Report Date: 02-Feb-2016 09:29:10 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8865.D

Lims ID: BFB

Client ID:

Sample Type: BFB

Inject. Date: 02-Feb-2016 09:21:30 ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 1.0 uL Dil. Factor: 1.0000

Sample Info: BFB

Misc. Info.: 480-0050332-002

Operator ID: RR Instrument ID: HP5973Q

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 02-Feb-2016 09:29:09 Calib Date: 11-Jan-2016 21:55:30

Integrator: RTE ID Type: RT Order ID

Quant Method: Internal Standard Quant By: Initial Calibration

Last ICal File: \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1: ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK032

First Level Reviewer: reiler Date: 02-Feb-2016 09:29:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 61 RER	05	1 230	1 239	0.000	Λ	<i>1</i> 1222	ND	ND	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_WRK_00051 Amount Added: 1.00 Units: uL

Report Date: 02-Feb-2016 09:29:10 Chrom Revision: 2.2 02-Dec-2015 11:51:48

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8865.D Injection Date: 02-Feb-2016 09:21:30 Instrument ID: HP5973Q

Lims ID: BFB

Client ID:

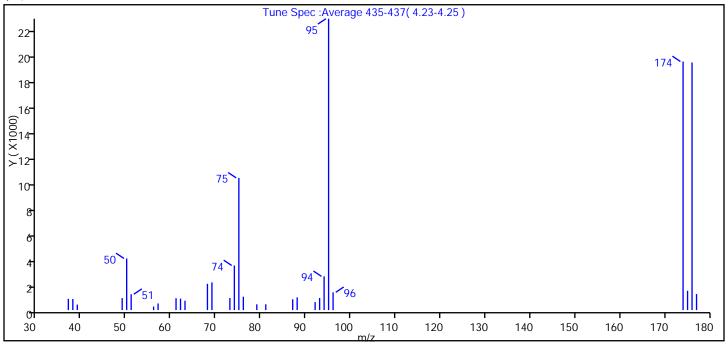
Operator ID: RR ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 1.0 uL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Tune Method: BFB Method 8260

\$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.7
75	30 to 60% of m/z 95	45.4
96	5 to 9% of m/z 95	6.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	85.3
175	5 to 9% of m/z 174	6.6 (7.8)
176	Greater than 95% but less than 101% of m/z 174	85.0 (99.6)
177	5 to 9% of m/z 176	5.5 (6.5)

Report Date: 02-Feb-2016 09:29:10 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8865.D\Q-8260.rslt\spectra.d

Injection Date: 02-Feb-2016 09:21:30

Spectrum: Tune Spec :Average 435-437(4.23-4.25)

Base Peak: 95.00 Minimum % Base Peak: 0 Number of Points: 30

m/z	Υ	m/z	Υ	m/z	Υ	m/z	Υ
37.00	883	61.00	935	76.00	1052	95.00	22936
38.00	872	62.00	898	79.00	454	96.00	1398
39.00	430	63.00	733	81.00	455	174.00	19568
49.00	944	68.00	2068	87.00	847	175.00	1520
50.00	4061	69.00	2177	88.00	997	176.00	19496
51.00	1250	73.00	950	92.00	629	177.00	1261
56.00	278	74.00	3509	93.00	950		
57.00	521	75.00	10407	94.00	2654		

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1						
SDG No.:							
Client Sample ID:	Lab Sample ID: MB 480-285459/7						
Matrix: Water	Lab File ID: Q8809.D						
Analysis Method: 8260C	Date Collected:						
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 13:17						
Soil Aliquot Vol:	Dilution Factor: 1						
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)						
% Moisture:	Level: (low/med) Low						
Analysis Batch No.: 285459	Units: ug/L						

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	0.202	J	1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1							
SDG No.:								
Client Sample ID:	Lab Sample ID: MB 480-285459/7							
Matrix: Water	Lab File ID: Q8809.D							
Analysis Method: 8260C	Date Collected:							
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 13:17							
Soil Aliquot Vol:	Dilution Factor: 1							
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)							
% Moisture:	Level: (low/med) Low							
Analysis Batch No.: 285459	Units: ug/L							

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		66-137
460-00-4	4-Bromofluorobenzene (Surr)	99		73-120
2037-26-5	Toluene-d8 (Surr)	89		71-126
1868-53-7	Dibromofluoromethane (Surr)	95		60-140

Report Date: 29-Jan-2016 16:05:28 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Target Compound Quantitation Report \\ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8809.D

Lims ID: MB

Client ID:

Data File:

Sample Type: MB

Inject. Date: 29-Jan-2016 13:17:30 ALS Bottle#: 8 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: MB

Misc. Info.: 480-0050272-007

Operator ID: RR Instrument ID: HP5973Q

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:29-Jan-2016 16:05:27Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK014

First Level Reviewer: reiler Date: 29-Jan-2016 16:05:27

First Level Reviewer: reiler			D.	ate:		29-Jan-201	6 16:05:27		
		RT	Adj RT	DIt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.124	5.119	0.005	99	86474	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.410	7.406	0.004	84	158646	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.279	-0.002	94	188079	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr		4.643	4.639	0.004	93	108166	25.0	23.7	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.893	4.888	0.005	0	61448	25.0	23.1	
\$ 5 Toluene-d8 (Surr)	98	6.291	6.287	0.004	92	332300	25.0	22.2	
\$ 6 4-Bromofluorobenzene (Surr	174	8.341	8.336	0.005	92	113739	25.0	24.7	
10 Dichlorodifluoromethane	85		1.432					ND	
11 Chlorodifluoromethane	51		1.458					ND	
12 Chloromethane	50		1.626					ND	
13 Vinyl chloride	62		1.712					ND	
144 Butadiene	54		1.724					ND	
14 Bromomethane	94		2.028					ND	
15 Chloroethane	64		2.119					ND	
17 Trichlorofluoromethane	101		2.320					ND	
16 Dichlorofluoromethane	67		2.326					ND	
18 Ethyl ether	59		2.599					ND	
20 Acrolein	56		2.745					ND	
22 1,1-Dichloroethene	96		2.800					ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.806					ND	
141 Ethanol	45		2.818					ND	
23 Acetone	43		2.891					ND	
25 Iodomethane	142		2.940					ND	
26 Carbon disulfide	76	2.983	2.983	0.000	97	3564		0.2021	
24 Isopropyl alcohol	45		3.046					ND	
28 3-Chloro-1-propene	41		3.129					ND	
27 Methyl acetate	43		3.159					ND	
29 Acetonitrile	40		3.161					ND	
30 Methylene Chloride	84		3.250					ND	
31 2-Methyl-2-propanol	59		3.378					ND	
32 Methyl tert-butyl ether	73		3.451					ND	
			-	000 (05	_			00/0	4/0040

Report Date: 29-Jan-2016 16:05:28 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8809.D

Compound Sig RT (min.) Adj RT (min.) Dlt RT (min.) Q Response Cal Amt ug/L OnCol Amt ug/L Flags 34 trans-1,2-Dichloroethene 96 3.463 ND 33 Acrylonitrile 53 3.481 ND 35 Hexane 57 3.645 ND 39 1,1-Dichloroethane 63 3.810 ND 36 Isopropyl ether 45 3.830 ND 37 Vinyl acetate 43 3.846 ND 40 2-Chloro-1,3-butadiene 53 3.867 ND 38 1,1-Dimethoxyethane 75 3.885 ND 41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND 47 Methacrylonitrile 41 4.456 ND
33 Acrylonitrile 53 3.481 ND 35 Hexane 57 3.645 ND 39 1,1-Dichloroethane 63 3.810 ND 36 Isopropyl ether 45 3.830 ND 37 Vinyl acetate 43 3.846 ND 40 2-Chloro-1,3-butadiene 53 3.867 ND 38 1,1-Dimethoxyethane 75 3.885 ND 41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
33 Acrylonitrile 53 3.481 ND 35 Hexane 57 3.645 ND 39 1,1-Dichloroethane 63 3.810 ND 36 Isopropyl ether 45 3.830 ND 37 Vinyl acetate 43 3.846 ND 40 2-Chloro-1,3-butadiene 53 3.867 ND 38 1,1-Dimethoxyethane 75 3.885 ND 41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
35 Hexane 57 3.645 ND 39 1,1-Dichloroethane 63 3.810 ND 36 Isopropyl ether 45 3.830 ND 37 Vinyl acetate 43 3.846 ND 40 2-Chloro-1,3-butadiene 53 3.867 ND 38 1,1-Dimethoxyethane 75 3.885 ND 41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
39 1,1-Dichloroethane 63 3.810 ND 36 Isopropyl ether 45 3.830 ND 37 Vinyl acetate 43 3.846 ND 40 2-Chloro-1,3-butadiene 53 3.867 ND 38 1,1-Dimethoxyethane 75 3.885 ND 41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
36 Isopropyl ether 45 3.830 ND 37 Vinyl acetate 43 3.846 ND 40 2-Chloro-1,3-butadiene 53 3.867 ND 38 1,1-Dimethoxyethane 75 3.885 ND 41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
37 Vinyl acetate 43 3.846 ND 40 2-Chloro-1,3-butadiene 53 3.867 ND 38 1,1-Dimethoxyethane 75 3.885 ND 41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
40 2-Chloro-1,3-butadiene 53 3.867 ND 38 1,1-Dimethoxyethane 75 3.885 ND 41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
38 1,1-Dimethoxyethane 75 3.885 ND 41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
41 Tert-butyl ethyl ether 59 4.110 ND 44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
44 2,2-Dichloropropane 77 4.254 ND 45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
45 cis-1,2-Dichloroethene 96 4.272 ND 43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
43 2-Butanone (MEK) 43 4.284 ND 42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
42 Ethyl acetate 43 4.311 ND 46 Propionitrile 54 4.353 ND
46 Propionitrile 54 4.353 ND
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47 MEDIACIMONUME 41 4456 ND
48 Chlorobromomethane 128 4.460 ND
49 Tetrahydrofuran 42 4.479 ND
50 Chloroform 83 4.521 ND
51 1,1,1-Trichloroethane 97 4.631 ND
52 Cyclohexane 56 4.655 ND
54 1,1-Dichloropropene 75 4.752 ND
55 Carbon tetrachloride 117 4.752 ND
53 Isobutyl alcohol 43 4.874 ND
57 Benzene 78 4.910 ND
146 Isooctane 57 4.925 ND
140 t-Amyl alcohol 59 4.937 ND
58 1,2-Dichloroethane 62 4.953 ND
56 Tert-amyl methyl ether 73 4.967 ND
59 n-Heptane 43 5.062 ND
1 1,4-Difluorobenzene 114 5.198 ND
60 n-Butanol 56 5.357 ND
62 Trichloroethene 95 5.391 ND
145 Ethyl acrylate 55 5.460 ND
64 Methylcyclohexane 83 5.506 ND
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67 Dibromomethane 93 5.677 ND
66 1,4-Dioxane 88 5.677 ND
68 Dichlorobromomethane 83 5.786 ND
70 2-Nitropropane 43 5.959 ND
69 2-Chloroethyl vinyl ether 63 5.987 ND
71 Epichlorohydrin 57 6.056 ND
77 trans-1,3-Dichloropropene 75 6.108 ND
73 4-Methyl-2-pentanone (MIBK 43 6.200 ND
74 Toluene 92 6.339 ND
76 2-Methylthiophene 97 6.445 ND
72 cis-1,3-Dichloropropene 75 6.528 ND
75 Ethyl methacrylate 69 6.558 ND
78 3-Methylthiophene 97 6.567 ND
79 1,1,2-Trichloroethane 83 6.674 ND
81 Tetrachloroethene 166 6.753 ND
82 1,3-Dichloropropane 76 6.802 ND

Report Date: 29-Jan-2016 16:05:28 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8809.D

Data File: \\Cnromina\B	unaio\				129-50	J272.b\Q8809.			
Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
80 2-Hexanone	43		6.832					ND	
149 n-Butyl acetate	43		6.913					ND	
83 Chlorodibromomethane	129		6.984					ND	
84 Ethylene Dibromide	107		7.069					ND	
139 1-Chlorohexane	55		7.376					ND	
85 3-Chlorobenzotrifluoride	180		7.382					ND	
86 4-Chlorobenzotrifluoride	180		7.430					ND	
87 Chlorobenzene	112		7.434					ND	
89 1,1,1,2-Tetrachloroethane	131		7.495					ND	
88 Ethylbenzene	91		7.495					ND	
90 m-Xylene & p-Xylene	106		7.586					ND	
91 o-Xylene	106		7.908					ND	
92 Styrene	104		7.921					ND	
95 Bromoform	173		8.109					ND	
93 2-Chlorobenzotrifluoride	180		8.117					ND	
94 Isopropylbenzene	105		8.188					ND	
96 Cyclohexanone	55		8.312					ND	
101 Bromobenzene	156		8.468					ND	
97 1,1,2,2-Tetrachloroethane	83		8.468					ND	
100 1,2,3-Trichloropropane	110		8.504					ND	
98 trans-1,4-Dichloro-2-buten	53		8.511					ND	
99 N-Propylbenzene	91		8.517					ND	
103 2-Chlorotoluene	126		8.608					ND	
102 1,3,5-Trimethylbenzene	105		8.656					ND	
104 3-Chlorotoluene	126		8.659					ND	
105 4-Chlorotoluene	126		8.699					ND	
106 tert-Butylbenzene	134		8.924					ND	
107 1,2,4-Trimethylbenzene	105		8.967					ND	
108 Pentachloroethane	167		8.975					ND	
109 sec-Butylbenzene	105		9.100					ND	
110 4-Isopropyltoluene	119		9.216					ND	
111 1,3-Dichlorobenzene	146		9.222					ND	
114 Dicyclopentadiene	66		9.297					ND	
113 1,4-Dichlorobenzene	146		9.301					ND	
112 1,2,3-Trimethylbenzene	105		9.322					ND	
143 Benzyl chloride	126		9.413					ND	
115 n-Butylbenzene	91		9.557					ND	
116 1,2-Dichlorobenzene	146		9.611					ND	
117 1,2-Dibromo-3-Chloropropan	75		10.268					ND	
118 1,3,5-Trichlorobenzene	180		10.416					ND	
119 1,2,4-Trichlorobenzene	180		10.931					ND	
120 Hexachlorobutadiene	225		11.046					ND	
121 Naphthalene	128		11.138					ND	
122 1,2,3-Trichlorobenzene	180		11.326					ND	
142 2-Methylnaphthalene	142	11.996	11.997	-0.001	85	2601		0.6228	
132 Halothane	1		0.000					ND	
S 125 1,2-Dichloroethene, Total	1		30.000					ND	
S 126 1,3-Dichloropropene, Total	1		30.000					ND	
S 123 Total BTEX	1		30.000					ND	
S 124 Xylenes, Total	1		30.000					ND	
T 150 1-Chloro-1-fluoroethane TI	47		2.000					ND	
T 127 Ethanol TIC	45		2.280					ND	
27 Ethanor 110	.0		2.200						

Chrom Revision: 2.2 02-Dec-2015 11:51:48

Bata File: ((OHIOHIII) ((B	unaio (C CITIDA	077	3 2 ,20 100	/ 0	3272:8120007			
Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
T 124 Doubt ablance the are TIC	1		0.000					ND	
T 134 Pentachloroethane TIC	ı		0.000					ND	
T 136 Propene oxide TIC	1		0.000					ND	
T 133 bis(chloromethyl)ether TIC	1		0.000					ND	
T 9 bis(2-chloromethyl)ether T	1		0.000					ND	
T 128 Hexachloroethane TIC	1		0.000					ND	
T 138 Ethylene oxide TIC	1		0.000					ND	
T 137 1-Bromopropane TIC	1		0.000					ND	
T 131 tert-amyl alcohol TIC	1		0.000					ND	
T 130 Bromoethane TIC	1		0.000					ND	
T 129 Aziridine TIC	1		0.000					ND	
Reagents:									
Q_8260_IS_00114		Amount	Added:	1.25	ι	Jnits: uL	Run Reage	nt	
Q_8260_SURR_00107		Amount	Added:	1.25	l	Jnits: uL	Run Reage		
Reagents: Q_8260_IS_00114	1		Added:				Run Reage	nt	

Report Date: 29-Jan-2016 16:05:28 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: 29-Jan-2016 13:17:30 HP5973Q Injection Date: Instrument ID:

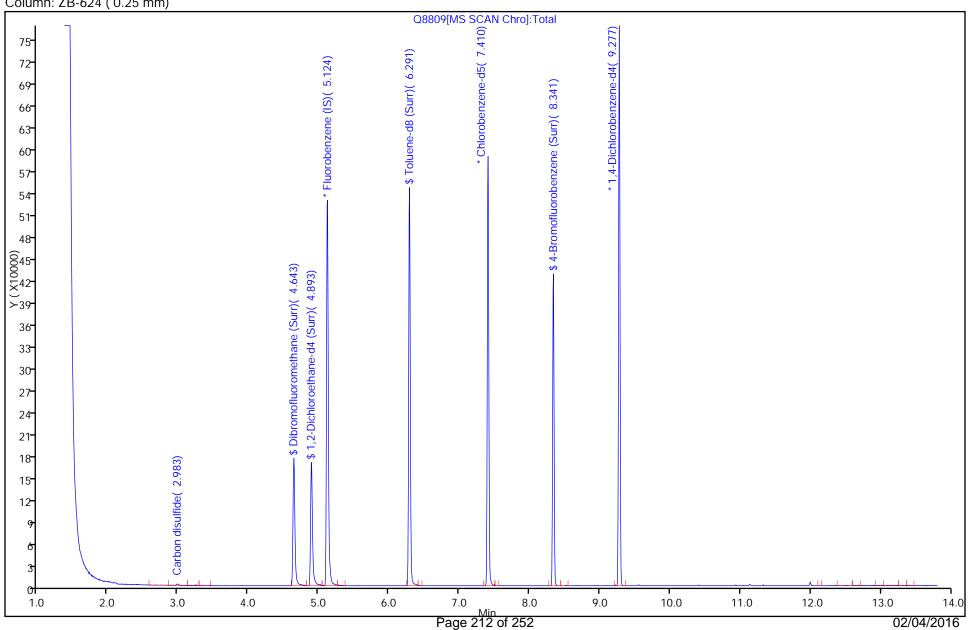
Lims ID: MB

Client ID: Purge Vol:

Dil. Factor: 1.0000 5.000 mL

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

RR

7

8

Report Date: 29-Jan-2016 16:05:28 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: 29-Jan-2016 13:17:30 Injection Date: Instrument ID: HP5973Q

Lims ID: MB

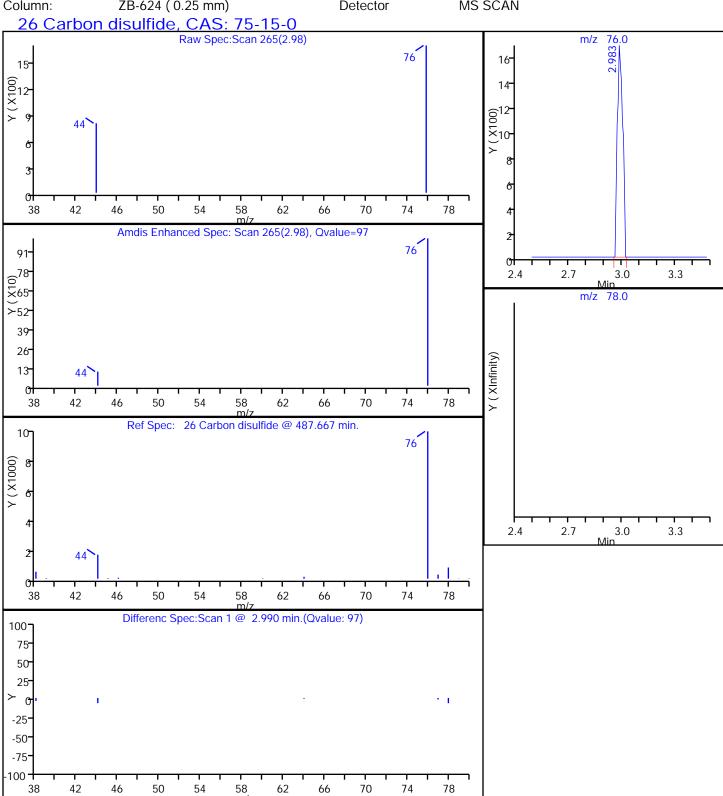
Client ID:

Operator ID: RR ALS Bottle#: 8 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS SCAN



FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1						
SDG No.:							
Client Sample ID:	Lab Sample ID: MB 480-285817/7						
Matrix: Water	Lab File ID: Q8870.D						
Analysis Method: 8260C	Date Collected:						
Sample wt/vol: 5(mL)	Date Analyzed: 02/02/2016 12:09						
Soil Aliquot Vol:	Dilution Factor: 1						
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)						
% Moisture:	Level: (low/med) Low						
Analysis Batch No.: 285817	Units: ug/L						

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: <u>480-94483-1</u>
SDG No.:	
Client Sample ID:	Lab Sample ID: MB 480-285817/7
Matrix: Water	Lab File ID: Q8870.D
Analysis Method: 8260C	Date Collected:
Sample wt/vol: 5(mL)	Date Analyzed: 02/02/2016 12:09
Soil Aliquot Vol:	Dilution Factor: 1
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Batch No.: 285817	Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		66-137
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
2037-26-5	Toluene-d8 (Surr)	86		71-126
1868-53-7	Dibromofluoromethane (Surr)	89		60-140

Report Date: 02-Feb-2016 13:30:03 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

\\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8870.D

Lims ID: MB

Client ID:

Data File:

Sample Type: MB

Inject. Date: 02-Feb-2016 12:09:30 ALS Bottle#: 6 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: MB

Misc. Info.: 480-0050332-007

Operator ID: RR Instrument ID: HP5973Q

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update: 02-Feb-2016 13:30:02 Calib Date: 11-Jan-2016 21:55:30 Integrator: RTE ID Type: Deconvolution ID Quant Method: Internal Standard Quant By: Initial Calibration \ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK032

First Level Reviewer: reiler Date: 02-Feb-2016 13:30:02

First Level Reviewer: reiler		Date:				02-Feb-2016 13:30:02			
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.120	5.118	0.002	99	86528	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.406	7.411	-0.005	84	166349	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.279	9.278	0.001	94	189354	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.639	4.638	0.001	94	101468	25.0	22.2	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.895	4.893	0.002	0	56300	25.0	21.2	
\$ 5 Toluene-d8 (Surr)	98	6.287	6.286	0.001	92	337697	25.0	21.5	
\$ 6 4-Bromofluorobenzene (Surr	174	8.343	8.341	0.002	93	117527	25.0	24.4	
10 Dichlorodifluoromethane	85		1.433					ND	
11 Chlorodifluoromethane	51		1.451					ND	
12 Chloromethane	50		1.609					ND	
13 Vinyl chloride	62		1.707					ND	
144 Butadiene	54		1.737					ND	
14 Bromomethane	94		2.023					ND	
15 Chloroethane	64		2.126					ND	
17 Trichlorofluoromethane	101		2.303					ND	
16 Dichlorofluoromethane	67		2.333					ND	
18 Ethyl ether	59		2.588					ND	
20 Acrolein	56		2.741					ND	
22 1,1-Dichloroethene	96		2.789					ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.807					ND	
141 Ethanol	45		2.818					ND	
23 Acetone	43		2.886					ND	
25 lodomethane	142		2.935					ND	
26 Carbon disulfide	76		2.978					ND	
24 Isopropyl alcohol	45		3.032					ND	
28 3-Chloro-1-propene	41		3.124					ND	
27 Methyl acetate	43		3.160					ND	
29 Acetonitrile	40		3.160					ND	
30 Methylene Chloride	84		3.245					ND	
31 2-Methyl-2-propanol	59		3.385					ND	
32 Methyl tert-butyl ether	73		3.446					ND	
3			_	040 (05	_			00/0	1/0010

Report Date: 02-Feb-2016 13:30:03 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8870.D

Data File. //CII/OIII/A/B	I				102-30	J332.b\Q6670.	Cal Amt	OnCol Amt	
Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	ug/L	ug/L	Flags
34 trans-1,2-Dichloroethene	96		3.458					ND	
33 Acrylonitrile	53		3.476					ND	
35 Hexane	57		3.641					ND	
39 1,1-Dichloroethane	63		3.811					ND	
36 Isopropyl ether	45		3.829					ND	
37 Vinyl acetate	43		3.847					ND	
40 2-Chloro-1,3-butadiene	53		3.866					ND	
38 1,1-Dimethoxyethane	75		3.884					ND	
41 Tert-butyl ethyl ether	59		4.115					ND	
44 2,2-Dichloropropane	77		4.249					ND	
45 cis-1,2-Dichloroethene	96		4.267					ND	
43 2-Butanone (MEK)	43		4.279					ND	
42 Ethyl acetate	43		4.310					ND	
46 Propionitrile	54		4.352					ND	
47 Methacrylonitrile	41		4.455					ND	
48 Chlorobromomethane	128		4.462					ND	
49 Tetrahydrofuran	42		4.480					ND	
50 Chloroform	83		4.516					ND	
51 1,1,1-Trichloroethane	97		4.632					ND	
52 Cyclohexane	56		4.650					ND	
54 1,1-Dichloropropene	75		4.747					ND	
55 Carbon tetrachloride	117		4.747					ND	
53 Isobutyl alcohol	43		4.875					ND	
57 Benzene	78		4.912					ND	
146 Isooctane	57		4.912					ND	
140 t-Amyl alcohol	59		4.930					ND	
58 1,2-Dichloroethane	62		4.948					ND	
56 Tert-amyl methyl ether	73		4.966					ND	
59 n-Heptane	43		5.058					ND	
1 1,4-Difluorobenzene	114		5.197					ND	
60 n-Butanol	56		5.356					ND	
62 Trichloroethene	95		5.392					ND	
			5.459					ND	
145 Ethyl acrylate 64 Methylcyclohexane	55 83							ND	
3 3			5.501						
65 1,2-Dichloropropane	63		5.568					ND	
63 Methyl methacrylate	41		5.629					ND	
66 1,4-Dioxane	88		5.672					ND	
67 Dibromomethane	93		5.672					ND	
68 Dichlorobromomethane	83		5.781					ND	
70 2-Nitropropane	43		5.958					ND	
69 2-Chloroethyl vinyl ether	63		5.988					ND	
71 Epichlorohydrin	57		6.055					ND	
77 trans-1,3-Dichloropropene	75		6.103					ND	
73 4-Methyl-2-pentanone (MIBK	43		6.201					ND	
74 Toluene	92		6.341					ND	
76 2-Methylthiophene	97		6.445					ND	
72 cis-1,3-Dichloropropene	75		6.529					ND	
75 Ethyl methacrylate	69		6.554					ND	
78 3-Methylthiophene	97		6.567					ND	
79 1,1,2-Trichloroethane	83		6.675					ND	
81 Tetrachloroethene	166		6.754					ND	
82 1,3-Dichloropropane	76		6.797					ND	

Report Date: 02-Feb-2016 13:30:03 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8870.D

Data File: \\Cnromina\B	unaio\	UnromData\HP		1	ZUZ-5(J332.D\Q8870.		1 .	
Compound	Sig	RT Adj (min.) (min		Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
80 2-Hexanone	43	6.8	22					ND	
149 n-Butyl acetate	43	6.9						ND	
83 Chlorodibromomethane	43 129	6.9						ND	
84 Ethylene Dibromide	107	7.0						ND	
139 1-Chlorohexane	55	7.0						ND	
85 3-Chlorobenzotrifluoride	180	7.3						ND	
87 Chlorobenzene	112	7.3 7.4						ND	
86 4-Chlorobenzotrifluoride	180	7.4						ND	
88 Ethylbenzene	91	7.4						ND	
89 1,1,1,2-Tetrachloroethane	131	7.4						ND	
90 m-Xylene & p-Xylene	106	7.4						ND	
	106	7.9						ND	
91 o-Xylene	104	7.9						ND	
92 Styrene 95 Bromoform	173	8.1						ND	
93 2-Chlorobenzotrifluoride	180	8.1 8.1						ND	
	105	8.1 8.1						ND	
94 Isopropylbenzene	55	8.3						ND ND	
96 Cyclohexanone 101 Bromobenzene	55 156	8.4						ND ND	
	83	8.4						ND	
97 1,1,2,2-Tetrachloroethane	os 110	8.5						ND	
100 1,2,3-Trichloropropane									
98 trans-1,4-Dichloro-2-buten	53 91	8.5						ND	
99 N-Propylbenzene		8.5						ND	
103 2-Chlorotoluene	126	8.6						ND	
102 1,3,5-Trimethylbenzene	105	8.6						ND	
104 3-Chlorotoluene	126	8.6						ND	
105 4-Chlorotoluene	126	8.7						ND	
106 tert-Butylbenzene	134	8.9						ND	
107 1,2,4-Trimethylbenzene	105	8.9						ND	
108 Pentachloroethane	167	8.9						ND	
109 sec-Butylbenzene	105	9.1						ND	
110 4-Isopropyltoluene	119	9.2						ND	
111 1,3-Dichlorobenzene	146	9.2						ND	
113 1,4-Dichlorobenzene	146	9.2						ND	
114 Dicyclopentadiene	66	9.2						ND	
112 1,2,3-Trimethylbenzene	105	9.3						ND	
143 Benzyl chloride	126	9.4						ND	
115 n-Butylbenzene	91	9.5						ND	
116 1,2-Dichlorobenzene	146	9.6						ND	
117 1,2-Dibromo-3-Chloropropan	75	10.2						ND	
118 1,3,5-Trichlorobenzene	180	10.4						ND	
119 1,2,4-Trichlorobenzene	180	10.9						ND	
120 Hexachlorobutadiene	225	11.0						ND	
121 Naphthalene	128	11.1	39					ND	
122 1,2,3-Trichlorobenzene	180	11.3						ND	
142 2-Methylnaphthalene	142	11.9	96					ND	
132 Halothane	1	0.0	00					ND	
S 123 Total BTEX	1	30.0	00					ND	
S 124 Xylenes, Total	1	30.0	00					ND	
S 125 1,2-Dichloroethene, Total	1	30.0	00					ND	
S 126 1,3-Dichloropropene, Total	1	30.0	00					ND	
T 150 1-Chloro-1-fluoroethane TI	47	2.0	00					ND	
T 127 Ethanol TIC	45	2.2	30					ND	

Chrom Revision: 2.2 02-Dec-2015 11:51:48

Bata File: World of the	unalo (oomba	077	7 - 7 - 7 - 7 - 7					
Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
				•					
T 137 1-Bromopropane TIC	1		0.000					ND	
T 138 Ethylene oxide TIC	1		0.000					ND	
T 131 tert-amyl alcohol TIC	1		0.000					ND	
T 129 Aziridine TIC	1		0.000					ND	
T 130 Bromoethane TIC	1		0.000					ND	
T 136 Propene oxide TIC	1		0.000					ND	
T 134 Pentachloroethane TIC	1		0.000					ND	
T 133 bis(chloromethyl)ether TIC	1		0.000					ND	
T 128 Hexachloroethane TIC	1		0.000					ND	
T 9 bis(2-chloromethyl)ether T	1		0.000	ND					
Reagents:									
Q_8260_IS_00114		Amount	Added:	1.25	ι	Jnits: uL	Run Reage	nt	
Q_8260_SURR_00107			Added:	1.25		Jnits: uL	Run Reage		

Report Date: 02-Feb-2016 13:30:03 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: HP5973Q Injection Date: 02-Feb-2016 12:09:30 Instrument ID:

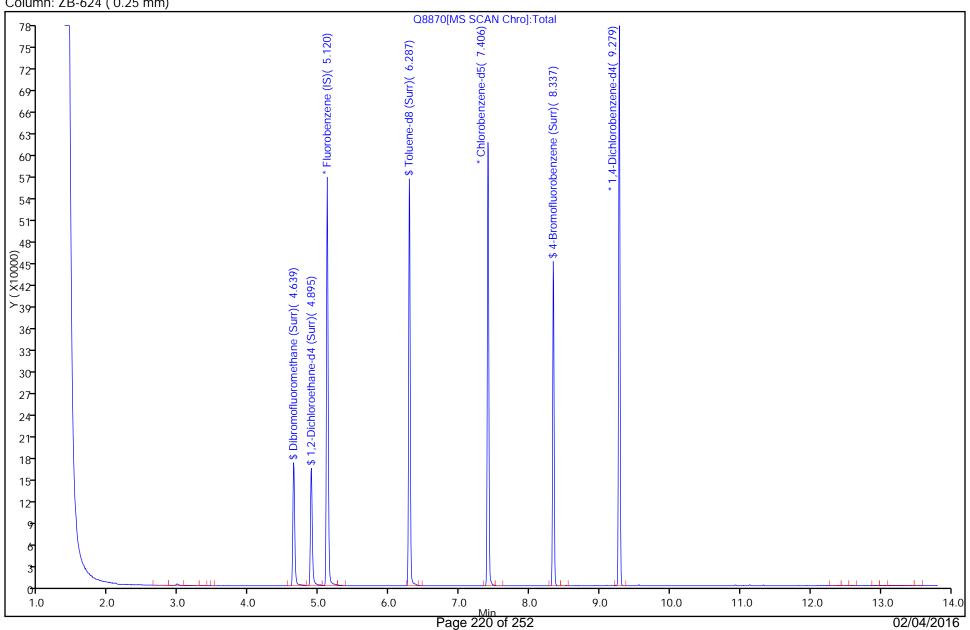
Lims ID: MB

Client ID: Purge Vol:

Dil. Factor: 1.0000 5.000 mL

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Operator ID:

ALS Bottle#:

Worklist Smp#:

RR

7

6

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1
SDG No.:	
Client Sample ID:	Lab Sample ID: LCS 480-285459/52
Matrix: Water	Lab File ID: Q8807.D
Analysis Method: 8260C	Date Collected:
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 12:16
Soil Aliquot Vol:	Dilution Factor: 1
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)
% Moisture:	Level: (low/med) Low
Analysis Batch No.: 285459	Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	21.1		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	22.4		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	15.6		1.0	0.31
79-00-5	1,1,2-Trichloroethane	22.4		1.0	0.23
75-34-3	1,1-Dichloroethane	20.8		1.0	0.38
75-35-4	1,1-Dichloroethene	19.7		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	23.0		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	25.1		1.0	0.39
106-93-4	1,2-Dibromoethane	23.8		1.0	0.73
95-50-1	1,2-Dichlorobenzene	22.0		1.0	0.79
107-06-2	1,2-Dichloroethane	23.2		1.0	0.21
78-87-5	1,2-Dichloropropane	21.2		1.0	0.72
541-73-1	1,3-Dichlorobenzene	22.4		1.0	0.78
106-46-7	1,4-Dichlorobenzene	21.6		1.0	0.84
78-93-3	2-Butanone (MEK)	73.0		10	1.3
591-78-6	2-Hexanone	103		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	103		5.0	2.1
67-64-1	Acetone	107		10	3.0
71-43-2	Benzene	20.9		1.0	0.41
75-27-4	Bromodichloromethane	24.4		1.0	0.39
75-25-2	Bromoform	25.4		1.0	0.26
74-83-9	Bromomethane	32.8		1.0	0.69
75-15-0	Carbon disulfide	19.1		1.0	0.19
56-23-5	Carbon tetrachloride	21.4		1.0	0.27
108-90-7	Chlorobenzene	22.0		1.0	0.75
75-00-3	Chloroethane	30.5		1.0	0.32
67-66-3	Chloroform	21.5		1.0	0.34
74-87-3	Chloromethane	20.9		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	21.4		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	25.9		1.0	0.36
110-82-7	Cyclohexane	16.1		1.0	0.18
124-48-1	Dibromochloromethane	25.6		1.0	0.32
75-71-8	Dichlorodifluoromethane	25.3		1.0	0.68
100-41-4	Ethylbenzene	22.2		1.0	0.74
98-82-8	Isopropylbenzene	22.2		1.0	0.79

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1					
SDG No.:						
Client Sample ID:	Lab Sample ID: LCS 480-285459/52					
Matrix: Water	Lab File ID: Q8807.D					
Analysis Method: 8260C	Date Collected:					
Sample wt/vol: 5(mL)	Date Analyzed: 01/29/2016 12:16					
Soil Aliquot Vol:	Dilution Factor: 1					
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)					
% Moisture:	Level: (low/med) Low					
Analysis Batch No.: 285459	Units: ua/L					

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	110		2.5	1.3
1634-04-4	Methyl tert-butyl ether	21.7		1.0	0.16
108-87-2	Methylcyclohexane	18.3		1.0	0.16
75-09-2	Methylene Chloride	20.1		1.0	0.44
100-42-5	Styrene	22.6		1.0	0.73
127-18-4	Tetrachloroethene	23.2		1.0	0.36
108-88-3	Toluene	21.5		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	20.8		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	23.9		1.0	0.37
79-01-6	Trichloroethene	21.8		1.0	0.46
75-69-4	Trichlorofluoromethane	27.8		1.0	0.88
75-01-4	Vinyl chloride	23.4		1.0	0.90
1330-20-7	Xylenes, Total	43.0		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		66-137
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
2037-26-5	Toluene-d8 (Surr)	88		71-126
1868-53-7	Dibromofluoromethane (Surr)	90		60-140

Report Date: 29-Jan-2016 13:07:01 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8807.D

Lims ID: LCS

Client ID:

Sample Type: LCS

Inject. Date: 29-Jan-2016 12:16:30 ALS Bottle#: 6 Worklist Smp#: 52

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: LCS

Misc. Info.: 480-0050272-052

Operator ID: RR Instrument ID: HP5973Q

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:29-Jan-2016 13:07:00Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK014

First Level Reviewer: reiler Date: 29-Jan-2016 13:07:00

First Level Reviewer: reiler			D	ate:		29-Jan-201	6 13:07:00		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.120	5.119	0.001	99	94743	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.406	7.406	0.000	84	182421	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.279	9.279	0.000	93	194784	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.639	4.639	0.000	94	112432	25.0	22.5	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.895	4.888	0.007	0	70461	25.0	24.2	
\$ 5 Toluene-d8 (Surr)	98	6.287	6.287	0.000	92	376141	25.0	21.9	
\$ 6 4-Bromofluorobenzene (Surr	174	8.337	8.336	0.001	91	125759	25.0	23.8	
10 Dichlorodifluoromethane	85	1.434	1.432	0.002	99	126186	25.0	25.3	
11 Chlorodifluoromethane	51	1.453	1.458	-0.005	97	149113	25.0	21.5	
12 Chloromethane	50	1.617	1.626	-0.009	99	142361	25.0	20.9	
13 Vinyl chloride	62	1.708	1.712	-0.004	98	144863	25.0	23.4	
144 Butadiene	54	1.738	1.724	0.014	89	118087	25.0	21.5	
14 Bromomethane	94	2.030	2.028	0.002	91	94608	25.0	32.8	
15 Chloroethane	64	2.134	2.119	0.015	100	82168	25.0	30.5	
17 Trichlorofluoromethane	101	2.310	2.320	-0.010	97	217189	25.0	27.8	
16 Dichlorofluoromethane	67	2.328	2.326	0.002	96	233650	25.0	26.7	
18 Ethyl ether	59	2.590	2.599	-0.009	93	129112	25.0	23.8	
20 Acrolein	56	2.742	2.745	-0.003	98	79587	125.0	56.1	
22 1,1-Dichloroethene	96	2.797	2.800	-0.004	98	118346	25.0	19.7	
21 1,1,2-Trichloro-1,2,2-trif	101	2.809	2.806	0.003	92	85711	25.0	15.6	
141 Ethanol	45		2.818				ND	ND	
23 Acetone	43	2.888	2.891	-0.003	99	361555	125.0	106.9	
25 Iodomethane	142	2.936	2.940	-0.004	100	240608	25.0	21.1	
26 Carbon disulfide	76	2.979	2.983	-0.004	99	369883	25.0	19.1	
24 Isopropyl alcohol	45	3.046	3.046	0.000	95	107575	250.0	212.7	
28 3-Chloro-1-propene	41	3.131	3.129	0.002	92	397475	25.0	40.6	
27 Methyl acetate	43	3.161	3.159	0.002	97	864768	125.0	110.4	
29 Acetonitrile	40	3.149	3.161	-0.012	86	140302	250.0	172.9	
30 Methylene Chloride	84	3.247	3.250	-0.004	91	140512	25.0	20.1	
31 2-Methyl-2-propanol	59	3.380	3.378	0.002	99	328378	250.0	175.9	
32 Methyl tert-butyl ether	73	3.447	3.451	-0.004	94	460623	25.0	21.7	
3				000 (05	•			00/0	4/0040

Chrom Revision: 2.2 02-Dec-2015 11:51:48

Compound Sig RT (min.) Adj RT (min.) Dlt RT (min.) Q Response Cal Amt ug/L OnCol Amt ug/L FI 34 trans-1,2-Dichloroethene 96 3.459 3.463 -0.004 98 137874 25.0 20.8 33 Acrylonitrile 53 3.478 3.481 -0.003 98 830248 250.0 215.5 35 Hexane 57 3.642 3.645 -0.003 92 153782 25.0 17.2	lags
34 trans-1,2-Dichloroethene 96 3.459 3.463 -0.004 98 137874 25.0 20.8 33 Acrylonitrile 53 3.478 3.481 -0.003 98 830248 250.0 215.5	iays
33 Acrylonitrile 53 3.478 3.481 -0.003 98 830248 250.0 215.5	
33 Acrylonitrile 53 3.478 3.481 -0.003 98 830248 250.0 215.5	
, and the state of	
39 1,1-Dichloroethane 63 3.806 3.810 -0.004 96 236793 25.0 20.8	
36 Isopropyl ether 45 3.830 3.830 0.000 96 450080 25.0 22.5	
37 Vinyl acetate 43 3.842 3.846 -0.004 97 991758 50.0 64.4	
40 2-Chloro-1,3-butadiene 53 3.867 3.867 0.000 92 229720 25.0 24.4	
38 1,1-Dimethoxyethane 75 3.885 3.885 0.000 91 262365 125.0 119.6	
41 Tert-butyl ether 59 4.110 4.110 0.000 97 462745 25.0 23.5	
44 2,2-Dichloropropane 77 4.250 4.254 -0.004 86 170262 25.0 20.9	
45 cis-1,2-Dichloroethene 96 4.268 4.272 -0.004 80 155562 25.0 21.4	
43 2-Butanone (MEK) 43 4.280 4.284 -0.004 94 375767 125.0 73.0	
· · ·	M
46 Propionitrile 54 4.353 4.353 0.000 99 335820 250.0 206.8	VI
47 Methacrylonitrile 41 4.457 4.456 0.001 92 1228223 250.0 251.6	
48 Chlorobromomethane 128 4.463 4.460 0.003 86 80259 25.0 21.1	
49 Tetrahydrofuran 42 4.481 4.479 0.002 88 183034 50.0 48.8	
50 Chloroform 83 4.518 4.521 -0.003 93 235458 25.0 21.5	
51 1,1,1-Trichloroethane 97 4.633 4.631 0.002 98 193182 25.0 21.1	
52 Cyclohexane 56 4.651 4.655 -0.004 92 177302 25.0 16.1	
55 Carbon tetrachloride 117 4.749 4.752 -0.003 97 169924 25.0 21.4	
y	
58 1,2-Dichloroethane 62 4.949 4.953 -0.004 98 204910 25.0 23.2 56 Tert-amyl methyl ether 73 4.968 4.967 0.001 97 506950 25.0 18.8	
59 n-Heptane 43 5.059 5.062 -0.003 92 150962 25.0 19.2 1 1,4-Difluorobenzene 114 5.199 5.198 0.001 94 466749 25.0 26.1	
·	
60 n-Butanol 56 5.357 5.357 0.001 87 189876 625.0 466.4	
62 Trichloroethene 95 5.387 5.391 -0.004 97 143695 25.0 21.8	
145 Ethyl acrylate 55 5.460 5.460 0.000 99 233241 25.0 25.4	
64 Methylcyclohexane 83 5.503 5.506 -0.003 88 193977 25.0 18.3	
65 1,2-Dichloropropane 63 5.570 5.567 0.003 93 121216 25.0 21.2	
63 Methyl methacrylate 41 5.630 5.630 0.000 90 303671 50.0 52.3	
66 1,4-Dioxane 88 5.673 5.677 -0.004 35 34321 500.0 325.6	
67 Dibromomethane 93 5.673 5.677 -0.004 95 96062 25.0 23.0	
68 Dichlorobromomethane 83 5.782 5.786 -0.004 99 180699 25.0 24.4	
70 2-Nitropropane 43 5.959 5.959 0.000 99 100243 50.0 52.3	
69 2-Chloroethyl vinyl ether 63 5.983 5.987 -0.004 87 91506 25.0 24.4	
71 Epichlorohydrin 57 6.056 6.056 0.000 99 265919 250.0 235.7	
77 trans-1,3-Dichloropropene 75 6.105 6.108 -0.003 93 216340 25.0 23.9	
73 4-Methyl-2-pentanone (MIBK 43 6.202 6.200 0.002 95 984732 125.0 103.4	
74 Toluene 92 6.342 6.339 0.003 99 318579 25.0 21.5	
72 cis-1,3-Dichloropropene 75 6.524 6.528 -0.004 98 193261 25.0 25.9	
75 Ethyl methacrylate 69 6.555 6.558 -0.003 88 181975 25.0 22.6	
79 1,1,2-Trichloroethane 83 6.670 6.674 -0.004 91 99398 25.0 22.4	
81 Tetrachloroethene 166 6.755 6.753 0.002 97 149846 25.0 23.2	
82 1,3-Dichloropropane 76 6.798 6.802 -0.004 87 203994 25.0 22.6	
80 2-Hexanone 43 6.835 6.832 0.002 96 694576 125.0 103.1	
149 n-Butyl acetate 43 6.914 6.913 0.001 98 250086 25.0 21.1	

Report Date: 29-Jan-2016 13:07:01 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Data File:

Data File. \(\text{\tinct{\text{\te\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex{\tex									
Commissioned	Cim	RT	Adj RT	Dlt RT		Doonsiis	Cal Amt	OnCol Amt	Пета
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
83 Chlorodibromomethane	129	6.980	6.984	-0.004	89	154347	25.0	25.6	
84 Ethylene Dibromide	107	7.072	7.069	0.003	99	141232	25.0 25.0	23.8	
139 1-Chlorohexane	55	7.382	7.009	0.003	99 96	141232	25.0	23.6	
85 3-Chlorobenzotrifluoride	180	7.382 7.388	7.382	0.006	90 91	228652	25.0 25.0	28.1	
86 4-Chlorobenzotrifluoride	180	7.366	7.362	0.000	91 97	218213	25.0	27.9	
87 Chlorobenzene	112	7.430	7.430	-0.004	97 97	362672	25.0	22.0	
88 Ethylbenzene	91	7.430 7.497	7.434 7.495	0.004	97 98	595647	25.0 25.0	22.0	
89 1,1,1,2-Tetrachloroethane	131	7.497	7.495 7.495	0.002	46	144576	25.0	23.4	
	106	7.497	7.493	-0.002	0	239379	25.0	23.4	
90 m-Xylene & p-Xylene	106	7.363 7.905	7.366	-0.004	96	239379 244787	25.0 25.0	21.4	
91 o-Xylene	108	7.903 7.923	7.908 7.921	0.003	96 95	389126	25.0 25.0	21.6	
92 Styrene 95 Bromoform	173	7.923 8.105	8.109	-0.002	95 96	94502	25.0 25.0	25.4	
93 2-Chlorobenzotrifluoride		8.118				234333	25.0 25.0	26.9	
	180	8.118	8.117 8.188	0.001 0.003	97 05		25.0 25.0	20.9 22.2	
94 Isopropylbenzene	105				95 02	620015			
96 Cyclohexanone	55 154	8.306	8.312	-0.006	92	81496 164117	250.0	197.9	
101 Bromobenzene	156	8.464	8.468	-0.004	93 05		25.0	22.7	
97 1,1,2,2-Tetrachloroethane	83	8.470	8.468	0.002	95 07	193449 69244	25.0	22.4	
100 1,2,3-Trichloropropane	110	8.507	8.504	0.003	87		25.0	22.8	
98 trans-1,4-Dichloro-2-buten	53	8.507	8.511	-0.004	74	50191	25.0	22.5	
99 N-Propylbenzene	91 127	8.519	8.517	0.002	98	684209	25.0	22.0	
103 2-Chlorotoluene	126	8.610	8.608	0.002	97	157287	25.0	22.7	
102 1,3,5-Trimethylbenzene	105	8.659	8.656	0.003	94	523115	25.0	22.2	
104 3-Chlorotoluene	126	8.659	8.659	0.000	93	174717	25.0	26.4	
105 4-Chlorotoluene	126	8.695	8.699	-0.004	97	163724	25.0	23.4	
106 tert-Butylbenzene	134	8.926	8.924	0.002	92	117009	25.0	22.2	
107 1,2,4-Trimethylbenzene	105	8.969	8.967	0.002	96	553581	25.0	22.7	
108 Pentachloroethane	167	8.975	8.975	0.000	92	92020	25.0	26.1	
109 sec-Butylbenzene	105	9.103	9.100	0.003	94	637026	25.0	22.1	
110 4-Isopropyltoluene	119	9.218	9.216	0.002	97	585507	25.0	22.4	
111 1,3-Dichlorobenzene	146	9.224	9.222	0.002	98	306548	25.0	22.4	
114 Dicyclopentadiene	66	9.297	9.297	0.000	96	617304	25.0	24.5	
113 1,4-Dichlorobenzene	146	9.297	9.301	-0.004	75	304381	25.0	21.6	
112 1,2,3-Trimethylbenzene	105	9.322	9.322	0.000	97	619852	25.0	26.3	
143 Benzyl chloride	126	9.413	9.413	0.000	98	91012	25.0	25.2	
115 n-Butylbenzene	91	9.559	9.557	0.002	97	463081	25.0	21.3	
116 1,2-Dichlorobenzene	146	9.614	9.611	0.003	98	308375	25.0	22.0	
117 1,2-Dibromo-3-Chloropropan	75	10.270	10.268	0.002	90	53123	25.0	25.1	
118 1,3,5-Trichlorobenzene	180	10.416	10.416	0.000	98	263388	25.0	26.6	
119 1,2,4-Trichlorobenzene	180	10.933	10.931	0.002	95	238080	25.0	23.0	
120 Hexachlorobutadiene	225	11.043	11.046	-0.003	97	77612	25.0	22.1	
121 Naphthalene	128	11.140	11.138	0.002	97	830036	25.0	23.8	
122 1,2,3-Trichlorobenzene	180	11.329	11.326	0.003	96	229704	25.0	23.1	
142 2-Methylnaphthalene	142	11.998	11.997	0.001	92	515740	25.0	25.3	
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QC Flag Legend Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Report Date: 29-Jan-2016 13:07:01 Chrom Revision: 2.2 02-Dec-2015 11:51:48

Reagents:

<u> </u>			
8260 CORP mix_00063	Amount Added: 12.50	Units: uL	
GAS CORP mix_00132	Amount Added: 12.50	Units: uL	
ADD CORP mix_00043	Amount Added: 12.50	Units: uL	
Q_8260_IS_00114	Amount Added: 1.25	Units: uL	Run Reagent
Q_8260_SURR_00107	Amount Added: 1.25	Units: uL	Run Reagent

Report Date: 29-Jan-2016 13:07:01 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160129-50272.b\Q8807.D Injection Date: 29-Jan-2016 12:16:30 Instrument ID: HP5973Q

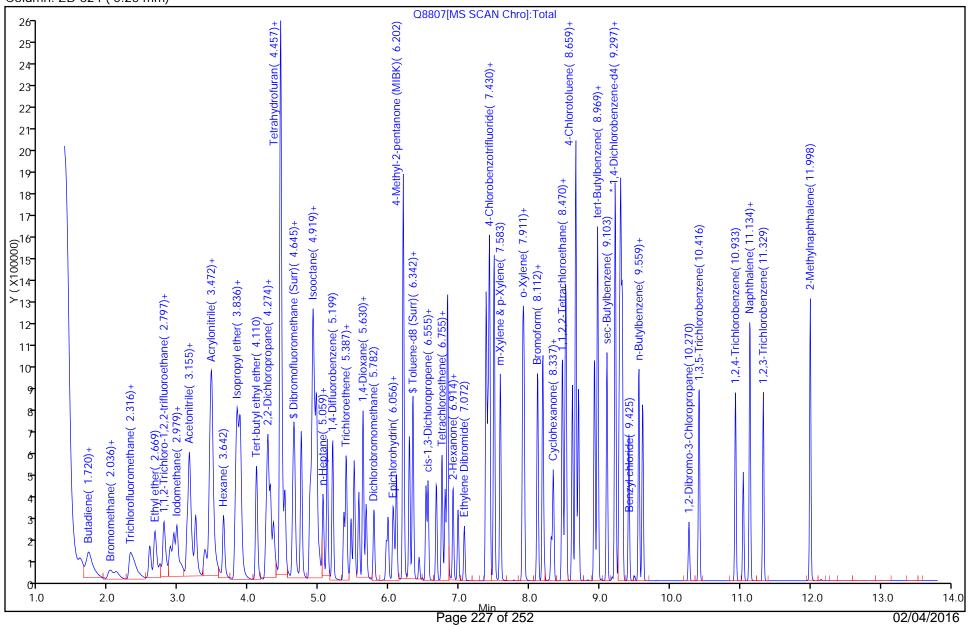
Lims ID: LCS

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



RR

52

6

Operator ID:

ALS Bottle#:

Worklist Smp#:

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1					
SDG No.:						
Client Sample ID:	Lab Sample ID: LCS 480-285817/5					
Matrix: Water	Lab File ID: Q8868.D					
Analysis Method: 8260C	Date Collected:					
Sample wt/vol: 5(mL)	Date Analyzed: 02/02/2016 11:08					
Soil Aliquot Vol:	Dilution Factor: 1					
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)					
% Moisture:	Level: (low/med) Low					
Analysis Batch No.: 285817	Units: ug/L					

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	23.1		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	22.4		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	18.3		1.0	0.31
79-00-5	1,1,2-Trichloroethane	23.0		1.0	0.23
75-34-3	1,1-Dichloroethane	22.1		1.0	0.38
75-35-4	1,1-Dichloroethene	21.6		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	22.9		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	23.8		1.0	0.39
106-93-4	1,2-Dibromoethane	24.9		1.0	0.73
95-50-1	1,2-Dichlorobenzene	22.7		1.0	0.79
107-06-2	1,2-Dichloroethane	24.7		1.0	0.21
78-87-5	1,2-Dichloropropane	22.2		1.0	0.72
541-73-1	1,3-Dichlorobenzene	22.7		1.0	0.78
106-46-7	1,4-Dichlorobenzene	22.5		1.0	0.84
78-93-3	2-Butanone (MEK)	100		10	1.3
591-78-6	2-Hexanone	103		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	104		5.0	2.1
67-64-1	Acetone	53.9		10	3.0
71-43-2	Benzene	22.5		1.0	0.41
75-27-4	Bromodichloromethane	25.8		1.0	0.39
75-25-2	Bromoform	25.3		1.0	0.26
74-83-9	Bromomethane	30.4		1.0	0.69
75-15-0	Carbon disulfide	21.6		1.0	0.19
56-23-5	Carbon tetrachloride	23.8		1.0	0.27
108-90-7	Chlorobenzene	23.1		1.0	0.75
75-00-3	Chloroethane	26.7		1.0	0.32
67-66-3	Chloroform	23.5		1.0	0.34
74-87-3	Chloromethane	20.9		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	22.9		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	26.7		1.0	0.36
110-82-7	Cyclohexane	18.5		1.0	0.18
124-48-1	Dibromochloromethane	25.5		1.0	0.32
75-71-8	Dichlorodifluoromethane	29.1		1.0	0.68
100-41-4	Ethylbenzene	23.2		1.0	0.74
98-82-8	Isopropylbenzene	23.0		1.0	0.79

FORM I GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo	Job No.: 480-94483-1				
SDG No.:					
Client Sample ID:	Lab Sample ID: LCS 480-285817/5				
Matrix: Water	Lab File ID: Q8868.D				
Analysis Method: 8260C	Date Collected:				
Sample wt/vol: 5(mL)	Date Analyzed: 02/02/2016 11:08				
Soil Aliquot Vol:	Dilution Factor: 1				
Soil Extract Vol.:	GC Column: ZB-624 (60) ID: 0.25(mm)				
% Moisture:	Level: (low/med) Low				
Analysis Batch No.: 285817	Units: ug/L				

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	97.6		2.5	1.3
1634-04-4	Methyl tert-butyl ether	22.8		1.0	0.16
108-87-2	Methylcyclohexane	20.2		1.0	0.16
75-09-2	Methylene Chloride	20.4		1.0	0.44
100-42-5	Styrene	23.6		1.0	0.73
127-18-4	Tetrachloroethene	22.9		1.0	0.36
108-88-3	Toluene	22.7		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	22.8		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	24.4		1.0	0.37
79-01-6	Trichloroethene	23.4		1.0	0.46
75-69-4	Trichlorofluoromethane	25.3		1.0	0.88
75-01-4	Vinyl chloride	23.1		1.0	0.90
1330-20-7	Xylenes, Total	45.0		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		66-137
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
2037-26-5	Toluene-d8 (Surr)	85		71-126
1868-53-7	Dibromofluoromethane (Surr)	88		60-140

Report Date: 02-Feb-2016 11:43:29 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8868.D

Lims ID: LCS

Client ID:

Sample Type: LCS

Inject. Date: 02-Feb-2016 11:08:30 ALS Bottle#: 4 Worklist Smp#: 5

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Sample Info: LCS

Misc. Info.: 480-0050332-005

Operator ID: RR Instrument ID: HP5973Q

Method: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q-8260.m

Limit Group: MV - 8260C ICAL

Last Update:02-Feb-2016 11:42:03Calib Date:11-Jan-2016 21:55:30Integrator:RTEID Type:Deconvolution IDQuant Method:Internal StandardQuant By:Initial CalibrationLast ICal File:\ChromNA\Buffalo\ChromData\HP5973Q\20160111-49854.b\Q8391.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN

Process Host: XAWRK032

First Level Reviewer: reiler Date: 02-Feb-2016 11:43:29

First Level Reviewer: reiler			D	ate:		02-Feb-201	6 11:43:29		
		RT	Adj RT	Dlt RT			Cal Amt	OnCol Amt	
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
* 147 Fluorobenzene (IS)	70	5.118	5.118	0.000	99	94854	25.0	25.0	
2 Chlorobenzene-d5	82	7.410	7.411	-0.001	84	182045	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.277	9.278	-0.001	94	196598	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.637	4.638	-0.001	93	110534	25.0	22.1	
\$ 41,2-Dichloroethane-d4 (Sur	67	4.886	4.893	-0.007	0	63364	25.0	21.8	
\$ 5 Toluene-d8 (Surr)	98	6.285	6.286	-0.001	92	364820	25.0	21.3	
\$ 6 4-Bromofluorobenzene (Surr	174	8.341	8.341	0.000	92	123497	25.0	23.4	
10 Dichlorodifluoromethane	85	1.432	1.433	-0.001	99	145618	25.0	29.1	M
12 Chloromethane	50	1.627	1.609	0.018	99	142357	25.0	20.9	
13 Vinyl chloride	62	1.712	1.707	0.005	98	143448	25.0	23.1	
144 Butadiene	54	1.748	1.737	0.011	89	121675	25.0	22.2	
14 Bromomethane	94	2.040	2.023	0.017	93	87873	25.0	30.4	
15 Chloroethane	64	2.132	2.126	0.006	99	71918	25.0	26.7	
17 Trichlorofluoromethane	101	2.302	2.303	-0.001	98	197845	25.0	25.3	
16 Dichlorofluoromethane	67	2.344	2.333	0.011	97	211038	25.0	24.0	
18 Ethyl ether	59	2.588	2.588	0.000	90	110658	25.0	20.4	
20 Acrolein	56	2.740	2.741	0.000	100	83021	125.0	58.4	
22 1,1-Dichloroethene	96	2.788	2.789	-0.001	98	129697	25.0	21.6	
21 1,1,2-Trichloro-1,2,2-trif	101	2.825	2.807	0.018	91	101112	25.0	18.3	
23 Acetone	43	2.880	2.886	-0.006	99	182308	125.0	53.9	
25 lodomethane	142	2.934	2.935	-0.001	99	260209	25.0	22.8	
26 Carbon disulfide	76	2.971	2.978	-0.007	99	418097	25.0	21.6	
28 3-Chloro-1-propene	41	3.123	3.124	-0.001	90	192090	25.0	19.6	
27 Methyl acetate	43	3.153	3.160	-0.007	97	765255	125.0	97.6	
30 Methylene Chloride	84	3.245	3.245	-0.001	91	142994	25.0	20.4	
31 2-Methyl-2-propanol	59	3.378	3.385	-0.007	99	275840	250.0	147.5	M
32 Methyl tert-butyl ether	73	3.445	3.446	-0.001	94	485462	25.0	22.8	
34 trans-1,2-Dichloroethene	96	3.457	3.458	-0.001	97	151270	25.0	22.8	
33 Acrylonitrile	53	3.476	3.476	0.000	99	820469	250.0	212.7	
35 Hexane	57	3.640	3.641	-0.001	91	170056	25.0	19.0	
39 1,1-Dichloroethane	63	3.804	3.811	-0.007	96	251648	25.0	22.1	

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8868.D

Data File: \\Cnromina\\B	ullaio\(1		ZUZ-51	U332.D\Q8868.			
Compound	Cia	RT (min.)	Adj RT	Dlt RT		Doctores	Cal Amt	OnCol Amt	Elece
Compound	Sig	(min.)	(min.)	(min.)	Q	Response	ug/L	ug/L	Flags
27 Vinul acatata	12	3.840	2 0 4 7	0.007	07	471141	E0 0	12.4	
37 Vinyl acetate 44 2,2-Dichloropropane	43 77	3.840 4.248	3.847 4.249	-0.007 -0.001	97 87	671461 185793	50.0 25.0	43.6 22.8	
45 cis-1,2-Dichloroethene	96	4.246	4.249 4.267	-0.001	80	166328	25.0 25.0	22.0	
43 2-Butanone (MEK)	43	4.200	4.207	-0.001	99	517172	125.0	100.3	
48 Chlorobromomethane	43 128	4.455	4.279	-0.001	99 88	90353	25.0	23.8	
49 Tetrahydrofuran	42	4.433	4.480	-0.007	85	138918	50.0	23.6 37.0	
50 Chloroform	83	4.479	4.460	0.000	93	257620	25.0	23.5	
	os 97	4.625	4.632	-0.007	93 98	211588	25.0 25.0	23.3	
51 1,1,1-Trichloroethane	56	4.623	4.652 4.650	-0.007	90 91	203788	25.0 25.0	23. i 18.5	
52 Cyclohexane	75	4.049	4.030 4.747	0.000	91 95	197366	25.0 25.0	22.9	
54 1,1-Dichloropropene 55 Carbon tetrachloride	75 117	4.747	4.747 4.747	0.000	93 97		25.0 25.0	23.8	
						189256			
53 Isobutyl alcohol	43	4.874	4.875	-0.001	95 07	304845	625.0	430.7	
57 Benzene	78	4.911	4.912	-0.001	97 07	539395	25.0	22.5	
58 1,2-Dichloroethane	62	4.947	4.948	-0.001	97	218412	25.0	24.7	
59 n-Heptane	43	5.057	5.058	-0.001	90	155065	25.0	19.7	
62 Trichloroethene	95	5.391	5.392	-0.001	97	154624	25.0	23.4	
64 Methylcyclohexane	83	5.501	5.501	0.000	89	213993	25.0	20.2	
65 1,2-Dichloropropane	63	5.568	5.568	0.000	93	127018	25.0	22.2	
66 1,4-Dioxane	88	5.671	5.672	-0.001	35	39059	500.0	371.3	
67 Dibromomethane	93	5.671	5.672	-0.001	93	101911	25.0	24.4	
68 Dichlorobromomethane	83	5.780	5.781	-0.001	99	190792	25.0	25.8	
69 2-Chloroethyl vinyl ether	63	5.987	5.988	-0.001	93	93547	25.0	24.9	
77 trans-1,3-Dichloropropene	75	6.103	6.103	0.000	93	220355	25.0	24.4	
73 4-Methyl-2-pentanone (MIBK	43	6.200	6.201	-0.001	95	985515	125.0	103.7	
74 Toluene	92	6.340	6.341	-0.001	99	336167	25.0	22.7	
72 cis-1,3-Dichloropropene	75	6.522	6.529	-0.007	98	199224	25.0	26.7	
75 Ethyl methacrylate	69	6.553	6.554	-0.001	89	189255	25.0	23.6	
79 1,1,2-Trichloroethane	83	6.674	6.675	-0.001	91	101903	25.0	23.0	
81 Tetrachloroethene	166	6.753	6.754	-0.001	96	147546	25.0	22.9	
82 1,3-Dichloropropane	76	6.796	6.797	-0.001	88	211408	25.0	23.5	
80 2-Hexanone	43	6.832	6.833	-0.001	95	695662	125.0	103.5	
83 Chlorodibromomethane	129	6.985	6.985	0.000	90	153475	25.0	25.5	
84 Ethylene Dibromide	107	7.070	7.070	0.000	98	147203	25.0	24.9	
87 Chlorobenzene	112	7.428	7.429	-0.001	97	381218	25.0	23.1	
88 Ethylbenzene	91	7.495	7.496	-0.001	98	619829	25.0	23.2	
89 1,1,1,2-Tetrachloroethane	131	7.495	7.496	-0.001	46	145754	25.0	23.6	
90 m-Xylene & p-Xylene	106	7.587	7.587	0.000	0	251707	25.0	22.6	
91 o-Xylene	106	7.903	7.904	-0.001	96	253268	25.0	22.4	
92 Styrene	104	7.921	7.922	-0.001	95	406444	25.0	23.6	
95 Bromoform	173	8.110	8.110	0.000	97	93990	25.0	25.3	
94 Isopropylbenzene	105	8.189	8.189	0.000	95	647955	25.0	23.0	
101 Bromobenzene	156	8.468	8.469	-0.001	92	170943	25.0	23.4	
97 1,1,2,2-Tetrachloroethane	83	8.468	8.469	-0.001	95	195408	25.0	22.4	
100 1,2,3-Trichloropropane	110	8.505	8.506	-0.001	87	68996	25.0	22.5	
98 trans-1,4-Dichloro-2-buten	53	8.505	8.506	-0.001	74	46335	25.0	20.5	
99 N-Propylbenzene	91	8.517	8.518	-0.001	99	715766	25.0	22.8	
103 2-Chlorotoluene	126	8.608	8.609	-0.001	97	161648	25.0	23.1	
102 1,3,5-Trimethylbenzene	105	8.657	8.658	-0.001	95	549694	25.0	23.1	
105 4-Chlorotoluene	126	8.699	8.700	-0.001	97	161679	25.0	22.9	
106 tert-Butylbenzene	134	8.924	8.925	-0.001	92	120677	25.0	22.6	
107 1,2,4-Trimethylbenzene	105	8.967	8.968	-0.001	92 97	567118	25.0	23.1	
5									
109 sec-Butylbenzene	105	9.101	9.102	-0.001	94	643028	25.0	22.1	

Report Date: 02-Feb-2016 11:43:29 Chrom Revision: 2.2 02-Dec-2015 11:51:48

\\ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8868.D Data File:

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
Compound.	0.9	()	()	()	_	rtooponeo	3,1	<i></i> 9, -	. lage
110 4-Isopropyltoluene	119	9.216	9.217	-0.001	97	594985	25.0	22.6	
111 1,3-Dichlorobenzene	146	9.222	9.223	-0.001	98	312965	25.0	22.7	
113 1,4-Dichlorobenzene	146	9.295	9.296	-0.001	95	320424	25.0	22.5	
115 n-Butylbenzene	91	9.557	9.558	-0.001	97	481086	25.0	22.0	
116 1,2-Dichlorobenzene	146	9.612	9.612	0.000	98	320655	25.0	22.7	
117 1,2-Dibromo-3-Chloropropan	75	10.268	10.269	-0.001	88	50831	25.0	23.8	
119 1,2,4-Trichlorobenzene	180	10.931	10.932	-0.001	95	239394	25.0	22.9	
120 Hexachlorobutadiene	225	11.041	11.048	-0.007	97	79199	25.0	22.3	
121 Naphthalene	128	11.138	11.139	-0.001	97	810712	25.0	23.1	
122 1,2,3-Trichlorobenzene	180	11.327	11.327	0.000	96	227818	25.0	22.7	
QC Flag Legend									

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00133	Amount Added: 12.50	Units: uL	
8260 CORP mix_00064	Amount Added: 12.50	Units: uL	
Q_8260_IS_00114	Amount Added: 1.25	Units: uL	Run Reagent
Q_8260_SURR_00107	Amount Added: 1.25	Units: uL	Run Reagent

Report Date: 02-Feb-2016 11:43:29 Chrom Revision: 2.2 02-Dec-2015 11:51:48

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8868.D Injection Date: 02-Feb-2016 11:08:30 Instrument ID: HP5973Q

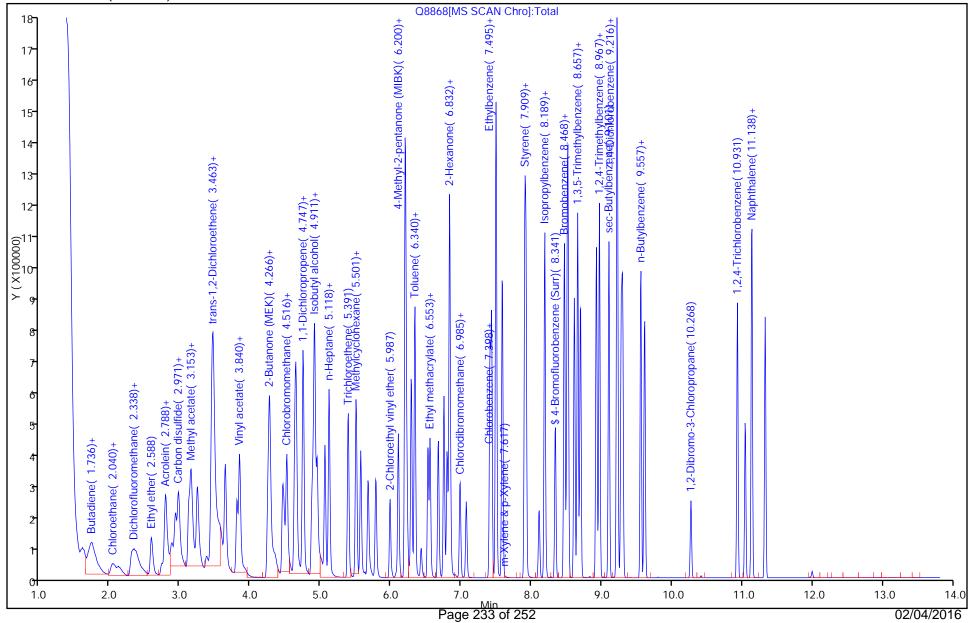
Lims ID: LCS

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



RR

5

4

Operator ID:

ALS Bottle#:

Worklist Smp#:

Report Date: 02-Feb-2016 11:43:29 Chrom Revision: 2.2 02-Dec-2015 11:51:48 Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \ChromNA\Buffalo\ChromData\HP5973Q\20160202-50332.b\Q8868.D Injection Date: 02-Feb-2016 11:08:30 Instrument ID: HP5973Q

Lims ID: LCS

Client ID:

Operator ID: RR ALS Bottle#: 4 Worklist Smp#: 5

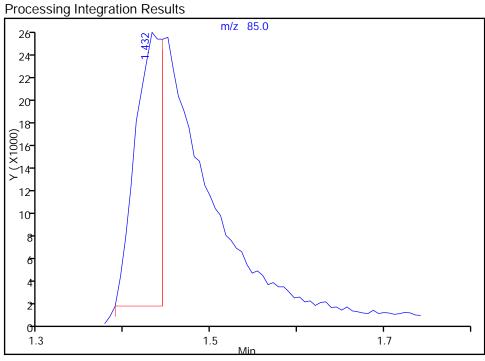
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: Q-8260 Limit Group: MV - 8260C ICAL

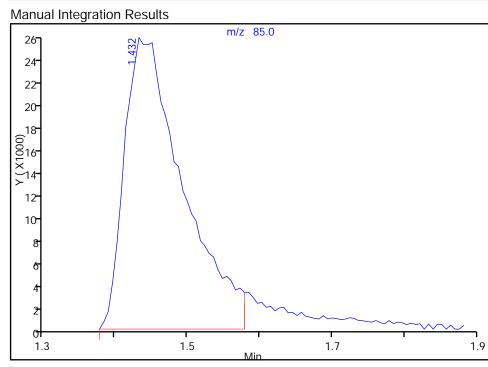
Column: ZB-624 (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

RT: 1.43 Area: 54080 Amount: 10.809175 Amount Units: ug/L



RT: 1.43 Area: 145618 Amount: 29.105223 Amount Units: ug/L



Reviewer: reiler, 02-Feb-2016 11:33:08 Audit Action: Manually Integrated Audit Reason: Poor chromatography

GC/MS VOA ANALYSIS RUN LOG

Lab Name: '	l'estAmerica Buffalo	JOD NO.: 48U-94483-1
SDG No.: _		
Instrument	ID: HP5973Q	Start Date: 01/11/2016 12:30

Analysis Batch Number: 283036 End Date: 01/11/2016 23:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		01/11/2016 12:30	1		ZB-624 (60) 0.25 (mm)
BFB 480-283036/3		01/11/2016 15:13	1	Q8374.D	ZB-624 (60) 0.25(mm)
ZZZZZ		01/11/2016 15:43	1		ZB-624 (60) 0.25(mm)
IC 480-283036/5		01/11/2016 16:06	1	Q8376.D	ZB-624 (60) 0.25(mm)
IC 480-283036/6		01/11/2016 16:29	1	Q8377.D	ZB-624 (60) 0.25(mm)
IC 480-283036/7		01/11/2016 16:53	1	Q8378.D	ZB-624 (60) 0.25(mm)
IC 480-283036/8		01/11/2016 17:17	1	Q8379.D	ZB-624 (60) 0.25(mm)
IC 480-283036/9		01/11/2016 17:40	1	Q8380.D	ZB-624 (60) 0.25(mm)
ICIS 480-283036/10		01/11/2016 18:03	1	Q8381.D	ZB-624 (60) 0.25(mm)
IC 480-283036/11		01/11/2016 18:26	1	Q8382.D	ZB-624 (60) 0.25(mm)
IC 480-283036/12		01/11/2016 18:50	1	Q8383.D	ZB-624 (60) 0.25(mm)
ZZZZZ		01/11/2016 19:13	1		ZB-624 (60) 0.25(mm)
IC 480-283036/14		01/11/2016 19:36	1		ZB-624 (60) 0.25(mm)
IC 480-283036/15		01/11/2016 19:59	1		ZB-624 (60) 0.25(mm)
IC 480-283036/16		01/11/2016 20:22	1		ZB-624 (60) 0.25(mm)
IC 480-283036/17		01/11/2016 20:45	1		ZB-624 (60) 0.25(mm)
IC 480-283036/18		01/11/2016 21:08	1		ZB-624 (60) 0.25(mm)
IC 480-283036/19		01/11/2016 21:32	1		ZB-624 (60) 0.25(mm)
IC 480-283036/20		01/11/2016 21:55	1		ZB-624 (60) 0.25 (mm)
MDLV 480-283036/22		01/11/2016 22:42	1		ZB-624 (60) 0.25(mm)
MDLV 480-283036/23		01/11/2016 23:05	1		ZB-624 (60) 0.25(mm)
ICV 480-283036/24		01/11/2016 23:28	1		ZB-624 (60) 0.25(mm)
ICV 480-283036/25		01/11/2016 23:52	1		ZB-624 (60) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name:	TestAmerica Buffalo	Job No.: 480-94483-1
SDG No.:		
Instrument	ID: HP5973Q	Start Date: 01/29/2016 09:36

Analysis Batch Number: 285459 End Date: 01/29/2016 21:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-285459/2		01/29/2016 09:36	1	Q8803.D	ZB-624 (60) 0.25 (mm)
CCVIS 480-285459/3		01/29/2016 10:02	1	Q8804.D	ZB-624 (60) 0.25(mm)
CCV 480-285459/4		01/29/2016 10:45	1		ZB-624 (60) 0.25(mm)
LCS 480-285459/52		01/29/2016 12:16	1	Q8807.D	ZB-624 (60) 0.25(mm)
RL 480-285459/6		01/29/2016 12:53	1		ZB-624 (60) 0.25(mm)
MB 480-285459/7		01/29/2016 13:17	1	Q8809.D	ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 13:52	50		ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 14:16	2		ZB-624 (60) 0.25 (mm)
ZZZZZ		01/29/2016 14:40	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		01/29/2016 15:03	1		ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 15:26	1		ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 15:50	5		ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 16:13	4		ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 16:36	1		ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 16:59	1		ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 17:23	1		ZB-624 (60) 0.25(mm)
480-94483-1		01/29/2016 17:46	10	Q8820.D	ZB-624 (60) 0.25(mm)
480-94483-2		01/29/2016 18:09	8	Q8821.D	ZB-624 (60) 0.25(mm)
480-94483-3		01/29/2016 18:33	1	Q8822.D	ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 18:56	10		ZB-624 (60) 0.25(mm)
480-94483-5		01/29/2016 19:19	20	Q8824.D	ZB-624 (60) 0.25(mm)
480-94483-6		01/29/2016 19:42	500	Q8825.D	ZB-624 (60) 0.25 (mm)
480-94483-7		01/29/2016 20:05	20	Q8826.D	ZB-624 (60) 0.25(mm)
480-94483-8		01/29/2016 20:29	500	Q8827.D	ZB-624 (60) 0.25(mm)
480-94483-9		01/29/2016 20:52	1	Q8828.D	ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 21:16	500		ZB-624 (60) 0.25(mm)
ZZZZZ		01/29/2016 21:39	500		ZB-624 (60) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab	Name:	TestAmerica	Buffalo	Job No.:	480-94483-1
SDG	No.:				
	_				

Instrument ID: <u>HP5973Q</u> Start Date: <u>02/02/2016</u> 09:21

Analysis Batch Number: 285817 End Date: 02/02/2016 20:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-285817/2		02/02/2016 09:21	1	Q8865.D	ZB-624 (60) 0.25 (mm)
CCVIS 480-285817/3		02/02/2016 09:44	1	Q8866.D	ZB-624 (60) 0.25 (mm)
CCV 480-285817/4		02/02/2016 10:19	1		ZB-624 (60) 0.25 (mm)
LCS 480-285817/5		02/02/2016 11:08	1	Q8868.D	ZB-624 (60) 0.25 (mm)
RL 480-285817/6		02/02/2016 11:46	1		ZB-624 (60) 0.25 (mm)
MB 480-285817/7		02/02/2016 12:09	1	Q8870.D	ZB-624 (60) 0.25 (mm)
480-94483-4		02/02/2016 12:48	2	Q8871.D	ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 13:11	10		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 13:35	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 13:58	5		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 14:22	5		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 14:46	5		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 15:09	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 15:33	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 15:57	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 16:21	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 16:44	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 17:07	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 17:30	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 17:54	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 18:17	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 18:40	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 19:04	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		02/02/2016 19:27	4		ZB-624 (60) 0.25(mm)
ZZZZZ		02/02/2016 19:50	10		ZB-624 (60) 0.25(mm)
ZZZZZ		02/02/2016 20:13	10		ZB-624 (60) 0.25(mm)

Batch Number: 480-285459

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Jan 29 2016 9:36AM

Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial pH	o o	Final weight/volume of	Instrument	8260 CORP	ADD CORF
					sample	sample		mix_00063	mix_00043
BFB~480-285459/2	2	8260C			1 uL	1 uL	HP5973Q		
CCVIS~480-28545	9/	8260C			5 mL	5 mL	HP5973Q	12.5 uL	
CCV~480-285459/	4	8260C			5 mL	5 mL	HP5973Q		12.5 uL
RL~480-285459/6					5 mL	5 mL	HP5973Q	1 uL	
MB~480-285459/7		8260C			5 mL	5 mL	HP5973Q		
480-94460-A-1	WELL 1-2A	8260C	T	<2 SU	5 mL	5 mL	HP5973Q		
480-94460-A-2	WELL 1-3	8260C	T	<2 SU	5 mL	5 mL	HP5973Q		
480-94460-A-3	TRIP BLANK 1-27-15	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-1	MW-23S	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-2	MW-23D	8260C	T	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-3	MW-1DD	8260C	T	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-4	GM-9	8260C	T	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-5	MW-1D	8260C	T	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-6	MW-13	8260C	T	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-7	MW-1	8260C	T	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-8	DUP-1_012816	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-9	TRIP BLANK	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q		
480-94333-A-13	57625	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q		
480-94442-D-2	MW-1			<2 SU	5 mL	5 mL	HP5973Q		
480-94475-D-1	B-4	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q		
480-94475-D-2	B-5	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q		
480-94475-D-3	B-6	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q		
480-94483-A-6~MS	3	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q	12.5 uL	12.5 uL
480-94483-A-6~MS	3	8260C	Т	<2 SU	5 mL	5 mL	HP5973Q	12.5 uL	12.5 uL
LCS~480-285459/5	52	8260C			5 mL	5 mL	HP5973Q	12.5 uL	12.5 uL

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02/04/2016 -

Batch Number: 480-285459

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Jan 29 2016 9:36AM

Batch End:

Lab ID	Client ID	Method Chain	Basis	BFB_WRK_00050	GAS CORP mix_00132	Q_8260_IS_00114	Q_8260_SURR_00107	
BFB~480-285459/2		8260C		1 uL				
CCVIS~480-285459	9/	8260C			12.5 uL	1.25 uL	1.25 uL	
CCV~480-285459/4	ļ	8260C				1.25 uL	1.25 uL	
RL~480-285459/6					1 uL	1.25 uL	1.25 uL	
MB~480-285459/7		8260C				1.25 uL	1.25 uL	
480-94460-A-1	WELL 1-2A	8260C	Т			1.25 uL	1.25 uL	
480-94460-A-2	WELL 1-3	8260C	Т			1.25 uL	1.25 uL	
480-94460-A-3	TRIP BLANK 1-27-15	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-1	MW-23S	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-2	MW-23D	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-3	MW-1DD	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-4	GM-9	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-5	MW-1D	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-6	MW-13	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-7	MW-1	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-8	DUP-1_012816	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-9	TRIP BLANK	8260C	Т			1.25 uL	1.25 uL	
480-94333-A-13	57625	8260C	Т			1.25 uL	1.25 uL	
480-94442-D-2	MW-1					1.25 uL	1.25 uL	
480-94475-D-1	B-4	8260C	Т			1.25 uL	1.25 uL	
480-94475-D-2	B-5	8260C	Т			1.25 uL	1.25 uL	
480-94475-D-3	B-6	8260C	Т			1.25 uL	1.25 uL	
480-94483-A-6~MS		8260C	Т		12.5 uL	1.25 uL	1.25 uL	
480-94483-A-6~MS D		8260C	Т		12.5 uL	1.25 uL	1.25 uL	
LCS~480-285459/5	2	8260C			12.5 uL	1.25 uL	1.25 uL	

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Batch Number: 480-285459

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Jan 29 2016 9:36AM

Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial pH	Initial weight/volume of sample	Final weight/volume of sample	Instrument	8260 CORP mix_00063	ADD CORP mix_00043
480-94458-B-1-A		8260C	Р		5 mL	5 mL	HP5973Q		
480-94442-D-2	MW-1	8260C	Т	7 SU	5 mL	5 mL	HP5973Q		

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02/04/2016

Batch Number: 480-285459

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Jan 29 2016 9:36AM

Batch End:

Lab ID	Client ID	Method Chain	Basis	BFB_WRK_00050	GAS CORP mix_00132	Q_8260_IS_00114	Q_8260_SURR_00107
480-94458-B-1-A		8260C	Р			1.25 uL	1.25 uL
480-94442-D-2	MW-1	8260C	Т			1.25 uL	1.25 uL

Batch Number: 480-285459

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Jan 29 2016 9:36AM

Batch End:

Comments

Lab ID	Client ID	Method Chain	Pacia	Analysis comment	Comm
	Cilent ID		Basis	Analysis comment	
BFB~480-285459/2		8260C			
CCVIS~480-285459/ 3	1	8260C			
CCV~480-285459/4		8260C			
RL~480-285459/6					
MB~480-285459/7		8260C			
	WELL 1-2A	8260C	Т		
480-94460-A-2	WELL 1-3	8260C	Т		
480-94460-A-3	TRIP BLANK 1-27-15	8260C	Т		
480-94483-A-1	MW-23S	8260C	Т		
	MW-23D	8260C	Т		
	MW-1DD	8260C	Т		
480-94483-A-4	GM-9	8260C	Т	rerun at lower DL	
480-94483-A-5	MW-1D	8260C	Т		
480-94483-A-6	MW-13	8260C	Т		
480-94483-A-7	MW-1	8260C	Т		
480-94483-A-8	DUP-1_012816	8260C	Т		
480-94483-A-9	TRIP BLANK	8260C	Т		
480-94333-A-13	57625	8260C	Т		
480-94442-D-2	MW-1			reran at higher DL	
480-94475-D-1	B-4	8260C	Т		
480-94475-D-2	B-5	8260C	Т		
480-94475-D-3	B-6	8260C	Т		
480-94483-A-6~MS		8260C	Т		
480-94483-A-6~MS		8260C	Т	didn't make 12 hour	
D LCS~480-285459/52	•	8260C			
LU3~40U-200409/02		020UC			
				Page 242 of 252	02/04/201 Page

Batch Number: 480-285459

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Jan 29 2016 9:36AM

Batch End:

Comments

Lab ID	Client ID	Method Chain	Basis	Analysis comment
480-94458-B-1-A		8260C	Р	
480-94442-D-2	MW-1	8260C	T	

Batch Number: 480-285817

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Feb 02 2016 9:21AM Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial pH	Initial weight/volume of sample	Final weight/volume of sample	Instrument	8260 CORP mix_00064	ADD CORP mix_00043
BFB~480-285817/2		8260C			 1 uL	 1 uL	HP5973Q		
CCVIS~480-285817	7/	8260C			5 mL	5 mL	HP5973Q	12.5 uL	
CCV~480-285817/4		8260C			5 mL	5 mL	HP5973Q		12.5 uL
LCS~480-285817/5		8260C			5 mL	5 mL	HP5973Q	12.5 uL	
RL~480-285817/6					5 mL	5 mL	HP5973Q	1 uL	
MB~480-285817/7		8260C			5 mL	5 mL	HP5973Q		
480-94529-C-1	MW-1	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94529-C-2	MW-2	8260C	T	<2 SU	1 uL	1 uL	HP5973Q		
480-94529-C-3	MW-3	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94529-C-4	MW-4	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94529-C-5	MW-5	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94529-C-6	RW-1	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94529-A-7	TRIP BLANK	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94533-A-1	SYSTEM INFLUENT	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94533-A-2	SYSTEM EFFLUENT	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94539-A-1	OW-1	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94539-A-2	OW-2	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
480-94483-B-4	GM-9	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
680-121370-B-1	1P-1	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
680-121370-B-4	IW-B3	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
680-121370-B-8	MW-19	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
680-121370-B-9	MW-16	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
680-121370-B-11	MW-18	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
680-121370-B-12	MW-20	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q		
680-121370-B-1~M		8260C	Т	<2 SU	1 uL	1 uL	HP5973Q	12.5 uL	

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Batch Number: 480-285817

Method: 8260C

Analyst: Reile, Rebecca S

680-121370-B-1~MS

8260C

Τ

Date Open: Feb 02 2016 9:21AM Batch End:

_ab ID	Client ID	Method Chain	Basis	BFB_WRK_00051	GAS CORP mix_00133	Q_8260_IS_00114	Q_8260_SURR_00107	
BFB~480-285817/2		8260C		1 uL				
CCVIS~480-285817/ 3	1	8260C			12.5 uL	1.25 uL	1.25 uL	
CCV~480-285817/4		8260C				1.25 uL	1.25 uL	
_CS~480-285817/5		8260C			12.5 uL	1.25 uL	1.25 uL	
RL~480-285817/6					1 uL	1.25 uL	1.25 uL	
MB~480-285817/7		8260C				1.25 uL	1.25 uL	
180-94529-C-1	MW-1	8260C	Т			1.25 uL	1.25 uL	
180-94529-C-2	MW-2	8260C	Т			1.25 uL	1.25 uL	
180-94529-C-3	MW-3	8260C	Т			1.25 uL	1.25 uL	
180-94529-C-4	MW-4	8260C	Т			1.25 uL	1.25 uL	
180-94529-C-5	MW-5	8260C	Т			1.25 uL	1.25 uL	
180-94529-C-6	RW-1	8260C	Т			1.25 uL	1.25 uL	
180-94529-A-7	TRIP BLANK	8260C	Т			1.25 uL	1.25 uL	
180-94533-A-1	SYSTEM INFLUENT	8260C	Т			1.25 uL	1.25 uL	
180-94533-A-2	SYSTEM EFFLUENT	8260C	T			1.25 uL	1.25 uL	
180-94539-A-1	OW-1	8260C	Т			1.25 uL	1.25 uL	
180-94539-A-2	OW-2	8260C	Т			1.25 uL	1.25 uL	
180-94483-B-4	GM-9	8260C	Т			1.25 uL	1.25 uL	
680-121370-B-1	1P-1	8260C	Т			1.25 uL	1.25 uL	
680-121370-B-4	IW-B3	8260C	Т			1.25 uL	1.25 uL	
680-121370-B-8	MW-19	8260C	Т			1.25 uL	1.25 uL	
680-121370-B-9	MW-16	8260C	Т			1.25 uL	1.25 uL	
680-121370-B-11	MW-18	8260C	Т			1.25 uL	1.25 uL	
680-121370-B-12	MW-20	8260C	Т			1.25 uL	1.25 uL	

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12.5 uL

1.25 uL

1.25 uL

Batch Number: 480-285817

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Feb 02 2016 9:21AM

Batch End:

o ID	Client ID	Method Chain	Basis	Initial pH	Initial weight/volume of sample	Final weight/volume of sample	Instrument	8260 CORP mix_00064	ADD CORF mix_00043
0-121370-B-	1~MS	8260C	Т	<2 SU	1 uL	1 uL	HP5973Q	12.5 uL	

Batch Number: 480-285817

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Feb 02 2016 9:21AM

Batch End:

Lab ID	Client ID	Method Chain	Basis	BFB_WRK_00051	GAS CORP mix_00133	Q_8260_IS_00114	Q_8260_SURR_00107	
680-121370-B-1~N D	IS	8260C	Т		12.5 uL	1.25 uL	1.25 uL	

Batch Number: 480-285817

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Feb 02 2016 9:21AM Batch End:

Comments

Lab ID (Client ID	Method Chain	Basis	Analysis comment
BFB~480-285817/2		8260C		
CCVIS~480-285817/		8260C		
CCV~480-285817/4		8260C		
LCS~480-285817/5		8260C		
RL~480-285817/6				
MB~480-285817/7		8260C		
480-94529-C-1	MW-1	8260C	Т	
480-94529-C-2	MW-2	8260C	Т	
480-94529-C-3	MW-3	8260C	Т	
480-94529-C-4	MW-4	8260C	Т	
480-94529-C-5	MW-5	8260C	Т	
480-94529-C-6	RW-1	8260C	Т	
480-94529-A-7	TRIP BLANK	8260C	Т	
480-94533-A-1	SYSTEM INFLUENT	8260C	Т	
480-94533-A-2	SYSTEM EFFLUENT	8260C	Т	rerunning at higher DL
480-94539-A-1	OW-1	8260C	Т	rerunning for possible carry over
480-94539-A-2	OW-2	8260C	Т	rerunning at lower DL
480-94483-B-4	GM-9	8260C	Т	
680-121370-B-1	1P-1	8260C	Т	
680-121370-B-4	IW-B3	8260C	Т	
680-121370-B-8	MW-19	8260C	Т	
680-121370-B-9	MW-16	8260C	Т	
680-121370-B-11	MW-18	8260C	Т	
680-121370-B-12	MW-20	8260C	Т	
680-121370-B-1~MS		8260C	Т	
				Page 249 of 252

Batch Number: 480-285817

Method: 8260C

Analyst: Reile, Rebecca S

Date Open: Feb 02 2016 9:21AM Batch End:

Comments

Lab ID	Client ID	Method Chain	Basis	Analysis comment
680-121370-B-1~N D	IS	8260C	Т	

Shipping and Receiving Documents

Albany Chain of Cust

480501-Albany

Phone (716) 691-2600 Fax (716) 691-7991

Amherst, NY 14228-2298

10 Hazelwood Drive

TestAmerica Buffalo

Chain of Custody Record

PestAmerica

Sompany ALM N - None
O - Ashaboz
P - Na2O4S
Q - Na2SO3
R - Na2SSSO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify) 米し Special Instructions/Note: **Albany** Sompany Sompany Months 480-77941-19312.2 Preservation Codes: G - Amchlor H - Ascorbic Acid Page: 🛔 🐧 Page 🐉 of 🚳 D - Nitric Acid E - NaHSO4 F - MeOH J - DI Water K - EDTA L - EDA 0100 Total Number of containers Disposal By Lab Analysis Requested Opler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: Lab PM: Deyo, Melissa L E-Mait: melissa.deyo@testamericainc.com 3 N N N N 3 M ≥ <u>M</u> SZEOC - LCF Volatiles 3 Z Z 2 ime. Company 7 A MB Company (W=water, S=solid, O=waste/oll, Water Water Water Water Water Water Water Matrix Preservation Code Water Water Water Radiological (C=Comp, G=grab) Type (1) (0) O (1) (1) (1) 1330 (1) (5/8)250-7300 () 800 1550 0850 0820 0930 1/28/16 0825 00/50 Sample 1/27/16/1550 Time Sampler BO+ES ĺ Date: Unknown TAT Requested (days): 9 Date/#Ime: 1 | 28 | 1 C Date/Time: / Jue Date Requested: PO# 00266417.0000 Sample Date 1/27/116 1 28 16 128/16 1/28/16 112816 i [28] i [28] 1/28/16 Project #: 48008440 SSOW#: NO#: Poison B Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No.: 518)250-7300 Flammable -01286 Possible Hazard Identification Crown Dykman - Glen Cove, NY aaron.bobar@arcadis-us.com Trip Blank Empty Kit Relinquished by: 855 Route 146 Suite 210 Custody Seals Intact: △ Yes △ No Client Information Sample Identification MW-230 NW-235 エジーロリ Company: ARCADIS U.S. Inc Non-Hazard 10 - WM elinquished by: MW-13 07-D 1-45i0 Client Contact Aaron Bobar -3X State, Zip: NY, 12065 Clifton Park

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02/04/2016

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc Job Number: 480-94483-1

Login Number: 94483 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	

Second Post-Injection Analytical Sampling – March 2015



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-96991-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

Authorized for release by: 4/5/2016 10:09:29 AM

Melissa Deyo, Project Manager I (716)504-9874

melissa.deyo@testamericainc.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: 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.

2

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Definitions/Glossary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
*	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.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

TEF

TEQ

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
Į.	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)
Oil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
ИDA	Minimum detectable activity
DL	Estimated Detection Limit
/IDC	Minimum detectable concentration
IDL	Method Detection Limit
ΛL	Minimum Level (Dioxin)
IC	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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

TestAmerica Buffalo

Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Job ID: 480-96991-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-96991-1

Receipt

The samples were received on 3/24/2016 2:15 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: The continuing calibration verification (CCV) associated with batch 480-293392 recovered above the upper control limit for Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: MW-23S (480-96991-1), MW-23D (480-96991-2), MW-1DD (480-96991-3), MW-1D (480-96991-4), IW-01S (480-96991-5), MW-1 (480-96991-6), MW-13 (480-96991-8), MW-9 (480-96991-9), MW-14R (480-96991-10), MP-20 (480-96991-11), DUP-1 (480-96991-12) and TRIP BLANK (480-96991-13).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-23S (480-96991-1), MW-23D (480-96991-2), MW-23D (480-96991-2[MSD]), MW-1D (480-96991-4), IW-01S (480-96991-5), MW-1 (480-96991-6), MW-13 (480-96991-8), MW-9 (480-96991-9), MW-14R (480-96991-10) and DUP-1 (480-96991-12). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-293565 recovered above the upper control limit for 1,4-Dioxane, Acetone and Carbon tetrachloride. 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-23S (480-96991-1), MW-23D (480-96991-2), MW-1DD (480-96991-3), MW-1D (480-96991-4), IW-01S (480-96991-5), GM-9 (480-96991-7), MW-14R (480-96991-10) and DUP-1 (480-96991-12).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-293565 recovered outside acceptance criteria, low biased, for Bromomethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: MW-23S (480-96991-1), MW-23D (480-96991-2), MW-1DD (480-96991-3), MW-1D (480-96991-4), IW-01S (480-96991-5), GM-9 (480-96991-7), MW-14R (480-96991-10) and DUP-1 (480-96991-12).

Method(s) 8260C: The laboratory control sample (LCS) for batch analytical batch 480-293565 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-23S (480-96991-1), MW-23D (480-96991-2), MW-1DD (480-96991-3), MW-1D (480-96991-4), IW-01S (480-96991-5), GM-9 (480-96991-7), MW-14R (480-96991-10) and DUP-1 (480-96991-12).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-293565 recovered outside control limits for the following analyte: Bromomethane. Bromomethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The following samples are impacted: MW-23S (480-96991-1), MW-23D (480-96991-2), MW-1DD (480-96991-3), MW-1D (480-96991-4), IW-01S (480-96991-5), GM-9 (480-96991-7), MW-14R (480-96991-10) and DUP-1 (480-96991-12).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-23S (480-96991-1), MW-23D (480-96991-2), MW-1DD (480-96991-3), MW-1D (480-96991-4), IW-01S (480-96991-5), GM-9 (480-96991-7), MW-14R (480-96991-10), DUP-1 (480-96991-12), (480-96991-B-1 MS) and (480-96991-B-1 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-23D (480-96991-2[MS]), MW-23D (480-96991-2[MSD]) and MW-9 (480-96991-9). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with analytical batch 293608 recovered above the upper control limit for analyte Carbon tetrachloride. The sample associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported. MW-9 (480-96991-9).

Method(s) 8260C: The continuing calibration verification (CCV) associated with analytical batch 293608 recovered outside acceptance criteria, low biased, for analytes Chloromethane and Cyclohexane. A reporting limit (RL) standard was analyzed, and the target analytes

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Job ID: 480-96991-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

were detected. Since the associated sample was non-detect for these analytes, the data has been reported. MW-9 (480-96991-9).

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in analytical batch 293608 was outside the method criteria for the following analyte Vinyl chloride. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated. MW-9 (480-96991-9).

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

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Client: ARCADIS U.S. Inc

Client Sample ID: MW-23S

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2400	E	10	8.1	ug/L	10	_	8260C	Total/NA
Tetrachloroethene	1600	E	10	3.6	ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	15		10	9.0	ug/L	10		8260C	Total/NA
Trichloroethene	680		10	4.6	ug/L	10		8260C	Total/NA
Carbon disulfide - DL	17	J	50	9.5	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene - DL	3000	F1	50	41	ug/L	50		8260C	Total/NA
Tetrachloroethene - DL	2000	F1	50	18	ug/L	50		8260C	Total/NA
Trichloroethene - DL	840		50	23	ug/L	50		8260C	Total/NA

Client Sample ID: MW-23D Lab Sample ID: 480-96991-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1000	E	8.0	6.5	ug/L	8	- ;	8260C	Total/NA
Tetrachloroethene	700	F1	8.0	2.9	ug/L	8		8260C	Total/NA
Trichloroethene	300	F1	8.0	3.7	ug/L	8		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1200	F1	20	16	ug/L	20		8260C	Total/NA
Tetrachloroethene - DL	820	F1	20	7.2	ug/L	20		8260C	Total/NA
Trichloroethene - DL	350		20	9.2	ug/L	20		8260C	Total/NA

Client Sample ID: MW-1DD Lab Sample ID: 480-96991-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.4		1.0	0.29	ug/L	1	_	8260C	Total/NA
Benzene	0.49	J	1.0	0.41	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	500	E	1.0	0.81	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	9.9		1.0	0.16	ug/L	1		8260C	Total/NA
Tetrachloroethene	300	E	1.0	0.36	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	2.6		1.0	0.90	ug/L	1		8260C	Total/NA
Trichloroethene	150	E	1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	31		1.0	0.90	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	560		10	8.1	ug/L	10		8260C	Total/NA
Methyl tert-butyl ether - DL	10		10	1.6	ug/L	10		8260C	Total/NA
Tetrachloroethene - DL	290		10	3.6	ug/L	10		8260C	Total/NA
Trichloroethene - DL	150		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride - DL	28		10	9.0	ug/L	10		8260C	Total/NA

Client Sample ID: MW-1D Lab Sample ID: 480-96991-4

Analyte	Result Q	ualifier RL	MDL	Unit	Dil Fac	D Metho	d Prep Type
cis-1,2-Dichloroethene	1900		16	ug/L	20	82600	Total/NA
Tetrachloroethene	2600 E	20	7.2	ug/L	20	82600	Total/NA
Trichloroethene	1000	20	9.2	ug/L	20	82600	Total/NA
Vinyl chloride	31	20	18	ug/L	20	82600	Total/NA
cis-1,2-Dichloroethene - DL	2500	50	41	ug/L	50	82600	Total/NA
Tetrachloroethene - DL	3500	50	18	ug/L	50	82600	Total/NA
Trichloroethene - DL	1400	50	23	ug/L	50	82600	Total/NA

Client Sample ID: IW-01S Lab Sample ID: 480-96991-5

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-5

Lab Sample ID: 480-96991-6

Lab Sample ID: 480-96991-7

Lab Sample ID: 480-96991-8

Lab Sample ID: 480-96991-9

Lab Sample ID: 480-96991-10

Client Sample ID:	IW-01S	(Continued)
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Analyte	Popult	Qualifier	RL	MDL	Unit	Dil Ess	D Method	Bron Tuno
Allalyte	Result	Qualifier	KL	MIDL	Offic	DII Fac	- wethou	Prep Type
cis-1,2-Dichloroethene	500		20	16	ug/L	20	8260C	Total/NA
Tetrachloroethene	3300	E	20	7.2	ug/L	20	8260C	Total/NA
Trichloroethene	240		20	9.2	ug/L	20	8260C	Total/NA
cis-1,2-Dichloroethene - DL	590		50	41	ug/L	50	8260C	Total/NA
Tetrachloroethene - DL	4400		50	18	ug/L	50	8260C	Total/NA
Trichloroethene - DL	290		50	23	ug/L	50	8260C	Total/NA

Client Sample ID: MW-1

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1300	20	16	ug/L	20	_	8260C	Total/NA
Tetrachloroethene	350	20	7.2	ug/L	20		8260C	Total/NA
Trichloroethene	130	20	9.2	ug/L	20		8260C	Total/NA

Client Sample ID: GM-9

Analyte	Result Quali	ifier RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	91	5.0	4.1	ug/L	5	8260C	Total/NA
Methyl tert-butyl ether	1.5 J	5.0	0.80	ug/L	5	8260C	Total/NA
Tetrachloroethene	120	5.0	1.8	ug/L	5	8260C	Total/NA
Trichloroethene	24	5.0	2.3	ug/L	5	8260C	Total/NA

Client Sample ID: MW-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	15000		500	410	ug/L	500	_	8260C	Total/NA
Tetrachloroethene	3500		500	180	ug/L	500		8260C	Total/NA
Trichloroethene	1800		500	230	ug/L	500		8260C	Total/NA

Client Sample ID: MW-9

- Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D M	ethod	Prep Type
cis-1,2-Dichloroethene	1400	E	10	8.1	ug/L	10	_ 8	260C	Total/NA
Vinyl chloride	170		10	9.0	ug/L	10	82	260C	Total/NA
cis-1,2-Dichloroethene - DL	1800		40	32	ug/L	40	82	260C	Total/NA
Vinyl chloride - DL	200		40	36	ug/L	40	82	260C	Total/NA

Client Sample ID: MW-14R

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D M	ethod	Prep Type
1,2-Dibromo-3-Chloropropane	2.3		2.0	0.78	ug/L	2	82	260C	Total/NA
Acetone	6.7	J	20	6.0	ug/L	2	82	260C	Total/NA
Benzene	1.8	J	2.0	0.82	ug/L	2	82	260C	Total/NA
cis-1,2-Dichloroethene	990	E	2.0	1.6	ug/L	2	82	260C	Total/NA
Ethylbenzene	29		2.0	1.5	ug/L	2	82	260C	Total/NA
Isopropylbenzene	14		2.0	1.6	ug/L	2	82	260C	Total/NA
Methyl tert-butyl ether	1.7	J	2.0	0.32	ug/L	2	82	260C	Total/NA
Methylcyclohexane	1.4	J	2.0	0.32	ug/L	2	82	260C	Total/NA
Toluene	25		2.0	1.0	ug/L	2	82	260C	Total/NA
trans-1,2-Dichloroethene	8.3		2.0	1.8	ug/L	2	82	260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-14R (Continued)

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	810	E	2.0	1.8	ug/L	2	_ {	8260C	Total/NA
Xylenes, Total	200		4.0	1.3	ug/L	2	8	8260C	Total/NA
cis-1,2-Dichloroethene - DL	1500		20	16	ug/L	20		8260C	Total/NA
Ethylbenzene - DL	36		20	15	ug/L	20	8	8260C	Total/NA
Isopropylbenzene - DL	17	J	20	16	ug/L	20	8	8260C	Total/NA
Toluene - DL	31		20	10	ug/L	20		8260C	Total/NA
Vinyl chloride - DL	1100		20	18	ug/L	20	8	8260C	Total/NA
Xylenes, Total - DL	250		40	13	ug/L	20		8260C	Total/NA

Client Sample ID: MP-20 Lab Sample ID: 480-96991-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.1		1.0	0.81	ug/L		_	8260C	Total/NA
Tetrachloroethene	0.51	J	1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	0.98	J	1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	1.9		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: DUP-1 Lab Sample ID: 480-96991-12

Analyte	Result (Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	2500	E	10	8.1	ug/L	10	8260C	Total/NA
Tetrachloroethene	1600 I	E	10	3.6	ug/L	10	8260C	Total/NA
trans-1,2-Dichloroethene	13		10	9.0	ug/L	10	8260C	Total/NA
Trichloroethene	680		10	4.6	ug/L	10	8260C	Total/NA
cis-1,2-Dichloroethene - DL	3300		50	41	ug/L	50	8260C	Total/NA
Tetrachloroethene - DL	2200		50	18	ug/L	50	8260C	Total/NA
Trichloroethene - DL	900		50	23	ug/L	50	8260C	Total/NA

Client Sample ID: TRIP BLANK Lab Sample ID: 480-96991-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.96	J	1.0	0.81	ug/L	1	_	8260C	Total/NA
Tetrachloroethene	0.52	J	1.0	0.36	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-1

Matrix: Water

Client Sample ID: MW-23S Date Collected: 03/22/16 15:25 Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		10	8.2	ug/L			03/31/16 11:28	1
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			03/31/16 11:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			03/31/16 11:28	1
1,1,2-Trichloroethane	ND		10	2.3	ug/L			03/31/16 11:28	1
1,1-Dichloroethane	ND		10	3.8	ug/L			03/31/16 11:28	1
1,1-Dichloroethene	ND		10	2.9	ug/L			03/31/16 11:28	1
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			03/31/16 11:28	1
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			03/31/16 11:28	1
1,2-Dibromoethane	ND		10	7.3	ug/L			03/31/16 11:28	1
1,2-Dichlorobenzene	ND		10	7.9	ug/L			03/31/16 11:28	1
1,2-Dichloroethane	ND		10	2.1	ug/L			03/31/16 11:28	1
1,2-Dichloropropane	ND		10	7.2	ug/L			03/31/16 11:28	1
1,3-Dichlorobenzene	ND		10	7.8	ug/L			03/31/16 11:28	1
1,4-Dichlorobenzene	ND		10		ug/L			03/31/16 11:28	1
1,4-Dioxane	ND		400		ug/L			03/31/16 11:28	1
2-Butanone (MEK)	ND		100		ug/L			03/31/16 11:28	1
2-Hexanone	ND		50		ug/L			03/31/16 11:28	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			03/31/16 11:28	1
Acetone	ND		100		ug/L			03/31/16 11:28	 1
Benzene	ND		10	4.1	-			03/31/16 11:28	1
Bromodichloromethane	ND		10		ug/L			03/31/16 11:28	1
Bromoform	ND		10		ug/L			03/31/16 11:28	 1
Bromomethane	ND		10		ug/L			03/31/16 11:28	1
Carbon disulfide	ND		10		ug/L			03/31/16 11:28	1
Carbon tetrachloride	ND		10		ug/L			03/31/16 11:28	
Chlorobenzene	ND		10		ug/L			03/31/16 11:28	1
Chloroethane	ND ND		10		ug/L			03/31/16 11:28	1
Chloroform	ND		10		ug/L			03/31/16 11:28	
Chloromethane	ND ND		10		-			03/31/16 11:28	1
		_	10	8.1	ug/L			03/31/16 11:28	1
cis-1,2-Dichloroethene	2400								
cis-1,3-Dichloropropene	ND		10		ug/L			03/31/16 11:28	1
Cyclohexane	ND		10		ug/L			03/31/16 11:28	1
Dibromochloromethane	ND		10		ug/L			03/31/16 11:28	
Dichlorodifluoromethane	ND		10		ug/L			03/31/16 11:28	1
Ethylbenzene 	ND		10		ug/L			03/31/16 11:28	1
sopropylbenzene	ND		10		ug/L			03/31/16 11:28	
Methyl acetate	ND		25		ug/L			03/31/16 11:28	1
Methyl tert-butyl ether	ND		10		ug/L			03/31/16 11:28	1
Methylcyclohexane	ND		10		ug/L			03/31/16 11:28	
Methylene Chloride	ND		10		ug/L			03/31/16 11:28	1
Styrene	ND		10		ug/L			03/31/16 11:28	1
Tetrachloroethene	1600	E	10		ug/L			03/31/16 11:28	
Гoluene	ND		10	5.1	-			03/31/16 11:28	1
rans-1,2-Dichloroethene	15		10	9.0	ug/L			03/31/16 11:28	1
rans-1,3-Dichloropropene	ND		10		ug/L			03/31/16 11:28	
Frichloroethene	680		10	4.6	ug/L			03/31/16 11:28	1
Trichlorofluoromethane	ND		10	8.8	ug/L			03/31/16 11:28	1
/inyl chloride	ND		10	9.0	ug/L			03/31/16 11:28	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Cample ID: 400 00004 4

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-1

Matrix: Water

Client Sample ID: MW-23S Date Collected: 03/22/16 15:25

Date Received: 03/24/16 02:15

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105	66 - 137		03/31/16 11:28	10
4-Bromofluorobenzene (Surr)	108	73 - 120		03/31/16 11:28	10
Dibromofluoromethane (Surr)	112	60 - 140		03/31/16 11:28	10
Toluene-d8 (Surr)	107	71 - 126		03/31/16 11:28	10

Toluene-uo (Sull) - -	107		71 - 120					03/31/10 11.26	70
Method: 8260C - Volatile Organ Analyte		by GC/MS - [Qualifier	D L RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	Quanner	50		ug/L		гтератец	03/31/16 22:19	50
1,1,2,2-Tetrachloroethane	ND		50		ug/L			03/31/16 22:19	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50		ug/L			03/31/16 22:19	50
1,1,2-Trichloroethane	ND		50		ug/L			03/31/16 22:19	50
1,1-Dichloroethane	ND		50		ug/L			03/31/16 22:19	50
1,1-Dichloroethene	ND		50		ug/L			03/31/16 22:19	50
1,2,4-Trichlorobenzene	ND		50		ug/L			03/31/16 22:19	50
1,2-Dibromo-3-Chloropropane	ND		50		ug/L			03/31/16 22:19	50
1,2-Dibromoethane	ND		50		ug/L			03/31/16 22:19	50
1,2-Dichlorobenzene	ND		50		ug/L			03/31/16 22:19	
1,2-Dichloroethane	ND		50		ug/L			03/31/16 22:19	50
1,2-Dichloropropane	ND.		50		ug/L			03/31/16 22:19	50
1,3-Dichlorobenzene	ND		50		ug/L			03/31/16 22:19	50
1,4-Dichlorobenzene	ND		50		ug/L			03/31/16 22:19	50
1,4-Dioxane	ND		2000		ug/L			03/31/16 22:19	50
2-Butanone (MEK)	ND		500		ug/L			03/31/16 22:19	50
2-Hexanone	ND		250		ug/L			03/31/16 22:19	50
4-Methyl-2-pentanone (MIBK)	ND		250		ug/L			03/31/16 22:19	50
Acetone	ND	*	500		ug/L			03/31/16 22:19	50
Benzene	ND		50		ug/L			03/31/16 22:19	50
Bromodichloromethane	ND		50		ug/L			03/31/16 22:19	50
Bromoform	ND		50		ug/L			03/31/16 22:19	50
Bromomethane	ND	*	50		ug/L			03/31/16 22:19	50
Carbon disulfide	17		50		ug/L			03/31/16 22:19	50
Carbon tetrachloride	ND		50		ug/L			03/31/16 22:19	50
Chlorobenzene	ND		50		ug/L			03/31/16 22:19	50
Chloroethane	ND		50		ug/L			03/31/16 22:19	50
Chloroform	ND		50		ug/L			03/31/16 22:19	50
Chloromethane	ND		50		ug/L			03/31/16 22:19	50
cis-1,2-Dichloroethene	3000	F1	50		ug/L			03/31/16 22:19	50
cis-1,3-Dichloropropene	ND		50		ug/L			03/31/16 22:19	50
Cyclohexane	ND		50		ug/L			03/31/16 22:19	50
Dibromochloromethane	ND		50		ug/L			03/31/16 22:19	50
Dichlorodifluoromethane	ND		50		ug/L			03/31/16 22:19	50
Ethylbenzene	ND		50		ug/L			03/31/16 22:19	50
Isopropylbenzene	ND		50		ug/L			03/31/16 22:19	50
Methyl acetate	ND		130		ug/L			03/31/16 22:19	50
Methyl tert-butyl ether	ND		50		ug/L			03/31/16 22:19	50
Methylcyclohexane	ND		50		ug/L			03/31/16 22:19	50
Methylene Chloride	ND		50		ug/L			03/31/16 22:19	50
Styrene	ND		50		ug/L			03/31/16 22:19	50
Tetrachloroethene	2000	F1	50		ug/L			03/31/16 22:19	50
Toluene	ND		50		ug/L			03/31/16 22:19	50

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-1

Matrix: Water

Client Sample ID: MW-23S

Date Collected: 03/22/16 15:25 Date Received: 03/24/16 02:15

Client Sample ID: MW-23D

Date Collected: 03/22/16 15:35 Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		50	45	ug/L			03/31/16 22:19	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			03/31/16 22:19	50
Trichloroethene	840		50	23	ug/L			03/31/16 22:19	50
Trichlorofluoromethane	ND		50	44	ug/L			03/31/16 22:19	50
Vinyl chloride	ND		50	45	ug/L			03/31/16 22:19	50
Xylenes, Total	ND		100	33	ug/L			03/31/16 22:19	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137			-		03/31/16 22:19	50
4-Bromofluorobenzene (Surr)	110		73 - 120					03/31/16 22:19	50
Dibromofluoromethane (Surr)	108		60 - 140					03/31/16 22:19	50
Toluene-d8 (Surr)	107		71 - 126					03/31/16 22:19	50

Lab Sample ID: 480-96991-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		8.0	6.6	ug/L			03/31/16 11:52	8
1,1,2,2-Tetrachloroethane	ND		8.0	1.7	ug/L			03/31/16 11:52	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5	ug/L			03/31/16 11:52	8
1,1,2-Trichloroethane	ND		8.0	1.8	ug/L			03/31/16 11:52	8
1,1-Dichloroethane	ND		8.0	3.0	ug/L			03/31/16 11:52	8
1,1-Dichloroethene	ND		8.0	2.3	ug/L			03/31/16 11:52	8
1,2,4-Trichlorobenzene	ND		8.0	3.3	ug/L			03/31/16 11:52	8
1,2-Dibromo-3-Chloropropane	ND		8.0	3.1	ug/L			03/31/16 11:52	8
1,2-Dibromoethane	ND		8.0	5.8	ug/L			03/31/16 11:52	8
1,2-Dichlorobenzene	ND		8.0	6.3	ug/L			03/31/16 11:52	8
1,2-Dichloroethane	ND		8.0	1.7	ug/L			03/31/16 11:52	8
1,2-Dichloropropane	ND		8.0	5.8	ug/L			03/31/16 11:52	8
1,3-Dichlorobenzene	ND		8.0	6.2	ug/L			03/31/16 11:52	8
1,4-Dichlorobenzene	ND		8.0	6.7	ug/L			03/31/16 11:52	8
1,4-Dioxane	ND		320	75	ug/L			03/31/16 11:52	8
2-Butanone (MEK)	ND		80	11	ug/L			03/31/16 11:52	8
2-Hexanone	ND		40	9.9	ug/L			03/31/16 11:52	8
4-Methyl-2-pentanone (MIBK)	ND		40	17	ug/L			03/31/16 11:52	8
Acetone	ND		80	24	ug/L			03/31/16 11:52	8
Benzene	ND		8.0	3.3	ug/L			03/31/16 11:52	8
Bromodichloromethane	ND		8.0	3.1	ug/L			03/31/16 11:52	8
Bromoform	ND		8.0	2.1	ug/L			03/31/16 11:52	8
Bromomethane	ND		8.0	5.5	ug/L			03/31/16 11:52	8
Carbon disulfide	ND		8.0	1.5	ug/L			03/31/16 11:52	8
Carbon tetrachloride	ND		8.0	2.2	ug/L			03/31/16 11:52	8
Chlorobenzene	ND		8.0	6.0	ug/L			03/31/16 11:52	8
Chloroethane	ND		8.0	2.6	ug/L			03/31/16 11:52	8
Chloroform	ND		8.0	2.7	ug/L			03/31/16 11:52	8
Chloromethane	ND		8.0	2.8	ug/L			03/31/16 11:52	8
cis-1,2-Dichloroethene	1000	E	8.0	6.5	ug/L			03/31/16 11:52	8
cis-1,3-Dichloropropene	ND		8.0	2.9	ug/L			03/31/16 11:52	8

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Cample ID: 400 00004 0

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-2

Matrix: Water

Client Sample ID: MW-23D Date Collected: 03/22/16 15:35

Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		8.0	1.4	ug/L			03/31/16 11:52	8
Dibromochloromethane	ND		8.0	2.6	ug/L			03/31/16 11:52	8
Dichlorodifluoromethane	ND		8.0	5.4	ug/L			03/31/16 11:52	8
Ethylbenzene	ND		8.0	5.9	ug/L			03/31/16 11:52	8
Isopropylbenzene	ND		8.0	6.3	ug/L			03/31/16 11:52	8
Methyl acetate	ND		20	10	ug/L			03/31/16 11:52	8
Methyl tert-butyl ether	ND		8.0	1.3	ug/L			03/31/16 11:52	8
Methylcyclohexane	ND		8.0	1.3	ug/L			03/31/16 11:52	8
Methylene Chloride	ND		8.0	3.5	ug/L			03/31/16 11:52	8
Styrene	ND		8.0	5.8	ug/L			03/31/16 11:52	8
Tetrachloroethene	700	F1	8.0	2.9	ug/L			03/31/16 11:52	8
Toluene	ND		8.0	4.1	ug/L			03/31/16 11:52	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			03/31/16 11:52	8
trans-1,3-Dichloropropene	ND		8.0	3.0	ug/L			03/31/16 11:52	8
Trichloroethene	300	F1	8.0	3.7	ug/L			03/31/16 11:52	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			03/31/16 11:52	8
Vinyl chloride	ND		8.0	7.2	ug/L			03/31/16 11:52	8
Xylenes, Total	ND		16	5.3	ug/L			03/31/16 11:52	8
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137			-		03/31/16 11:52	8
4-Bromofluorobenzene (Surr)	109		73 - 120					03/31/16 11:52	8
Dibromofluoromethane (Surr)	109		60 - 140					03/31/16 11:52	8
Toluene-d8 (Surr)	108		71 - 126					03/31/16 11:52	8

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	20	16	ug/L			03/31/16 22:42	20
1,1,2,2-Tetrachloroethane	ND	20	4.2	ug/L			03/31/16 22:42	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20	6.2	ug/L			03/31/16 22:42	20
1,1,2-Trichloroethane	ND	20	4.6	ug/L			03/31/16 22:42	20
1,1-Dichloroethane	ND	20	7.6	ug/L			03/31/16 22:42	20
1,1-Dichloroethene	ND	20	5.8	ug/L			03/31/16 22:42	20
1,2,4-Trichlorobenzene	ND	20	8.2	ug/L			03/31/16 22:42	20
1,2-Dibromo-3-Chloropropane	ND	20	7.8	ug/L			03/31/16 22:42	20
1,2-Dibromoethane	ND	20	15	ug/L			03/31/16 22:42	20
1,2-Dichlorobenzene	ND	20	16	ug/L			03/31/16 22:42	20
1,2-Dichloroethane	ND	20	4.2	ug/L			03/31/16 22:42	20
1,2-Dichloropropane	ND	20	14	ug/L			03/31/16 22:42	20
1,3-Dichlorobenzene	ND	20	16	ug/L			03/31/16 22:42	20
1,4-Dichlorobenzene	ND	20	17	ug/L			03/31/16 22:42	20
1,4-Dioxane	ND	800	190	ug/L			03/31/16 22:42	20
2-Butanone (MEK)	ND	200	26	ug/L			03/31/16 22:42	20
2-Hexanone	ND	100	25	ug/L			03/31/16 22:42	20
4-Methyl-2-pentanone (MIBK)	ND	100	42	ug/L			03/31/16 22:42	20
Acetone	ND *	200	60	ug/L			03/31/16 22:42	20
Benzene	ND	20	8.2	ug/L			03/31/16 22:42	20
Bromodichloromethane	ND	20	7.8	ug/L			03/31/16 22:42	20
Bromoform	ND	20	5.2	ug/L			03/31/16 22:42	20
Bromomethane	ND *	20	14	ug/L			03/31/16 22:42	20

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-2

Matrix: Water

Client Sample ID: MW-23D

Date Collected: 03/22/16 15:35 Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		20	3.8	ug/L			03/31/16 22:42	20
Carbon tetrachloride	ND		20	5.4	ug/L			03/31/16 22:42	20
Chlorobenzene	ND		20	15	ug/L			03/31/16 22:42	20
Chloroethane	ND		20	6.4	ug/L			03/31/16 22:42	20
Chloroform	ND		20	6.8	ug/L			03/31/16 22:42	20
Chloromethane	ND		20	7.0	ug/L			03/31/16 22:42	20
cis-1,2-Dichloroethene	1200	F1	20	16	ug/L			03/31/16 22:42	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			03/31/16 22:42	20
Cyclohexane	ND		20	3.6	ug/L			03/31/16 22:42	20
Dibromochloromethane	ND		20	6.4	ug/L			03/31/16 22:42	20
Dichlorodifluoromethane	ND		20	14	ug/L			03/31/16 22:42	20
Ethylbenzene	ND		20	15	ug/L			03/31/16 22:42	20
Isopropylbenzene	ND		20	16	ug/L			03/31/16 22:42	20
Methyl acetate	ND		50	26	ug/L			03/31/16 22:42	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			03/31/16 22:42	20
Methylcyclohexane	ND		20	3.2	ug/L			03/31/16 22:42	20
Methylene Chloride	ND		20	8.8	ug/L			03/31/16 22:42	20
Styrene	ND		20	15	ug/L			03/31/16 22:42	20
Tetrachloroethene	820	F1	20	7.2	ug/L			03/31/16 22:42	20
Toluene	ND		20	10	ug/L			03/31/16 22:42	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			03/31/16 22:42	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			03/31/16 22:42	20
Trichloroethene	350		20	9.2	ug/L			03/31/16 22:42	20
Trichlorofluoromethane	ND		20	18	ug/L			03/31/16 22:42	20
Vinyl chloride	ND		20	18	ug/L			03/31/16 22:42	20
Xylenes, Total	ND		40	13	ug/L			03/31/16 22:42	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137					03/31/16 22:42	20
4-Bromofluorobenzene (Surr)	112		73 - 120					03/31/16 22:42	20

Client Sample ID: MW-1DD

108

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Date Collected: 03/22/16 16:25

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Date Received: 03/24/16 02:15

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	1.0	0.82	ug/L			03/31/16 12:16	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			03/31/16 12:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			03/31/16 12:16	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			03/31/16 12:16	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			03/31/16 12:16	1
1,1-Dichloroethene	1.4	1.0	0.29	ug/L			03/31/16 12:16	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			03/31/16 12:16	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			03/31/16 12:16	1
1,2-Dibromoethane	ND	1.0	0.73	ug/L			03/31/16 12:16	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			03/31/16 12:16	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			03/31/16 12:16	1

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Lab Sample ID: 480-96991-3

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03/31/16 22:42

03/31/16 22:42

Matrix: Water

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-96991-3

TestAmerica Job ID: 480-96991-1

Matrix: Water

Client Sample ID: MW-1DD

Date Collected: 03/22/16 16:25 Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/31/16 12:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/31/16 12:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/31/16 12:16	1
1,4-Dioxane	ND		40	9.3	ug/L			03/31/16 12:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/31/16 12:16	1
2-Hexanone	ND		5.0	1.2	ug/L			03/31/16 12:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/31/16 12:16	1
Acetone	ND		10	3.0	ug/L			03/31/16 12:16	1
Benzene	0.49	J	1.0	0.41	ug/L			03/31/16 12:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/31/16 12:16	1
Bromoform	ND		1.0	0.26	ug/L			03/31/16 12:16	1
Bromomethane	ND		1.0	0.69	ug/L			03/31/16 12:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/31/16 12:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/31/16 12:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/31/16 12:16	1
Chloroethane	ND		1.0	0.32	ug/L			03/31/16 12:16	1
Chloroform	ND		1.0	0.34	ug/L			03/31/16 12:16	1
Chloromethane	ND		1.0	0.35	ug/L			03/31/16 12:16	1
cis-1,2-Dichloroethene	500	E	1.0	0.81	ug/L			03/31/16 12:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/31/16 12:16	1
Cyclohexane	ND		1.0	0.18	ug/L			03/31/16 12:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/31/16 12:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/31/16 12:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/31/16 12:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/31/16 12:16	1
Methyl acetate	ND		2.5	1.3	ug/L			03/31/16 12:16	1
Methyl tert-butyl ether	9.9		1.0	0.16	ug/L			03/31/16 12:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/31/16 12:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/31/16 12:16	1
Styrene	ND		1.0	0.73	ug/L			03/31/16 12:16	1
Tetrachloroethene	300	E	1.0	0.36	ug/L			03/31/16 12:16	1
Toluene	ND		1.0	0.51	ug/L			03/31/16 12:16	1
trans-1,2-Dichloroethene	2.6		1.0	0.90	ug/L			03/31/16 12:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/31/16 12:16	1
Trichloroethene	150	E	1.0	0.46	ug/L			03/31/16 12:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/31/16 12:16	1
Vinyl chloride	31		1.0	0.90	ug/L			03/31/16 12:16	1
Xylenes, Total	ND		2.0	0.66	ua/L			03/31/16 12:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137		03/31/16 12:16	1
4-Bromofluorobenzene (Surr)	109		73 - 120		03/31/16 12:16	1
Dibromofluoromethane (Surr)	110		60 - 140		03/31/16 12:16	1
Toluene-d8 (Surr)	107		71 - 126		03/31/16 12:16	1

Method: 8260C - Volatile Organic	Compounds I	oy GC/MS - D	L						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			03/31/16 23:06	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			03/31/16 23:06	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			03/31/16 23:06	10

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-3

Matrix: Water

Client Sample ID: MW-1DD

Date Collected: 03/22/16 16:25 Date Received: 03/24/16 02:15

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Analyte	Result Qualifier	RL		Unit	D Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND	10	2.3	ug/L		03/31/16 23:06	10
1,1-Dichloroethane	ND	10	3.8	ug/L		03/31/16 23:06	10
1,1-Dichloroethene	ND	10	2.9	ug/L		03/31/16 23:06	10
1,2,4-Trichlorobenzene	ND	10	4.1	ug/L		03/31/16 23:06	10
1,2-Dibromo-3-Chloropropane	ND	10	3.9	ug/L		03/31/16 23:06	10
1,2-Dibromoethane	ND	10	7.3	ug/L		03/31/16 23:06	10
1,2-Dichlorobenzene	ND	10	7.9	ug/L		03/31/16 23:06	10
1,2-Dichloroethane	ND	10	2.1	ug/L		03/31/16 23:06	10
1,2-Dichloropropane	ND	10	7.2	ug/L		03/31/16 23:06	10
1,3-Dichlorobenzene	ND	10		ug/L		03/31/16 23:06	10
1,4-Dichlorobenzene	ND	10		ug/L		03/31/16 23:06	10
1,4-Dioxane	ND	400		ug/L		03/31/16 23:06	10
2-Butanone (MEK)	ND	100		ug/L		03/31/16 23:06	10
2-Hexanone	ND	50		ug/L		03/31/16 23:06	10
4-Methyl-2-pentanone (MIBK)	ND	50		ug/L		03/31/16 23:06	10
Acetone (WIBK)	ND *	100		ug/L		03/31/16 23:06	10
Benzene	ND ND	10		ug/L		03/31/16 23:06	10
Bromodichloromethane				-			
	ND ND	10		ug/L		03/31/16 23:06	10
Bromoform	ND	10		ug/L		03/31/16 23:06	10
Bromomethane	ND *	10		ug/L		03/31/16 23:06	10
Carbon disulfide	ND	10		ug/L		03/31/16 23:06	10
Carbon tetrachloride	ND	10		ug/L		03/31/16 23:06	10
Chlorobenzene	ND	10		ug/L		03/31/16 23:06	10
Chloroethane	ND	10	3.2	ug/L		03/31/16 23:06	10
Chloroform	ND	10		ug/L		03/31/16 23:06	10
Chloromethane	ND	10	3.5	ug/L		03/31/16 23:06	10
cis-1,2-Dichloroethene	560	10	8.1	ug/L		03/31/16 23:06	10
cis-1,3-Dichloropropene	ND	10	3.6	ug/L		03/31/16 23:06	10
Cyclohexane	ND	10	1.8	ug/L		03/31/16 23:06	10
Dibromochloromethane	ND	10	3.2	ug/L		03/31/16 23:06	10
Dichlorodifluoromethane	ND	10	6.8	ug/L		03/31/16 23:06	10
Ethylbenzene	ND	10	7.4	ug/L		03/31/16 23:06	10
Isopropylbenzene	ND	10	7.9	ug/L		03/31/16 23:06	10
Methyl acetate	ND	25	13	ug/L		03/31/16 23:06	10
Methyl tert-butyl ether	10	10	1.6	ug/L		03/31/16 23:06	10
Methylcyclohexane	ND	10	1.6	ug/L		03/31/16 23:06	10
Methylene Chloride	ND	10		ug/L		03/31/16 23:06	10
Styrene	ND	10		ug/L		03/31/16 23:06	10
Tetrachloroethene	290	10		ug/L		03/31/16 23:06	10
Toluene	ND	10		ug/L		03/31/16 23:06	10
trans-1,2-Dichloroethene	ND	10		ug/L		03/31/16 23:06	10
trans-1,3-Dichloropropene	ND	10		ug/L		03/31/16 23:06	10
		10		ug/L		03/31/16 23:06	10
Trichloroethene Trichlorofluoromethane	150 ND	10				03/31/16 23:06	10
				ug/L			
Vidence Total	28 	10		ug/L		03/31/16 23:06	10
Xylenes, Total	ND	20	6.6	ug/L		03/31/16 23:06	10
Surrogate	%Recovery Qualifier	Limits			Prepared	Analyzed	Dil Fac
						00/04/40 00:00	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-3

Matrix: Water

Client Sample ID: MW-1DD

Date Collected: 03/22/16 16:25 Date Received: 03/24/16 02:15

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	105		60 - 140		03/31/16 23:06	10
Toluene-d8 (Surr)	107		71 - 126		03/31/16 23:06	10

Client Sample ID: MW-1D Lab Sample ID: 480-96991-4

Date Collected: 03/22/16 16:30 Matrix: Water

Date Received: 03/24/16 02:15

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	20	16	ug/L			03/31/16 12:39	20
1,1,2,2-Tetrachloroethane	ND	20	4.2	ug/L			03/31/16 12:39	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20	6.2	ug/L			03/31/16 12:39	20
1,1,2-Trichloroethane	ND	20	4.6	ug/L			03/31/16 12:39	20
1,1-Dichloroethane	ND	20	7.6	ug/L			03/31/16 12:39	20
1,1-Dichloroethene	ND	20	5.8	ug/L			03/31/16 12:39	20
1,2,4-Trichlorobenzene	ND	20	8.2	ug/L			03/31/16 12:39	20
1,2-Dibromo-3-Chloropropane	ND	20	7.8	ug/L			03/31/16 12:39	20
1,2-Dibromoethane	ND	20	15	ug/L			03/31/16 12:39	20
1,2-Dichlorobenzene	ND	20	16	ug/L			03/31/16 12:39	20
1,2-Dichloroethane	ND	20	4.2	ug/L			03/31/16 12:39	20
1,2-Dichloropropane	ND	20	14	ug/L			03/31/16 12:39	20
1,3-Dichlorobenzene	ND	20	16	ug/L			03/31/16 12:39	20
1,4-Dichlorobenzene	ND	20	17	ug/L			03/31/16 12:39	20
1,4-Dioxane	ND	800	190	ug/L			03/31/16 12:39	20
2-Butanone (MEK)	ND	200	26	ug/L			03/31/16 12:39	20
2-Hexanone	ND	100	25	ug/L			03/31/16 12:39	20
4-Methyl-2-pentanone (MIBK)	ND	100	42	ug/L			03/31/16 12:39	20
Acetone	ND	200	60	ug/L			03/31/16 12:39	20
Benzene	ND	20	8.2	ug/L			03/31/16 12:39	20
Bromodichloromethane	ND	20	7.8	ug/L			03/31/16 12:39	20
Bromoform	ND	20	5.2	ug/L			03/31/16 12:39	20
Bromomethane	ND	20		ug/L			03/31/16 12:39	20
Carbon disulfide	ND	20	3.8	ug/L			03/31/16 12:39	20
Carbon tetrachloride	ND	20	5.4	ug/L			03/31/16 12:39	20
Chlorobenzene	ND	20	15	ug/L			03/31/16 12:39	20
Chloroethane	ND	20	6.4	ug/L			03/31/16 12:39	20
Chloroform	ND	20	6.8	ug/L			03/31/16 12:39	20
Chloromethane	ND	20	7.0	ug/L			03/31/16 12:39	20
cis-1,2-Dichloroethene	1900	20	16	ug/L			03/31/16 12:39	20
cis-1,3-Dichloropropene	ND	20	7.2	ug/L			03/31/16 12:39	20
Cyclohexane	ND	20	3.6	ug/L			03/31/16 12:39	20
Dibromochloromethane	ND	20	6.4	ug/L			03/31/16 12:39	20
Dichlorodifluoromethane	ND	20	14	ug/L			03/31/16 12:39	20
Ethylbenzene	ND	20		ug/L			03/31/16 12:39	20
Isopropylbenzene	ND	20		ug/L			03/31/16 12:39	20
Methyl acetate	ND	50		ug/L			03/31/16 12:39	20
Methyl tert-butyl ether	ND	20		ug/L			03/31/16 12:39	20
Methylcyclohexane	ND	20		ug/L			03/31/16 12:39	20
Methylene Chloride	ND	20		ug/L			03/31/16 12:39	20

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Client Sample ID: MW-1D Lab Sample ID: 480-96991-4

Date Collected: 03/22/16 16:30 Matrix: Water Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		20	15	ug/L			03/31/16 12:39	20
Tetrachloroethene	2600	E	20	7.2	ug/L			03/31/16 12:39	20
Toluene	ND		20	10	ug/L			03/31/16 12:39	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			03/31/16 12:39	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			03/31/16 12:39	20
Trichloroethene	1000		20	9.2	ug/L			03/31/16 12:39	20
Trichlorofluoromethane	ND		20	18	ug/L			03/31/16 12:39	20
Vinyl chloride	31		20	18	ug/L			03/31/16 12:39	20
Xylenes, Total	ND		40	13	ug/L			03/31/16 12:39	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137			-		03/31/16 12:39	20
4-Bromofluorobenzene (Surr)	109		73 - 120					03/31/16 12:39	20
Dibromofluoromethane (Surr)	108		60 - 140					03/31/16 12:39	20
Toluene-d8 (Surr)	106		71 - 126					03/31/16 12:39	20

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	50	41	ug/L			03/31/16 23:29	50
1,1,2,2-Tetrachloroethane	ND	50	11	ug/L			03/31/16 23:29	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	16	ug/L			03/31/16 23:29	50
1,1,2-Trichloroethane	ND	50	12	ug/L			03/31/16 23:29	50
1,1-Dichloroethane	ND	50	19	ug/L			03/31/16 23:29	50
1,1-Dichloroethene	ND	50	15	ug/L			03/31/16 23:29	50
1,2,4-Trichlorobenzene	ND	50	21	ug/L			03/31/16 23:29	50
1,2-Dibromo-3-Chloropropane	ND	50	20	ug/L			03/31/16 23:29	50
1,2-Dibromoethane	ND	50	37	ug/L			03/31/16 23:29	50
1,2-Dichlorobenzene	ND	50	40	ug/L			03/31/16 23:29	50
1,2-Dichloroethane	ND	50	11	ug/L			03/31/16 23:29	50
1,2-Dichloropropane	ND	50	36	ug/L			03/31/16 23:29	50
1,3-Dichlorobenzene	ND	50	39	ug/L			03/31/16 23:29	50
1,4-Dichlorobenzene	ND	50	42	ug/L			03/31/16 23:29	50
1,4-Dioxane	ND	2000	470	ug/L			03/31/16 23:29	50
2-Butanone (MEK)	ND	500	66	ug/L			03/31/16 23:29	50
2-Hexanone	ND	250	62	ug/L			03/31/16 23:29	50
4-Methyl-2-pentanone (MIBK)	ND	250	110	ug/L			03/31/16 23:29	50
Acetone	ND *	500	150	ug/L			03/31/16 23:29	50
Benzene	ND	50	21	ug/L			03/31/16 23:29	50
Bromodichloromethane	ND	50	20	ug/L			03/31/16 23:29	50
Bromoform	ND	50	13	ug/L			03/31/16 23:29	50
Bromomethane	ND *	50	35	ug/L			03/31/16 23:29	50
Carbon disulfide	ND	50	9.5	ug/L			03/31/16 23:29	50
Carbon tetrachloride	ND	50	14	ug/L			03/31/16 23:29	50
Chlorobenzene	ND	50	38	ug/L			03/31/16 23:29	50
Chloroethane	ND	50	16	ug/L			03/31/16 23:29	50
Chloroform	ND	50	17	ug/L			03/31/16 23:29	50
Chloromethane	ND	50	18	ug/L			03/31/16 23:29	50
cis-1,2-Dichloroethene	2500	50	41	ug/L			03/31/16 23:29	50
cis-1,3-Dichloropropene	ND	50	18	ug/L			03/31/16 23:29	50
Cyclohexane	ND	50	9.0	ug/L			03/31/16 23:29	50

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-4

Matrix: Water

Client Sample ID: MW-1D

Date Collected: 03/22/16 16:30 Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		50	16	ug/L			03/31/16 23:29	50
Dichlorodifluoromethane	ND		50	34	ug/L			03/31/16 23:29	50
Ethylbenzene	ND		50	37	ug/L			03/31/16 23:29	50
Isopropylbenzene	ND		50	40	ug/L			03/31/16 23:29	50
Methyl acetate	ND		130	65	ug/L			03/31/16 23:29	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			03/31/16 23:29	50
Methylcyclohexane	ND		50	8.0	ug/L			03/31/16 23:29	50
Methylene Chloride	ND		50	22	ug/L			03/31/16 23:29	50
Styrene	ND		50	37	ug/L			03/31/16 23:29	50
Tetrachloroethene	3500		50	18	ug/L			03/31/16 23:29	50
Toluene	ND		50	26	ug/L			03/31/16 23:29	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			03/31/16 23:29	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			03/31/16 23:29	50
Trichloroethene	1400		50	23	ug/L			03/31/16 23:29	50
Trichlorofluoromethane	ND		50	44	ug/L			03/31/16 23:29	50
Vinyl chloride	ND		50	45	ug/L			03/31/16 23:29	50
Xylenes, Total	ND		100	33	ug/L			03/31/16 23:29	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137			-		03/31/16 23:29	50
4-Bromofluorobenzene (Surr)	112		73 - 120					03/31/16 23:29	50
Dibromofluoromethane (Surr)	111		60 - 140					03/31/16 23:29	50
Toluene-d8 (Surr)	106		71 - 126					03/31/16 23:29	50

Client Sample ID: IW-01S

Lab Sample ID: 480-96991-5

Date Collected: 03/22/16 17:15

Date Received: 03/24/16 02:15

Matrix: Water

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			03/31/16 13:03	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			03/31/16 13:03	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			03/31/16 13:03	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			03/31/16 13:03	20
1,1-Dichloroethane	ND		20	7.6	ug/L			03/31/16 13:03	20
1,1-Dichloroethene	ND		20	5.8	ug/L			03/31/16 13:03	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			03/31/16 13:03	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			03/31/16 13:03	20
1,2-Dibromoethane	ND		20	15	ug/L			03/31/16 13:03	20
1,2-Dichlorobenzene	ND		20	16	ug/L			03/31/16 13:03	20
1,2-Dichloroethane	ND		20	4.2	ug/L			03/31/16 13:03	20
1,2-Dichloropropane	ND		20	14	ug/L			03/31/16 13:03	20
1,3-Dichlorobenzene	ND		20	16	ug/L			03/31/16 13:03	20
1,4-Dichlorobenzene	ND		20	17	ug/L			03/31/16 13:03	20
1,4-Dioxane	ND		800	190	ug/L			03/31/16 13:03	20
2-Butanone (MEK)	ND		200	26	ug/L			03/31/16 13:03	20
2-Hexanone	ND		100	25	ug/L			03/31/16 13:03	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			03/31/16 13:03	20
Acetone	ND		200	60	ug/L			03/31/16 13:03	20
Benzene	ND		20	8.2	ug/L			03/31/16 13:03	20

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-5

Matrix: Water

Client Sample ID: IW-01S

Date Collected: 03/22/16 17:15 Date Received: 03/24/16 02:15

Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND ND		20	7.8	ug/L			03/31/16 13:03	20
Bromoform	ND		20	5.2	ug/L			03/31/16 13:03	20
Bromomethane	ND		20	14	ug/L			03/31/16 13:03	20
Carbon disulfide	ND		20	3.8	ug/L			03/31/16 13:03	20
Carbon tetrachloride	ND		20	5.4	ug/L			03/31/16 13:03	20
Chlorobenzene	ND		20	15	ug/L			03/31/16 13:03	20
Chloroethane	ND		20	6.4	ug/L			03/31/16 13:03	20
Chloroform	ND		20	6.8	ug/L			03/31/16 13:03	20
Chloromethane	ND		20	7.0	ug/L			03/31/16 13:03	20
cis-1,2-Dichloroethene	500		20	16	ug/L			03/31/16 13:03	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			03/31/16 13:03	20
Cyclohexane	ND		20	3.6	ug/L			03/31/16 13:03	20
Dibromochloromethane	ND		20	6.4	ug/L			03/31/16 13:03	20
Dichlorodifluoromethane	ND		20	14	ug/L			03/31/16 13:03	20
Ethylbenzene	ND		20	15	ug/L			03/31/16 13:03	20
Isopropylbenzene	ND		20	16	ug/L			03/31/16 13:03	20
Methyl acetate	ND		50	26	ug/L			03/31/16 13:03	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			03/31/16 13:03	20
Methylcyclohexane	ND		20	3.2	ug/L			03/31/16 13:03	20
Methylene Chloride	ND		20	8.8	ug/L			03/31/16 13:03	20
Styrene	ND		20	15	ug/L			03/31/16 13:03	20
Tetrachloroethene	3300 E		20	7.2	ug/L			03/31/16 13:03	20
Toluene	ND		20	10	ug/L			03/31/16 13:03	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			03/31/16 13:03	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			03/31/16 13:03	20
Trichloroethene	240		20	9.2	ug/L			03/31/16 13:03	20
Trichlorofluoromethane	ND		20	18	ug/L			03/31/16 13:03	20
Vinyl chloride	ND		20	18	ug/L			03/31/16 13:03	20
Xylenes, Total	ND		40	13	ug/L			03/31/16 13:03	20
Surrogate	%Recovery Q	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			=		03/31/16 13:03	20
4-Bromofluorobenzene (Surr)	108		73 - 120					03/31/16 13:03	20
Dibromofluoromethane (Surr)	105		60 - 140					03/31/16 13:03	20
Toluene-d8 (Surr)	104		71 - 126					03/31/16 13:03	20

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	50	41	ug/L			03/31/16 23:52	50
1,1,2,2-Tetrachloroethane	ND	50	11	ug/L			03/31/16 23:52	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	16	ug/L			03/31/16 23:52	50
1,1,2-Trichloroethane	ND	50	12	ug/L			03/31/16 23:52	50
1,1-Dichloroethane	ND	50	19	ug/L			03/31/16 23:52	50
1,1-Dichloroethene	ND	50	15	ug/L			03/31/16 23:52	50
1,2,4-Trichlorobenzene	ND	50	21	ug/L			03/31/16 23:52	50
1,2-Dibromo-3-Chloropropane	ND	50	20	ug/L			03/31/16 23:52	50
1,2-Dibromoethane	ND	50	37	ug/L			03/31/16 23:52	50
1,2-Dichlorobenzene	ND	50	40	ug/L			03/31/16 23:52	50
1,2-Dichloroethane	ND	50	11	ug/L			03/31/16 23:52	50
1,2-Dichloropropane	ND	50	36	ug/L			03/31/16 23:52	50

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-5

Matrix: Water

Client Sample ID: IW-01S

Date Collected: 03/22/16 17:15 Date Received: 03/24/16 02:15

Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		50	39	ug/L			03/31/16 23:52	50
1,4-Dichlorobenzene	ND		50	42	ug/L			03/31/16 23:52	50
1,4-Dioxane	ND		2000	470	ug/L			03/31/16 23:52	50
2-Butanone (MEK)	ND		500	66	ug/L			03/31/16 23:52	50
2-Hexanone	ND		250	62	ug/L			03/31/16 23:52	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			03/31/16 23:52	50
Acetone	ND *	*	500	150	ug/L			03/31/16 23:52	50
Benzene	ND		50	21	ug/L			03/31/16 23:52	50
Bromodichloromethane	ND		50	20	ug/L			03/31/16 23:52	50
Bromoform	ND		50	13	ug/L			03/31/16 23:52	50
Bromomethane	ND *	*	50	35	ug/L			03/31/16 23:52	50
Carbon disulfide	ND		50	9.5	ug/L			03/31/16 23:52	50
Carbon tetrachloride	ND		50	14	ug/L			03/31/16 23:52	50
Chlorobenzene	ND		50	38	ug/L			03/31/16 23:52	50
Chloroethane	ND		50	16	ug/L			03/31/16 23:52	50
Chloroform	ND		50	17	ug/L			03/31/16 23:52	50
Chloromethane	ND		50	18	ug/L			03/31/16 23:52	50
cis-1,2-Dichloroethene	590		50	41	ug/L			03/31/16 23:52	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			03/31/16 23:52	50
Cyclohexane	ND		50	9.0	ug/L			03/31/16 23:52	50
Dibromochloromethane	ND		50	16	ug/L			03/31/16 23:52	50
Dichlorodifluoromethane	ND		50	34	ug/L			03/31/16 23:52	50
Ethylbenzene	ND		50	37	ug/L			03/31/16 23:52	50
Isopropylbenzene	ND		50	40	ug/L			03/31/16 23:52	50
Methyl acetate	ND		130	65	ug/L			03/31/16 23:52	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			03/31/16 23:52	50
Methylcyclohexane	ND		50	8.0	ug/L			03/31/16 23:52	50
Methylene Chloride	ND		50	22	ug/L			03/31/16 23:52	50
Styrene	ND		50	37	ug/L			03/31/16 23:52	50
Tetrachloroethene	4400		50	18	ug/L			03/31/16 23:52	50
Toluene	ND		50	26	ug/L			03/31/16 23:52	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			03/31/16 23:52	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			03/31/16 23:52	50
Trichloroethene	290		50	23	ug/L			03/31/16 23:52	50
Trichlorofluoromethane	ND		50	44	ug/L			03/31/16 23:52	50
Vinyl chloride	ND		50	45	ug/L			03/31/16 23:52	50
Xylenes, Total	ND		100	33	ug/L			03/31/16 23:52	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			_		03/31/16 23:52	50
4-Bromofluorobenzene (Surr)	113		73 - 120					03/31/16 23:52	50
Dibromofluoromethane (Surr)	106		60 - 140					03/31/16 23:52	50
Toluene-d8 (Surr)	106		71 - 126					03/31/16 23:52	50

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Client Sample ID: MW-1 Lab Sample ID: 480-96991-6

Date Collected: 03/22/16 17:20 Matrix: Water

Date Received: 03/24/16 02:15

1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane 2-Butanone (MEK)	ND ND ND ND ND ND ND ND ND ND ND ND ND N	20 20 20 20 20 20 20 20 20 20 20 20 20 2	4.2 6.2 4.6 7.6 5.8 8.2 7.8 15 16 4.2	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L		03/31/16 13:27 03/31/16 13:27	20 20 20 20 20 20
1,1,2-Trichloro-1,2,2-trifluoroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichloropropane 1,4-Dichlorobenzene 1,4-Dichlorobenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	20 20 20 20 20 20 20 20 20 20 20 20	6.2 4.6 7.6 5.8 8.2 7.8 15 16 4.2	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L		03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27	20 20 20 20 20 20 20 20
1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND ND ND ND ND ND ND ND ND ND N	20 20 20 20 20 20 20 20 20 20 20	4.6 7.6 5.8 8.2 7.8 15 16 4.2	ug/L ug/L ug/L ug/L ug/L ug/L ug/L		03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27	2(2) 2(2) 2(2) 2(
1,1-Dichloroethane 1,1-Dichloroethene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND ND ND ND ND ND ND ND ND ND N	20 20 20 20 20 20 20 20 20 20 20	7.6 5.8 8.2 7.8 15 16 4.2	ug/L ug/L ug/L ug/L ug/L ug/L		03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27	20 20 20 20 20
1,1-Dichloroethene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND ND ND ND ND ND ND ND ND ND N	20 20 20 20 20 20 20 20 20 20	5.8 8.2 7.8 15 16 4.2	ug/L ug/L ug/L ug/L ug/L ug/L		03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27	20 20 20 20 20 20
1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND ND ND ND ND ND ND ND ND ND N	20 20 20 20 20 20 20 20 20	8.2 7.8 15 16 4.2	ug/L ug/L ug/L ug/L ug/L		03/31/16 13:27 03/31/16 13:27 03/31/16 13:27 03/31/16 13:27	20 20 20
1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND ND ND ND ND ND ND ND ND ND	20 20 20 20 20 20 20 20	7.8 15 16 4.2 14	ug/L ug/L ug/L ug/L		03/31/16 13:27 03/31/16 13:27 03/31/16 13:27	20 20 20
1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND ND ND ND ND ND ND ND	20 20 20 20 20 20 20	15 16 4.2 14	ug/L ug/L ug/L		03/31/16 13:27 03/31/16 13:27	20
1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND ND ND	20 20 20 20 20 20	16 4.2 14	ug/L ug/L		03/31/16 13:27	20
1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND ND	20 20 20 20	4.2 14	ug/L			
1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND ND	20 20 20	14			03/31/16 13:37	
1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND ND	20 20	14			03/3// 10 13.2/	20
1,4-Dichlorobenzene 1,4-Dioxane	ND ND ND	20	16	-		03/31/16 13:27	20
1,4-Dioxane	ND ND			ug/L		03/31/16 13:27	20
	ND	000	17	ug/L		03/31/16 13:27	20
	ND	800		ug/L		03/31/16 13:27	20
		200		ug/L		03/31/16 13:27	20
2-Hexanone	ND	100		ug/L		03/31/16 13:27	20
4-Methyl-2-pentanone (MIBK)	ND	100		ug/L		03/31/16 13:27	20
Acetone	ND	200		ug/L		03/31/16 13:27	20
Benzene	ND	20		ug/L		03/31/16 13:27	20
Bromodichloromethane	ND	20		ug/L		03/31/16 13:27	2
Bromoform	ND	20		ug/L ug/L		03/31/16 13:27	20
Bromomethane	ND	20		ug/L		03/31/16 13:27	20
Carbon disulfide	ND	20		ug/L ug/L		03/31/16 13:27	20
Carbon tetrachloride	ND	20		ug/L ug/L		03/31/16 13:27	20
Chlorobenzene	ND ND	20		-		03/31/16 13:27	20
Chloroethane	ND ND	20		ug/L		03/31/16 13:27	20
				ug/L			
Chloromothana	ND ND	20		ug/L		03/31/16 13:27	20
Chloromethane		20		ug/L		03/31/16 13:27	20
cis-1,2-Dichloroethene	1300	20		ug/L		03/31/16 13:27	20
cis-1,3-Dichloropropene	ND	20		ug/L		03/31/16 13:27	20
Cyclohexane	ND	20		ug/L		03/31/16 13:27	20
Dibromochloromethane	ND	20		ug/L		03/31/16 13:27	20
Dichlorodifluoromethane	ND	20		ug/L		03/31/16 13:27	20
Ethylbenzene	ND	20		ug/L		03/31/16 13:27	20
Isopropylbenzene	ND	20		ug/L		03/31/16 13:27	20
Methyl acetate	ND	50		ug/L		03/31/16 13:27	20
Methyl tert-butyl ether	ND	20		ug/L		03/31/16 13:27	20
Methylcyclohexane	ND	20		ug/L		03/31/16 13:27	20
Methylene Chloride	ND	20		ug/L		03/31/16 13:27	20
Styrene	ND	20		ug/L		03/31/16 13:27	20
Tetrachloroethene	350	20		ug/L		03/31/16 13:27	20
Toluene	ND	20		ug/L		03/31/16 13:27	20
trans-1,2-Dichloroethene	ND	20	18	ug/L		03/31/16 13:27	20
trans-1,3-Dichloropropene	ND	20	7.4	ug/L		03/31/16 13:27	2
Trichloroethene	130	20	9.2	ug/L		03/31/16 13:27	20
Trichlorofluoromethane	ND	20	18	ug/L		03/31/16 13:27	20
Vinyl chloride	ND	20	18	ug/L		03/31/16 13:27	20

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-96991-6

TestAmerica Job ID: 480-96991-1

Matrix: Water

Client Sample ID: MW-1
Date Collected: 03/22/16 17:20
Date Received: 03/24/16 02:15

Surrogate	%Recovery Qu	alifier Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105	66 - 137	03/31/16 13:27	20
4-Bromofluorobenzene (Surr)	110	73 - 120	03/31/16 13:27	20
Dibromofluoromethane (Surr)	107	60 - 140	03/31/16 13:27	20
Toluene-d8 (Surr)	108	71 - 126	03/31/16 13:27	20

Client Sample ID: GM-9 Lab Sample ID: 480-96991-7

Date Collected: 03/22/16 17:55 Matrix: Water

Date Collected: 03/22/16 17:55

Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			04/01/16 00:16	
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			04/01/16 00:16	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			04/01/16 00:16	
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			04/01/16 00:16	
1,1-Dichloroethane	ND		5.0	1.9	ug/L			04/01/16 00:16	:
1,1-Dichloroethene	ND		5.0	1.5	ug/L			04/01/16 00:16	:
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			04/01/16 00:16	
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			04/01/16 00:16	
1,2-Dibromoethane	ND		5.0	3.7	ug/L			04/01/16 00:16	
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			04/01/16 00:16	
1,2-Dichloroethane	ND		5.0	1.1	ug/L			04/01/16 00:16	
1,2-Dichloropropane	ND		5.0	3.6	ug/L			04/01/16 00:16	
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			04/01/16 00:16	
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			04/01/16 00:16	
1,4-Dioxane	ND		200	47	ug/L			04/01/16 00:16	
2-Butanone (MEK)	ND		50	6.6	ug/L			04/01/16 00:16	
2-Hexanone	ND		25	6.2	ug/L			04/01/16 00:16	
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			04/01/16 00:16	
Acetone	ND	*	50	15	ug/L			04/01/16 00:16	
Benzene	ND		5.0	2.1	ug/L			04/01/16 00:16	
Bromodichloromethane	ND		5.0	2.0	ug/L			04/01/16 00:16	
Bromoform	ND		5.0	1.3	ug/L			04/01/16 00:16	
Bromomethane	ND	*	5.0	3.5	ug/L			04/01/16 00:16	
Carbon disulfide	ND		5.0	0.95	ug/L			04/01/16 00:16	
Carbon tetrachloride	ND		5.0	1.4	ug/L			04/01/16 00:16	
Chlorobenzene	ND		5.0	3.8	ug/L			04/01/16 00:16	
Chloroethane	ND		5.0	1.6	ug/L			04/01/16 00:16	
Chloroform	ND		5.0	1.7	ug/L			04/01/16 00:16	
Chloromethane	ND		5.0	1.8	ug/L			04/01/16 00:16	
cis-1,2-Dichloroethene	91		5.0	4.1	ug/L			04/01/16 00:16	
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			04/01/16 00:16	
Cyclohexane	ND		5.0	0.90	ug/L			04/01/16 00:16	
Dibromochloromethane	ND		5.0	1.6	ug/L			04/01/16 00:16	
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			04/01/16 00:16	
Ethylbenzene	ND		5.0	3.7	ug/L			04/01/16 00:16	
Isopropylbenzene	ND		5.0	4.0	ug/L			04/01/16 00:16	
Methyl acetate	ND		13	6.5	ug/L			04/01/16 00:16	
Methyl tert-butyl ether	1.5	J	5.0	0.80	ug/L			04/01/16 00:16	
Methylcyclohexane	ND		5.0	0.80	ug/L			04/01/16 00:16	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-7

Matrix: Water

Client Sample ID: GM-9

Date Collected: 03/22/16 17:55 Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	2.2	ug/L			04/01/16 00:16	5
Styrene	ND		5.0	3.7	ug/L			04/01/16 00:16	5
Tetrachloroethene	120		5.0	1.8	ug/L			04/01/16 00:16	5
Toluene	ND		5.0	2.6	ug/L			04/01/16 00:16	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			04/01/16 00:16	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			04/01/16 00:16	5
Trichloroethene	24		5.0	2.3	ug/L			04/01/16 00:16	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			04/01/16 00:16	5
Vinyl chloride	ND		5.0	4.5	ug/L			04/01/16 00:16	5
Xylenes, Total	ND		10	3.3	ug/L			04/01/16 00:16	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137			_		04/01/16 00:16	5
4-Bromofluorobenzene (Surr)	111		73 - 120					04/01/16 00:16	5
Dibromofluoromethane (Surr)	110		60 - 140					04/01/16 00:16	5
Toluene-d8 (Surr)	107		71 - 126					04/01/16 00:16	5

Client Sample ID: MW-13 Lab Sample ID: 480-96991-8

Date Collected: 03/22/16 18:00

Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		500	410	ug/L			03/31/16 14:13	500
1,1,2,2-Tetrachloroethane	ND		500	110	ug/L			03/31/16 14:13	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	160	ug/L			03/31/16 14:13	500
1,1,2-Trichloroethane	ND		500	120	ug/L			03/31/16 14:13	500
1,1-Dichloroethane	ND		500	190	ug/L			03/31/16 14:13	500
1,1-Dichloroethene	ND		500	150	ug/L			03/31/16 14:13	500
1,2,4-Trichlorobenzene	ND		500	210	ug/L			03/31/16 14:13	500
1,2-Dibromo-3-Chloropropane	ND		500	200	ug/L			03/31/16 14:13	500
1,2-Dibromoethane	ND		500	370	ug/L			03/31/16 14:13	500
1,2-Dichlorobenzene	ND		500	400	ug/L			03/31/16 14:13	500
1,2-Dichloroethane	ND		500	110	ug/L			03/31/16 14:13	500
1,2-Dichloropropane	ND		500	360	ug/L			03/31/16 14:13	50
1,3-Dichlorobenzene	ND		500	390	ug/L			03/31/16 14:13	500
1,4-Dichlorobenzene	ND		500	420	ug/L			03/31/16 14:13	50
1,4-Dioxane	ND		20000	4700	ug/L			03/31/16 14:13	500
2-Butanone (MEK)	ND		5000	660	ug/L			03/31/16 14:13	50
2-Hexanone	ND		2500	620	ug/L			03/31/16 14:13	500
4-Methyl-2-pentanone (MIBK)	ND		2500	1100	ug/L			03/31/16 14:13	500
Acetone	ND		5000	1500	ug/L			03/31/16 14:13	500
Benzene	ND		500	210	ug/L			03/31/16 14:13	500
Bromodichloromethane	ND		500	200	ug/L			03/31/16 14:13	500
Bromoform	ND		500	130	ug/L			03/31/16 14:13	500
Bromomethane	ND		500	350	ug/L			03/31/16 14:13	500
Carbon disulfide	ND		500	95	ug/L			03/31/16 14:13	500
Carbon tetrachloride	ND		500	140	ug/L			03/31/16 14:13	500
Chlorobenzene	ND		500	380	ug/L			03/31/16 14:13	500
Chloroethane	ND		500	160	ug/L			03/31/16 14:13	500

TestAmerica Buffalo

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Matrix: Water

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-8

Matrix: Water

Client Sample ID: MW-13 Date Collected: 03/22/16 18:00

Date Received: 03/24/16 02:15

Xylenes, Total

Date Collected: 03/23/16 08:45

Date Received: 03/24/16 02:15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued) Analyte Result Qualifier MDL Unit D Prepared Analyzed Dil Fac Chloroform ND 500 170 ug/L 03/31/16 14:13 500 Chloromethane ND 500 500 ug/L 03/31/16 14:13 180 cis-1,2-Dichloroethene 15000 500 410 ug/L 03/31/16 14:13 500 cis-1,3-Dichloropropene ND 500 180 ug/L 03/31/16 14:13 500 Cyclohexane ND 500 90 ug/L 03/31/16 14:13 500 ug/L Dibromochloromethane ND 500 03/31/16 14:13 500 160 Dichlorodifluoromethane ND 500 340 ug/L 03/31/16 14:13 500 Ethylbenzene ND 500 370 ug/L 03/31/16 14:13 500 ND 500 500 Isopropylbenzene 400 ug/L 03/31/16 14:13 ND 1300 500 Methyl acetate 650 ug/L 03/31/16 14:13 Methyl tert-butyl ether ND 500 80 ug/L 03/31/16 14:13 500 Methylcyclohexane ND 500 80 ug/L 03/31/16 14:13 500 ND 500 Methylene Chloride 220 ug/L 03/31/16 14:13 500 Styrene ND 500 370 ug/L 03/31/16 14:13 500 500 3500 180 ug/L 03/31/16 14:13 500 Tetrachloroethene Toluene ND 500 ug/L 03/31/16 14:13 500 ND 500 500 trans-1,2-Dichloroethene 450 ug/L 03/31/16 14:13 trans-1,3-Dichloropropene ND 500 190 ug/L 03/31/16 14:13 500 500 230 ug/L 03/31/16 14:13 500 **Trichloroethene** 1800 500 Trichlorofluoromethane ND 440 ug/L 03/31/16 14:13 500 Vinyl chloride ND 500 450 ug/L 03/31/16 14:13 500

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137	-		03/31/16 14:13	500
4-Bromofluorobenzene (Surr)	112		73 - 120			03/31/16 14:13	500
Dibromofluoromethane (Surr)	106		60 - 140			03/31/16 14:13	500
Toluene-d8 (Surr)	108		71 - 126			03/31/16 14:13	500

1000

330 ug/L

Client Sample ID: MW-9

ND

Lab Sample ID: 480-96991-9 Matrix: Water

03/31/16 14:13

Method: 8260C - Volatile Organic (Analyte	Result Qualifie		MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		8.2	ug/L			03/31/16 14:36	10
1,1,2,2-Tetrachloroethane	ND	10	2.1	ug/L			03/31/16 14:36	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	3.1	ug/L			03/31/16 14:36	10
1,1,2-Trichloroethane	ND	10	2.3	ug/L			03/31/16 14:36	10
1,1-Dichloroethane	ND	10	3.8	ug/L			03/31/16 14:36	10
1,1-Dichloroethene	ND	10	2.9	ug/L			03/31/16 14:36	10
1,2,4-Trichlorobenzene	ND	10	4.1	ug/L			03/31/16 14:36	10
1,2-Dibromo-3-Chloropropane	ND	10	3.9	ug/L			03/31/16 14:36	10
1,2-Dibromoethane	ND	10	7.3	ug/L			03/31/16 14:36	10
1,2-Dichlorobenzene	ND	10	7.9	ug/L			03/31/16 14:36	10
1,2-Dichloroethane	ND	10	2.1	ug/L			03/31/16 14:36	10
1,2-Dichloropropane	ND	10	7.2	ug/L			03/31/16 14:36	10
1,3-Dichlorobenzene	ND	10	7.8	ug/L			03/31/16 14:36	10
1,4-Dichlorobenzene	ND	10	8.4	ug/L			03/31/16 14:36	10
1,4-Dioxane	ND	400	93	ug/L			03/31/16 14:36	10

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-9

Matrix: Water

Client Sample ID: MW-9

Date Collected: 03/23/16 08:45 Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		100	13	ug/L			03/31/16 14:36	10
2-Hexanone	ND		50	12	ug/L			03/31/16 14:36	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			03/31/16 14:36	10
Acetone	ND		100	30	ug/L			03/31/16 14:36	10
Benzene	ND		10	4.1	ug/L			03/31/16 14:36	10
Bromodichloromethane	ND		10	3.9	ug/L			03/31/16 14:36	10
Bromoform	ND		10	2.6	ug/L			03/31/16 14:36	10
Bromomethane	ND		10	6.9	ug/L			03/31/16 14:36	10
Carbon disulfide	ND		10	1.9	ug/L			03/31/16 14:36	10
Carbon tetrachloride	ND		10	2.7	ug/L			03/31/16 14:36	10
Chlorobenzene	ND		10	7.5	ug/L			03/31/16 14:36	10
Chloroethane	ND		10	3.2	ug/L			03/31/16 14:36	10
Chloroform	ND		10	3.4	ug/L			03/31/16 14:36	10
Chloromethane	ND		10	3.5	ug/L			03/31/16 14:36	10
cis-1,2-Dichloroethene	1400	E	10	8.1	ug/L			03/31/16 14:36	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			03/31/16 14:36	10
Cyclohexane	ND		10	1.8	ug/L			03/31/16 14:36	10
Dibromochloromethane	ND		10	3.2	ug/L			03/31/16 14:36	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			03/31/16 14:36	10
Ethylbenzene	ND		10	7.4	ug/L			03/31/16 14:36	10
Isopropylbenzene	ND		10	7.9	ug/L			03/31/16 14:36	10
Methyl acetate	ND		25	13	ug/L			03/31/16 14:36	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			03/31/16 14:36	10
Methylcyclohexane	ND		10	1.6	ug/L			03/31/16 14:36	10
Methylene Chloride	ND		10	4.4	ug/L			03/31/16 14:36	10
Styrene	ND		10	7.3	ug/L			03/31/16 14:36	10
Tetrachloroethene	ND		10	3.6	ug/L			03/31/16 14:36	10
Toluene	ND		10	5.1	ug/L			03/31/16 14:36	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			03/31/16 14:36	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			03/31/16 14:36	10
Trichloroethene	ND		10	4.6	ug/L			03/31/16 14:36	10
Trichlorofluoromethane	ND		10	8.8	ug/L			03/31/16 14:36	10
Vinyl chloride	170		10	9.0	ug/L			03/31/16 14:36	10
Xylenes, Total	ND		20	6.6	ug/L			03/31/16 14:36	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137			-		03/31/16 14:36	10
4.0	440		70 100					00/04/40 44 00	40

Toluene-d8 (Surr)	108	71 - 126	03/31/16 14:36	10
Dibromofluoromethane (Surr)	110	60 - 140	03/31/16 14:36	10
4-Bromofluorobenzene (Surr)	112	73 - 120	03/31/16 14:36	10
1,2-Dichioroethane-04 (Sun)	107	00 - 137	03/31/10 14.30	10

Method: 8260C	- Volatile Organic Compounds by GC/MS - DL
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		.,							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	33	ug/L			04/01/16 14:29	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			04/01/16 14:29	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40	12	ug/L			04/01/16 14:29	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			04/01/16 14:29	40
1,1-Dichloroethane	ND		40	15	ug/L			04/01/16 14:29	40
1,1-Dichloroethene	ND		40	12	ug/L			04/01/16 14:29	40
1,2,4-Trichlorobenzene	ND		40	16	ug/L			04/01/16 14:29	40

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-9

Matrix: Water

Client Sample ID: MW-9

Date Collected: 03/23/16 08:45 Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,2-Dibromo-3-Chloropropane	ND		40	16	ug/L			04/01/16 14:29	4
1,2-Dibromoethane	ND		40	29	ug/L			04/01/16 14:29	4
1,2-Dichlorobenzene	ND		40	32	ug/L			04/01/16 14:29	4
1,2-Dichloroethane	ND		40	8.4	ug/L			04/01/16 14:29	4
1,2-Dichloropropane	ND		40	29	ug/L			04/01/16 14:29	4
1,3-Dichlorobenzene	ND		40	31	ug/L			04/01/16 14:29	4
1,4-Dichlorobenzene	ND		40	34	ug/L			04/01/16 14:29	4
1,4-Dioxane	ND		1600	370	ug/L			04/01/16 14:29	4
2-Butanone (MEK)	ND		400	53	ug/L			04/01/16 14:29	
2-Hexanone	ND		200	50	ug/L			04/01/16 14:29	4
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			04/01/16 14:29	4
Acetone	ND		400	120	ug/L			04/01/16 14:29	
Benzene	ND		40		ug/L			04/01/16 14:29	4
Bromodichloromethane	ND		40		ug/L			04/01/16 14:29	4
Bromoform	ND		40		ug/L			04/01/16 14:29	4
Bromomethane	ND		40	28	ug/L			04/01/16 14:29	4
Carbon disulfide	ND		40		ug/L			04/01/16 14:29	4
Carbon tetrachloride	ND		40		ug/L			04/01/16 14:29	
Chlorobenzene	ND		40		ug/L			04/01/16 14:29	2
Chloroethane	ND		40		ug/L			04/01/16 14:29	4
Chloroform	ND		40		ug/L			04/01/16 14:29	
Chloromethane	ND		40		ug/L			04/01/16 14:29	4
cis-1,2-Dichloroethene	1800		40		ug/L			04/01/16 14:29	4
cis-1,3-Dichloropropene	ND		40		ug/L			04/01/16 14:29	
Cyclohexane	ND		40		ug/L			04/01/16 14:29	4
Dibromochloromethane	ND		40		ug/L			04/01/16 14:29	4
Dichlorodifluoromethane	ND		40		ug/L ug/L			04/01/16 14:29	
Ethylbenzene	ND		40		ug/L			04/01/16 14:29	_
Isopropylbenzene	ND		40		ug/L ug/L			04/01/16 14:29	_
Methyl acetate	ND		100		ug/L ug/L			04/01/16 14:29	
Methyl tert-butyl ether	ND		40		ug/L			04/01/16 14:29	_
Methylcyclohexane	ND ND		40		ug/L ug/L			04/01/16 14:29	
	ND		40					04/01/16 14:29	<u>-</u> 2
Methylene Chloride	ND ND		40		ug/L			04/01/16 14:29	2
Styrene Tetrachloroethene	ND ND		40		ug/L			04/01/16 14:29	
			40		ug/L				
Toluene	ND				ug/L			04/01/16 14:29	
trans-1,2-Dichloroethene	ND		40		ug/L			04/01/16 14:29	4
trans-1,3-Dichloropropene	ND		40		ug/L			04/01/16 14:29	
Trichloroethene	ND		40		ug/L			04/01/16 14:29	4
Trichlorofluoromethane	ND		40		ug/L			04/01/16 14:29	4
Vinyl chloride	200		40		ug/L			04/01/16 14:29	
Xylenes, Total	ND		80	26	ug/L			04/01/16 14:29	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
1,2-Dichloroethane-d4 (Surr)	106		66 - 137			-		04/01/16 14:29	
4-Bromofluorobenzene (Surr)	111		73 - 120					04/01/16 14:29	4
Dibromofluoromethane (Surr)	108		60 - 140					04/01/16 14:29	4

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Client Sample ID: MW-14R

Lab Sample ID: 480-96991-10

Matrix: Water

Date Collected: 03/23/16 09:45 Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			03/31/16 15:00	
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			03/31/16 15:00	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			03/31/16 15:00	
I,1,2-Trichloroethane	ND		2.0		ug/L			03/31/16 15:00	
I,1-Dichloroethane	ND		2.0		ug/L			03/31/16 15:00	
1,1-Dichloroethene	ND		2.0	0.58	ug/L			03/31/16 15:00	
I,2,4-Trichlorobenzene	ND		2.0	0.82				03/31/16 15:00	
,2-Dibromo-3-Chloropropane	2.3		2.0		ug/L			03/31/16 15:00	
I,2-Dibromoethane	ND		2.0		ug/L			03/31/16 15:00	
1,2-Dichlorobenzene	ND		2.0		ug/L			03/31/16 15:00	
,2-Dichloroethane	ND		2.0		ug/L			03/31/16 15:00	
1,2-Dichloropropane	ND		2.0		ug/L			03/31/16 15:00	
1,3-Dichlorobenzene	ND		2.0		ug/L			03/31/16 15:00	
1,4-Dichlorobenzene	ND		2.0		ug/L			03/31/16 15:00	
1,4-Dioxane	ND		80		ug/L ug/L			03/31/16 15:00	
2-Butanone (MEK)	ND		20		ug/L ug/L			03/31/16 15:00	
2-Hexanone	ND		10		ug/L ug/L			03/31/16 15:00	
1-Methyl-2-pentanone (MIBK)	ND		10		ug/L			03/31/16 15:00	
								03/31/16 15:00	
Acetone	6.7		20		ug/L				
Benzene	1.8	J	2.0		ug/L			03/31/16 15:00	
Bromodichloromethane	ND		2.0		ug/L			03/31/16 15:00	
Bromoform	ND		2.0		ug/L			03/31/16 15:00	
Bromomethane	ND		2.0		ug/L			03/31/16 15:00	
Carbon disulfide	ND		2.0		ug/L			03/31/16 15:00	
Carbon tetrachloride	ND		2.0		ug/L			03/31/16 15:00	
Chlorobenzene	ND		2.0		ug/L			03/31/16 15:00	
Chloroethane	ND		2.0		ug/L			03/31/16 15:00	
Chloroform	ND		2.0		ug/L			03/31/16 15:00	
Chloromethane	ND		2.0		ug/L			03/31/16 15:00	
cis-1,2-Dichloroethene	990	E	2.0	1.6	ug/L			03/31/16 15:00	
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			03/31/16 15:00	
Cyclohexane	ND		2.0	0.36	ug/L			03/31/16 15:00	
Dibromochloromethane	ND		2.0	0.64	ug/L			03/31/16 15:00	
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			03/31/16 15:00	
Ethylbenzene	29		2.0		ug/L			03/31/16 15:00	
sopropylbenzene	14		2.0		ug/L			03/31/16 15:00	
Methyl acetate	ND		5.0	2.6	ug/L			03/31/16 15:00	
Methyl tert-butyl ether	1.7	J	2.0	0.32	ug/L			03/31/16 15:00	
Methylcyclohexane	1.4	J	2.0	0.32	ug/L			03/31/16 15:00	
Methylene Chloride	ND		2.0	0.88	ug/L			03/31/16 15:00	
Styrene	ND		2.0	1.5	ug/L			03/31/16 15:00	
Tetrachloroethene	ND		2.0	0.72	ug/L			03/31/16 15:00	
Foluene	25		2.0	1.0	ug/L			03/31/16 15:00	
rans-1,2-Dichloroethene	8.3		2.0		ug/L			03/31/16 15:00	
rans-1,3-Dichloropropene	ND		2.0		ug/L			03/31/16 15:00	
Frichloroethene	ND		2.0		ug/L			03/31/16 15:00	
Trichlorofluoromethane	ND		2.0		ug/L			03/31/16 15:00	
Vinyl chloride	810	E	2.0		ug/L			03/31/16 15:00	
Xylenes, Total	200		4.0		ug/L			03/31/16 15:00	

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14

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Client Sample ID: MW-14R Lab Sample ID: 480-96991-10

Date Collected: 03/23/16 09:45
Date Received: 03/24/16 02:15
Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106	66 - 137	<u></u>	03/31/16 15:00	2
4-Bromofluorobenzene (Surr)	115	73 - 120		03/31/16 15:00	2
Dibromofluoromethane (Surr)	116	60 - 140		03/31/16 15:00	2
Toluene-d8 (Surr)	111	71 - 126		03/31/16 15:00	2

- Toluelle-uo (Sull) -	111	71 - 120					03/31/10 15.00	2
Method: 8260C - Volatile Organ Analyte	ic Compounds by GC/MS Result Qualifier	- DL RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND Qualifor			ug/L	<u> </u>	Tropulou	04/01/16 01:04	20
1,1,2,2-Tetrachloroethane	ND	20		ug/L			04/01/16 01:04	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20		ug/L			04/01/16 01:04	20
1,1,2-Trichloroethane	ND	20		ug/L			04/01/16 01:04	20
1,1-Dichloroethane	ND	20		ug/L			04/01/16 01:04	20
1,1-Dichloroethene	ND	20		ug/L			04/01/16 01:04	20
1,2,4-Trichlorobenzene	ND	20	8.2	ug/L			04/01/16 01:04	20
1,2-Dibromo-3-Chloropropane	ND	20		ug/L			04/01/16 01:04	20
1,2-Dibromoethane	ND	20		ug/L			04/01/16 01:04	20
1,2-Dichlorobenzene	ND	20		ug/L			04/01/16 01:04	20
1,2-Dichloroethane	ND	20		ug/L			04/01/16 01:04	20
1,2-Dichloropropane	ND	20		ug/L			04/01/16 01:04	20
1,3-Dichlorobenzene	ND	20		ug/L			04/01/16 01:04	20
1,4-Dichlorobenzene	ND	20		ug/L			04/01/16 01:04	20
1,4-Dioxane	ND	800		ug/L			04/01/16 01:04	20
2-Butanone (MEK)	ND	200		ug/L			04/01/16 01:04	20
2-Hexanone	ND	100		ug/L			04/01/16 01:04	20
4-Methyl-2-pentanone (MIBK)	ND	100		ug/L			04/01/16 01:04	20
Acetone	ND *	200		ug/L			04/01/16 01:04	20
Benzene	ND	20		ug/L			04/01/16 01:04	20
Bromodichloromethane	ND	20		ug/L			04/01/16 01:04	20
Bromoform	ND	20	5.2	ug/L			04/01/16 01:04	20
Bromomethane	ND *	20	14	ug/L			04/01/16 01:04	20
Carbon disulfide	ND	20	3.8	ug/L			04/01/16 01:04	20
Carbon tetrachloride	ND	20	5.4	ug/L			04/01/16 01:04	20
Chlorobenzene	ND	20	15	ug/L			04/01/16 01:04	20
Chloroethane	ND	20	6.4	ug/L			04/01/16 01:04	20
Chloroform	ND	20	6.8	ug/L			04/01/16 01:04	20
Chloromethane	ND	20	7.0	ug/L			04/01/16 01:04	20
cis-1,2-Dichloroethene	1500	20	16	ug/L			04/01/16 01:04	20
cis-1,3-Dichloropropene	ND	20	7.2	ug/L			04/01/16 01:04	20
Cyclohexane	ND	20	3.6	ug/L			04/01/16 01:04	20
Dibromochloromethane	ND	20	6.4	ug/L			04/01/16 01:04	20
Dichlorodifluoromethane	ND	20	14	ug/L			04/01/16 01:04	20
Ethylbenzene	36	20	15	ug/L			04/01/16 01:04	20
Isopropylbenzene	17 J	20	16	ug/L			04/01/16 01:04	20
Methyl acetate	ND	50		ug/L			04/01/16 01:04	20
Methyl tert-butyl ether	ND	20		ug/L			04/01/16 01:04	20
Methylcyclohexane	ND	20	3.2	ug/L			04/01/16 01:04	20
Methylene Chloride	ND	20		ug/L			04/01/16 01:04	20
Styrene	ND	20		ug/L			04/01/16 01:04	20
Tetrachloroethene	ND	20		ug/L			04/01/16 01:04	20
Toluene	31	20		ug/L			04/01/16 01:04	20

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Client Sample ID: MW-14R Lab Sample ID: 480-96991-10

Date Collected: 03/23/16 09:45
Date Received: 03/24/16 02:15
Matrix: Water

Method: 8260C - Volatile Orga	nic Compounds I	oy GC/MS -	DL (Continued)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		20	18	ug/L			04/01/16 01:04	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			04/01/16 01:04	20
Trichloroethene	ND		20	9.2	ug/L			04/01/16 01:04	20
Trichlorofluoromethane	ND		20	18	ug/L			04/01/16 01:04	20
Vinyl chloride	1100		20	18	ug/L			04/01/16 01:04	20
Xylenes, Total	250		40	13	ug/L			04/01/16 01:04	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137			-		04/01/16 01:04	20
4-Bromofluorobenzene (Surr)	112		73 - 120					04/01/16 01:04	20
Dibromofluoromethane (Surr)	108		60 - 140					04/01/16 01:04	20
Toluene-d8 (Surr)	108		71 - 126					04/01/16 01:04	20

Client Sample ID: MP-20

Lab Sample ID: 480-96991-11

Date Collected: 03/23/16 09:45

Matrix: Water

Date Received: 03/24/16 02:15

Analyte	Result Qua	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			03/31/16 15:23	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			03/31/16 15:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			03/31/16 15:23	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			03/31/16 15:23	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			03/31/16 15:23	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			03/31/16 15:23	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			03/31/16 15:23	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			03/31/16 15:23	1
1,2-Dibromoethane	ND	1.0	0.73	ug/L			03/31/16 15:23	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			03/31/16 15:23	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			03/31/16 15:23	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			03/31/16 15:23	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			03/31/16 15:23	1
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			03/31/16 15:23	1
1,4-Dioxane	ND	40	9.3	ug/L			03/31/16 15:23	1
2-Butanone (MEK)	ND	10	1.3	ug/L			03/31/16 15:23	1
2-Hexanone	ND	5.0	1.2	ug/L			03/31/16 15:23	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			03/31/16 15:23	1
Acetone	ND	10	3.0	ug/L			03/31/16 15:23	1
Benzene	ND	1.0	0.41	ug/L			03/31/16 15:23	1
Bromodichloromethane	ND	1.0	0.39	ug/L			03/31/16 15:23	1
Bromoform	ND	1.0	0.26	ug/L			03/31/16 15:23	1
Bromomethane	ND	1.0	0.69	ug/L			03/31/16 15:23	1
Carbon disulfide	ND	1.0	0.19	ug/L			03/31/16 15:23	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			03/31/16 15:23	1
Chlorobenzene	ND	1.0	0.75	ug/L			03/31/16 15:23	1
Chloroethane	ND	1.0	0.32	ug/L			03/31/16 15:23	1
Chloroform	ND	1.0	0.34	ug/L			03/31/16 15:23	1
Chloromethane	ND	1.0	0.35	ug/L			03/31/16 15:23	1
cis-1,2-Dichloroethene	4.1	1.0	0.81	ug/L			03/31/16 15:23	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			03/31/16 15:23	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-96991-11

Lab Sample ID: 480-96991-12

Matrix: Water

TestAmerica Job ID: 480-96991-1

Matrix: Water

Client Sample ID: MP-20 Date Collected: 03/23/16 09:45

Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			03/31/16 15:23	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/31/16 15:23	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/31/16 15:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/31/16 15:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/31/16 15:23	1
Methyl acetate	ND		2.5	1.3	ug/L			03/31/16 15:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/31/16 15:23	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/31/16 15:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/31/16 15:23	1
Styrene	ND		1.0	0.73	ug/L			03/31/16 15:23	1
Tetrachloroethene	0.51	J	1.0	0.36	ug/L			03/31/16 15:23	1
Toluene	ND		1.0	0.51	ug/L			03/31/16 15:23	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/31/16 15:23	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/31/16 15:23	1
Trichloroethene	0.98	J	1.0	0.46	ug/L			03/31/16 15:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/31/16 15:23	1
Vinyl chloride	1.9		1.0	0.90	ug/L			03/31/16 15:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/31/16 15:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		66 - 137					03/31/16 15:23	1
4-Bromofluorobenzene (Surr)	114		73 - 120					03/31/16 15:23	1
Dibromofluoromethane (Surr)	111		60 - 140					03/31/16 15:23	1
Toluene-d8 (Surr)	108		71 - 126					03/31/16 15:23	1

Client Sample ID: DUP-1

Date Collected: 03/22/16 00:00

Date Received: 03/24/16 02:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			03/31/16 15:46	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			03/31/16 15:46	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			03/31/16 15:46	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			03/31/16 15:46	10
1,1-Dichloroethane	ND		10	3.8	ug/L			03/31/16 15:46	10
1,1-Dichloroethene	ND		10	2.9	ug/L			03/31/16 15:46	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			03/31/16 15:46	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			03/31/16 15:46	10
1,2-Dibromoethane	ND		10	7.3	ug/L			03/31/16 15:46	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			03/31/16 15:46	10
1,2-Dichloroethane	ND		10	2.1	ug/L			03/31/16 15:46	10
1,2-Dichloropropane	ND		10	7.2	ug/L			03/31/16 15:46	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			03/31/16 15:46	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			03/31/16 15:46	10
1,4-Dioxane	ND		400	93	ug/L			03/31/16 15:46	10
2-Butanone (MEK)	ND		100	13	ug/L			03/31/16 15:46	10
2-Hexanone	ND		50	12	ug/L			03/31/16 15:46	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			03/31/16 15:46	10
Acetone	ND		100	30	ug/L			03/31/16 15:46	10

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-12

Matrix: Water

Client Sample ID: DUP-1

Date Collected: 03/22/16 00:00 Date Received: 03/24/16 02:15

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		10	4.1	ug/L			03/31/16 15:46	10
Bromodichloromethane	ND		10	3.9	ug/L			03/31/16 15:46	10
Bromoform	ND		10	2.6	ug/L			03/31/16 15:46	10
Bromomethane	ND		10	6.9	ug/L			03/31/16 15:46	10
Carbon disulfide	ND		10	1.9	ug/L			03/31/16 15:46	10
Carbon tetrachloride	ND		10	2.7	ug/L			03/31/16 15:46	10
Chlorobenzene	ND		10	7.5	ug/L			03/31/16 15:46	10
Chloroethane	ND		10	3.2	ug/L			03/31/16 15:46	10
Chloroform	ND		10	3.4	ug/L			03/31/16 15:46	10
Chloromethane	ND		10	3.5	ug/L			03/31/16 15:46	10
cis-1,2-Dichloroethene	2500	E	10	8.1	ug/L			03/31/16 15:46	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			03/31/16 15:46	10
Cyclohexane	ND		10	1.8	ug/L			03/31/16 15:46	10
Dibromochloromethane	ND		10	3.2	ug/L			03/31/16 15:46	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			03/31/16 15:46	10
Ethylbenzene	ND		10	7.4	ug/L			03/31/16 15:46	10
Isopropylbenzene	ND		10	7.9	ug/L			03/31/16 15:46	10
Methyl acetate	ND		25	13	ug/L			03/31/16 15:46	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			03/31/16 15:46	10
Methylcyclohexane	ND		10	1.6	ug/L			03/31/16 15:46	10
Methylene Chloride	ND		10	4.4	ug/L			03/31/16 15:46	10
Styrene	ND		10	7.3	ug/L			03/31/16 15:46	10
Tetrachloroethene	1600	E	10	3.6	ug/L			03/31/16 15:46	10
Toluene	ND		10	5.1	ug/L			03/31/16 15:46	10
trans-1,2-Dichloroethene	13		10	9.0	ug/L			03/31/16 15:46	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			03/31/16 15:46	10
Trichloroethene	680		10	4.6	ug/L			03/31/16 15:46	10
Trichlorofluoromethane	ND		10	8.8	ug/L			03/31/16 15:46	10
Vinyl chloride	ND		10	9.0	ug/L			03/31/16 15:46	10
Xylenes, Total	ND		20	6.6	ug/L			03/31/16 15:46	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137			-		03/31/16 15:46	10
4-Bromofluorobenzene (Surr)	111		73 - 120					03/31/16 15:46	10

Analyte	Result Qualit	fier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	50	41	ug/L			04/01/16 01:28	50
1,1,2,2-Tetrachloroethane	ND	50	11	ug/L			04/01/16 01:28	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	16	ug/L			04/01/16 01:28	50
1,1,2-Trichloroethane	ND	50	12	ug/L			04/01/16 01:28	50
1,1-Dichloroethane	ND	50	19	ug/L			04/01/16 01:28	50
1,1-Dichloroethene	ND	50	15	ug/L			04/01/16 01:28	50
1,2,4-Trichlorobenzene	ND	50	21	ug/L			04/01/16 01:28	50
1,2-Dibromo-3-Chloropropane	ND	50	20	ug/L			04/01/16 01:28	50
1,2-Dibromoethane	ND	50	37	ug/L			04/01/16 01:28	50
1,2-Dichlorobenzene	ND	50	40	ug/L			04/01/16 01:28	50
1,2-Dichloroethane	ND	50	11	ug/L			04/01/16 01:28	50

60 - 140

71 - 126

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03/31/16 15:46

03/31/16 15:46

Client: ARCADIS U.S. Inc

Date Received: 03/24/16 02:15

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Client Sample ID: DUP-1
Date Collected: 03/22/16 00:00

Lab Sample ID: 480-96991-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,2-Dichloropropane	ND		50	36	ug/L			04/01/16 01:28	5
1,3-Dichlorobenzene	ND		50	39	ug/L			04/01/16 01:28	50
1,4-Dichlorobenzene	ND		50	42	ug/L			04/01/16 01:28	50
1,4-Dioxane	ND		2000	470	ug/L			04/01/16 01:28	50
2-Butanone (MEK)	ND		500	66	ug/L			04/01/16 01:28	50
2-Hexanone	ND		250	62	ug/L			04/01/16 01:28	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			04/01/16 01:28	50
Acetone	ND	*	500	150	ug/L			04/01/16 01:28	50
Benzene	ND		50	21	ug/L			04/01/16 01:28	50
Bromodichloromethane	ND		50	20	ug/L			04/01/16 01:28	50
Bromoform	ND		50	13	ug/L			04/01/16 01:28	50
Bromomethane	ND	*	50	35	ug/L			04/01/16 01:28	50
Carbon disulfide	ND		50	9.5	ug/L			04/01/16 01:28	50
Carbon tetrachloride	ND		50	14	ug/L			04/01/16 01:28	50
Chlorobenzene	ND		50	38	ug/L			04/01/16 01:28	50
Chloroethane	ND		50	16	ug/L			04/01/16 01:28	50
Chloroform	ND		50	17	ug/L			04/01/16 01:28	50
Chloromethane	ND		50	18	ug/L			04/01/16 01:28	50
cis-1,2-Dichloroethene	3300		50	41	ug/L			04/01/16 01:28	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			04/01/16 01:28	50
Cyclohexane	ND		50	9.0	ug/L			04/01/16 01:28	50
Dibromochloromethane	ND		50	16	ug/L			04/01/16 01:28	50
Dichlorodifluoromethane	ND		50	34	ug/L			04/01/16 01:28	50
Ethylbenzene	ND		50	37	ug/L			04/01/16 01:28	50
Isopropylbenzene	ND		50	40	ug/L			04/01/16 01:28	50
Methyl acetate	ND		130	65	ug/L			04/01/16 01:28	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			04/01/16 01:28	50
Methylcyclohexane	ND		50	8.0	ug/L			04/01/16 01:28	50
Methylene Chloride	ND		50	22	ug/L			04/01/16 01:28	50
Styrene	ND		50	37	ug/L			04/01/16 01:28	50
Tetrachloroethene	2200		50	18	ug/L			04/01/16 01:28	50
Toluene	ND		50		ug/L			04/01/16 01:28	50
trans-1,2-Dichloroethene	ND		50		ug/L			04/01/16 01:28	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			04/01/16 01:28	50
Trichloroethene	900		50	23	ug/L			04/01/16 01:28	50
Trichlorofluoromethane	ND		50		ug/L			04/01/16 01:28	50
Vinyl chloride	ND		50		ug/L			04/01/16 01:28	50
Xylenes, Total	ND		100	33	ug/L			04/01/16 01:28	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137			-		04/01/16 01:28	50
								04/04/4004 ==	_

TestAmerica Buffalo

04/01/16 01:28

04/01/16 01:28

04/01/16 01:28

73 - 120

60 - 140

71 - 126

112

109

108

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-96991-13

TestAmerica Job ID: 480-96991-1

Client Sample ID: TRIP BLANK

Date Received: 03/24/16 02:15

Date Collected: 03/22/16 00:00

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
I,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/31/16 16:09	
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/31/16 16:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/31/16 16:09	
I,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/31/16 16:09	
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/31/16 16:09	
I,1-Dichloroethene	ND		1.0	0.29	ug/L			03/31/16 16:09	
I,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/31/16 16:09	
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/31/16 16:09	
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/31/16 16:09	
I,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/31/16 16:09	
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/31/16 16:09	
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/31/16 16:09	
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/31/16 16:09	
I,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/31/16 16:09	
I,4-Dioxane	ND		40		ug/L			03/31/16 16:09	
2-Butanone (MEK)	ND		10	1.3	ug/L			03/31/16 16:09	
2-Hexanone	ND		5.0	1.2	ug/L			03/31/16 16:09	
I-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/31/16 16:09	
Acetone	ND		10	3.0	ug/L			03/31/16 16:09	
Benzene	ND		1.0	0.41	ug/L			03/31/16 16:09	
Bromodichloromethane	ND		1.0	0.39	ug/L			03/31/16 16:09	
Bromoform	ND		1.0	0.26	ug/L			03/31/16 16:09	
Bromomethane	ND		1.0	0.69	ug/L			03/31/16 16:09	
Carbon disulfide	ND		1.0	0.19				03/31/16 16:09	
Carbon tetrachloride	ND		1.0	0.27				03/31/16 16:09	
Chlorobenzene	ND		1.0	0.75	-			03/31/16 16:09	
Chloroethane	ND		1.0	0.32	-			03/31/16 16:09	
Chloroform	ND		1.0	0.34				03/31/16 16:09	
Chloromethane	ND		1.0	0.35	-			03/31/16 16:09	
cis-1,2-Dichloroethene	0.96	J	1.0	0.81				03/31/16 16:09	
cis-1,3-Dichloropropene	ND		1.0	0.36				03/31/16 16:09	
Cyclohexane	ND		1.0	0.18				03/31/16 16:09	
Dibromochloromethane	ND		1.0	0.32	•			03/31/16 16:09	
Dichlorodifluoromethane	ND		1.0	0.68				03/31/16 16:09	
Ethylbenzene	ND		1.0	0.74	_			03/31/16 16:09	
sopropylbenzene	ND		1.0	0.79	_			03/31/16 16:09	
Methyl acetate	ND		2.5		ug/L			03/31/16 16:09	
Methyl tert-butyl ether	ND		1.0	0.16				03/31/16 16:09	
Methylcyclohexane	ND		1.0		ug/L			03/31/16 16:09	
Methylene Chloride	ND		1.0		ug/L			03/31/16 16:09	
Styrene	ND		1.0	0.73	_			03/31/16 16:09	
Tetrachloroethene	0.52	1	1.0	0.36	_			03/31/16 16:09	
Foluene	ND		1.0		ug/L			03/31/16 16:09	
rans-1,2-Dichloroethene	ND ND		1.0	0.90	_			03/31/16 16:09	
rans-1,3-Dichloropropene	ND		1.0	0.37	_			03/31/16 16:09	
Frichloroethene	ND ND		1.0	0.37				03/31/16 16:09	
Trichloroethene	ND ND		1.0		ug/L ug/L			03/31/16 16:09	
	ND ND				_				
/inyl chloride Kylenes, Total	ND ND		1.0		ug/L ug/L			03/31/16 16:09 03/31/16 16:09	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Client Sample ID: TRIP BLANK Lab Sample ID: 480-96991-13

Date Collected: 03/22/16 00:00 Matrix: Water Date Received: 03/24/16 02:15

Surrogate	%Recovery Quality	fier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104	66 - 137		03/31/16 16:09	1
4-Bromofluorobenzene (Surr)	111	73 - 120		03/31/16 16:09	1
Dibromofluoromethane (Surr)	110	60 - 140		03/31/16 16:09	1
Toluene-d8 (Surr)	107	71 - 126		03/31/16 16:09	1

Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

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

Matrix: Water Prep Type: Total/NA

				Percent Su	rrogate Recove	ry (Acceptance Limits
		12DCE	BFB	DBFM	TOL	
Lab Sample ID	Client Sample ID	(66-137)	(73-120)	(60-140)	(71-126)	
80-96991-1	MW-23S	105	108	112	107	
80-96991-1 - DL	MW-23S	104	110	108	107	
80-96991-1 MS	MW-23S	104	113	108	110	
80-96991-1 MSD	MW-23S	101	112	107	109	
80-96991-2	MW-23D	103	109	109	108	
180-96991-2 - DL	MW-23D	103	112	108	107	
480-96991-2 MS	MW-23D	99	113	104	109	
180-96991-2 MS - DL	MW-23D	102	113	107	109	
480-96991-2 MSD	MW-23D	104	112	108	109	
480-96991-2 MSD - DL	MW-23D	102	112	109	110	
180-96991-3	MW-1DD	103	109	110	107	
180-96991-3 - DL	MW-1DD	102	111	105	107	
180-96991-4	MW-1D	103	109	108	106	
180-96991-4 - DL	MW-1D	106	112	111	106	
180-96991-5	IW-01S	102	108	105	104	
180-96991-5 - DL	IW-01S	102	113	106	106	
80-96991-6	MW-1	105	110	107	108	
180-96991-7	GM-9	106	111	110	107	
80-96991-8	MW-13	105	112	106	108	
80-96991-9	MW-9	107	112	110	108	
180-96991-9 - DL	MW-9	106	111	108	109	
180-96991-10	MW-14R	106	115	116	111	
80-96991-10 - DL	MW-14R	105	112	108	108	
180-96991-11	MP-20	108	114	111	108	
30-96991-12	DUP-1	106	111	111	106	
180-96991-12 - DL	DUP-1	105	112	109	108	
480-96991-13	TRIP BLANK	104	111	110	107	
_CS 480-293392/5	Lab Control Sample	102	113	106	110	
CS 480-293565/5	Lab Control Sample	101	114	107	108	
CS 480-293608/5	Lab Control Sample	103	112	110	109	
MB 480-293392/7	Method Blank	104	113	109	107	
MB 480-293565/7	Method Blank	103	112	105	107	
MB 480-293608/7	Method Blank	104	112	106	108	

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

TestAmerica Buffalo

2

4

5

7

9

11

46

14

QC Sample Results

RL

1.0

1.0

MDL Unit

0.82 ug/L

0.21 ug/L

D

Prepared

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

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

MB MB Result Qualifier

ND

ND

ND

ND

ND

ND

ND

ND

ND

ND

ND

ND

ND

ND

ND

Lab Sample ID: MB 480-293392/7

Matrix: Water

1,1,1-Trichloroethane

Isopropylbenzene

Methyl tert-butyl ether

Methylcyclohexane

Methylene Chloride

Tetrachloroethene

Trichloroethene

Vinyl chloride

trans-1,2-Dichloroethene

Trichlorofluoromethane

trans-1,3-Dichloropropene

Styrene

Toluene

Methyl acetate

1,1,2,2-Tetrachloroethane

Analyte

Analysis Batch: 293392

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

Analyzed

03/31/16 10:43

03/31/16 10:43

Dil Fac

1,1,2,2 1000000000000			o.= . ug.=	00/01/10 10/10	•
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31 ug/L	03/31/16 10:43	1
1,1,2-Trichloroethane	ND	1.0	0.23 ug/L	03/31/16 10:43	1
1,1-Dichloroethane	ND	1.0	0.38 ug/L	03/31/16 10:43	1
1,1-Dichloroethene	ND	1.0	0.29 ug/L	03/31/16 10:43	1
1,2,4-Trichlorobenzene	ND	1.0	0.41 ug/L	03/31/16 10:43	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39 ug/L	03/31/16 10:43	1
1,2-Dibromoethane	ND	1.0	0.73 ug/L	03/31/16 10:43	1
1,2-Dichlorobenzene	ND	1.0	0.79 ug/L	03/31/16 10:43	1
1,2-Dichloroethane	ND	1.0	0.21 ug/L	03/31/16 10:43	1
1,2-Dichloropropane	ND	1.0	0.72 ug/L	03/31/16 10:43	1
1,3-Dichlorobenzene	ND	1.0	0.78 ug/L	03/31/16 10:43	1
1,4-Dichlorobenzene	ND	1.0	0.84 ug/L	03/31/16 10:43	1
1,4-Dioxane	ND	40	9.3 ug/L	03/31/16 10:43	1
2-Butanone (MEK)	ND	10	1.3 ug/L	03/31/16 10:43	1
2-Hexanone	ND	5.0	1.2 ug/L	03/31/16 10:43	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1 ug/L	03/31/16 10:43	1
Acetone	ND	10	3.0 ug/L	03/31/16 10:43	1
Benzene	ND	1.0	0.41 ug/L	03/31/16 10:43	1
Bromodichloromethane	ND	1.0	0.39 ug/L	03/31/16 10:43	1
Bromoform	ND	1.0	0.26 ug/L	03/31/16 10:43	1
Bromomethane	ND	1.0	0.69 ug/L	03/31/16 10:43	1
Carbon disulfide	ND	1.0	0.19 ug/L	03/31/16 10:43	1
Carbon tetrachloride	ND	1.0	0.27 ug/L	03/31/16 10:43	1
Chlorobenzene	ND	1.0	0.75 ug/L	03/31/16 10:43	1
Chloroethane	ND	1.0	0.32 ug/L	03/31/16 10:43	1
Chloroform	ND	1.0	0.34 ug/L	03/31/16 10:43	1
Chloromethane	ND	1.0	0.35 ug/L	03/31/16 10:43	1
cis-1,2-Dichloroethene	ND	1.0	0.81 ug/L	03/31/16 10:43	1
cis-1,3-Dichloropropene	ND	1.0	0.36 ug/L	03/31/16 10:43	1
Cyclohexane	ND	1.0	0.18 ug/L	03/31/16 10:43	1
Dibromochloromethane	ND	1.0	0.32 ug/L	03/31/16 10:43	1
Dichlorodifluoromethane	ND	1.0	0.68 ug/L	03/31/16 10:43	1
Ethylbenzene	ND	1.0	0.74 ug/L	03/31/16 10:43	1

TestAmerica Buffalo

4/5/2016

03/31/16 10:43

03/31/16 10:43

03/31/16 10:43

03/31/16 10:43

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03/31/16 10:43

03/31/16 10:43

03/31/16 10:43

03/31/16 10:43

03/31/16 10:43

03/31/16 10:43

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1.0

2.5

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

0.79 ug/L

1.3 ug/L

0.16 ug/L

0.16 ug/L

0.44 ug/L

0.73 ug/L

0.36 ug/L

0.90 ug/L

0.37 ug/L

0.46 ug/L

0.88 ug/L

0.90 ug/L

0.51 ug/L

QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

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

Result Qualifier

Lab Sample ID: MB 480-293392/7 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 293392

	Prep Type: Total/	NA
MB MB		

D

MDL Unit

Prepared Analyte Analyzed Xylenes, Total ND 2.0 03/31/16 10:43 0.66 ug/L MB MB

RL

Surrogate	%Recovery	Qualifier L	.imits	Prepa	red	Analyzed	Dil Fac	:
1,2-Dichloroethane-d4 (Surr)	104	6	6 - 137			03/31/16 10:43	1	ĺ
4-Bromofluorobenzene (Surr)	113	7	3 - 120			03/31/16 10:43	1	l
Dibromofluoromethane (Surr)	109	6	0 - 140			03/31/16 10:43	1	1
Toluene-d8 (Surr)	107	7	1 - 126			03/31/16 10:43	1	1

Lab Sample ID: LCS 480-293392/5 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 293392						
	Spike		LCS			%Rec.
Analyte	Added			nit D	%Rec	Limits
1,1,1-Trichloroethane	25.0	23.3	ug		93	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.5	ug	/L	102	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	24.0	ug	/L	96	52 ₋ 148
1,1,2-Trichloroethane	25.0	25.2	ug	/L	101	76 ₋ 122
1,1-Dichloroethane	25.0	21.9	ug	/L	88	71 _ 129
1,1-Dichloroethene	25.0	22.6	ug	/L	90	58 - 121
1,2,4-Trichlorobenzene	25.0	24.4	ug	/L	98	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.0	ug	/L	100	56 ₋ 134
1,2-Dibromoethane	25.0	26.9	ug	/L	107	77 - 120
1,2-Dichlorobenzene	25.0	24.3	ug	/L	97	80 - 124
1,2-Dichloroethane	25.0	20.7	ug	/L	83	75 - 127
1,2-Dichloropropane	25.0	24.1	ug	/L	97	76 - 120
1,3-Dichlorobenzene	25.0	23.4	ug	/L	94	77 - 120
1,4-Dichlorobenzene	25.0	22.7	ug	/L	91	75 ₋ 120
1,4-Dioxane	500	498	ug	/L	100	50 ₋ 174
2-Butanone (MEK)	125	125	ug	/L	100	57 - 140
2-Hexanone	125	116	ug	/L	93	65 _ 127
4-Methyl-2-pentanone (MIBK)	125	119	ug	/L	95	71 ₋ 125
Acetone	125	136	ug	/L	109	56 - 142
Benzene	25.0	22.7	ug	/L	91	71 _ 124
Bromodichloromethane	25.0	25.8	ug	/L	103	80 - 122
Bromoform	25.0	26.8	ug	/L	107	52 - 132
Bromomethane	25.0	19.1	ug	/L	76	55 - 144
Carbon disulfide	25.0	20.6	ug	/L	82	59 ₋ 134
Carbon tetrachloride	25.0	31.4	ug	/L	126	72 ₋ 134
Chlorobenzene	25.0	24.4	ug	/L	98	72 - 120
Chloroethane	25.0	19.8	ug	/L	79	69 _ 136
Chloroform	25.0	21.6	ug	/L	87	73 - 127
Chloromethane	25.0	19.1	ug	/L	76	68 - 124
cis-1,2-Dichloroethene	25.0	23.0	ug	/L	92	74 ₋ 124
cis-1,3-Dichloropropene	25.0	26.5	ug	/L	106	74 ₋ 124
Cyclohexane	25.0	21.6	ug	/L	87	59 ₋ 135
Dibromochloromethane	25.0	26.3	ug	/L	105	75 ₋ 125
Dichlorodifluoromethane	25.0	19.1	ug	/L	76	59 - 135

TestAmerica Buffalo

Dil Fac

TestAmerica Job ID: 480-96991-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 480-293392/5

Matrix: Water

Analysis Batch: 293392

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	25.0	23.2		ug/L		93	77 - 123	
Isopropylbenzene	25.0	23.4		ug/L		93	77 - 122	
Methyl acetate	125	115		ug/L		92	74 ₋ 133	
Methyl tert-butyl ether	25.0	22.6		ug/L		91	64 - 127	
Methylcyclohexane	25.0	23.0		ug/L		92	61 ₋ 138	
Methylene Chloride	25.0	23.5		ug/L		94	57 - 132	
Styrene	25.0	24.8		ug/L		99	70 - 130	
Tetrachloroethene	25.0	23.6		ug/L		94	74 - 122	
Toluene	25.0	23.6		ug/L		94	80 - 122	
trans-1,2-Dichloroethene	25.0	22.9		ug/L		92	73 - 127	
trans-1,3-Dichloropropene	25.0	28.2		ug/L		113	72 ₋ 123	
Trichloroethene	25.0	23.0		ug/L		92	74 ₋ 123	
Trichlorofluoromethane	25.0	23.0		ug/L		92	62 - 152	
Vinyl chloride	25.0	18.3		ug/L		73	65 - 133	
Xylenes, Total	50.0	48.0		ug/L		96	76 - 122	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		66 - 137
4-Bromofluorobenzene (Surr)	113		73 - 120
Dibromofluoromethane (Surr)	106		60 - 140
Toluene-d8 (Surr)	110		71 - 126

Lab Sample ID: 480-96991-2 MS

Matrix: Water

Analysis Batch: 293392										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	ND		200	195		ug/L		97	73 - 126	
1,1,2,2-Tetrachloroethane	ND		200	208		ug/L		104	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		200	177		ug/L		88	52 - 148	
ne										
1,1,2-Trichloroethane	ND		200	208		ug/L		104	76 - 122	
1,1-Dichloroethane	ND		200	176		ug/L		88	71 - 129	
1,1-Dichloroethene	ND		200	182		ug/L		91	58 - 121	
1,2,4-Trichlorobenzene	ND		200	197		ug/L		98	70 - 122	
1,2-Dibromo-3-Chloropropane	ND		200	198		ug/L		99	56 - 134	
1,2-Dibromoethane	ND		200	223		ug/L		112	77 - 120	
1,2-Dichlorobenzene	ND		200	196		ug/L		98	80 - 124	
1,2-Dichloroethane	ND		200	167		ug/L		84	75 - 127	
1,2-Dichloropropane	ND		200	198		ug/L		99	76 - 120	
1,3-Dichlorobenzene	ND		200	189		ug/L		95	77 - 120	
1,4-Dichlorobenzene	ND		200	184		ug/L		92	75 - 120	
1,4-Dioxane	ND		4000	4820		ug/L		121	50 - 174	
2-Butanone (MEK)	ND		1000	994		ug/L		99	57 - 140	
2-Hexanone	ND		1000	954		ug/L		95	65 - 127	
4-Methyl-2-pentanone (MIBK)	ND		1000	952		ug/L		95	71 _ 125	
Acetone	ND		1000	1100		ug/L		110	56 - 142	
Benzene	ND		200	187		ug/L		94	71 - 124	

TestAmerica Buffalo

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4/5/2016

Client Sample ID: MW-23D

Prep Type: Total/NA

Spike

MS MS

TestAmerica Job ID: 480-96991-1

%Rec.

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Sample Sample

Lab Sample ID: 480-96991-2 MS

Matrix: Water

Analysis Batch: 293392

Client Sample ID: MW-23D

Prep Type: Total/NA

	Gampic	Campic	Opino	1410	1010				/01 100 .	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Bromodichloromethane	ND		200	204		ug/L		102	80 - 122	
Bromoform	ND		200	211		ug/L		106	52 - 132	
Bromomethane	ND		200	156		ug/L		78	55 - 144	
Carbon disulfide	ND		200	165		ug/L		83	59 - 134	
Carbon tetrachloride	ND		200	255		ug/L		127	72 _ 134	
Chlorobenzene	ND		200	201		ug/L		100	72 - 120	
Chloroethane	ND		200	165		ug/L		82	69 - 136	
Chloroform	ND		200	175		ug/L		87	73 _ 127	
Chloromethane	ND		200	161		ug/L		80	68 - 124	
cis-1,2-Dichloroethene	1000	E	200	1060	E 4	ug/L		21	74 - 124	
cis-1,3-Dichloropropene	ND		200	209		ug/L		104	74 - 124	
Cyclohexane	ND		200	170		ug/L		85	59 ₋ 135	
Dibromochloromethane	ND		200	213		ug/L		106	75 - 125	
Dichlorodifluoromethane	ND		200	151		ug/L		76	59 ₋ 135	
Ethylbenzene	ND		200	191		ug/L		96	77 _ 123	
Isopropylbenzene	ND		200	189		ug/L		95	77 - 122	
Methyl acetate	ND		1000	927		ug/L		93	74 - 133	
Methyl tert-butyl ether	ND		200	178		ug/L		89	64 - 127	
Methylcyclohexane	ND		200	180		ug/L		90	61 - 138	
Methylene Chloride	ND		200	190		ug/L		95	57 _ 132	
Styrene	ND		200	202		ug/L		101	70 - 130	
Tetrachloroethene	700	F1	200	805	E F1	ug/L		54	74 - 122	
Toluene	ND		200	193		ug/L		97	80 - 122	
trans-1,2-Dichloroethene	ND		200	198		ug/L		99	73 _ 127	
trans-1,3-Dichloropropene	ND		200	221		ug/L		111	72 _ 123	
Trichloroethene	300	F1	200	447	F1	ug/L		71	74 - 123	
Trichlorofluoromethane	ND		200	191		ug/L		95	62 _ 152	
Vinyl chloride	ND		200	159		ug/L		79	65 _ 133	
Xylenes, Total	ND		400	392		ug/L		98	76 - 122	

MS MS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
4-Bromofluorobenzene (Surr)	113		73 - 120
Dibromofluoromethane (Surr)	104		60 - 140
Toluene-d8 (Surr)	109		71 - 126

Lab Sample ID: 480-96991-2 MSD

Matrix: Water

Analysis Batch: 293392

Client Sample ID: M	W-23D
Prep Type: To	tal/NA

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	ND		200	201		ug/L		100	73 - 126	3	15
1,1,2,2-Tetrachloroethane	ND		200	210		ug/L		105	70 - 126	1	15
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		200	187		ug/L		94	52 - 148	6	20
ne											
1,1,2-Trichloroethane	ND		200	202		ug/L		101	76 - 122	3	15
1,1-Dichloroethane	ND		200	180		ug/L		90	71 - 129	2	20
1,1-Dichloroethene	ND		200	185		ug/L		92	58 - 121	2	16

TestAmerica Buffalo

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TestAmerica Job ID: 480-96991-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: 480-96991-2 MSD

Matrix: Water

Analysis Batch: 293392

Client Sample ID: MW-23D

Prep Type: Total/NA	

	•	Sample	Spike	MSD					%Rec.		RPD
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2,4-Trichlorobenzene	ND		200	200		ug/L		100	70 - 122	1	20
1,2-Dibromo-3-Chloropropane	ND		200	207		ug/L		104	56 - 134	4	15
1,2-Dibromoethane	ND		200	215		ug/L		107	77 - 120	4	15
1,2-Dichlorobenzene	ND		200	194		ug/L		97	80 - 124	1	20
1,2-Dichloroethane	ND		200	172		ug/L		86	75 - 127	3	20
1,2-Dichloropropane	ND		200	197		ug/L		99	76 - 120	0	20
1,3-Dichlorobenzene	ND		200	185		ug/L		92	77 - 120	2	20
1,4-Dichlorobenzene	ND		200	179		ug/L		90	75 - 120	2	20
1,4-Dioxane	ND		4000	4820		ug/L		120	50 - 174	0	20
2-Butanone (MEK)	ND		1000	1070		ug/L		107	57 - 140	8	20
2-Hexanone	ND		1000	962		ug/L		96	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	ND		1000	971		ug/L		97	71 - 125	2	35
Acetone	ND		1000	1190		ug/L		119	56 - 142	8	15
Benzene	ND		200	189		ug/L		94	71 - 124	1	13
Bromodichloromethane	ND		200	210		ug/L		105	80 - 122	3	15
Bromoform	ND		200	210		ug/L		105	52 - 132	1	15
Bromomethane	ND		200	154		ug/L		77	55 ₋ 144	1	15
Carbon disulfide	ND		200	173		ug/L		86	59 - 134	4	15
Carbon tetrachloride	ND		200	259		ug/L		130	72 - 134	2	15
Chlorobenzene	ND		200	193		ug/L		97	72 - 120	4	25
Chloroethane	ND		200	165		ug/L		82	69 - 136	0	15
Chloroform	ND		200	179		ug/L		90	73 - 127	3	20
Chloromethane	ND		200	156		ug/L		78	68 - 124	3	15
cis-1,2-Dichloroethene	1000	E	200	1100	E 4	ug/L		39	74 - 124	3	15
cis-1,3-Dichloropropene	ND		200	206		ug/L		103	74 - 124	1	15
Cyclohexane	ND		200	171		ug/L		86	59 - 135	1	20
Dibromochloromethane	ND		200	212		ug/L		106	75 ₋ 125	0	15
Dichlorodifluoromethane	ND		200	155		ug/L		77	59 ₋ 135	2	20
Ethylbenzene	ND		200	185		ug/L		93	77 ₋ 123	3	15
Isopropylbenzene	ND		200	185		ug/L		93	77 ₋ 122	2	20
Methyl acetate	ND		1000	989		ug/L		99	74 - 133	6	20
Methyl tert-butyl ether	ND		200	187		ug/L		94	64 - 127	5	37
Methylcyclohexane	ND		200	181		ug/L		90	61 - 138	1	20
Methylene Chloride	ND		200	197		ug/L		98	57 - 132	3	15
Styrene	ND		200	195		ug/L		97	70 - 130	3	20
Tetrachloroethene	700	F1	200	775	F1	ug/L		39	74 - 122	4	20
Toluene	ND		200	186		ug/L ug/L		93	80 - 122	4	15
trans-1,2-Dichloroethene	ND		200	200		ug/L ug/L		100	73 - 127	1	20
trans-1,3-Dichloropropene	ND		200	214		ug/L ug/L		107	72 - 123	3	15
Trichloroethene	300	F1	200	448	F1	ug/L ug/L		72	74 - 123		16
Trichlorofluoromethane	ND		200	191		ug/L ug/L		95	62 - 152	0	20
Vinyl chloride	ND ND		200	157		ug/L ug/L		95 79	65 ₋ 133		15
Xylenes, Total										1	
AVIENES, TOTAL	ND		400	385		ug/L		96	76 - 122	2	16

		c	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		66 - 137
4 Duamanthaman (0)	110		70 400

1, 73 - 120 4-Bromofluorobenzene (Surr) 112 108 60 - 140 Dibromofluoromethane (Surr)

TestAmerica Buffalo

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4/5/2016

QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

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

Lab Sample ID: 480-96991-2 MSD

Lab Sample ID: MB 480-293565/7

Matrix: Water

Matrix: Water

Analysis Batch: 293392

MSD MSD

Surrogate %Recovery Qualifier Limits Toluene-d8 (Surr) 71 - 126 109

Client Sample ID: MW-23D **Prep Type: Total/NA**

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 293565

мв мв

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/31/16 21:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/31/16 21:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/31/16 21:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/31/16 21:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/31/16 21:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/31/16 21:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/31/16 21:25	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/31/16 21:25	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/31/16 21:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/31/16 21:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/31/16 21:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/31/16 21:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/31/16 21:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/31/16 21:25	1
1,4-Dioxane	ND		40	9.3	ug/L			03/31/16 21:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/31/16 21:25	1
2-Hexanone	ND		5.0	1.2	ug/L			03/31/16 21:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/31/16 21:25	1
Acetone	ND		10	3.0	ug/L			03/31/16 21:25	1
Benzene	ND		1.0	0.41	ug/L			03/31/16 21:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/31/16 21:25	1
Bromoform	ND		1.0	0.26	ug/L			03/31/16 21:25	1
Bromomethane	ND		1.0	0.69	ug/L			03/31/16 21:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/31/16 21:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/31/16 21:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/31/16 21:25	1
Chloroethane	ND		1.0	0.32	ug/L			03/31/16 21:25	1
Chloroform	ND		1.0	0.34	ug/L			03/31/16 21:25	1
Chloromethane	ND		1.0	0.35	ug/L			03/31/16 21:25	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/31/16 21:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/31/16 21:25	1
Cyclohexane	ND		1.0	0.18	ug/L			03/31/16 21:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/31/16 21:25	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/31/16 21:25	1
Ethylbenzene	ND		1.0		ug/L			03/31/16 21:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/31/16 21:25	1
Methyl acetate	ND		2.5	1.3	ug/L			03/31/16 21:25	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/31/16 21:25	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/31/16 21:25	1
Methylene Chloride	ND		1.0		ug/L			03/31/16 21:25	1
Styrene	ND		1.0		ug/L			03/31/16 21:25	1

TestAmerica Buffalo

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QC Sample Results

Client: ARCADIS U.S. Inc

Analysis Batch: 293565

Matrix: Water

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: MB 480-293565/7

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

MB MB

TestAmerica Job ID: 480-96991-1

Client Sample ID: Method Blank

Prep Type: Total/NA

Prepared	Analyzed	Dil Fac
	03/31/16 21:25	1

Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.36	ug/L			03/31/16 21:25	1
Toluene	ND		1.0	0.51	ug/L			03/31/16 21:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/31/16 21:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/31/16 21:25	1
Trichloroethene	ND		1.0	0.46	ug/L			03/31/16 21:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/31/16 21:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/31/16 21:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/31/16 21:25	1

'e	%Recovery Qualifier	,			
	70Necovery Qualifier	r Limits	Prepared	Analyzed	Dil Fac
oroethane-d4 (Surr)	103	66 - 137		3/31/16 21:25	1
fluorobenzene (Surr)	112	73 - 120	C	3/31/16 21:25	1
fluoromethane (Surr)	105	60 - 140	C	3/31/16 21:25	1
d8 (Surr)	107	71 - 126	6	3/31/16 21:25	1
1	loroethane-d4 (Surr) fluorobenzene (Surr) fluoromethane (Surr) -d8 (Surr)	fluorobenzene (Surr) 112 fluoromethane (Surr) 105	fluorobenzene (Surr) 112 73 - 120 fluoromethane (Surr) 105 60 - 140	fluorobenzene (Surr) 112 73 - 120 0 fluoromethane (Surr) 105 60 - 140 0	fluorobenzene (Surr) 112 73 - 120 03/31/16 21:25 fluoromethane (Surr) 105 60 - 140 03/31/16 21:25

Lab Sample ID: LCS 480-293565/5 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

<u> </u>		Unit D		LCS	Spike	
		Unit D			- p	
1,1-Trichloroethane 25.0 25.7 ug/L 103 73 - 126			Qualifier	Result	Added	Analyte
		ug/L		25.7	25.0	1,1,1-Trichloroethane
1,2,2-Tetrachloroethane 25.0 26.9 ug/L 108 70 - 126	108	ug/L		26.9	25.0	1,1,2,2-Tetrachloroethane
,1,2-Trichloro-1,2,2-trifluoroetha 25.0 24.3 ug/L 97 52 - 148	97	ug/L		24.3	25.0	1,1,2-Trichloro-1,2,2-trifluoroetha
						ne
•		ug/L				1,1,2-Trichloroethane
· ·		ug/L				1,1-Dichloroethane
1-Dichloroethene 25.0 23.6 ug/L 94 58 - 121	94	ug/L		23.6	25.0	1,1-Dichloroethene
2,4-Trichlorobenzene 25.0 29.0 ug/L 116 70 - 122	116	ug/L		29.0	25.0	1,2,4-Trichlorobenzene
2-Dibromo-3-Chloropropane 25.0 27.2 ug/L 109 56 - 134	109	ug/L		27.2	25.0	1,2-Dibromo-3-Chloropropane
2-Dibromoethane 25.0 28.8 ug/L 115 77 - 120	115	ug/L		28.8	25.0	1,2-Dibromoethane
2-Dichlorobenzene 25.0 26.0 ug/L 104 80 - 124	104	ug/L		26.0	25.0	1,2-Dichlorobenzene
2-Dichloroethane 25.0 22.7 ug/L 91 75 - 127	91	ug/L		22.7	25.0	1,2-Dichloroethane
2-Dichloropropane 25.0 26.4 ug/L 106 76 - 120	106	ug/L		26.4	25.0	1,2-Dichloropropane
,3-Dichlorobenzene 25.0 24.8 ug/L 99 77 - 120	99	ug/L		24.8	25.0	1,3-Dichlorobenzene
4-Dichlorobenzene 25.0 24.2 ug/L 97 75 - 120	97	ug/L		24.2	25.0	1,4-Dichlorobenzene
4-Dioxane 500 798 ug/L 160 50 - 174	160	ug/L		798	500	1,4-Dioxane
-Butanone (MEK) 125 150 ug/L 120 57 - 140	120	ug/L		150	125	2-Butanone (MEK)
-Hexanone 125 128 ug/L 102 65 - 127	102	ug/L		128	125	2-Hexanone
-Methyl-2-pentanone (MIBK) 125 125 ug/L 100 71 - 125	100	ug/L		125	125	4-Methyl-2-pentanone (MIBK)
cetone 125 187 * ug/L 150 56 - 142	150	ug/L	*	187	125	Acetone
enzene 25.0 25.0 ug/L 100 71 - 124	100	ug/L		25.0	25.0	Benzene
romodichloromethane 25.0 27.3 ug/L 109 80 - 122	109	ug/L		27.3	25.0	Bromodichloromethane
romoform 25.0 27.0 ug/L 108 52 - 132	108	ug/L		27.0	25.0	Bromoform
romomethane 25.0 12.7 * ug/L 51 55 ₋ 144	51	ug/L	*	12.7	25.0	Bromomethane
arbon disulfide 25.0 21.4 ug/L 85 59 - 134	85	ug/L		21.4	25.0	Carbon disulfide
arbon tetrachloride 25.0 33.1 ug/L 132 72 - 134	132	ug/L		33.1	25.0	Carbon tetrachloride
hlorobenzene 25.0 26.1 ug/L 104 72 - 120	104	ug/L		26.1	25.0	Chlorobenzene
hloroethane 25.0 19.8 ug/L 79 69 - 136	79	ug/L		19.8	25.0	Chloroethane

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TestAmerica Job ID: 480-96991-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 480-293565/5

Matrix: Water

Analysis Batch: 293565

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

-	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloroform	25.0	23.1		ug/L		92	73 - 127	
Chloromethane	25.0	21.2		ug/L		85	68 - 124	
cis-1,2-Dichloroethene	25.0	25.1		ug/L		100	74 - 124	
cis-1,3-Dichloropropene	25.0	29.0		ug/L		116	74 - 124	
Cyclohexane	25.0	22.4		ug/L		89	59 _ 135	
Dibromochloromethane	25.0	27.1		ug/L		108	75 - 125	
Dichlorodifluoromethane	25.0	20.7		ug/L		83	59 _ 135	
Ethylbenzene	25.0	24.7		ug/L		99	77 _ 123	
Isopropylbenzene	25.0	24.6		ug/L		99	77 - 122	
Methyl acetate	125	126		ug/L		101	74 - 133	
Methyl tert-butyl ether	25.0	24.7		ug/L		99	64 - 127	
Methylcyclohexane	25.0	24.0		ug/L		96	61 - 138	
Methylene Chloride	25.0	25.4		ug/L		102	57 _ 132	
Styrene	25.0	26.5		ug/L		106	70 _ 130	
Tetrachloroethene	25.0	25.1		ug/L		100	74 - 122	
Toluene	25.0	24.8		ug/L		99	80 - 122	
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	73 _ 127	
trans-1,3-Dichloropropene	25.0	29.6		ug/L		118	72 _ 123	
Trichloroethene	25.0	24.9		ug/L		100	74 - 123	
Trichlorofluoromethane	25.0	23.7		ug/L		95	62 _ 152	
Vinyl chloride	25.0	20.6		ug/L		83	65 - 133	
Xylenes, Total	50.0	51.0		ug/L		102	76 - 122	

LCS LCS

Surrogate	%Recovery Qua	alifier Limits
1,2-Dichloroethane-d4 (Surr)	101	66 - 137
4-Bromofluorobenzene (Surr)	114	73 - 120
Dibromofluoromethane (Surr)	107	60 - 140
Toluene-d8 (Surr)	108	71 126

Lab Sample ID: 480-96991-1 MS

Matrix: Water

Analysis Batch: 293565

_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	ND		1250	1310		ug/L		104	73 - 126	
1,1,2,2-Tetrachloroethane	ND		1250	1350		ug/L		108	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		1250	1230		ug/L		98	52 - 148	
ne										
1,1,2-Trichloroethane	ND		1250	1340		ug/L		107	76 - 122	
1,1-Dichloroethane	ND		1250	1190		ug/L		95	71 - 129	
1,1-Dichloroethene	ND		1250	1200		ug/L		96	58 - 121	
1,2,4-Trichlorobenzene	ND		1250	1210		ug/L		97	70 - 122	
1,2-Dibromo-3-Chloropropane	ND		1250	1210		ug/L		96	56 - 134	
1,2-Dibromoethane	ND		1250	1440		ug/L		116	77 - 120	
1,2-Dichlorobenzene	ND		1250	1270		ug/L		102	80 - 124	
1,2-Dichloroethane	ND		1250	1130		ug/L		91	75 - 127	
1,2-Dichloropropane	ND		1250	1330		ug/L		106	76 - 120	
1,3-Dichlorobenzene	ND		1250	1230		ug/L		98	77 - 120	

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Client Sample ID: MW-23S

Prep Type: Total/NA

QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

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

Lab Sample ID: 480-96991-1 MS

Matrix: Water

Methylene Chloride

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

trans-1,2-Dichloroethene

Trichlorofluoromethane

trans-1,3-Dichloropropene

Styrene

Toluene

Analysis Batch: 293565

Client Sample ID: MW-23S Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,4-Dichlorobenzene	ND		1250	1190	-	ug/L		95	75 - 120
1,4-Dioxane	ND		25000	27600		ug/L		110	50 - 174
2-Butanone (MEK)	ND		6250	6640		ug/L		106	57 - 140
2-Hexanone	ND		6250	6260		ug/L		100	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		6250	6290		ug/L		101	71 ₋ 125
Acetone	ND	*	6250	7330		ug/L		117	56 - 142
Benzene	ND		1250	1260		ug/L		101	71 - 124
Bromodichloromethane	ND		1250	1370		ug/L		110	80 - 122
Bromoform	ND		1250	1330		ug/L		106	52 - 132
Bromomethane	ND	*	1250	1010		ug/L		81	55 - 144
Carbon disulfide	17	J	1250	1100		ug/L		87	59 - 134
Carbon tetrachloride	ND	F1	1250	1670		ug/L		134	72 - 134
Chlorobenzene	ND		1250	1310		ug/L		105	72 - 120
Chloroethane	ND		1250	1040		ug/L		83	69 - 136
Chloroform	ND		1250	1180		ug/L		95	73 - 127
Chloromethane	ND		1250	1050		ug/L		84	68 - 124
cis-1,2-Dichloroethene	3000	F1	1250	3650	F1	ug/L		53	74 - 124
cis-1,3-Dichloropropene	ND		1250	1390		ug/L		111	74 - 124
Cyclohexane	ND		1250	1140		ug/L		91	59 - 135
Dibromochloromethane	ND		1250	1370		ug/L		109	75 - 125
Dichlorodifluoromethane	ND		1250	966		ug/L		77	59 - 135
Ethylbenzene	ND		1250	1260		ug/L		101	77 - 123
Isopropylbenzene	ND		1250	1240		ug/L		99	77 - 122
Methyl acetate	ND		6250	6290		ug/L		101	74 - 133
Methyl tert-butyl ether	ND		1250	1240		ug/L		99	64 - 127
Methylcyclohexane	ND		1250	1200		ug/L		96	61 - 138

1250

1250

1250

1250

1250

1250

1250

1250

1250

2500

1330

1340

1270

1270

1450

1890

1200

1020

2590

2750 F1

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ND

ND

ND

ND

ND

840

ND

ND

ND

2000 F1

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		66 - 137
4-Bromofluorobenzene (Surr)	113		73 - 120
Dibromofluoromethane (Surr)	108		60 - 140
Toluene-d8 (Surr)	110		71 - 126

TestAmerica Buffalo

57 - 132

70 - 130

74 - 122

80 - 122

73 - 127

72 - 123

74 - 123

62 - 152

65 - 133

76 - 122

106

108

59

101

102

116

84

96

81

QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

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

Lab Sample ID: 480-96991-1 MSD

Matrix: Water

Client Sam	ple ID:	MW-23S
Prep	Type:	Total/NA

Analysis Batch: 293565 Analyte		Cammi-	0 !!-						0/ Da -		
	-	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPC Limi
1,1,1-Trichloroethane	ND	- Qualifier	1250	1290	Quanner	ug/L		103	73 ₋ 126	2	15
1,1,2,2-Tetrachloroethane	ND		1250	1350		ug/L		108	70 - 126 70 - 126	0	19
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		1250	1200		ug/L		96	52 ₋ 148	2	20
ne	110		1200	1200		ug/L		00	02 - 110	-	
1,1,2-Trichloroethane	ND		1250	1340		ug/L		107	76 - 122	0	1:
1,1-Dichloroethane	ND		1250	1200		ug/L		96	71 - 129	0	20
1,1-Dichloroethene	ND		1250	1250		ug/L		100	58 - 121	4	16
1,2,4-Trichlorobenzene	ND		1250	1230		ug/L		98	70 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		1250	1240		ug/L		99	56 ₋ 134	3	15
1,2-Dibromoethane	ND		1250	1440		ug/L		116	77 - 120	0	15
1,2-Dichlorobenzene	ND		1250	1290		ug/L		103	80 - 124	1	20
1,2-Dichloroethane	ND		1250	1130		ug/L		90	75 - 127	0	20
1,2-Dichloropropane	ND		1250	1360		ug/L		108	76 ₋ 120	2	20
1,3-Dichlorobenzene	ND		1250	1250		ug/L		100	77 - 120	2	20
1,4-Dichlorobenzene	ND		1250	1220		ug/L		97	75 ₋ 120	3	20
1,4-Dioxane	ND		25000	28600		ug/L		114	50 - 174	3	20
2-Butanone (MEK)	ND		6250	6850		ug/L		110	57 - 140	3	20
2-Hexanone	ND		6250	6240		ug/L		100	65 - 127	0	15
4-Methyl-2-pentanone (MIBK)	ND		6250	6160		ug/L		99	71 - 125	2	35
Acetone	ND	*	6250	7260		ug/L		116	56 - 142	1	15
Benzene	ND		1250	1270		ug/L		102	71 - 124	1	13
Bromodichloromethane	ND		1250	1390		ug/L		111	80 - 122	1	15
Bromoform	ND		1250	1320		ug/L		106	52 - 132	0	15
Bromomethane	ND	*	1250	984		ug/L		79	55 ₋ 144	3	15
Carbon disulfide	17	J	1250	1120		ug/L		88	59 ₋ 134	2	15
Carbon tetrachloride	ND	F1	1250	1680	F1	ug/L		135	72 - 134	1	15
Chlorobenzene	ND		1250	1320		ug/L		105	72 - 120	1	25
Chloroethane	ND		1250	1020		ug/L		81	69 - 136	2	15
Chloroform	ND		1250	1190		ug/L		95	73 - 127	0	20
Chloromethane	ND		1250	1090		ug/L		87	68 - 124	4	15
cis-1,2-Dichloroethene	3000	F1	1250	3640	F1	ug/L		52	74 - 124	0	15
cis-1,3-Dichloropropene	ND		1250	1440		ug/L		115	74 - 124	4	15
Cyclohexane	ND		1250	1170		ug/L		94	59 - 135	3	20
Dibromochloromethane	ND		1250	1370		ug/L		109	75 - 125	0	15
Dichlorodifluoromethane	ND		1250	1060		ug/L		85	59 ₋ 135	10	20
Ethylbenzene	ND		1250	1250		ug/L		100	77 - 123	0	15
Isopropylbenzene	ND		1250	1250		ug/L		100	77 - 122	1	20
Methyl acetate	ND		6250	6280		ug/L		101	74 - 133		20
Methyl tert-butyl ether	ND		1250	1210		ug/L		97	64 - 127	2	37
Methylcyclohexane	ND		1250	1260		ug/L		101	61 - 138	5	20
Methylene Chloride	ND		1250	1310		ug/L		105	57 - 132	2	15
Styrene	ND		1250	1330		ug/L		106	70 - 130	1	20
Tetrachloroethene	2000	F1	1250	2790	F1	ug/L		62	70 - 130 74 - 122	1	20
Toluene	ND		1250	1260		ug/L		101	80 - 122	0	15
trans-1,2-Dichloroethene	ND ND		1250	1280		ug/L ug/L		101	73 ₋ 127	0	20
trans-1,3-Dichloropropene	ND ND		1250	1470		ug/L ug/L		118	73 - 127 72 - 123	2	15
Trichloroethene	840		1250	1940		ug/L ug/L		88	74 - 123	3	16
Trichlorofluoromethane	ND		1250	1220		ug/L ug/L		97	74 - 123 62 - 152	2	20

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

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

Lab Sample ID: 480-96991-1 MSD

Matrix: Water

Analysis Batch: 293565

Client Sample ID: MW-23S Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Vinyl chloride	ND		1250	1040		ug/L		83	65 - 133	2	15
Xylenes, Total	ND		2500	2570		ug/L		103	76 - 122	1	16

MSD MSD Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 66 - 137 101 4-Bromofluorobenzene (Surr) 112 73 - 120 60 - 140 107 Dibromofluoromethane (Surr) Toluene-d8 (Surr) 109 71 - 126

Lab Sample ID: MB 480-293608/7

Matrix: Water

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

Analysis Batch: 293608

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/01/16 10:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/01/16 10:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/01/16 10:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/01/16 10:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/01/16 10:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/01/16 10:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/01/16 10:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/01/16 10:43	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/01/16 10:43	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/01/16 10:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/01/16 10:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/01/16 10:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/01/16 10:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/01/16 10:43	1
1,4-Dioxane	ND		40	9.3	ug/L			04/01/16 10:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/01/16 10:43	1
2-Hexanone	ND		5.0	1.2	ug/L			04/01/16 10:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/01/16 10:43	1
Acetone	ND		10	3.0	ug/L			04/01/16 10:43	1
Benzene	ND		1.0	0.41	ug/L			04/01/16 10:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/01/16 10:43	1
Bromoform	ND		1.0	0.26	ug/L			04/01/16 10:43	1
Bromomethane	ND		1.0	0.69	ug/L			04/01/16 10:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/01/16 10:43	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/01/16 10:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/01/16 10:43	1
Chloroethane	ND		1.0	0.32	ug/L			04/01/16 10:43	1
Chloroform	ND		1.0	0.34	ug/L			04/01/16 10:43	1
Chloromethane	ND		1.0	0.35	ug/L			04/01/16 10:43	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/01/16 10:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/01/16 10:43	1
Cyclohexane	ND		1.0	0.18	ug/L			04/01/16 10:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/01/16 10:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/01/16 10:43	1

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TestAmerica Job ID: 480-96991-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 480-293608/7

Matrix: Water

Analysis Batch: 293608

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

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.74	ug/L			04/01/16 10:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/01/16 10:43	1
Methyl acetate	ND		2.5	1.3	ug/L			04/01/16 10:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/01/16 10:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/01/16 10:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/01/16 10:43	1
Styrene	ND		1.0	0.73	ug/L			04/01/16 10:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/01/16 10:43	1
Toluene	ND		1.0	0.51	ug/L			04/01/16 10:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/01/16 10:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/01/16 10:43	1
Trichloroethene	ND		1.0	0.46	ug/L			04/01/16 10:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/01/16 10:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/01/16 10:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/01/16 10:43	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104	66 - 137		04/01/16 10:43	1
4-Bromofluorobenzene (Surr)	112	73 - 120		04/01/16 10:43	1
Dibromofluoromethane (Surr)	106	60 - 140		04/01/16 10:43	1
Toluene-d8 (Surr)	108	71 - 126		04/01/16 10:43	1

Lab Sample ID: LCS 480-293608/5

Matrix: Water

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

Analysis Batch: 293608							
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	25.0	21.7		ug/L		87	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.6		ug/L		102	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	18.6		ug/L		74	52 _ 148
ne							
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	76 - 122
1,1-Dichloroethane	25.0	21.5		ug/L		86	71 ₋ 129
1,1-Dichloroethene	25.0	19.7		ug/L		79	58 ₋ 121
1,2,4-Trichlorobenzene	25.0	23.5		ug/L		94	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	56 ₋ 134
1,2-Dibromoethane	25.0	26.7		ug/L		107	77 _ 120
1,2-Dichlorobenzene	25.0	23.7		ug/L		95	80 - 124
1,2-Dichloroethane	25.0	21.1		ug/L		84	75 ₋ 127
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120
1,3-Dichlorobenzene	25.0	22.9		ug/L		92	77 _ 120
1,4-Dichlorobenzene	25.0	22.3		ug/L		89	75 ₋ 120
1,4-Dioxane	500	561		ug/L		112	50 ₋ 174
2-Butanone (MEK)	125	132		ug/L		106	57 _ 140
2-Hexanone	125	121		ug/L		97	65 - 127
4-Methyl-2-pentanone (MIBK)	125	121		ug/L		97	71 - 125
Acetone	125	145		ug/L		116	56 - 142
Benzene	25.0	22.3		ug/L		89	71 - 124

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Spike

LCS LCS

TestAmerica Job ID: 480-96991-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 480-293608/5

Matrix: Water

Analysis Batch: 293608

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

%Rec.

Analyte	Added	Result Qu	ualifier Unit	D %Rec	Limits
Bromodichloromethane	25.0	26.0	ug/L	104	80 - 122
Bromoform	25.0	26.1	ug/L	104	52 - 132
Bromomethane	25.0	19.8	ug/L	79	55 ₋ 144
Carbon disulfide	25.0	18.0	ug/L	72	59 - 134
Carbon tetrachloride	25.0	27.3	ug/L	109	72 ₋ 134
Chlorobenzene	25.0	23.5	ug/L	94	72 - 120
Chloroethane	25.0	20.1	ug/L	81	69 _ 136
Chloroform	25.0	21.6	ug/L	86	73 - 127
Chloromethane	25.0	19.4	ug/L	78	68 - 124
cis-1,2-Dichloroethene	25.0	23.2	ug/L	93	74 ₋ 124
cis-1,3-Dichloropropene	25.0	27.0	ug/L	108	74 - 124
Cyclohexane	25.0	17.3	ug/L	69	59 ₋ 135
Dibromochloromethane	25.0	25.8	ug/L	103	75 ₋ 125
Dichlorodifluoromethane	25.0	17.2	ug/L	69	59 - 135
Ethylbenzene	25.0	21.7	ug/L	87	77 ₋ 123
Isopropylbenzene	25.0	21.6	ug/L	87	77 - 122
Methyl acetate	125	125	ug/L	100	74 ₋ 133
Methyl tert-butyl ether	25.0	23.0	ug/L	92	64 - 127
Methylcyclohexane	25.0	19.5	ug/L	78	61 - 138
Methylene Chloride	25.0	23.8	ug/L	95	57 ₋ 132
Styrene	25.0	23.9	ug/L	96	70 - 130
Tetrachloroethene	25.0	20.6	ug/L	83	74 - 122
Toluene	25.0	22.0	ug/L	88	80 - 122
trans-1,2-Dichloroethene	25.0	21.8	ug/L	87	73 - 127
trans-1,3-Dichloropropene	25.0	27.8	ug/L	111	72 - 123
Trichloroethene	25.0	21.7	ug/L	87	74 - 123
Trichlorofluoromethane	25.0	22.9	ug/L	91	62 - 152
Vinyl chloride	25.0	18.2	ug/L	73	65 - 133
Xylenes, Total	50.0	45.1	ug/L	90	76 - 122

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
4-Bromofluorobenzene (Surr)	112		73 - 120
Dibromofluoromethane (Surr)	110		60 - 140
Toluene-d8 (Surr)	109		71 - 126

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

Lab Sample ID: 480-96991-2 MS

Matrix: Water

Analysis Batch: 293608

Prep Type: Total/NA

Alialysis Dalcii. 293000									
	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane - DL	ND		500	502		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane - DL	ND		500	502		ug/L		100	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		500	480		ug/L		96	52 - 148
ne - DL 1.1.2-Trichloroethane - DL	ND		500	503		ug/L		101	76 ₋ 122
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Client Sample ID: MW-23D

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Client Sample ID: MW-23D

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

Lab Sample ID: 480-96991-2 MS

	Anal	ysis	Batch:	293608	
ı					

Matrix: Water									Prep Type: To	Jlai/NA
Analysis Batch: 293608	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	•	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	
1,1-Dichloroethane - DL	ND		500	456		ug/L		91	71 - 129	
1,1-Dichloroethene - DL	ND		500	462		ug/L		92	58 ₋ 121	
1,2,4-Trichlorobenzene - DL	ND		500	459		ug/L		92	70 - 122	
1,2-Dibromo-3-Chloropropane -	ND		500	452		ug/L		90	56 - 134	
DL						· ·				
1,2-Dibromoethane - DL	ND		500	536		ug/L		107	77 - 120	
1,2-Dichlorobenzene - DL	ND		500	476		ug/L		95	80 - 124	
1,2-Dichloroethane - DL	ND		500	429		ug/L		86	75 - 127	
1,2-Dichloropropane - DL	ND		500	495		ug/L		99	76 - 120	
1,3-Dichlorobenzene - DL	ND		500	461		ug/L		92	77 - 120	
1,4-Dichlorobenzene - DL	ND		500	447		ug/L		89	75 - 120	
1,4-Dioxane - DL	ND		10000	11700		ug/L		117	50 - 174	
2-Butanone (MEK) - DL	ND		2500	2440		ug/L		98	57 - 140	
2-Hexanone - DL	ND		2500	2290		ug/L		91	65 _ 127	
4-Methyl-2-pentanone (MIBK) -	ND		2500	2320		ug/L		93	71 ₋ 125	
DL										
Acetone - DL	ND	*	2500	2660		ug/L		106	56 - 142	
Benzene - DL	ND		500	475		ug/L		95	71 - 124	
Bromodichloromethane - DL	ND		500	519		ug/L		104	80 - 122	
Bromoform - DL	ND		500	507		ug/L		101	52 - 132	
Bromomethane - DL	ND	*	500	406		ug/L		81	55 - 144	
Carbon disulfide - DL	ND		500	417		ug/L		83	59 - 134	
Carbon tetrachloride - DL	ND		500	646		ug/L		129	72 - 134	
Chlorobenzene - DL	ND		500	494		ug/L		99	72 - 120	
Chloroethane - DL	ND		500	420		ug/L		84	69 - 136	
Chloroform - DL	ND		500	449		ug/L		90	73 - 127	
Chloromethane - DL	ND		500	395		ug/L		79	68 - 124	
cis-1,2-Dichloroethene - DL	1200	F1	500	1520	F1	ug/L		63	74 - 124	
cis-1,3-Dichloropropene - DL	ND		500	527		ug/L		105	74 - 124	
Cyclohexane - DL	ND		500	437		ug/L		87	59 - 135	
Dibromochloromethane - DL	ND		500	514		ug/L		103	75 - 125	
Dichlorodifluoromethane - DL	ND		500	383		ug/L		77	59 - 135	
Ethylbenzene - DL	ND		500	478		ug/L		96	77 - 123	
Isopropylbenzene - DL	ND		500	467		ug/L		93	77 - 122	
Methyl acetate - DL	ND		2500	2330		ug/L		93	74 - 133	
Methyl tert-butyl ether - DL	ND		500	457		ug/L		91	64 - 127	
Methylcyclohexane - DL	ND		500	465		ug/L		93	61 - 138	
Methylene Chloride - DL	ND		500	488		ug/L		98	57 - 132	
Styrene - DL	ND		500	500		ug/L		100	70 - 130	
Tetrachloroethene - DL	820	F1	500	1180	F1	ug/L		72	74 - 122	
Toluene - DL	ND		500	483		ug/L		97	80 - 122	
trans-1,2-Dichloroethene - DL	ND		500	486		ug/L		97	73 _ 127	
trans-1,3-Dichloropropene - DL	ND		500	541		ug/L		108	72 - 123	
Trichloroethene - DL	350		500	789		ug/L		87	74 - 123	
Trichlorofluoromethane - DL	ND		500	493		ug/L		99	62 - 152	
Vinyl chloride - DL	ND		500	395		ug/L		79	65 ₋ 133	
Xylenes, Total - DL	ND		1000	977		ug/L		98	76 - 122	

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

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

Lab Sample ID: 480-96991-2 MS

Matrix: Water

Analysis Batch: 293608

Client Sample ID: MW-23D Prep Type: Total/NA

MS MS Surrogate %Recovery Qualifier Limits 66 - 137 1,2-Dichloroethane-d4 (Surr) -102 113 73 - 120 4-Bromofluorobenzene (Surr) -107 60 - 140 Dibromofluoromethane (Surr) -Toluene-d8 (Surr) - DL 109 71 - 126

Lab Sample ID: 480-96991-2 MSD

Matrix: Water

Client Sample ID: MW-23D

Prep Type: Total/NA

Analysis Batch: 293608	_										
	•	Sample	Spike		MSD				%Rec.		RPD
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane - DL	ND		500	489		ug/L		98	73 - 126	3	15
1,1,2,2-Tetrachloroethane - DL	ND		500	506		ug/L		101	70 - 126	1	15
1,1,2-Trichloro-1,2,2-trifluoroetha ne - DL	ND		500	424		ug/L		85	52 - 148	12	20
1,1,2-Trichloroethane - DL	ND		500	494		ug/L		99	76 - 122	2	15
1,1-Dichloroethane - DL	ND		500	447		ug/L		89	71 - 129	2	20
1,1-Dichloroethene - DL	ND		500	456		ug/L		91	58 - 121	1	16
1,2,4-Trichlorobenzene - DL	ND		500	440		ug/L		88	70 - 122	4	20
1,2-Dibromo-3-Chloropropane - DL	ND		500	445		ug/L		89	56 ₋ 134	2	15
1,2-Dibromoethane - DL	ND		500	528		ug/L		106	77 - 120	2	15
1,2-Dichlorobenzene - DL	ND		500	468		ug/L		94	80 - 124	2	20
1,2-Dichloroethane - DL	ND		500	428		ug/L		86	75 - 127	0	20
1,2-Dichloropropane - DL	ND		500	493		ug/L		99	76 - 120	0	20
1,3-Dichlorobenzene - DL	ND		500	457		ug/L		91	77 - 120	1	20
1,4-Dichlorobenzene - DL	ND		500	442		ug/L		88	75 - 120	1	20
1,4-Dioxane - DL	ND		10000	10600		ug/L		106	50 - 174	9	20
2-Butanone (MEK) - DL	ND		2500	2340		ug/L		94	57 - 140	4	20
2-Hexanone - DL	ND		2500	2220		ug/L		89	65 - 127	3	15
4-Methyl-2-pentanone (MIBK) - DL	ND		2500	2250		ug/L		90	71 ₋ 125	3	35
Acetone - DL	ND	*	2500	2550		ug/L		102	56 - 142	4	15
Benzene - DL	ND		500	469		ug/L		94	71 - 124	1	13
Bromodichloromethane - DL	ND		500	516		ug/L		103	80 - 122	0	15
Bromoform - DL	ND		500	509		ug/L		102	52 - 132	0	15
Bromomethane - DL	ND	*	500	376		ug/L		75	55 - 144	8	15
Carbon disulfide - DL	ND		500	410		ug/L		82	59 - 134	2	15
Carbon tetrachloride - DL	ND		500	638		ug/L		128	72 - 134	1	15
Chlorobenzene - DL	ND		500	481		ug/L		96	72 _ 120	3	25
Chloroethane - DL	ND		500	402		ug/L		80	69 - 136	4	15
Chloroform - DL	ND		500	445		ug/L		89	73 _ 127	1	20
Chloromethane - DL	ND		500	384		ug/L		77	68 - 124	3	15
cis-1,2-Dichloroethene - DL	1200	F1	500	1520	F1	ug/L		62	74 - 124	0	15
cis-1,3-Dichloropropene - DL	ND		500	524		ug/L		105	74 - 124	0	15
Cyclohexane - DL	ND		500	419		ug/L		84	59 - 135	4	20
Dibromochloromethane - DL	ND		500	518		ug/L		104	75 ₋ 125	1	15

TestAmerica Buffalo

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4/5/2016

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

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

Lab Sample ID: 480-96991-2 MSD

Matrix: Water

Analysis Batch: 293608

Client Sample ID: MW-23D

Prep Type: Total/NA

Analysis Batom 200000											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Dichlorodifluoromethane - DL	ND		500	352		ug/L		70	59 - 135	8	20
Ethylbenzene - DL	ND		500	462		ug/L		92	77 - 123	3	15
Isopropylbenzene - DL	ND		500	463		ug/L		93	77 - 122	1	20
Methyl acetate - DL	ND		2500	2250		ug/L		90	74 - 133	4	20
Methyl tert-butyl ether - DL	ND		500	455		ug/L		91	64 - 127	0	37
Methylcyclohexane - DL	ND		500	448		ug/L		90	61 - 138	4	20
Methylene Chloride - DL	ND		500	480		ug/L		96	57 ₋ 132	2	15
Styrene - DL	ND		500	487		ug/L		97	70 - 130	3	20
Tetrachloroethene - DL	820	F1	500	1140	F1	ug/L		64	74 - 122	4	20
Toluene - DL	ND		500	465		ug/L		93	80 - 122	4	15
trans-1,2-Dichloroethene - DL	ND		500	484		ug/L		97	73 - 127	0	20
trans-1,3-Dichloropropene - DL	ND		500	542		ug/L		108	72 - 123	0	15
Trichloroethene - DL	350		500	767		ug/L		83	74 - 123	3	16
Trichlorofluoromethane - DL	ND		500	476		ug/L		95	62 - 152	4	20
Vinyl chloride - DL	ND		500	380		ug/L		76	65 - 133	4	15
Xylenes, Total - DL	ND		1000	944		ug/L		94	76 - 122	3	16

Surrogate	%Recovery	Qualifier	Limits	
1,2-Dichloroethane-d4 (Surr) -	102		66 - 137	
DL				
4-Bromofluorobenzene (Surr) -	112		73 _ 120	
DL				
Dibromofluoromethane (Surr) -	109		60 - 140	
DL				
Toluene-d8 (Surr) - DL	110		71 - 126	

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

GC/MS VOA

Analysis Batch: 293392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-96991-1	MW-23S	Total/NA	Water	8260C	_
480-96991-2	MW-23D	Total/NA	Water	8260C	
480-96991-2 MS	MW-23D	Total/NA	Water	8260C	
480-96991-2 MSD	MW-23D	Total/NA	Water	8260C	
480-96991-3	MW-1DD	Total/NA	Water	8260C	
480-96991-4	MW-1D	Total/NA	Water	8260C	
480-96991-5	IW-01S	Total/NA	Water	8260C	
480-96991-6	MW-1	Total/NA	Water	8260C	
480-96991-8	MW-13	Total/NA	Water	8260C	
480-96991-9	MW-9	Total/NA	Water	8260C	
480-96991-10	MW-14R	Total/NA	Water	8260C	
480-96991-11	MP-20	Total/NA	Water	8260C	
480-96991-12	DUP-1	Total/NA	Water	8260C	
480-96991-13	TRIP BLANK	Total/NA	Water	8260C	
LCS 480-293392/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-293392/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 293565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-96991-1 - DL	MW-23S	Total/NA	Water	8260C	_
480-96991-1 MS	MW-23S	Total/NA	Water	8260C	
480-96991-1 MSD	MW-23S	Total/NA	Water	8260C	
480-96991-2 - DL	MW-23D	Total/NA	Water	8260C	
480-96991-3 - DL	MW-1DD	Total/NA	Water	8260C	
480-96991-4 - DL	MW-1D	Total/NA	Water	8260C	
480-96991-5 - DL	IW-01S	Total/NA	Water	8260C	
480-96991-7	GM-9	Total/NA	Water	8260C	
480-96991-10 - DL	MW-14R	Total/NA	Water	8260C	
480-96991-12 - DL	DUP-1	Total/NA	Water	8260C	
LCS 480-293565/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-293565/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 293608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-96991-2 MS - DL	MW-23D	Total/NA	Water	8260C	<u> </u>
480-96991-2 MSD - DL	MW-23D	Total/NA	Water	8260C	
480-96991-9 - DL	MW-9	Total/NA	Water	8260C	
LCS 480-293608/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-293608/7	Method Blank	Total/NA	Water	8260C	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-23S

Date Collected: 03/22/16 15:25 Date Received: 03/24/16 02:15 Lab Sample ID: 480-96991-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	293392	03/31/16 11:28	SMY	TAL BUF
Total/NA	Analysis	8260C	DL	50	293565	03/31/16 22:19	SWO	TAL BUF

Client Sample ID: MW-23D Lab Sample ID: 480-96991-2

Date Collected: 03/22/16 15:35 Date Received: 03/24/16 02:15 Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	293392	03/31/16 11:52	SMY	TAL BUF
Total/NA	Analysis	8260C	DL	20	293565	03/31/16 22:42	SWO	TAL BUF

Client Sample ID: MW-1DD Lab Sample ID: 480-96991-3

Date Collected: 03/22/16 16:25

Matrix: Water

Date Received: 03/24/16 02:15

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	8260C		1	293392	03/31/16 12:16	SMY	TAL BUF	
Total/NA	Analysis	8260C	DL	10	293565	03/31/16 23:06	SWO	TAL BUF	

Client Sample ID: MW-1D Lab Sample ID: 480-96991-4

Date Collected: 03/22/16 16:30 Date Received: 03/24/16 02:15 Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	293392	03/31/16 12:39	SMY	TAL BUF
Total/NA	Analysis	8260C	DL	50	293565	03/31/16 23:29	SWO	TAL BUF

Client Sample ID: IW-01S Lab Sample ID: 480-96991-5

Date Collected: 03/22/16 17:15 Date Received: 03/24/16 02:15 Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	293392	03/31/16 13:03	SMY	TAL BUF
Total/NA	Analysis	8260C	DL	50	293565	03/31/16 23:52	SWO	TAL BUF

Client Sample ID: MW-1 Lab Sample ID: 480-96991-6

Date Collected: 03/22/16 17:20

Matrix: Water

Date Received: 03/24/16 02:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	293392	03/31/16 13:27	SMY	TAL BUF

TestAmerica Buffalo

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Matrix: Water

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: GM-9

Lab Sample ID: 480-96991-7

Date Collected: 03/22/16 17:55

Matrix: Water

Date Received: 03/24/16 02:15

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Total/NA Analysis 8260C 5 293565 04/01/16 00:16 SWO TAL BUF

Client Sample ID: MW-13 Lab Sample ID: 480-96991-8

Date Collected: 03/22/16 18:00 Matrix: Water

Date Received: 03/24/16 02:15

Batch Batch Dilution Batch Prepared Method Factor Number **Prep Type** Type Run or Analyzed Analyst Lab 8260C TAL BUF Total/NA Analysis 500 293392 03/31/16 14:13 SMY

Client Sample ID: MW-9 Lab Sample ID: 480-96991-9

Date Collected: 03/23/16 08:45 Matrix: Water

Date Received: 03/24/16 02:15

Batch Dilution Batch Prepared Batch Prep Type Method Factor Number or Analyzed Туре Run Analyst Lab Total/NA Analysis 8260C 10 293392 03/31/16 14:36 SMY TAL BUF Total/NA Analysis 8260C DL 40 293608 04/01/16 14:29 SMY TAL BUF

Client Sample ID: MW-14R Lab Sample ID: 480-96991-10

Date Collected: 03/23/16 09:45

Date Received: 03/24/16 02:15

Batch Dilution Batch Batch Prepared Method Prep Type Туре Run Factor Number or Analyzed Analyst Lab Total/NA 8260C 2 TAL BUF Analysis 293392 03/31/16 15:00 SMY Total/NA 8260C DL 20 293565 SWO TAL BUF Analysis 04/01/16 01:04

Client Sample ID: MP-20 Lab Sample ID: 480-96991-11

Date Collected: 03/23/16 09:45 Matrix: Water

Date Received: 03/24/16 02:15

Batch Batch Dilution Batch Prepared Method or Analyzed Prep Type Type Run Factor Number Analyst Lab 8260C 293392 03/31/16 15:23 SMY TAL BUF Total/NA Analysis

Client Sample ID: DUP-1 Lab Sample ID: 480-96991-12

Date Collected: 03/22/16 00:00 Matrix: Water

Date Received: 03/24/16 02:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	293392	03/31/16 15:46	SMY	TAL BUF
Total/NA	Analysis	8260C	DL	50	293565	04/01/16 01:28	SWO	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID: 480-96991-13

Matrix: Water

Date Collected: 03/22/16 00:00 Date Received: 03/24/16 02:15

Client Sample ID: TRIP BLANK

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	293392	03/31/16 16:09	SMY	TAL BUF

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF

Protocol References:

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

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-96991-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-96991-1	MW-23S	Water	03/22/16 15:25	03/24/16 02:15
480-96991-2	MW-23D	Water	03/22/16 15:35	03/24/16 02:15
480-96991-3	MW-1DD	Water	03/22/16 16:25	03/24/16 02:15
480-96991-4	MW-1D	Water	03/22/16 16:30	03/24/16 02:15
480-96991-5	IW-01S	Water	03/22/16 17:15	03/24/16 02:15
480-96991-6	MW-1	Water	03/22/16 17:20	03/24/16 02:15
480-96991-7	GM-9	Water	03/22/16 17:55	03/24/16 02:15
480-96991-8	MW-13	Water	03/22/16 18:00	03/24/16 02:15
480-96991-9	MW-9	Water	03/23/16 08:45	03/24/16 02:15
480-96991-10	MW-14R	Water	03/23/16 09:45	03/24/16 02:15
480-96991-11	MP-20	Water	03/23/16 09:45	03/24/16 02:15
480-96991-12	DUP-1	Water	03/22/16 00:00	03/24/16 02:15
480-96991-13	TRIP BLANK	Water	03/22/16 00:00	03/24/16 02:15

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S-23-16 Date/Time: 324−16

Arcadis Company
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Date/Time: | Date/Time: | Date/Time: |

Date:

Empty Kit Relinquished by

820

Date/Time: 3 ~ 3 ~ 3 ~ 1 C
Date/Time:

Method of Shipment

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Soler Temperature(s) °C and Other Remarks:

480501-Albany

TestAmerica Buffalo

Amherst, NY 14228-2298

10 Hazelwood Drive

Chain of Custody Record

DOTATION OF THE PROPERTY OF TH

S - H2SO4 T - TSP Dodecahydrate U - Acetone THE LEADER IN ENVIRONMENTAL TESTING Special Instructions/Note: V - MCAA W - ph 4-5 Z - other (specify) N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 180201 480-80805-19830.1 reservation Codes: Page 1 of 😭 Z G - Amchlor H - Ascorbic Acid A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH Albany J - DI Water K - EDTA L - EDA Archive For Total Number of containers: on OMMMMM Disposal By Lab Analysis Requested Special Instructions/QC Requirements 480-96991 Chain of Custody Lab PM: Deyo, Melissa L E-Mait melissa.deyo@testamericainc.com 2 Presenvation Code Water Water Water Matrix Water Water Water Water Water Water Water Water Type (C=comp, G=grab) Radiological Sample 518-250-7300 9 0 () O **(**) (1) **(**) (1) () 9 (၂) 323/16/0945 1755 88 3/23/16 0845 3/23/16 1045 1525 1630 120 Sample 3122/16 (1625 322/16 1535 3/22/16/1715 BO + HM Unknown AT Requested (days): Due Date Requested: PO#. 00266417.0000 3/22/16 3/22/16 3/22/14 3/22/16 Sample Date 3)22/16 Project#: 48008440 SSOW#: Poison B Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify MM-IDD (MS)MSD) Phone (716) 691-2600 Fax (716) 691-7991 Possible Hazard Identification

Possible Hazard Identification 518-250-730 Srown Dykman - Glen Cove, NY aaron.bobar@arcadis-us.com 855 Route 146 Suite 210 MW-23D Client Information MW-235 Sample Identification CARRIED NO-128 20-21 <u>ローなど</u> ARCADIS U.S. Inc MW-IB 8-3M **5-10**0 132 Aaron Bobar Clifton Park State, Zip: NY, 12065

Custody Seal No.

Custody Seals Intact: △ Yes △ No

430501-Albany

TestAmerica Buffalo

10 Hazelwood Drive

Chain of Custody Record

TestAmerica THE LEADER IN SUVINGIAMENTAL TESTING

Amherst, NY 14228-2298 Phone (716) 691-2600 Fax (716) 691-7991	Cigii O	custody ivecold		THE LEADER IN SUVIRCHNICHTAL TESTING
	Sampler 25 + CZ	Lab PM: Devo, Melissa L	Carrier Tracking No(s):	COC No: 480-80805-19830.2
	Phone:	E-Mail: melissa devo@testamericainc.com	u co	Page:
			ı	- 2005 -
MS U.S. Inc	1		Analysis Requested	
Address: 855 Route 146 Suite 210	Due Date Requested:	震震		Preservation Codes:
City: Clifton Park	TAT Requested (days):			A - DCL B - NaOH C - Zn Acetate
	-,			
Phone. 518-250-7300	PO#: 00266417.0000	-;-{on		cid
cadis-us.com	WO#:			1-10e J-DI Water
٨۶	Project #: 48008440	io se)		
	SSOW#:) ası		Other:
Samula Idantification	Sample Type Sample (C=comp.			Serial Instructions/Note.
Odnipte Identification		mon code XX		
DOD-i	3/22/16 - G	Water M N 3		(CA)
		Water		
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	-	Water	/	
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)	Water / /		
		Water		4. 为票 55
		Water		
Possible Hazard Identification Non-Hazard Hammable Skin Irriant Pois	Poison B		ee may be assessed if samples are rei	Fained longer than 1 month) Archive For Months
sted: I, II, III, IV, Other (specify)		Specie		
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	
Relinquished by:	Date/Time: 3/23 16 1427	Sibo	LAD Date Time 3-10	Cehl >
To Service	Date/Time: 7-33-/C 1800	Receive	Date/Time:	OZET
	Date/ Ime:		Date/ ime:	Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No		Goler Temperature(s)	(goler Temperature(s) °C and Other Remarks:	0.4

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc Job Number: 480-96991-1

Login Number: 96991 List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

eroutori trimamo, eritotoprior e		
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	
s 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	

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APPENDIX D ISCO Injection Monitoring Data – 2015 ISCO Source Area Pilot Program

Injection Pilot Injection and Monitoring Data

Sodium Permanganate Mixing Log

Crown Dykman 66 Herb Hill Road, Glen Cove, New York

ARCADIS Personnel: CG/MR

ARCADIS Pers								
Date	Time	Total Volume Injected (gal)	Water (gal)	40% permanganate (gallons)	Color	pH (s.u)	Cond. (mS/cm)	Notes/Comments
12/3/2015	12:00	0	364	35	purple	7.45	38.33	
12/3/2015	16:20	399	431	40	purple	7.23	39.23	
12/3/2015	7:25	870	325	32	purple	7.27	40.26	
12/4/2015	9:25	1227	460	40	purple	7.15	30.12	
12/4/2015	14:30	1727	460	40	purple	7.03	29.67	
12/4/2015	17:50	2227	271	30	purple	7.16	29.69	
12/7/2015	7:30	2528	440	32	purple	7.11	27.34	
12/7/2015	1125	3000	420	30	purple	7.05	26.45	
12/7/2015	15:50	3450	420	30	purple	7.11	25.78	
12/7/2015	18:55	3900	417	30	purple	7.12	26.22	
12/8/2015	7:55	4347	422	31	purple	7.19	26.73	
12/8/2015	12:00	4800	460	40	purple	7.16	28.34	
12/8/2015	16:05	5300	460	40	purple	7.03	29.56	
12/8/2015	19:25	5800	424	33	purple	7.23	28.17	
12/9/2015	7:30	6257	415	28	purple	7.26	27.66	
12/9/2015	11:45	6700	420	30	purple	7.13	27.11	
12/9/2015	16:05	7150	420	30	purple	7.17	26.93	
12/9/2015	18:50	7600	420	29	purple	7.09	26.87	
12/10/2015	8:00	8049	356	25	purple	7.05	25.32	
12/10/2015	11:05	8425	405	25	purple	7.21	24.88	
12/10/2015	14:10	8850	264	20	purple	7.15	26.22	
12/10/2015	18:20	9114	225	0	clear	7.18	6.045	
12/11/2015	10:00	9339						

Arcadis Personnel: CG/MR

																				Perfor	mance Mo	nitoring		
							MW-26							MW-28							IW-01S			
			Total Injected Volume	Depth of we	ell (ft bTOC):		13.02				Depth of we	ell (ft bTOC):		14.02	2			Depth of we	II (ft bTOC):		17.41			
Date	Time	Minutes	(gal)			_	11 to 13							12 to 14		_				_	15 TO 17			-
				pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit)	ORP (mv)	DO (%)	DTW	Color	pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit)	ORP (mv)	DO (%)	DTW	Color	pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit)	ORP (mv)	DO (%)	DTW	Color
12/3/2015	9:00	0.00	0	6.51	0.538	18.61	-86.6	23.9	6.57	clear	6.37	0.776	18.16	-56.9	9.4	6.95	clear	7.13	0.649	16.97	29.01	14.3	4.93	clear
12/3/2015	16:17	437.00	420	6.38	0.525	17.96	-46.1	8.3	6.51	clear	6.26	0.720	18.11	-7.9	11.0	6.67	clear	7.11	0.621	16.92	121	19.2	4.53	clear
12/4/2015	13:45	1725.00	1470	6.51	0.551	18.2	-59.3	9.8	6.50	clear	6.42	0.700	18.23	-41.9	7.0	6.82	clear	7.17	0.626	17.21	-33.6	4.4	4.59	clear
12/7/2015	10:19	5839.00	2800	6.62	0.565	17.88	-64.3	8.8	6.49	clear	6.52	0.712	17.92	-56.6	7.1	6.71	clear	7.07	0.634	17.14	-37.4	4.9	4.59	clear
12/7/2015	16:29	6209.00	3600	6.44	0.569	17.71	-37.6	23.7	6.39	clear	6.35	0.653	17.85	-55.8	2.3	6.65	clear	7.02	0.656	17.35	-28.3	3.9	4.42	clear
12/8/2015	14:08	7508.00	5050	6.66	0.665	17.64	-43.3	5.3	6.19	clear	6.45	0.576	17.64	-65.1	1.2	6.35	clear	7.35	0.633	17.15	-25.5	3.5	4.25	clear
12/8/2015	17:05	7685.00	6000	6.70	0.653	17.69	-35.7	7.8	6.18	clear	6.74	0.613	17.61	-58.2	4.5	6.34	clear	7.23	0.636	17.16	-23.3	4.8	4.24	clear
12/9/2015	14:22	8962.00	7200	6.71	0.642	17.74	-52.9	6.7	6.18	clear	6.82	0.677	17.53	-54.4	6.2	6.33	clear	7.11	0.643	17.08	-31.1	5.5	4.23	clear
12/10/2015	9:10	10090.00	8200	6.67	0.651	17.70	-43.2	5.3	6.26	clear	6.72	0.779	17.48	23.5	8.2	6.36	clear	7.15	0.633	17.12	-24.4	6.3	4.28	clear
12/10/2015	15:44	10484.00	8900	6.61	0.661	17.74	-68.2	3.4	6.2	clear	6.55	0.934	17.43	393.5	13.5	6.34	red	7.09	0.637	17.15	-26.7	6.8	4.24	clear
12/11/2015	13:15	11775.00	9339	6.65	0.647	17.59	-80.2	3.3	6.42	clear	6.96	1.540	17.13	359.1	66.02	6.68	red							
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Arcadis Personnel: CG/MR

							IW-01D							MW-10S							MW-10D			
			-	Depth of we	ll (ft bTOC):		22.98				Depth of we	II (ft bTOC):		13.08	1			Depth of wel	l (ft bTOC):		20.42			
Date	Time	Minutes	Total Injected Volume (gal)				21 TO 23							11 TO 13							18 TO 20			
			,	pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit)	ORP (mv)	DO (%)	DTW	Color	pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit)	ORP (mv)	DO (%)	DTW	Color	pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit)	ORP (mv)	DO (%)	DTW	Color
12/3/2015	9:00	0.00	0	6.86	0.479	17.24	130.70	11.70	5.02	clear	6.63	0.589	17.28	64.96	12	5.15	clear	6.86	0.711	17.54	-1.2	8.5	4.91	clear
12/3/2015	16:17	437.00	420	6.95	0.482	17.41	136.5	11.6	4.57	clear	6.45	0.571	17.34	64.3	9.9	4.78	clear	6.66	0.728	17.63	48.3	9.5	4.70	clear
12/4/2015	13:45	1725.00	1470	6.83	0.517	17.3	40	3	4.82	clear	6.97	0.544	17.44	-30.6	2.2	5.03	clear	6.91	0.693	17.61	-71.2	2.7	5.18	clear
12/7/2015	10:19	5839.00	2800	7.01	0.567	17.24	-13.2	5	4.69	clear	6.64	0.547	17.26	-55.7	4.9	4.86	clear	6.87	0.704	17.6	-36	5	4.71	clear
12/7/2015	16:29	6209.00	3600	7.05	0.575	17.21	-16.2	3.8	4.5	clear	6.78	0.559	17.19	-44.7	2.2	4.69	clear	6.95	0.683	17.5	-31.3	6.7	4.59	clear
12/8/2015	14:08	7508.00	5050	7.02	0.533	17.36	25.3	4.8	4.35	clear	6.61	0.579	17.26	-104.7	1.4	4.52	clear	6.96	0.682	17.57	-65.3	6.4	4.38	clear
12/8/2015	17:05	7685.00	6000	7.00	0.535	17.35	18.9	6.3	4.34	clear	6.65	0.523	17.27	-34.8	2.1	4.5	clear	6.85	0.680	17.45	-45.2	6.7	4.37	clear
12/9/2015	14:22	8962.00	7200	6.95	0.523	17.18	-2.9	7.2	4.33	clear	6.68	0.510	17.31	-35.6	2.7	4.48	clear	6.77	0.674	17.52	19.2	4.3	4.36	clear
12/10/2015	9:10	10090.00	8200	6.86	0.523	17.16	34.6	9.2	4.36	clear	6.51	0.534	17.29	11.3	5.6	4.58	clear	6.74	0.675	17.50	34.2	8.7	4.45	clear
12/10/2015	15:44	10484.00	8900	6.76	0.525	17.18	352.3	58.0	4.33	brown	6.40	0.566	17.28	352.1	17.9	4.51	brown	6.71	0.676	17.52	322.4	28.9	4.38	brown
12/11/2015	13:15	11775.00	9339	6.86	0.545	17.38	342	26.5	4.64	brown	6.52	0.525	17.19	324.20	15.20	4.89	brown	6.72	0.642	17.56	278.3	16.1	4.66	brown
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Sodium PermanganateMonitoring Log Crown Dykman 66 Herb Hill Rd, Glen Cove, New York

Arcadis Pers	onnel: CG/	MR																																	
																Perfo	rmance f	Monitorir																	
						MW-21S						MW-210							MW-1							MW-1D							MW-1DD		
		Total	Depth o	f well (ft b	TOC):				Depth (of well (ft b	TOC):	29.85				Depth o	f well (ft b	TOC):					Depth	of well (ft b	TOC):	28.03				Depth	of well (ft	TOC):	32.6		
Date	Time	Injected Volume																																	
		(gal)	pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit)	ORP (mv) DO (%) DTW	Color	pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit	ORP (mv)	DO (%)	DTW	Color	pH (s.u.)	Cond. (mS/cm)	Temp (Farenhe	ORP (mv	DO (%)	DTW	Color	pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit	ORP (mv)	DO (%)	DTW	Color	pH (s.u.)	Cond. (mS/cm)	Temp (Farenheit)	ORP (mv)	DO (%) DT	TW Color
12/7/2015	10:19	0							6.61	0.617	16.5	-52.9	5.9	5.89	clear								6.92	0.434	17.25	-12.4	5.1	4.47	clear	6.72	0.489	17.23	-15.2	6.7 4.5	.91 clear
12/11/2015	14:05	9339							6.56	0.692	16.45	-68.8	7.2	4.73	clear								6.82	0.468	17.01	-31.6	7.4	4.43	clear	6.66	0.471	17.16	4.2	8.5 4.5	.82 clear
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Injection Pilot Daily Field Reports



Project Name:	Crown Dykman	Page	1 of 2	
Project Number:	00266417.0000	Date		12/1/2015
Site Location:	66 Herb Hill Road, Glen Cove, New York			
ARCADIS Personnel:	Christopher Glidden / Marcia MacKenzie			
Subcontractor(s):	N/A			
Equipment on-site:	Manchester Injection Skid, field vehicles			
Weather/Unusual Co	nditions: Cloudy 41 degrees			
Scope of Work:	Todays tasks include setting up injection skid insi	de dry clea	ner facility, taking	delivery
	of sodium permanganate, layflat hosing and back	flow prever	ntion device	

Time Description of Activities

Time	Description of Activities
6:45	CG onsite. CG parks trailer and await arrival of MM
7:10	MM arrives onsite to assist in set up of injection skid
7:30	CG/MM go through scope of work and await dry cleaning supervisor to arrive onsite
8:00	CG/MM speak to dry cleaner supervisor and he escorts field team to work location
8:10	CG/MM begin moving furniture and storage items from storage room where IW-2 and IW-3 are
	situated into room where overhead door is located in preparation for skid set up
9:00	CG/MM finish moving material into loading dock room
9:10	CG speaks with Rusty next door who informs team that overhead access to IW-2 and IW-3 location
	is blocked off with shelving. CG/MM re-evaluate location for setup
9:20	CG/MM begin moving furniture and storage items back into room where IW-2 and IW-3 are
	situated so field team can setup in room with overhead door
10:00	CG/MM hav cleared an area large enough to set up 10 x 14 secondary containment
10:10	CG/MM offsite to retrieve poly and PVC for set up of injection skid
11:20	CG/MM back onsite to set up secondary containment in the shipping and receiving room
11:50	CG/MM have completed set up on secondary containment. CG hooks truck up to trailer and
	moves trailer over to loading dock door to begin unloading trailer into receiving room
13:00	CG/MM complete the unload of equipment. Conway arrives to unload two permanganate totes
	and (3) 55 gallon drums of permanganate
13:35	Conway completes permanganate drop and leaves the site
13:40	CG/MM begin setting up tank, fittings and hosing in preparation for ISCO injections
16:20	CG/MM move permanganate drums off pallet into containment
16:35	CG/MM begin working on wellhead manifold connections

	Bulylyta	Milden	
Signature:			



Project Name: Crown Dykman Page Page 2 of 2 Time **Description of Activities** 16:55 CG/MM compile list of items needed to begin injection on 12/2/15 17:15 CG/MM offsite Chairtyle Mille

Signature:



Project Name:	Crown Dykman	Page	1 of 1	
Project Number:	00266417.0000	Date		12/2/2015
Site Location:	66 Herb Hill Road, Glen Cove, New York			
ARCADIS Personnel	Christopher Glidden / Marcia MacKenzie			
Subcontractor(s):	N/A	_		
Equipment on-site: Manchester Injection Skid, field vehicles, C185 air compressor				
Weather/Unusual Co	nditions: Cloudy 41 degrees			
Scope of Work:	Todays tasks include continuation of injection s	kid setup ins	ide dry cleaner faci	lity,
	taking delivery of layflat hosing and potentially k	peginning inje	ection	

Time Description of Activities

7:00 CG arrives at sunbelt to obtain C185 air compressor 7:20 CG completes paperwork and mobilizes compressor to site	
7.55 CC anaite with companyon MM anaite	-
7:55 CG onsite with compressor. MM onsite	
8:20 CG/MM continue with skid setup	
10:30 CG/MM receive delivery of layflat hose from McMaster-Carr	
11:00 CG/MM attempt to connect backflow prevention device to hydrant. Fitting will not connect to the	.
threads	
11:15 CG contacts Parratt Wolff to find out what kind of connection type is on backflow preventer	
Bill marrow states national hose thread is what came with preventer	
11:45 CG contacts water department to find out what kind of thread type is on the hydrant. The water	
department informs CG that a hydrant permit and deposit are required to tap into the hydrant	
13:00 CG meets with water department and asks town to excuse the fee and deposit as the work is	
begin completed under the discretion of the state	
13:15 Water department writes permit to access hydrant on Herb Hill Rd and contacts fire department	
to find out what kind of threads are on the hydrant. The town Fire Department states that	
New York Corp threads are on the hydrant	
14:00 CG/MM go over to the fire department to determine where to find a New York Corp thread	
attachment for the hydrant to install the backflow prevention device	
14:20 CG talks with Richie at the New York fire device and safety shop in Port Washington who states	1
he can have a fitting ready for Arcadis the morning of 12/3/15	
15:00 CG drops off MM at the site to pickup her truck	
15:15 CG/MM secure work area and are offsite for the day	

	Christyfa	Midden	
Signature:			



Project Name:	Crown Dykman	Page	1 of 1	
Project Number:	00266417.0000	Date		12/3/2015
Site Location:	66 Herb Hill Road, Glen Cove, New York			
ARCADIS Personnel:	Christopher Glidden / Mike Redman			
Subcontractor(s):	N/A			
Equipment on-site:	Manchester Injection Skid, field vehicles, C185 air	compresso	or	
Weather/Unusual Co	nditions: Cloudy 41 degrees			
Scope of Work:	Todays tasks include picking up New York Corp fi	itting for hy	drant, baseline	
	monitoring and begin ISCO activities			

Time Description of Activities

Time	Description of Activities
7:00	CG/MR onsite to begin baseline monitoring
7:20	CG/MR start setting up water line to run water from the hydrant to the dry cleaner unit
9:00	CG/MR complete baseline monitoring in preparation for ISCO activities
9:30	CG/MR offsite to retrieve New York Corp thread
10:30	CG/MR back onsite with fitting and begin preparation for injection of permanganate
11:05	CG/MR begin transferring permanganate concentrate into mixing tank
11:20	CG/MR begin transferring water from the hydrant into the mixing tank
11:35	CG/MR have solution in tank and begin mixing by way of air lifting
11:45	CG/MR begin injection on IW-2 and IW-3
11:50	CG/MR watch over flows on both wellheads for daylighting and monitor flow rates
13:30	CG/MR stop injection to obtain lunch
14:35	CG/MR begin pumping again on IW-2 and IW-3
15:35	Tank 1 injection is complete. CG/MR begin preparring another batch of permanganate solution
16:10	CG/MR have mixed another batch of permanganate solution and begin injection of Tank 2
16:17	CG/MR begin round of performance monitoring
17:45	CG/MR observe no daylighting of solution at either wellhead and injection continues to occur
	under atmospheric pressure
18:30	CG/MR complete injection of Tank 2 and begin preparring permanganate solution for injection
19:10	CG/MR have completed preparation of permangante solution and begin injection of Tank 3
20:00	CG/MR stop injection and wrap up equipment and material for the day
20:15	CG/MR offsite

Signature:	Chartyfa	Miller	
			-



Project Name:		Crown Dykman	Page	1 of 1	
Project Number:		00266417.0000	Date		/2015
Site Location:		66 Herb Hill Road, Glen Cove, New York			
ARCADIS Per	rsonnel:	Christopher Glidden / Mike Redman			
Subcontracto	or(s):	N/A			
Equipment o	n-site:	Manchester Injection Skid, field vehicles, C185 air c	ompresso	r	
Weather/Unu	sual Co	nditions: Cloudy 41 degrees			
Scope of Wo	rk:	Todays tasks include continuation of permanganan	te injectio	n, performance	
		monitoring and continual observation for daylighting	ıg inside d	ry cleaner facillity and i	n
		sewer system			
Time		Description of Activitie			
		onsite to continue injection of permanganante from			
		start pumping on IW-2 and IW-3 pulling solution fron			
8:35	CG/MR	complete injection of batch 3. CG/MR begin preparri	ng batch 4	solution	
9:20	CG/MR	start injection of batch 4 on IW-2 and IW-3			
11:40	CG/MR	complete injection of batch 4. CG/MR stop to go offs	ite and ret	rieve lunch	
12:40	CG/MR	obtain diesel for air compressor			
13:20	CG/MR	back onsite to begin preparation of batch 5			
		complete one round of performance monitoring on N	/W-26, MV	/-28, IW-01S, IW-01D,	
		S and MW-10D			
		complete performance monitoring and begin injection			
		complete injection of batch 5 and start preparring ba		•	
	• •	~300 gallon batch so no solution is left over the wee			
		complete preparation of batch 6 and start injecting o	n IW-2 and	1 IW-3	
		complete injection of batch 6 (partial)			
20:15	CG/MR	secure equipment for the weekend and are offsite			
			16	with Mill	-
		Signature:	0	my - whomen	



Project Name	e :	Crown Dykman	Page	1 of 1			
Project Number:		00266417.0000	Date		12/7/2015		
Site Location:		66 Herb Hill Road, Glen Cove, New York					
ARCADIS Pe	rsonnel:	Christopher Glidden / Mike Redman					
Subcontracto	or(s):	N/A					
Equipment o	n-site:	Manchester Injection Skid, field vehicles, C185 air co	mpresso	r			
		nditions: Sunny 50 degrees	- ::4:				
Scope of Wo	rk:	Todays tasks include continuation of permanganant			-		
Time		monitoring and continual observation for daylighting sewer system Description of Activities		ry cleaner fac	ility and in		
-	MR/CG	- Onsite, reconnect hosing to hydrant					
		- Fix influent/effluent air supply on pump.					
		- Start injection. Pump start pumping on IW-2 and IW	-3 pulling	solution fron	n batch 7		
		Complete a round of performance monitoring					
		Complete batch 7 and begin prep batch 8 for injection	n into IW	-2 & IW-3			
		CG - Start injection. Pump start pumping on IW-2 and IW-3 pulling solution from batch 8					
		- Complete batch 8 and begin prep batch 9 for injection					
15:45	MR/CG	- Start injection. Pump start pumping on IW-2 and IW	-3 pulling	solution fron	ı batch 9		
18:20	MR/CG	- Complete batch 9 and begin prep batch 10 for inject	ion into I	W-2 & IW-3			
18:30	MR/CG	- Start injection. Mixed water with remaining concent	ration ins	side of tote for	batch 10		
21:30	MR/CG	- Complete batch 10 injection. Disconnect hosing an	d leave Si	ite			
					- ANN		
		Signature:	Che	with the	Medh		



Project Name	e:	Crown Dykman	Page	1 of 1			
Project Number:		00266417.0000	Date	12/8/201			
Site Location:		66 Herb Hill Road, Glen Cove, New York					
ARCADIS Pe	rsonnel:	Christopher Glidden / Mike Redman					
Subcontract	or(s):	N/A					
Equipment o	on-site:	Manchester Injection Skid, field vehicles, C185	air compresso	r			
Weather/Unu	usual Co	nditions: Sunny 55 degrees					
_	_						
Scope of Wo	ork:	Todays tasks include continuation of permanga		· •			
		monitoring and continual observation for dayli	ghting inside d	ry cleaner facility and in			
Time		sewer system Description of Act	tivities				
	CC/MD	•					
		onsite to continue injection of permanganante v					
		start pumping on IW-2 and IW-3 pulling solution					
		complete injection of batch 11. CG/MR begin pro	eparing batch 1	2 solution			
		start injection of batch 12 on IW-2 and IW-3					
15:20	CG/MR	complete injection of batch 12. CG/MR begin pro	eparing batch 1	3 solution			
15:25	CG/MR	G/MR complete one round of performance monitoring					
16:00	CG/MR	G/MR start injection of batch 13 on IW-2 and IW-3					
18:45	CG/MR	stop injection to batch 13 and begin preparring	batch 14 for in	jection at IW-2 and IW-3			
19:20	CG/MR	complete preparation of batch 14 and start injection	cting on IW-2 ar	nd IW-3			
22:00	CG/MR	Off site for the night					
			16	ristof Mill			
		Signature:		and - Klesen			



Project Name	e:	Crown Dykman	Page	1 of 1			
Project Number:		00266417.0000	Date	12/9/2015			
Site Location:		66 Herb Hill Road, Glen Cove, New York					
ARCADIS Pe	rsonnel:	Christopher Glidden / Mike Redman					
Subcontract	or(s):	N/A					
Equipment o	n-site:	Manchester Injection Skid, field vehicles, C185 air co	mpresso	r			
Weather/Unu	ısual Co	nditions: Cloudy 48 degrees					
Scope of Wo	ork:	Todays tasks include continuation of permanganant	e injectio	n, performance			
		monitoring and continual observation for daylighting	g inside d	ry cleaner facility and in			
Time		sewer system	_				
	CC/MD	Description of Activities set up hosing for injection to wells IW-2 & IW-3 and n		15 of colution			
		set up nosing for injection to wells tw-2 & tw-3 and in start pumping on IW-2 and IW-3 pulling solution from					
		complete injection of batch 14. CG/MR begin preparir					
		start injection of batch 16 on IW-2 and IW-3	ig bateri	0 Solution			
		complete one round of performance monitoring					
		complete injection of batch 16. CG/MR begin preparir	ng batch 1	6 solution			
		start injection of batch 17 on IW-2 and IW-3	ig baton	- Jointion			
		IR stop injection to batch 17 and begin preparation of batch 18 into wells IW-2 and IW-3					
		start injection of batch 18 to wells IW-2 and IW-3					
		complete injection to batch 18. Disconnect hosing a	าd clean เ	up the Site			
		Off site for the night		<u> </u>			
;							
;							
			Ch	ristoff Medh			
		Signature:	0	- Jones			



Project Name:		Crown Dykman	Page	1 of 1		
Project Number:		00266417.0000	Date		12/10/2015	
Site Location:		66 Herb Hill Road, Glen Cove, New York				
ARCADIS Pe	rsonnel	: Christopher Glidden / Mike Redman				
Subcontracto	or(s):	N/A				
Equipment on-site:		Manchester Injection Skid, field vehicles, C185 air compressor				
Weather/Unu	sual Co	nditions: Partially Cloudy 58 degrees				
Scope of Wo	rk:	Todays tasks include continuation of permanganan	te injectio	n, perform	ance	
		monitoring and continual observation for daylighting inside dry cleaner facility and in				
		sewer system				
Time		Description of Activitie	s			
6:30	CG/MR	set up hosing for injection to wells IW-2 & IW-3 and r	mix batch	19 of solut	ion.	
8:00	CG/MR	start pumping on IW-2 and IW-3 pulling solution fron	n batch 19			
10:35	CG/MR	complete injection of batch 19. CG/MR begin prepari	ng batch 2	20 solution		
11:00	CG/MR	start injection of batch 20 on IW-2 and IW-3				
12:45	CG/MR	complete one round of performance monitoring				
13:35	CG/MR	complete injection of batch 20. CG/MR begin prepari	ng batch 2	21 solution		
14:05	CG/MR	start injection of batch 21 on IW-2 and IW-3				
17:25	CG/MR	stop injection to batch 21 and begin preparation of b	atch 22 in	to wells IW	/-2 and IW-3	
18:15	CG/MR	start injection of batch 22 to wells IW-2 and IW-3				
21:40	CG/MR	complete injection of batch 22. Put away equipment				
22:00	CG/MR	leave site for the night				
	<u> </u>		16,	1.11	· 9111	
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		Signature:				



Project Name:	Crown Dykman	Page	1 of 1		
Project Number:	00266417.0000	Date		12/11/2015	
Site Location:	66 Herb Hill Road, Glen Cove, New York				
ARCADIS Personnel	: Christopher Glidden / Mike Redman				
Subcontractor(s):	N/A				
Equipment on-site:	Manchester Injection Skid, field vehicles, C185 air compressor				
Weather/Unusual Co	onditions: Partly sunny 52 degrees				
Scope of Work:	Todays tasks include flushing of lines, permanganate drums and totes, and				
•	post injection monitoring. Injection skid breakdowr	and dem	ob.		
Time	Description of Activities				

site to begin flushing and breakdown of injection skid sps off air compressor at sunbelt gins hooking up water in preparation for clean permanganate totes and drums site to assist MR in clean up transfer approximately 60 gallons of water into (3) permanganate drums to rinse finish mixing water in drums with residue and begin pumping rinsate into IW-01S finish transferring rinsate into IW-01S. CG/MR spray nutruelizer into drums and roll drums are neutralizer is contacting all sidewalls of the drums move totes outside and begin transferring water into totes (20 gallons each) transfer water from totes into IW-01S.
gins hooking up water in preparation for clean permanganate totes and drums site to assist MR in clean up transfer approximately 60 gallons of water into (3) permanganate drums to rinse finish mixing water in drums with residue and begin pumping rinsate into IW-01S finish transferring rinsate into IW-01S. CG/MR spray nutruelizer into drums and roll drums are neutralizer is contacting all sidewalls of the drums move totes outside and begin transferring water into totes (20 gallons each) transfer water from totes into IW-01S.
site to assist MR in clean up transfer approximately 60 gallons of water into (3) permanganate drums to rinse finish mixing water in drums with residue and begin pumping rinsate into IW-01S finish transferring rinsate into IW-01S. CG/MR spray nutruelizer into drums and roll drums ure neutralizer is contacting all sidewalls of the drums move totes outside and begin transferring water into totes (20 gallons each) transfer water from totes into IW-01S.
transfer approximately 60 gallons of water into (3) permanganate drums to rinse finish mixing water in drums with residue and begin pumping rinsate into IW-01S finish transferring rinsate into IW-01S. CG/MR spray nutruelizer into drums and roll drums are neutralizer is contacting all sidewalls of the drums move totes outside and begin transferring water into totes (20 gallons each) transfer water from totes into IW-01S.
finish mixing water in drums with residue and begin pumping rinsate into IW-01S finish transferring rinsate into IW-01S. CG/MR spray nutruelizer into drums and roll drums are neutralizer is contacting all sidewalls of the drums move totes outside and begin transferring water into totes (20 gallons each) transfer water from totes into IW-01S.
finish transferring rinsate into IW-01S. CG/MR spray nutruelizer into drums and roll drums are neutralizer is contacting all sidewalls of the drums move totes outside and begin transferring water into totes (20 gallons each) transfer water from totes into IW-01S.
ure neutralizer is contacting all sidewalls of the drums move totes outside and begin transferring water into totes (20 gallons each) transfer water from totes into IW-01S.
move totes outside and begin transferring water into totes (20 gallons each) transfer water from totes into IW-01S.
transfer water from totes into IW-01S.
Color to a construction of the state in DN 040, OO/ND annual to the state to the state in the state in DN 040, OO/ND
finish transferring rinsate in IW-01S. CG/MR spray neutralizer into totes until sidewalls
ar
begin breaking down hosings and wellhead connections
offsite for lunch
back onsite to continue breakdown and monitoring
begin post injection monitoring on all accessible wells
complete post injection monitoring and begin loading up trailer with equipment
breakdown secondary containment
do final walkthrough of the site to make sure no equipment is left beind

Signature:	Chairtyfu Medle
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APPENDIX E

Laboratory Analytical Reports – 2017 VOC and PFAS, and 2018 1,4-Dioxane Data

Synoptic Sampling Round; October-November 2017



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-126895-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

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Authorized for release by: 11/16/2017 3:53:30 PM Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I (716)504-9874 melissa.deyo@testamericainc.com

.....LINKS

Review your project results through

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Have a Question?



Visit us at: 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: Crown Dykman - Glen Cove, NY

Compound was found in the blank and sample.

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

TestAmerica Job ID: 480-126895-1

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.
В	Compound was found in the blank and sample.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
LCMS	
Qualifier	Qualifier Description

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

В

J

RER

RPD

TEF

TEQ

RL

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	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

TestAmerica Buffalo

Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Job ID: 480-126895-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-126895-1

Receipt

The samples were received on 11/1/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-475225 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following samples was diluted due to the nature of the sample matrix: MW-7 (480-126895-4) and MW-23D (480-126895-5). 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.

LCMS

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

Organic Prep

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-192959.

Method code 3535 PFC, waters

Method(s) 3535: The following samples: MW-7 (480-126895-4) and MW-23D (480-126895-5) were decanted prior to preparation due to sediment being present in the samples.

preparation batch 320-192959 Method code 3535_PFC, waters

Method(s) 3535: Due to client's request, we extracted the sample duplicate (DU) and the sample matrix (MS) without the sample matrix duplicate (MSD), which is not our standard procedure.

preparation batch 320-192959 Method code: 3535_PFC.

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

VOA Prep

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

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Client: ARCADIS U.S. Inc

Client Sample ID: EB-01

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Lab Sample ID: 480-126895-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.54	JB	1.9	0.34	ng/L	1	_	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.34	JB	1.9	0.16	ng/L	1		537 (modified)	Total/NA

Client Sample ID: EB-02 Lab Sample ID: 480-126895-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.38	JB	1.9	0.33	ng/L	1	_	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.28	JB	1.9	0.16	ng/L	1		537 (modified)	Total/NA

Client Sample ID: EB-03 Lab Sample ID: 480-126895-3

	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.59	JB	1.9	0.34	ng/L	1	_	537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.56	J	1.9	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.30	JB	1.9	0.17	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-7 Lab Sample ID: 480-126895-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.37	J –	1.0	0.25	ug/L		_	8260C	Total/NA
Chloroform	0.54	J	1.0	0.23	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	210		1.0	0.21	ug/L	1		8260C	Total/NA
Tetrachloroethene	260		1.0	0.14	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	4.3		1.0	0.23	ug/L	1		8260C	Total/NA
Trichloroethene	130		1.0	0.20	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	14	В	2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	25		2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	23		2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	20		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	60		2.0	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	6.3		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	6.5		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	26		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	9.5	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	2.0		2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	150	В	2.0	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.51	JB	2.0	0.35	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-23D Lab Sample ID: 480-126895-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	910		10	2.1	ug/L	10	_	8260C	Total/NA
Methyl tert-butyl ether	3.3	J	10	1.7	ug/L	10		8260C	Total/NA
Methylene Chloride	11	JB	50	10	ug/L	10		8260C	Total/NA
Tetrachloroethene	480		10	1.4	ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	5.1	J	10	2.3	ug/L	10		8260C	Total/NA
Trichloroethene	230		10	2.0	ug/L	10		8260C	Total/NA
Vinyl chloride	11		10	1.8	ug/L	10		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	20	В	1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	20		1.9	0.46	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

11/16/2017

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-23D (Continued)

TestAmerica Job ID: 480-126895-1

Lab Sample ID: 480-126895-5

Analyte	Result (Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	19		1.9	0.55	ng/L	1	_	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	17		1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	65		1.9	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	8.8		1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	7.7		1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	19		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	8.4 E	В	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	2.0		1.9	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	130 E	В	1.9	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.2 、	JB	1.9	0.33	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-23S Lab Sample ID: 480-126895-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.79	J	1.0	0.25	ug/L	1	_	8260C	Total/NA
cis-1,2-Dichloroethene	380		1.0	0.21	ug/L	1		8260C	Total/NA
Tetrachloroethene	320		1.0	0.14	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	2.5		1.0	0.23	ug/L	1		8260C	Total/NA
Trichloroethene	140		1.0	0.20	ug/L	1		8260C	Total/NA
Vinyl chloride	3.6		1.0	0.18	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	14		2.0	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	26		2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	24		2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	16		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	51		2.0	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	5.5		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	4.7		2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.1	J	2.0	1.1	ng/L	1		537 (modified)	Total/NA
Perfluorotridecanoic Acid (PFTriA)	1.6	J	2.0	1.3	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	22		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	11	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.6	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	94		2.0	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.1	JB	2.0	0.34	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-126895-7

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: EB-01

Lab Sample ID: 480-126895-1

TestAmerica Job ID: 480-126895-1

Date Collected: 10/31/17 09:20 Matrix: Water Date Received: 11/01/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.54	JB	1.9	0.34	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.47	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.56	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.24	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.82	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.26	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.30	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.1	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.53	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.3	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.28	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.19	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorohexanesulfonic acid (PFHxS)	0.34	JB	1.9	0.16	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.18	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.52	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.31	ng/L		11/06/17 08:43	11/10/17 23:50	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.34	ng/L		11/06/17 08:43	11/10/17 23:50	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	48		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C4 PFBA	49		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C2 PFHxA	51		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C4 PFOA	46		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C5 PFNA	51		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C2 PFDA	54		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C2 PFUnA	55		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C2 PFDoA	49		25 - 150				11/06/17 08:43	11/10/17 23:50	1
18O2 PFHxS	49		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C4 PFOS	51		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C4-PFHpA	53		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C5 PFPeA	50		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C3-PFBS	50		25 - 150				11/06/17 08:43	11/10/17 23:50	1
13C2-PFTeDA	59		25 - 150				11/06/17 08:43	11/10/17 23:50	1

Client Sample ID: EB-02 Lab Sample ID: 480-126895-2

Date Collected: 10/31/17 09:30 Matrix: Water Date Received: 11/01/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.38	J B	1.9	0.33	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.46	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.55	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.24	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.80	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.26	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.29	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.52	ng/L		11/06/17 08:43	11/10/17 23:58	1

TestAmerica Buffalo

11/16/2017

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-126895-2

TestAmerica Job ID: 480-126895-1

Matrix: Water

Client Sample ID: EB-02 Date Collected: 10/31/17 09:30

Date Received: 11/01/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.27	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.19	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorohexanesulfonic acid (PFHxS)	0.28	JB	1.9	0.16	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.18	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.51	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		11/06/17 08:43	11/10/17 23:58	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.33	ng/L		11/06/17 08:43	11/10/17 23:58	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	80		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C4 PFBA	76		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C2 PFHxA	84		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C4 PFOA	75		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C5 PFNA	84		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C2 PFDA	86		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C2 PFUnA	84		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C2 PFDoA	77		25 - 150				11/06/17 08:43	11/10/17 23:58	1
1802 PFHxS	81		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C4 PFOS	81		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C4-PFHpA	84		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C5 PFPeA	83		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C3-PFBS	83		25 - 150				11/06/17 08:43	11/10/17 23:58	1
13C2-PFTeDA	87		25 - 150				11/06/17 08:43	11/10/17 23:58	1

Client Sample ID: EB-03 Lab Sample ID: 480-126895-3

Date Collected: 10/31/17 09:40

Date Received: 11/01/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.59	JB -	1.9	0.34	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.48	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.57	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.24	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.83	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.26	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.30	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.1	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.54	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.3	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorotetradecanoic acid (PFTeA)	0.56	J	1.9	0.28	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.19	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorohexanesulfonic acid (PFHxS)	0.30	JB	1.9	0.17	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.19	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.53	ng/L		11/06/17 08:43	11/11/17 00:06	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.31	ng/L		11/06/17 08:43	11/11/17 00:06	1

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Matrix: Water

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Lab Sample ID: 480-126895-3

Matrix: Water

Client Sample ID: EB-03

Date Collected: 10/31/17 09:40 Date Received: 11/01/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.34	ng/L		11/06/17 08:43	11/11/17 00:06	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	74		25 _ 150				11/06/17 08:43	11/11/17 00:06	1
13C4 PFBA	67		25 - 150				11/06/17 08:43	11/11/17 00:06	1
13C2 PFHxA	69		25 _ 150				11/06/17 08:43	11/11/17 00:06	1
13C4 PFOA	64		25 - 150				11/06/17 08:43	11/11/17 00:06	1
13C5 PFNA	74		25 - 150				11/06/17 08:43	11/11/17 00:06	1
13C2 PFDA	84		25 _ 150				11/06/17 08:43	11/11/17 00:06	1
13C2 PFUnA	84		25 - 150				11/06/17 08:43	11/11/17 00:06	1
13C2 PFDoA	70		25 _ 150				11/06/17 08:43	11/11/17 00:06	1
18O2 PFHxS	69		25 - 150				11/06/17 08:43	11/11/17 00:06	1
13C4 PFOS	70		25 - 150				11/06/17 08:43	11/11/17 00:06	1
13C4-PFHpA	70		25 - 150				11/06/17 08:43	11/11/17 00:06	1
13C5 PFPeA	71		25 - 150				11/06/17 08:43	11/11/17 00:06	1
13C3-PFBS	74		25 - 150				11/06/17 08:43	11/11/17 00:06	1
13C2-PFTeDA	75		25 - 150				11/06/17 08:43	11/11/17 00:06	1

Client Sample ID: MW-7 Lab Sample ID: 480-126895-4

Date Collected: 10/31/17 11:20 Matrix: Water

Date Received: 11/01/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 11:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 11:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 11:20	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 11:20	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 11:20	1
1,1-Dichloroethene	0.37	J	1.0	0.25	ug/L			11/11/17 11:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 11:20	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 11:20	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 11:20	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/17 11:20	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 11:20	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 11:20	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 11:20	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 11:20	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 11:20	1
2-Hexanone	ND		10	1.3	ug/L			11/11/17 11:20	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 11:20	1
Acetone	ND		25	2.7	ug/L			11/11/17 11:20	1
Benzene	ND		1.0	0.20	ug/L			11/11/17 11:20	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/11/17 11:20	1
Bromoform	ND		1.0	0.29	ug/L			11/11/17 11:20	1
Bromomethane	ND		1.0	0.35	ug/L			11/11/17 11:20	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/11/17 11:20	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/11/17 11:20	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/11/17 11:20	1
Chloroethane	ND		1.0		ug/L			11/11/17 11:20	1

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Client: ARCADIS U.S. Inc

Client Sample ID: MW-7

Date Collected: 10/31/17 11:20

Date Received: 11/01/17 09:30

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-126895-4

TestAmerica Job ID: 480-126895-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.54	J	1.0	0.23	ug/L			11/11/17 11:20	1
Chloromethane	ND		1.0	0.36	ug/L			11/11/17 11:20	1
cis-1,2-Dichloroethene	210		1.0	0.21	ug/L			11/11/17 11:20	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 11:20	1
Cyclohexane	ND		5.0	0.13	ug/L			11/11/17 11:20	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/11/17 11:20	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/11/17 11:20	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/11/17 11:20	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/11/17 11:20	1
Methyl acetate	ND		10	0.58	ug/L			11/11/17 11:20	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/11/17 11:20	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/11/17 11:20	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/11/17 11:20	1
Styrene	ND		1.0	0.28	ug/L			11/11/17 11:20	1
Tetrachloroethene	260		1.0	0.14	ug/L			11/11/17 11:20	1
Toluene	ND		1.0	0.17	ug/L			11/11/17 11:20	1
trans-1,2-Dichloroethene	4.3		1.0	0.23	ug/L			11/11/17 11:20	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 11:20	1
Trichloroethene	130		1.0	0.20	ug/L			11/11/17 11:20	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/17 11:20	1
Vinyl chloride	ND		1.0	0.18	ug/L			11/11/17 11:20	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/11/17 11:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 130			•		11/11/17 11:20	1
4-Bromofluorobenzene (Surr)	98		70 - 130					11/11/17 11:20	1
Dibromofluoromethane (Surr)	106		70 - 130					11/11/17 11:20	1
Toluene-d8 (Surr)	101		70 - 130					11/11/17 11:20	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	14	В	2.0	0.35	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluoropentanoic acid (PFPeA)	25		2.0	0.48	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorohexanoic acid (PFHxA)	23		2.0	0.57	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluoroheptanoic acid (PFHpA)	20		2.0	0.25	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorooctanoic acid (PFOA)	60		2.0	0.84	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorononanoic acid (PFNA)	6.3		2.0	0.27	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorodecanoic acid (PFDA)	6.5		2.0	0.31	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorobutanesulfonic acid (PFBS)	26		2.0	0.20	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorohexanesulfonic acid (PFHxS)	9.5	В	2.0	0.17	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	2.0		2.0	0.19	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorooctanesulfonic acid (PFOS)	150	В	2.0	0.53	ng/L		11/06/17 08:43	11/11/17 00:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/06/17 08:43	11/11/17 00:14	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-7

Date Collected: 10/31/17 11:20 Date Received: 11/01/17 09:30 Lab Sample ID: 480-126895-4

TestAmerica Job ID: 480-126895-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctane Sulfonamide (FOSA)	0.51	J B	2.0	0.35	ng/L		11/06/17 08:43	11/11/17 00:14	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	76		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C4 PFBA	54		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C2 PFHxA	71		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C4 PFOA	72		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C5 PFNA	80		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C2 PFDA	83		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C2 PFUnA	81		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C2 PFDoA	74		25 - 150				11/06/17 08:43	11/11/17 00:14	1
1802 PFHxS	77		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C4 PFOS	79		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C4-PFHpA	79		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C5 PFPeA	67		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C3-PFBS	75		25 - 150				11/06/17 08:43	11/11/17 00:14	1
13C2-PFTeDA	84		25 - 150				11/06/17 08:43	11/11/17 00:14	1

Client Sample ID: MW-23D Lab Sample ID: 480-126895-5

Date Collected: 10/31/17 13:10 Matrix: Water

Date Received: 11/01/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	1.9	ug/L			11/11/17 10:28	10
1,1,2,2-Tetrachloroethane	ND		10	1.9	ug/L			11/11/17 10:28	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	1.5	ug/L			11/11/17 10:28	10
1,1,2-Trichloroethane	ND		10	1.9	ug/L			11/11/17 10:28	10
1,1-Dichloroethane	ND		10	2.4	ug/L			11/11/17 10:28	10
1,1-Dichloroethene	ND		10	2.5	ug/L			11/11/17 10:28	10
1,2,4-Trichlorobenzene	ND		10	2.0	ug/L			11/11/17 10:28	10
1,2-Dibromo-3-Chloropropane	ND		100	9.4	ug/L			11/11/17 10:28	10
1,2-Dibromoethane	ND		10	2.1	ug/L			11/11/17 10:28	10
1,2-Dichlorobenzene	ND		10	1.9	ug/L			11/11/17 10:28	10
1,2-Dichloroethane	ND		10	2.0	ug/L			11/11/17 10:28	10
1,2-Dichloropropane	ND		10	2.5	ug/L			11/11/17 10:28	10
1,3-Dichlorobenzene	ND		10	1.8	ug/L			11/11/17 10:28	10
1,4-Dichlorobenzene	ND		10	1.7	ug/L			11/11/17 10:28	10
2-Butanone (MEK)	ND		500	26	ug/L			11/11/17 10:28	10
2-Hexanone	ND		100	13	ug/L			11/11/17 10:28	10
4-Methyl-2-pentanone (MIBK)	ND		100	8.1	ug/L			11/11/17 10:28	10
Acetone	ND		250	27	ug/L			11/11/17 10:28	10
Benzene	ND		10	2.0	ug/L			11/11/17 10:28	10
Bromodichloromethane	ND		10	1.7	ug/L			11/11/17 10:28	10
Bromoform	ND		10	2.9	ug/L			11/11/17 10:28	10
Bromomethane	ND		10	3.5	ug/L			11/11/17 10:28	10
Carbon disulfide	ND		10	2.2	ug/L			11/11/17 10:28	10
Carbon tetrachloride	ND		10	1.8	ug/L			11/11/17 10:28	10
Chlorobenzene	ND		10	1.8	ug/L			11/11/17 10:28	10
Chloroethane	ND		10	3.6	ug/L			11/11/17 10:28	10

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Client: ARCADIS U.S. Inc

Toluene-d8 (Surr)

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-126895-5

TestAmerica Job ID: 480-126895-1

Matrix: Water

Client Sample ID: MW-23D Date Collected: 10/31/17 13:10 Date Received: 11/01/17 09:30

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND ND	10	2.3	ug/L			11/11/17 10:28	10
Chloromethane	ND	10	3.6	ug/L			11/11/17 10:28	10
cis-1,2-Dichloroethene	910	10	2.1	ug/L			11/11/17 10:28	10
cis-1,3-Dichloropropene	ND	10	1.7	ug/L			11/11/17 10:28	10
Cyclohexane	ND	50	1.3	ug/L			11/11/17 10:28	10
Dibromochloromethane	ND	10	2.5	ug/L			11/11/17 10:28	10
Dichlorodifluoromethane	ND	10	1.7	ug/L			11/11/17 10:28	10
Ethylbenzene	ND	10	1.9	ug/L			11/11/17 10:28	10
Isopropylbenzene	ND	10	3.3	ug/L			11/11/17 10:28	10
Methyl acetate	ND	100	5.8	ug/L			11/11/17 10:28	10
Methyl tert-butyl ether	3.3 J	10	1.7	ug/L			11/11/17 10:28	10
Methylcyclohexane	ND	50	0.90	ug/L			11/11/17 10:28	10
Methylene Chloride	11 JB	50	10	ug/L			11/11/17 10:28	10
Styrene	ND	10	2.8	ug/L			11/11/17 10:28	10
Tetrachloroethene	480	10	1.4	ug/L			11/11/17 10:28	10
Toluene	ND	10	1.7	ug/L			11/11/17 10:28	10
trans-1,2-Dichloroethene	5.1 J	10	2.3	ug/L			11/11/17 10:28	10
trans-1,3-Dichloropropene	ND	10	1.7	ug/L			11/11/17 10:28	10
Trichloroethene	230	10	2.0	ug/L			11/11/17 10:28	10
Trichlorofluoromethane	ND	10	2.1	ug/L			11/11/17 10:28	10
Vinyl chloride	11	10	1.8	ug/L			11/11/17 10:28	10
Xylenes, Total	ND	30	5.8	ug/L			11/11/17 10:28	10
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93	70 - 130			-		11/11/17 10:28	10
4-Bromofluorobenzene (Surr)	100	70 - 130					11/11/17 10:28	10
Dibromofluoromethane (Surr)	111	70 ₋ 130					11/11/17 10:28	10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	20	В	1.9	0.33	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluoropentanoic acid (PFPeA)	20		1.9	0.46	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorohexanoic acid (PFHxA)	19		1.9	0.55	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluoroheptanoic acid (PFHpA)	17		1.9	0.24	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorooctanoic acid (PFOA)	65		1.9	0.81	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorononanoic acid (PFNA)	8.8		1.9	0.26	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorodecanoic acid (PFDA)	7.7		1.9	0.29	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.52	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.27	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorobutanesulfonic acid (PFBS)	19		1.9	0.19	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorohexanesulfonic acid (PFHxS)	8.4	В	1.9	0.16	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	2.0		1.9	0.18	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorooctanesulfonic acid (PFOS)	130	В	1.9	0.51	ng/L		11/06/17 08:43	11/11/17 00:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		11/06/17 08:43	11/11/17 00:22	1

70 - 130

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TestAmerica Buffalo

11/11/17 10:28

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11/16/2017

Client: ARCADIS U.S. Inc

Date Received: 11/01/17 09:30

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-23D

Lab Sample ID: 480-126895-5

TestAmerica Job ID: 480-126895-1

Date Collected: 10/31/17 13:10 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctane Sulfonamide	1.2	J B	1.9	0.33	ng/L		11/06/17 08:43	11/11/17 00:22	1
(FOSA)									
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	78		25 _ 150				11/06/17 08:43	11/11/17 00:22	1
13C4 PFBA	52		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C2 PFHxA	74		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C4 PFOA	76		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C5 PFNA	84		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C2 PFDA	85		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C2 PFUnA	87		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C2 PFDoA	75		25 - 150				11/06/17 08:43	11/11/17 00:22	1
1802 PFHxS	82		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C4 PFOS	85		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C4-PFHpA	78		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C5 PFPeA	71		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C3-PFBS	83		25 - 150				11/06/17 08:43	11/11/17 00:22	1
13C2-PFTeDA	85		25 - 150				11/06/17 08:43	11/11/17 00:22	1

Client Sample ID: MW-23S Lab Sample ID: 480-126895-6

Date Collected: 10/31/17 14:50 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/12/17 01:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/12/17 01:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1.0	0.15	ug/L			11/12/17 01:17	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/12/17 01:17	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/12/17 01:17	1
1,1-Dichloroethene	0.79	J	1.0	0.25	ug/L			11/12/17 01:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/12/17 01:17	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/12/17 01:17	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/12/17 01:17	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/17 01:17	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/12/17 01:17	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/12/17 01:17	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/12/17 01:17	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/12/17 01:17	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/12/17 01:17	1
2-Hexanone	ND		10	1.3	ug/L			11/12/17 01:17	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/12/17 01:17	1
Acetone	ND		25	2.7	ug/L			11/12/17 01:17	1
Benzene	ND		1.0	0.20	ug/L			11/12/17 01:17	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/12/17 01:17	1
Bromoform	ND		1.0	0.29	ug/L			11/12/17 01:17	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/17 01:17	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/12/17 01:17	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/12/17 01:17	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/12/17 01:17	1
Chloroethane	ND		1.0	0.36	ug/L			11/12/17 01:17	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Lab Sample ID: 480-126895-6

Matrice Water

Matrix: Water

Client Sample ID: MW-23S
Date Collected: 10/31/17 14:50
Date Received: 11/01/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.23	ug/L			11/12/17 01:17	1
Chloromethane	ND		1.0	0.36	ug/L			11/12/17 01:17	1
cis-1,2-Dichloroethene	380		1.0	0.21	ug/L			11/12/17 01:17	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/12/17 01:17	1
Cyclohexane	ND		5.0	0.13	ug/L			11/12/17 01:17	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/12/17 01:17	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/12/17 01:17	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/12/17 01:17	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/12/17 01:17	1
Methyl acetate	ND		10	0.58	ug/L			11/12/17 01:17	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/12/17 01:17	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/12/17 01:17	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/12/17 01:17	1
Styrene	ND		1.0	0.28	ug/L			11/12/17 01:17	1
Tetrachloroethene	320		1.0	0.14	ug/L			11/12/17 01:17	1
Toluene	ND		1.0	0.17	ug/L			11/12/17 01:17	1
trans-1,2-Dichloroethene	2.5		1.0	0.23	ug/L			11/12/17 01:17	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/12/17 01:17	1
Trichloroethene	140		1.0	0.20	ug/L			11/12/17 01:17	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/12/17 01:17	1
Vinyl chloride	3.6		1.0	0.18	ug/L			11/12/17 01:17	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/12/17 01:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130			-		11/12/17 01:17	1

Surrogate	%Recovery Qua	ıalifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96	70 - 130		11/12/17 01:17	1
4-Bromofluorobenzene (Surr)	96	70 - 130		11/12/17 01:17	1
Dibromofluoromethane (Surr)	110	70 - 130		11/12/17 01:17	1
Toluene-d8 (Surr)	96	70 - 130		11/12/17 01:17	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	14		2.0	0.34	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluoropentanoic acid (PFPeA)	26		2.0	0.48	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluorohexanoic acid (PFHxA)	24		2.0	0.57	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluoroheptanoic acid (PFHpA)	16		2.0	0.25	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluorooctanoic acid (PFOA)	51		2.0	0.84	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluorononanoic acid (PFNA)	5.5		2.0	0.27	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluorodecanoic acid (PFDA)	4.7		2.0	0.30	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluoroundecanoic acid (PFUnA)	1.1	J	2.0	1.1	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluorotridecanoic Acid (PFTriA)	1.6	J	2.0	1.3	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluorobutanesulfonic acid (PFBS)	22		2.0	0.20	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluorohexanesulfonic acid (PFHxS)	11	В	2.0	0.17	ng/L		11/06/17 08:49	11/13/17 18:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.6	J	2.0	0.19	ng/L		11/06/17 08:49	11/13/17 18:59	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Client Sample ID: MW-23S

Date Received: 11/01/17 09:30

Lab Sample ID: 480-126895-6 Date Collected: 10/31/17 14:50

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued) Result Qualifier RLMDL Unit Prepared Analyzed Dil Fac Perfluorooctanesulfonic acid 2.0 0.53 ng/L 11/06/17 08:49 11/13/17 18:59 94 (PFOS) 2.0 11/06/17 08:49 11/13/17 18:59 Perfluorodecanesulfonic acid (PFDS) ND 0.31 ng/L Perfluorooctane Sulfonamide 1.1 2.0 0.34 ng/L 11/06/17 08:49 11/13/17 18:59

1.1	JB	2.0	0.54 Tig/L	11/00/17 08.49	11/13/17 10.39	'
%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
79		25 - 150		11/06/17 08:49	11/13/17 18:59	1
53		25 - 150		11/06/17 08:49	11/13/17 18:59	1
78		25 - 150		11/06/17 08:49	11/13/17 18:59	1
80		25 - 150		11/06/17 08:49	11/13/17 18:59	1
86		25 - 150		11/06/17 08:49	11/13/17 18:59	1
88		25 - 150		11/06/17 08:49	11/13/17 18:59	1
88		25 - 150		11/06/17 08:49	11/13/17 18:59	1
73		25 - 150		11/06/17 08:49	11/13/17 18:59	1
83		25 - 150		11/06/17 08:49	11/13/17 18:59	1
85		25 - 150		11/06/17 08:49	11/13/17 18:59	1
80		25 - 150		11/06/17 08:49	11/13/17 18:59	1
73		25 - 150		11/06/17 08:49	11/13/17 18:59	1
85		25 - 150		11/06/17 08:49	11/13/17 18:59	1
85		25 - 150		11/06/17 08:49	11/13/17 18:59	1
	%Recovery 79 53 78 80 86 88 88 73 83 85 80 73	53 78 80 86 88 88 73 83 85 80 73	%Recovery Qualifier Limits 79 25 - 150 53 25 - 150 78 25 - 150 80 25 - 150 86 25 - 150 88 25 - 150 88 25 - 150 83 25 - 150 83 25 - 150 85 25 - 150 80 25 - 150 85 25 - 150 85 25 - 150 85 25 - 150 85 25 - 150	%Recovery Qualifier Limits 79 25 - 150 53 25 - 150 80 25 - 150 86 25 - 150 88 25 - 150 88 25 - 150 83 25 - 150 83 25 - 150 85 25 - 150 80 25 - 150 85 25 - 150 85 25 - 150 85 25 - 150 85 25 - 150	%Recovery Qualifier Limits Prepared 79 25.150 11/06/17 08:49 53 25.150 11/06/17 08:49 78 25.150 11/06/17 08:49 80 25.150 11/06/17 08:49 86 25.150 11/06/17 08:49 88 25.150 11/06/17 08:49 88 25.150 11/06/17 08:49 83 25.150 11/06/17 08:49 83 25.150 11/06/17 08:49 85 25.150 11/06/17 08:49 80 25.150 11/06/17 08:49 81 25.150 11/06/17 08:49 85 25.150 11/06/17 08:49 85 25.150 11/06/17 08:49 85 25.150 11/06/17 08:49 85 25.150 11/06/17 08:49 85 25.150 11/06/17 08:49	%Recovery Qualifier Limits Prepared Analyzed 79 25 - 150 11/06/17 08:49 11/13/17 18:59 53 25 - 150 11/06/17 08:49 11/13/17 18:59 78 25 - 150 11/06/17 08:49 11/13/17 18:59 80 25 - 150 11/06/17 08:49 11/13/17 18:59 86 25 - 150 11/06/17 08:49 11/13/17 18:59 88 25 - 150 11/06/17 08:49 11/13/17 18:59 88 25 - 150 11/06/17 08:49 11/13/17 18:59 73 25 - 150 11/06/17 08:49 11/13/17 18:59 85 25 - 150 11/06/17 08:49 11/13/17 18:59 80 25 - 150 11/06/17 08:49 11/13/17 18:59 80 25 - 150 11/06/17 08:49 11/13/17 18:59 80 25 - 150 11/06/17 08:49 11/13/17 18:59 81 25 - 150 11/06/17 08:49 11/13/17 18:59 82 25 - 150 11/06/17 08:49 11/13/17 18:59 83 25 - 150 11/06/17 08:49

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-126895-7 Date Collected: 10/31/17 00:00 Matrix: Water

Date Received: 11/01/17 09:30

Analyte	Result	Qualifier R	L MDI	. Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.	0.19	ug/L			11/11/17 03:30	1
1,1,2,2-Tetrachloroethane	ND	1.	0 0.19	ug/L			11/11/17 03:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.	0 0.15	ug/L			11/11/17 03:30	1
1,1,2-Trichloroethane	ND	1.	0 0.19	ug/L			11/11/17 03:30	1
1,1-Dichloroethane	ND	1.	0 0.24	ug/L			11/11/17 03:30	1
1,1-Dichloroethene	ND	1.	0 0.25	ug/L			11/11/17 03:30	1
1,2,4-Trichlorobenzene	ND	1.	0 0.20	ug/L			11/11/17 03:30	1
1,2-Dibromo-3-Chloropropane	ND	1	0 0.94	ug/L			11/11/17 03:30	1
1,2-Dibromoethane	ND	1.	0 0.21	ug/L			11/11/17 03:30	1
1,2-Dichlorobenzene	ND	1.	0 0.19	ug/L			11/11/17 03:30	1
1,2-Dichloroethane	ND	1.	0 0.20	ug/L			11/11/17 03:30	1
1,2-Dichloropropane	ND	1.	0 0.25	ug/L			11/11/17 03:30	1
1,3-Dichlorobenzene	ND	1.	0 0.18	B ug/L			11/11/17 03:30	1
1,4-Dichlorobenzene	ND	1.	0 0.17	ug/L			11/11/17 03:30	1
2-Butanone (MEK)	ND	5	0 2.6	ug/L			11/11/17 03:30	1
2-Hexanone	ND	1	0 1.3	B ug/L			11/11/17 03:30	1
4-Methyl-2-pentanone (MIBK)	ND	1	0 0.81	ug/L			11/11/17 03:30	1
Acetone	ND	2	5 2.7	ug/L			11/11/17 03:30	1
Benzene	ND	1.	0 0.20	ug/L			11/11/17 03:30	1
Bromodichloromethane	ND	1.	0 0.17	ug/L			11/11/17 03:30	1
Bromoform	ND	1.	0 0.29	ug/L			11/11/17 03:30	1
Bromomethane	ND	1.	0 0.35	i ug/L			11/11/17 03:30	1
Carbon disulfide	ND	1.	0 0.22	2 ug/L			11/11/17 03:30	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: TRIP BLANK

TestAmerica Job ID: 480-126895-1

Lab Sample ID: 480-126895-7

Matrix: Water

Date Collected: 10/31/17 00:00 Date Received: 11/01/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/11/17 03:30	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/11/17 03:30	1
Chloroethane	ND		1.0	0.36	ug/L			11/11/17 03:30	1
Chloroform	ND		1.0	0.23	ug/L			11/11/17 03:30	1
Chloromethane	ND		1.0	0.36	ug/L			11/11/17 03:30	1
cis-1,2-Dichloroethene	ND		1.0	0.21	ug/L			11/11/17 03:30	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 03:30	1
Cyclohexane	ND		5.0	0.13	ug/L			11/11/17 03:30	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/11/17 03:30	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/11/17 03:30	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/11/17 03:30	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/11/17 03:30	1
Methyl acetate	ND		10	0.58	ug/L			11/11/17 03:30	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/11/17 03:30	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/11/17 03:30	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/11/17 03:30	1
Styrene	ND		1.0	0.28	ug/L			11/11/17 03:30	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/11/17 03:30	1
Toluene	ND		1.0	0.17	ug/L			11/11/17 03:30	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/11/17 03:30	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 03:30	1
Trichloroethene	ND		1.0	0.20	ug/L			11/11/17 03:30	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/17 03:30	1
Vinyl chloride	ND		1.0	0.18	ug/L			11/11/17 03:30	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/11/17 03:30	1

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96	70 - 130		11/11/17 03:30	1
4-Bromofluorobenzene (Surr)	101	70 - 130		11/11/17 03:30	1
Dibromofluoromethane (Surr)	111	70 - 130		11/11/17 03:30	1
Toluene-d8 (Surr)	98	70 - 130		11/11/17 03:30	1

TestAmerica Buffalo

Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

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

Matrix: Water Prep Type: Total/NA

				Percent Su	rrogate Rec
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-126895-4	MW-7	95	98	106	101
480-126895-5	MW-23D	93	100	111	96
480-126895-6	MW-23S	96	96	110	96
480-126895-6 MS	MW-23S	89	95	110	98
480-126895-6 MSD	MW-23S	88	94	106	97
480-126895-7	TRIP BLANK	96	101	111	98
LCS 490-475094/4	Lab Control Sample	95	93	111	97
LCS 490-475225/3	Lab Control Sample	88	94	107	99
LCSD 490-475225/4	Lab Control Sample Dup	89	93	108	96
MB 490-475094/6	Method Blank	93	103	109	98
MB 490-475225/6	Method Blank	92	98	105	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

TestAmerica Buffalo

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Isotope Dilution Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water Prep Type: Total/NA

			P	ercent Isotop	e Dilution Re	covery (Acc	eptance Limit	s)	
		13C8 FOSA	13C4 PFBA	3C2 PFHx/	13C4 PFOA	13C5 PFNA	13C2 PFDA	3C2 PFUn/	3C2 PFDo/
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
480-126895-1	EB-01	48	49	51	46	51	54	55	49
480-126895-2	EB-02	80	76	84	75	84	86	84	77
480-126895-3	EB-03	74	67	69	64	74	84	84	70
480-126895-4	MW-7	76	54	71	72	80	83	81	74
480-126895-5	MW-23D	78	52	74	76	84	85	87	75
480-126895-6	MW-23S	79	53	78	80	86	88	88	73
LCS 320-192959/2-A	Lab Control Sample	60	65	63	59	68	70	68	61
LCS 320-192966/2-A	Lab Control Sample	78	92	89	79	87	88	88	79
LCSD 320-192959/3-A	Lab Control Sample Dup	75	79	78	72	78	87	85	75
LCSD 320-192966/3-A	Lab Control Sample Dup	64	68	67	64	72	68	71	62
MB 320-192959/1-A	Method Blank	93	104	104	94	106	110	104	92
MB 320-192966/1-A	Method Blank	58	56	64	58	63	63	63	56

Percent Isotope Dilution Recovery (Acceptance Limits)

		8O2 PFHxs	13C4 PFOS	3C4-PFHp/	3C5 PFPe	13C3-PFBS	3C2-PFTeD
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
480-126895-1	EB-01	49	51	53	50	50	59
480-126895-2	EB-02	81	81	84	83	83	87
480-126895-3	EB-03	69	70	70	71	74	75
180-126895-4	MW-7	77	79	79	67	75	84
180-126895-5	MW-23D	82	85	78	71	83	85
180-126895-6	MW-23S	83	85	80	73	85	85
CS 320-192959/2-A	Lab Control Sample	65	65	66	66	71	73
CS 320-192966/2-A	Lab Control Sample	84	85	90	90	94	87
CSD 320-192959/3-A	Lab Control Sample Dup	79	79	82	80	85	86
CSD 320-192966/3-A	Lab Control Sample Dup	74	71	71	72	74	71
/IB 320-192959/1-A	Method Blank	99	99	105	103	104	103
MB 320-192966/1-A	Method Blank	65	63	64	64	63	60

Surrogate Legend

13C8 FOSA = 13C8 FOSA

13C4 PFBA = 13C4 PFBA

13C2 PFHxA = 13C2 PFHxA

13C4 PFOA = 13C4 PFOA

13C5 PFNA = 13C5 PFNA

13C2 PFDA = 13C2 PFDA

13C2 PFUnA = 13C2 PFUnA

13C2 PFDoA = 13C2 PFDoA 18O2 PFHxS = 18O2 PFHxS

13C4 PFOS = 13C4 PFOS

13C4-PFHpA = 13C4-PFHpA

13C5 PFPeA = 13C5 PFPeA

13C3-PFBS = 13C3-PFBS

13C2-PFTeDA = 13C2-PFTeDA

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

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

Lab Sample ID: MB 490-475094/6

Matrix: Water

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

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 02:38	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 02:38	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 02:38	
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 02:38	
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 02:38	
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 02:38	
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 02:38	
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 02:38	
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 02:38	
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/17 02:38	
1,2-Dichloroethane	ND		1.0		ug/L			11/11/17 02:38	
1,2-Dichloropropane	ND		1.0		ug/L			11/11/17 02:38	
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/17 02:38	
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/17 02:38	
2-Butanone (MEK)	ND		50		ug/L			11/11/17 02:38	
2-Hexanone	ND		10		ug/L			11/11/17 02:38	
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/17 02:38	
Acetone	ND		25		ug/L			11/11/17 02:38	
Benzene	ND		1.0		ug/L ug/L			11/11/17 02:38	
Bromodichloromethane	ND		1.0		ug/L ug/L			11/11/17 02:38	
Bromoform	ND		1.0		ug/L ug/L			11/11/17 02:38	
Bromomethane	ND		1.0		ug/L ug/L			11/11/17 02:38	
Carbon disulfide	ND ND		1.0	0.33				11/11/17 02:38	
	ND ND				-				
Carbon tetrachloride			1.0		ug/L			11/11/17 02:38	
Chlorothera	ND		1.0		ug/L			11/11/17 02:38	
Chloroform	ND		1.0		ug/L			11/11/17 02:38	
Chloroform	ND		1.0		ug/L			11/11/17 02:38	
Chloromethane	ND		1.0		ug/L			11/11/17 02:38	
cis-1,2-Dichloroethene	ND		1.0	0.21				11/11/17 02:38	
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 02:38	
Cyclohexane	ND		5.0		ug/L			11/11/17 02:38	
Dibromochloromethane	ND		1.0		ug/L			11/11/17 02:38	
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/17 02:38	
Ethylbenzene	ND		1.0	0.19				11/11/17 02:38	
Isopropylbenzene	ND		1.0		ug/L			11/11/17 02:38	
Methyl acetate	ND		10		ug/L			11/11/17 02:38	
Methyl tert-butyl ether	ND		1.0	0.17				11/11/17 02:38	
Methylcyclohexane	ND		5.0	0.090				11/11/17 02:38	
Methylene Chloride	1.32	J	5.0	1.0	ug/L			11/11/17 02:38	
Styrene	ND		1.0	0.28	ug/L			11/11/17 02:38	
Tetrachloroethene	ND		1.0	0.14	ug/L			11/11/17 02:38	
Toluene	ND		1.0	0.17	ug/L			11/11/17 02:38	
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/11/17 02:38	
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 02:38	
Trichloroethene	ND		1.0	0.20	ug/L			11/11/17 02:38	
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/17 02:38	
Vinyl chloride	ND		1.0	0.18	ug/L			11/11/17 02:38	
Xylenes, Total	ND		3.0	0.58	ug/L			11/11/17 02:38	

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Client: ARCADIS U.S. Inc

trans-1,2-Dichloroethene

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		11/11/17 02:38	1
4-Bromofluorobenzene (Surr)	103		70 - 130		11/11/17 02:38	1
Dibromofluoromethane (Surr)	109		70 - 130		11/11/17 02:38	1
Toluene-d8 (Surr)	98		70 - 130		11/11/17 02:38	1

Lab Sample ID: LCS 490-475094/4 Client Sample ID: Lab Control Sample **Matrix: Water**

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	20.0	23.7		ug/L		118	78 - 135
1,1,2,2-Tetrachloroethane	20.0	18.1		ug/L		90	69 - 131
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.0		ug/L		125	77 - 129
ne							
1,1,2-Trichloroethane	20.0	20.6		ug/L		103	80 - 124
1,1-Dichloroethane	20.0	21.2		ug/L		106	78 - 125
1,1-Dichloroethene	20.0	22.0		ug/L		110	79 - 124
1,2,4-Trichlorobenzene	20.0	17.5		ug/L		87	63 _ 133
1,2-Dibromo-3-Chloropropane	20.0	17.6		ug/L		88	54 - 125
1,2-Dibromoethane	20.0	20.9		ug/L		104	80 - 129
I,2-Dichlorobenzene	20.0	21.2		ug/L		106	80 - 121
1,2-Dichloroethane	20.0	21.0		ug/L		105	77 - 121
1,2-Dichloropropane	20.0	19.7		ug/L		99	75 ₋ 120
1,3-Dichlorobenzene	20.0	21.5		ug/L		108	80 _ 122
,4-Dichlorobenzene	20.0	21.8		ug/L		109	80 - 120
2-Butanone (MEK)	100	92.2		ug/L		92	62 - 133
2-Hexanone	100	79.2		ug/L		79	60 - 142
4-Methyl-2-pentanone (MIBK)	100	79.9		ug/L		80	60 - 137
Acetone	100	80.1		ug/L		80	54 - 145
Benzene	20.0	20.1		ug/L		101	80 - 121
Bromodichloromethane	20.0	21.9		ug/L		109	75 ₋ 129
Bromoform	20.0	19.6		ug/L		98	46 - 145
Bromomethane	20.0	22.7		ug/L		114	41 - 150
Carbon disulfide	20.0	20.6		ug/L		103	77 ₋ 126
Carbon tetrachloride	20.0	24.4		ug/L		122	64 - 147
Chlorobenzene	20.0	21.4		ug/L ug/L		107	80 - 120
Chloroethane	20.0	20.8		-		107	72 - 120
				ug/L			
Chloroform	20.0	22.1		ug/L		110	73 ₋ 129
Chloromethane	20.0	17.0		ug/L		85 407	12 ₋ 150
cis-1,2-Dichloroethene	20.0	21.5		ug/L		107	76 - 125
cis-1,3-Dichloropropene	20.0	19.6		ug/L		98	74 _ 140
Cyclohexane	20.0	19.6		ug/L		98	73 - 122
Dibromochloromethane	20.0	22.0		ug/L		110	69 ₋ 133
Dichlorodifluoromethane	20.0	24.4		ug/L		122	37 _ 127
Ethylbenzene 	20.0	19.6		ug/L 		98	80 - 130
sopropylbenzene	20.0	19.1		ug/L		95	80 - 141
Methyl acetate	40.0	37.1		ug/L		93	64 - 150
Methyl tert-butyl ether	20.0	19.6		ug/L		98	72 ₋ 133
Methylcyclohexane	20.0	21.9		ug/L		109	71 - 129
Methylene Chloride	20.0	23.2		ug/L		116	79 - 123
Styrene	20.0	19.4		ug/L		97	80 - 127
Tetrachloroethene	20.0	22.0		ug/L		110	80 - 126
Toluene	20.0	20.0		ug/L		100	80 - 126

TestAmerica Buffalo

20.0

20.8

ug/L

104

79 - 126

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

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

Lab Sample ID: LCS 490-475094/4

Matrix: Water

Analysis Batch: 475094

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,3-Dichloropropene	20.0	19.5		ug/L		98	63 - 134	 -
Trichloroethene	20.0	23.9		ug/L		119	80 - 123	
Trichlorofluoromethane	20.0	23.7		ug/L		119	65 - 124	
Vinyl chloride	20.0	20.3		ug/L		101	68 - 120	
Xylenes, Total	40.0	38.3		ug/L		96	80 _ 132	

LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 95 70 - 130 4-Bromofluorobenzene (Surr) 93 70 - 130 Dibromofluoromethane (Surr) 111 70 - 130 Toluene-d8 (Surr) 97 70 - 130

Lab Sample ID: 480-126895-6 MS

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 475094	Sample	Sample	Spike	Me	MS				%Rec.	
Analyte	-	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	ND		400	552	Qualifici	ug/L		138	68 - 144	
1,1,2,2-Tetrachloroethane	ND		400	404		ug/L		101	56 - 145	
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		400	578		ug/L		145	63 - 150	
ne				-		-9. –				
1,1,2-Trichloroethane	ND		400	440		ug/L		110	70 - 130	
1,1-Dichloroethane	ND		400	475		ug/L		119	61 - 139	
1,1-Dichloroethene	ND		400	525		ug/L		131	54 ₋ 150	
1,2,4-Trichlorobenzene	ND		400	340		ug/L		85	47 - 147	
1,2-Dibromo-3-Chloropropane	ND		400	378		ug/L		95	38 _ 138	
1,2-Dibromoethane	ND		400	447		ug/L		112	65 _ 137	
1,2-Dichlorobenzene	ND		400	456		ug/L		114	70 - 130	
1,2-Dichloroethane	ND		400	485		ug/L		121	64 - 136	
1,2-Dichloropropane	ND		400	442		ug/L		110	67 _ 130	
1,3-Dichlorobenzene	ND		400	473		ug/L		118	68 _ 131	
1,4-Dichlorobenzene	ND		400	472		ug/L		118	70 - 130	
2-Butanone (MEK)	ND		2000	1920		ug/L		96	50 - 143	
2-Hexanone	ND		2000	1620		ug/L		81	44 - 150	
4-Methyl-2-pentanone (MIBK)	ND		2000	1640		ug/L		82	50 - 140	
Acetone	ND		2000	1660		ug/L		83	39 _ 150	
Benzene	ND		400	460		ug/L		115	55 _ 147	
Bromodichloromethane	ND		400	493		ug/L		123	70 - 140	
Bromoform	ND		400	428		ug/L		107	53 _ 150	
Bromomethane	ND		400	444		ug/L		111	30 - 150	
Carbon disulfide	ND		400	473		ug/L		118	35 _ 150	
Carbon tetrachloride	ND		400	572		ug/L		143	56 ₋ 150	
Chlorobenzene	ND		400	476		ug/L		119	70 - 130	
Chloroethane	ND		400	483		ug/L		121	58 ₋ 141	
Chloroform	ND		400	513		ug/L		128	66 - 138	
Chloromethane	ND		400	391		ug/L		98	10 _ 150	
cis-1,2-Dichloroethene	390		400	807		ug/L		105	68 _ 131	
cis-1,3-Dichloropropene	ND		400	411		ug/L		103	70 - 133	

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TestAmerica Job ID: 480-126895-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: 480-126895-6 MS

Matrix: Water

Analysis Batch: 475094

Client Sample ID: MW-23S Prep Type: Total/NA

7 maryoro Zatom 11 oco 1	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cyclohexane	ND		400	450		ug/L		113	48 - 150
Dibromochloromethane	ND		400	466		ug/L		116	66 - 140
Dichlorodifluoromethane	ND		400	580		ug/L		145	10 _ 150
Ethylbenzene	ND		400	429		ug/L		107	65 - 139
Isopropylbenzene	ND		400	407		ug/L		102	70 - 137
Methyl acetate	ND		800	787		ug/L		98	42 - 136
Methyl tert-butyl ether	ND		400	413		ug/L		103	55 - 141
Methylcyclohexane	ND		400	468		ug/L		117	59 - 150
Methylene Chloride	22	JB	400	513		ug/L		123	64 - 130
Styrene	ND		400	418		ug/L		104	70 - 130
Tetrachloroethene	320		400	731		ug/L		103	57 - 138
Toluene	ND		400	442		ug/L		110	64 - 136
trans-1,2-Dichloroethene	ND		400	473		ug/L		118	59 - 143
trans-1,3-Dichloropropene	ND		400	401		ug/L		100	63 - 142
Trichloroethene	130		400	649		ug/L		129	63 - 135
Trichlorofluoromethane	ND	F1	400	591		ug/L		148	44 - 150
Vinyl chloride	ND		400	462		ug/L		116	57 _ 150
Xylenes, Total	ND		800	830		ug/L		104	69 - 132
	140	140							

MS MS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	95		70 - 130
Dibromofluoromethane (Surr)	110		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: 480-126895-6 MSD

Matrix: Water

Analysis Batch: 475094

Alialysis Datcil. 47 3034											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	ND		400	532		ug/L		133	68 - 144	4	17
1,1,2,2-Tetrachloroethane	ND		400	392		ug/L		98	56 - 145	3	20
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		400	576		ug/L		144	63 - 150	0	18
ne											
1,1,2-Trichloroethane	ND		400	433		ug/L		108	70 - 130	1	15
1,1-Dichloroethane	ND		400	460		ug/L		115	61 - 139	3	17
1,1-Dichloroethene	ND		400	506		ug/L		127	54 - 150	4	17
1,2,4-Trichlorobenzene	ND		400	360		ug/L		90	47 - 147	6	19
1,2-Dibromo-3-Chloropropane	ND		400	370		ug/L		92	38 - 138	2	24
1,2-Dibromoethane	ND		400	444		ug/L		111	65 - 137	1	15
1,2-Dichlorobenzene	ND		400	443		ug/L		111	70 - 130	3	15
1,2-Dichloroethane	ND		400	456		ug/L		114	64 - 136	6	17
1,2-Dichloropropane	ND		400	424		ug/L		106	67 - 130	4	17
1,3-Dichlorobenzene	ND		400	464		ug/L		116	68 - 131	2	15
1,4-Dichlorobenzene	ND		400	467		ug/L		117	70 - 130	1	15
2-Butanone (MEK)	ND		2000	1890		ug/L		95	50 - 143	1	19
2-Hexanone	ND		2000	1590		ug/L		80	44 - 150	2	15
4-Methyl-2-pentanone (MIBK)	ND		2000	1700		ug/L		85	50 ₋ 140	3	17

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TestAmerica Job ID: 480-126895-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: 480-126895-6 MSD

Matrix: Water

Analysis Batch: 475094

Client Sample ID: MW-23S Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acetone	ND		2000	1670		ug/L		84	39 - 150	1	21
Benzene	ND		400	440		ug/L		110	55 - 147	5	17
Bromodichloromethane	ND		400	466		ug/L		117	70 - 140	5	18
Bromoform	ND		400	415		ug/L		104	53 - 150	3	16
Bromomethane	ND		400	470		ug/L		117	30 - 150	6	50
Carbon disulfide	ND		400	468		ug/L		117	35 - 150	1	21
Carbon tetrachloride	ND		400	551		ug/L		138	56 - 150	4	19
Chlorobenzene	ND		400	459		ug/L		115	70 - 130	4	14
Chloroethane	ND		400	495		ug/L		124	58 - 141	2	20
Chloroform	ND		400	475		ug/L		119	66 - 138	8	18
Chloromethane	ND		400	378		ug/L		95	10 - 150	3	31
cis-1,2-Dichloroethene	390		400	789		ug/L		100	68 - 131	2	17
cis-1,3-Dichloropropene	ND		400	413		ug/L		103	70 - 133	1	15
Cyclohexane	ND		400	440		ug/L		110	48 - 150	2	16
Dibromochloromethane	ND		400	453		ug/L		113	66 - 140	3	15
Dichlorodifluoromethane	ND		400	586		ug/L		147	10 - 150	1	18
Ethylbenzene	ND		400	422		ug/L		106	65 _ 139	1	15
Isopropylbenzene	ND		400	398		ug/L		100	70 - 137	2	16
Methyl acetate	ND		800	769		ug/L		96	42 - 136	2	31
Methyl tert-butyl ether	ND		400	417		ug/L		104	55 - 141	1	16
Methylcyclohexane	ND		400	456		ug/L		114	59 - 150	3	19
Methylene Chloride	22	JB	400	497		ug/L		119	64 - 130	3	17
Styrene	ND		400	411		ug/L		103	70 - 130	2	24
Tetrachloroethene	320		400	729		ug/L		102	57 ₋ 138	0	16
Toluene	ND		400	443		ug/L		111	64 - 136	0	15
trans-1,2-Dichloroethene	ND		400	451		ug/L		113	59 - 143	5	16
trans-1,3-Dichloropropene	ND		400	401		ug/L		100	63 - 142	0	14
Trichloroethene	130		400	621		ug/L		122	63 - 135	4	17
Trichlorofluoromethane	ND	F1	400	619	F1	ug/L		155	44 - 150	5	18
Vinyl chloride	ND		400	465		ug/L		116	57 ₋ 150	1	17
Xylenes, Total	ND		800	813		ug/L		102	69 - 132	2	15

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: MB 490-475225/6

Matrix: Water

Analysis Batch: 475225

Client Sample ID: Method Blank

Prep Type: Total/NA

ı		MB	МВ							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 17:26	1
ı	1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 17:26	1
	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 17:26	1
ı	1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 17:26	1
	1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 17:26	1

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TestAmerica Job ID: 480-126895-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 490-475225/6

Matrix: Water

Surrogate

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Analysis Batch: 475225

Client San	nple ID: N	/lethod	Blank
	Prep Ty	pe: To	tal/NA

Analyto	Docult	Qualifier	RL	MDi	Unit	D	Drongrad	Analuzod	Dil Fac
Analyte 1,1-Dichloroethene	ND	Quaimer	1.0	0.25			Prepared	Analyzed	DII Fac
					ug/L			11/11/17 17:26	
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/17 17:26	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			11/11/17 17:26	1
1,2-Dibromoethane	ND		1.0		ug/L			11/11/17 17:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/17 17:26	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 17:26	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 17:26	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 17:26	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 17:26	•
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 17:26	1
2-Hexanone	ND		10	1.3	ug/L			11/11/17 17:26	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 17:26	1
Acetone	ND		25	2.7	ug/L			11/11/17 17:26	1
Benzene	ND		1.0	0.20	ug/L			11/11/17 17:26	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/11/17 17:26	
Bromoform	ND		1.0		ug/L			11/11/17 17:26	
Bromomethane	ND		1.0	0.35				11/11/17 17:26	
Carbon disulfide	ND		1.0	0.22	_			11/11/17 17:26	
Carbon tetrachloride	ND		1.0	0.18	_			11/11/17 17:26	
Chlorobenzene	ND		1.0	0.18				11/11/17 17:26	
Chloroethane	ND		1.0	0.36	_			11/11/17 17:26	,
Chloroform	ND		1.0		_			11/11/17 17:26	1
Chloromethane	ND ND			0.23				11/11/17 17:26	,
			1.0		ug/L				
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/17 17:26	
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 17:26	
Cyclohexane	ND		5.0		ug/L			11/11/17 17:26	,
Dibromochloromethane	ND		1.0		ug/L			11/11/17 17:26	,
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/11/17 17:26	
Ethylbenzene	ND		1.0	0.19	ug/L			11/11/17 17:26	•
Isopropylbenzene	ND		1.0	0.33	ug/L			11/11/17 17:26	,
Methyl acetate	ND		10	0.58	ug/L			11/11/17 17:26	•
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/11/17 17:26	· · · · · · · · ·
Methylcyclohexane	ND		5.0	0.090	ug/L			11/11/17 17:26	•
Methylene Chloride	ND		5.0	1.0	ug/L			11/11/17 17:26	•
Styrene	ND		1.0	0.28	ug/L			11/11/17 17:26	
Tetrachloroethene	ND		1.0	0.14	ug/L			11/11/17 17:26	1
Toluene	ND		1.0		ug/L			11/11/17 17:26	
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/11/17 17:26	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 17:26	1
Trichloroethene	ND		1.0		ug/L			11/11/17 17:26	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/17 17:26	1
Vinyl chloride	ND		1.0		ug/L			11/11/17 17:26	1
Xylenes, Total	ND		3.0		ug/L ug/L			11/11/17 17:26	1

11/11/17 17:26

TestAmerica Buffalo

Analyzed

11/11/17 17:26

11/11/17 17:26

Prepared

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Limits

70 - 130

70 - 130

70 - 130

%Recovery Qualifier

92

98

105

Dil Fac

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

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

Lab Sample ID: MB 490-475225/6

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Matrix: Water

Analysis Batch: 475225

Client Sample ID: Method Blank **Prep Type: Total/NA**

MB MB

Surrogate %Recovery Qualifier Limits Dil Fac Prepared Analyzed Toluene-d8 (Surr) 70 - 130 11/11/17 17:26 100

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 475225	.							
Australia	Spike	LCS		1114	-	0/ D	%Rec. Limits	
Analyte	Added	23.7	Qualifier	Unit	D	%Rec 119	78 ₋ 135	
1,1,1-Trichloroethane	20.0			ug/L				
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		102	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.9	î	ug/L		130	77 - 129	
ne 1,1,2-Trichloroethane	20.0	22.0		ug/L		110	80 - 124	
1,1-Dichloroethane	20.0	21.5		ug/L		108	78 - 125	
1,1-Dichloroethene	20.0	22.3		ug/L		112	79 - 124	
1,2,4-Trichlorobenzene	20.0	18.5		ug/L		92	63 - 133	
1,2-Dibromo-3-Chloropropane	20.0	19.2		ug/L		96	54 - 125	
1,2-Dibromoethane	20.0	22.2		ug/L		111	80 - 129	
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 _ 121	
1,2-Dichloroethane	20.0	22.7		ug/L		114	77 ₋ 121	
1,2-Dichloropropane	20.0	20.9		ug/L		105	75 - 120	
1,3-Dichlorobenzene	20.0	23.0		ug/L		115	80 _ 122	
1,4-Dichlorobenzene	20.0	23.3		ug/L		116	80 - 120	
2-Butanone (MEK)	100	88.0		ug/L		88	62 _ 133	
2-Hexanone	100	86.0		ug/L		86	60 _ 142	
4-Methyl-2-pentanone (MIBK)	100	85.4		ug/L		85	60 _ 137	
Acetone	100	87.4		ug/L		87	54 ₋ 145	
Benzene	20.0	20.6		ug/L		103	80 - 121	
Bromodichloromethane	20.0	23.1		ug/L		115	75 ₋ 129	
Bromoform	20.0	21.2		ug/L		106	46 - 145	
Bromomethane	20.0	21.4		ug/L		107	41 - 150	
Carbon disulfide	20.0	21.4		ug/L		107	77 - 126	
Carbon tetrachloride	20.0	25.5		ug/L		128	64 - 147	
Chlorobenzene	20.0	23.1		ug/L		115	80 - 120	
Chloroethane	20.0	20.7		ug/L		103	72 - 120	
Chloroform	20.0	23.4		ug/L		117	73 - 129	
Chloromethane	20.0	16.4		ug/L		82	12 - 150	
cis-1,2-Dichloroethene	20.0	21.8		ug/L		109	76 - 125	
cis-1,3-Dichloropropene	20.0	21.4		ug/L		107	74 - 140	
Cyclohexane	20.0	19.7		ug/L		99	73 - 122	
Dibromochloromethane	20.0	22.2		ug/L		111	69 - 133	
Dichlorodifluoromethane	20.0	23.0		ug/L		115	37 - 127	
Ethylbenzene	20.0	20.3		ug/L		101	80 - 130	
Isopropylbenzene	20.0	19.1		ug/L		95	80 - 141	
Methyl acetate	40.0	39.5		ug/L		99	64 - 150	
Methyl tert-butyl ether	20.0	20.8		ug/L		104	72 - 133	
Methylcyclohexane	20.0	21.5		ug/L		108	71 - 129	
Methylene Chloride	20.0	21.7		ug/L		108	79 - 123	
Styrene	20.0	20.2		ug/L		101	80 _ 127	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

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

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Analysis Batch: 475225

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Tetrachloroethene	20.0	22.8		ug/L		114	80 - 126	
Toluene	20.0	20.8		ug/L		104	80 - 126	
trans-1,2-Dichloroethene	20.0	21.3		ug/L		107	79 ₋ 126	
trans-1,3-Dichloropropene	20.0	20.6		ug/L		103	63 - 134	
Trichloroethene	20.0	23.9		ug/L		120	80 - 123	
Trichlorofluoromethane	20.0	24.8		ug/L		124	65 - 124	
Vinyl chloride	20.0	20.2		ug/L		101	68 - 120	
Xylenes, Total	40.0	39.9		ug/L		100	80 _ 132	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Client Sample	ID: Lab	Control	San	iple Dup
		Prep Ty	/pe: ·	Total/NA

Matrix: water							Prep I	ype: 10	tai/NA
Analysis Batch: 475225	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	24.2		ug/L		121	78 - 135	2	15
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	69 - 131	2	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	26.3	*	ug/L		132	77 - 129	2	16
ne				-					
1,1,2-Trichloroethane	20.0	21.8		ug/L		109	80 - 124	1	13
1,1-Dichloroethane	20.0	21.9		ug/L		110	78 - 125	2	17
1,1-Dichloroethene	20.0	23.7		ug/L		118	79 - 124	6	20
1,2,4-Trichlorobenzene	20.0	18.7		ug/L		94	63 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	19.5		ug/L		98	54 - 125	2	19
1,2-Dibromoethane	20.0	21.5		ug/L		108	80 - 129	3	13
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 - 121	0	12
1,2-Dichloroethane	20.0	23.2		ug/L		116	77 - 121	2	13
1,2-Dichloropropane	20.0	21.4		ug/L		107	75 - 120	2	15
1,3-Dichlorobenzene	20.0	23.1		ug/L		116	80 - 122	1	13
1,4-Dichlorobenzene	20.0	23.2		ug/L		116	80 - 120	0	12
2-Butanone (MEK)	100	95.9		ug/L		96	62 - 133	9	19
2-Hexanone	100	86.1		ug/L		86	60 - 142	0	17
4-Methyl-2-pentanone (MIBK)	100	87.1		ug/L		87	60 - 137	2	21
Acetone	100	90.2		ug/L		90	54 ₋ 145	3	23
Benzene	20.0	21.0		ug/L		105	80 - 121	2	12
Bromodichloromethane	20.0	23.4		ug/L		117	75 ₋ 129	1	14
Bromoform	20.0	21.2		ug/L		106	46 - 145	0	14
Bromomethane	20.0	22.0		ug/L		110	41 - 150	3	19
Carbon disulfide	20.0	21.8		ug/L		109	77 - 126	2	16
Carbon tetrachloride	20.0	25.4		ug/L		127	64 - 147	0	16
Chlorobenzene	20.0	22.3		ug/L		111	80 - 120	3	12
Chloroethane	20.0	21.7		ug/L		108	72 - 120	5	15
Chloroform	20.0	23.8		ug/L		119	73 - 129	2	14

TestAmerica Buffalo

TestAmerica Job ID: 480-126895-1

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Analysis Batch: 475225

Client: ARCADIS U.S. Inc

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

7 , 0.10 - 2.110 11 - 0-2-0	Spike	LCCD	LCSD				%Rec.		RPD
Analyte	Added		Qualifier	Unit	D	%Rec	MRec.	RPD	Limit
Chloromethane		16.4	Qualifier	ug/L		82	12 ₋ 150		20
cis-1,2-Dichloroethene	20.0	22.1				111	76 - 125		15
cis-1,3-Dichloropropene	20.0	20.9		ug/L ug/L		104	70 - 125 74 - 140	2	15
Cyclohexane	20.0	19.9		ug/L		99	73 - 122	.	16
Dibromochloromethane	20.0	22.8		ug/L		114	69 - 133	3	13
Dichlorodifluoromethane	20.0	22.4		ug/L		112	37 - 127	2	16
Ethylbenzene	20.0	20.2		ug/L		101	80 - 130	0	12
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 141	1	13
Methyl acetate	40.0	40.4		ug/L		101	64 - 150	2	18
Methyl tert-butyl ether	20.0	21.4		ug/L		107	72 - 133	3	16
Methylcyclohexane	20.0	21.5		ug/L		107	71 - 129	0	17
Methylene Chloride	20.0	23.3		ug/L		116	79 - 123	7	15
Styrene	20.0	20.2		ug/L		101	80 - 127	0	12
Tetrachloroethene	20.0	22.5		ug/L		112	80 - 126	1	17
Toluene	20.0	20.8		ug/L		104	80 - 126	0	13
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	79 - 126	0	15
trans-1,3-Dichloropropene	20.0	20.7		ug/L		103	63 - 134	0	13
Trichloroethene	20.0	23.7		ug/L		118	80 - 123	1	14
Trichlorofluoromethane	20.0	24.5		ug/L		122	65 - 124	1	22
Vinyl chloride	20.0	20.4		ug/L		102	68 - 120	1	15

40.0

39.5

ug/L

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-192959/1-A

Matrix: Water

Xylenes, Total

Analysis Batch: 194036

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 192959

80 - 132

	МВ	МВ						•	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.430	J	2.0	0.35	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorohexanesulfonic acid (PFHxS)	0.427	J	2.0	0.17	ng/L		11/06/17 08:43	11/10/17 21:44	1

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11

13

14

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

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

MB MB

Lab Sample ID: MB 320-192959/1-A

Matrix: Water

Analysis Batch: 194036

Client Sample ID: Method Blank **Prep Type: Total/NA**

Prep Batch: 192959

	1110	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic Acid	ND		2.0	0.19	ng/L		11/06/17 08:43	11/10/17 21:44	1
(PFHpS)									
Perfluorooctanesulfonic acid (PFOS)	0.542	J	2.0	0.54	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/06/17 08:43	11/10/17 21:44	1
Perfluorooctane Sulfonamide (FOSA)	0.679	J	2.0	0.35	ng/L		11/06/17 08:43	11/10/17 21:44	1
	MB	MB							

	MB	МВ				
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	93	-	25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C4 PFBA	104		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C2 PFHxA	104		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C4 PFOA	94		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C5 PFNA	106		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C2 PFDA	110		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C2 PFUnA	104		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C2 PFDoA	92		25 - 150	11/06/17 08:43	11/10/17 21:44	1
1802 PFHxS	99		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C4 PFOS	99		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C4-PFHpA	105		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C5 PFPeA	103		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C3-PFBS	104		25 - 150	11/06/17 08:43	11/10/17 21:44	1
13C2-PFTeDA	103		25 - 150	11/06/17 08:43	11/10/17 21:44	1

Lab Sample ID: LCS 320-192959/2-A

Matrix: Water

Analysis Ratch: 194036

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

Analysis Batch: 194036							Prep Bate	ch: 192959
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Perfluorobutanoic acid (PFBA)	40.0	39.0		ng/L		97	78 - 138	
Perfluoropentanoic acid (PFPeA)	40.0	38.4		ng/L		96	66 - 136	
Perfluorohexanoic acid (PFHxA)	40.0	40.6		ng/L		101	76 - 136	
Perfluoroheptanoic acid (PFHpA)	40.0	38.3		ng/L		96	78 - 138	
Perfluorooctanoic acid (PFOA)	40.0	40.0		ng/L		100	70 - 130	
Perfluorononanoic acid (PFNA)	40.0	38.1		ng/L		95	77 - 137	
Perfluorodecanoic acid (PFDA)	40.0	38.4		ng/L		96	74 - 134	
Perfluoroundecanoic acid	40.0	37.5		ng/L		94	68 - 128	
(PFUnA)								
Perfluorododecanoic acid	40.0	42.5		ng/L		106	72 - 132	
(PFDoA)								
Perfluorotridecanoic Acid	40.0	44.4		ng/L		111	56 - 163	
(PFTriA)								
Perfluorotetradecanoic acid	40.0	34.2		ng/L		85	63 - 123	
(PFTeA)	0.5.4	0= 4		,,			70 400	
Perfluorobutanesulfonic acid	35.4	35.1		ng/L		99	79 ₋ 139	
(PFBS)								
Perfluorohexanesulfonic acid	36.4	34.8		ng/L		96	77 - 137	
(PFHxS)	38.1	20.0		/1		400	00 440	
Perfluoroheptanesulfonic Acid	38.1	39.2		ng/L		103	83 - 143	
(PFHpS)	07.4	05.0				07	74 404	
Perfluorooctanesulfonic acid	37.1	35.9		ng/L		97	74 ₋ 134	
(PFOS)								

TestAmerica Buffalo

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TestAmerica Job ID: 480-126895-1

Client Sample ID: Lab Control Sample

Client: ARCADIS U.S. Inc

Lab Sample ID: LCS 320-192959/2-A

Project/Site: Crown Dykman - Glen Cove, NY

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

Matrix: Water							Prep T	ype: Total/NA
Analysis Batch: 194036							Prep	Batch: 192959
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Perfluorodecanesulfonic acid	 38.6	37.4		ng/L		97	75 - 135	
(PFDS)								
Perfluorooctane Sulfonamide	40.0	39.9		ng/L		100	82 - 142	

(FOSA)

LCS LC	,3
%Recovery Qu	ualifier Limits
60	25 - 150
65	25 - 150
63	25 - 150
59	25 - 150
68	25 - 150
70	25 - 150
68	25 - 150
61	25 - 150
65	25 - 150
65	25 - 150
66	25 - 150
66	25 - 150
71	25 - 150
73	25 - 150
	%Recovery Qu 60 65 63 59 68 70 68 61 65 65 66 66 71

Lab Sample ID: LCSD 320-192959/3-A

Matrix: Water

Analysis Batch: 194036

Perfluorooctanesulfonic acid

Perfluorodecanesulfonic acid

(PFOS)

(PFDS)

Client Sample ID	Lab	Control	Sample Dup
		Prep Ty	/pe: Total/NA

%Rec.

Prep Batch: 192959

Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Perfluorobutanoic acid (PFBA) 40.0 40.8 ng/L 102 78 - 138 5 30 Perfluoropentanoic acid (PFPeA) 40.0 38.3 ng/L 96 66 - 136 0 30 Perfluorohexanoic acid (PFHxA) 40.0 40.2 101 76 - 136 30 ng/L 78 - 138 Perfluoroheptanoic acid (PFHpA) 40.0 41.3 ng/L 103 8 30 Perfluorooctanoic acid (PFOA) 40.0 40.9 ng/L 102 70 - 130 2 30 Perfluorononanoic acid (PFNA) 40.0 40.2 ng/L 101 77 - 1376 30 Perfluorodecanoic acid (PFDA) 40.0 37.5 94 74 - 134 2 30 ng/L Perfluoroundecanoic acid 40.0 37 4 ng/L 94 68 - 128 30 (PFUnA) 40.0 44.3 ng/L 111 72 - 13230 Perfluorododecanoic acid (PFDoA) 40.0 47.0 ng/L 117 56 - 163 30 Perfluorotridecanoic Acid (PFTriA) 40.0 36.5 ng/L 91 63 - 123 30 Perfluorotetradecanoic acid (PFTeA) Perfluorobutanesulfonic acid 35.4 37.2 ng/L 105 79 - 139 30 (PFBS) 37.0 102 30 36.4 77 - 1376 Perfluorohexanesulfonic acid ng/L (PFHxS) 108 38.1 41.1 ng/L 83 _ 143 5 30 Perfluoroheptanesulfonic Acid (PFHpS)

Spike

LCSD LCSD

TestAmerica Buffalo

RPD

30

30

37.1

37.3

39.4

ng/L

ng/L

100

102

74 - 134

75 - 135

TestAmerica Job ID: 480-126895-1

82 - 142

131

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCSD 320-192959/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA Analysis Batch: 194036 **Prep Batch: 192959** LCSD LCSD Spike RPD Analyte Added Result Qualifier Limits RPD Limit Unit %Rec

52.4

40.0

(FOSA)

Perfluorooctane Sulfonamide

LCSD	LUSD	
%Recovery	Qualifier	Limits
75		25 - 150
79		25 - 150
78		25 - 150
72		25 - 150
78		25 - 150
87		25 - 150
85		25 - 150
75		25 - 150
79		25 - 150
79		25 - 150
82		25 - 150
80		25 - 150
85		25 - 150
86		25 - 150
	%Recovery 75 79 78 72 78 87 85 75 79 82 80 85	79 78 72 78 87 85 75 79 79 82 80 85

Lab Sample ID: MB 320-192966/1-A

Matrix: Water

Analysis Batch: 194032

Client Sample ID: Method Blank **Prep Type: Total/NA Prep Batch: 192966**

ng/L

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorohexanesulfonic acid (PFHxS)	0.305	J	2.0	0.17	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/06/17 08:49	11/10/17 14:58	1
Perfluorooctane Sulfonamide (FOSA)	0.452	J	2.0	0.35	ng/L		11/06/17 08:49	11/10/17 14:58	1
	МВ	MB							

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	58		25 _ 150	11/06/17 08:49	11/10/17 14:58	1
13C4 PFBA	56		25 - 150	11/06/17 08:49	11/10/17 14:58	1
13C2 PFHxA	64		25 - 150	11/06/17 08:49	11/10/17 14:58	1
13C4 PFOA	58		25 _ 150	11/06/17 08:49	11/10/17 14:58	1
13C5 PFNA	63		25 - 150	11/06/17 08:49	11/10/17 14:58	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

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

Lab Sample ID: MB 320-192966/1-A

Lab Sample ID: LCS 320-192966/2-A

Matrix: Water

Matrix: Water

(FOSA)

Analysis Batch: 194032

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

Prep Batch: 192966

	MB	MB			•	
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	63		25 - 150	11/06/17 08:49	11/10/17 14:58	1
13C2 PFUnA	63		25 - 150	11/06/17 08:49	11/10/17 14:58	1
13C2 PFDoA	56		25 - 150	11/06/17 08:49	11/10/17 14:58	1
1802 PFHxS	65		25 - 150	11/06/17 08:49	11/10/17 14:58	1
13C4 PFOS	63		25 - 150	11/06/17 08:49	11/10/17 14:58	1
13C4-PFHpA	64		25 - 150	11/06/17 08:49	11/10/17 14:58	1
13C5 PFPeA	64		25 - 150	11/06/17 08:49	11/10/17 14:58	1
13C3-PFBS	63		25 - 150	11/06/17 08:49	11/10/17 14:58	1
13C2-PFTeDA	60		25 - 150	11/06/17 08:49	11/10/17 14:58	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 192966

Analysis Batch: 194470							Prep Batch: 19296
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	38.5		ng/L		96	78 - 138
Perfluoropentanoic acid (PFPeA)	40.0	38.2		ng/L		96	66 - 136
Perfluorohexanoic acid (PFHxA)	40.0	39.3		ng/L		98	76 ₋ 136
Perfluoroheptanoic acid (PFHpA)	40.0	37.4		ng/L		94	78 - 138
Perfluorooctanoic acid (PFOA)	40.0	39.3		ng/L		98	70 - 130
Perfluorononanoic acid (PFNA)	40.0	38.7		ng/L		97	77 ₋ 137
Perfluorodecanoic acid (PFDA)	40.0	38.0		ng/L		95	74 - 134
Perfluoroundecanoic acid (PFUnA)	40.0	35.5		ng/L		89	68 - 128
Perfluorododecanoic acid (PFDoA)	40.0	39.4		ng/L		99	72 ₋ 132
Perfluorotridecanoic Acid (PFTriA)	40.0	42.0		ng/L		105	56 - 163
Perfluorotetradecanoic acid (PFTeA)	40.0	34.8		ng/L		87	63 - 123
Perfluorobutanesulfonic acid (PFBS)	35.4	34.0		ng/L		96	79 - 139
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.5	В	ng/L		95	77 ₋ 137
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.8		ng/L		102	83 - 143
Perfluorooctanesulfonic acid (PFOS)	37.1	35.0		ng/L		94	74 - 134
Perfluorodecanesulfonic acid (PFDS)	38.6	35.5		ng/L		92	75 - 135
Perfluorooctane Sulfonamide	40.0	40.1	В	ng/L		100	82 - 142

LCS LCS

Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	78		25 - 150
13C4 PFBA	92		25 - 150
13C2 PFHxA	89		25 - 150
13C4 PFOA	79		25 - 150
13C5 PFNA	87		25 - 150
13C2 PFDA	88		25 - 150
13C2 PFUnA	88		25 - 150

TestAmerica Buffalo

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TestAmerica Job ID: 480-126895-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 320-192966/2-A

Matrix: Water

Analysis Batch: 194470

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

Prep Batch: 192966

•	LCS	LCS	
Isotope Dilution	%Recovery	Qualifier	Limits
13C2 PFDoA	79		25 - 150
1802 PFHxS	84		25 - 150
13C4 PFOS	85		25 - 150
13C4-PFHpA	90		25 - 150
13C5 PFPeA	90		25 - 150
13C3-PFBS	94		25 - 150
13C2-PFTeDA	87		25 - 150

Lab Sample ID: LCSD 320-192966/3-A

Matrix: Water

Analysis Batch: 194032

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

82 - 142

Prep Batch: 192966

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorobutanoic acid (PFBA)	40.0	40.0		ng/L		100	78 - 138	4	30
Perfluoropentanoic acid (PFPeA)	40.0	38.1		ng/L		95	66 - 136	0	30
Perfluorohexanoic acid (PFHxA)	40.0	42.5		ng/L		106	76 - 136	8	30
Perfluoroheptanoic acid (PFHpA)	40.0	42.5		ng/L		106	78 - 138	13	30
Perfluorooctanoic acid (PFOA)	40.0	40.5		ng/L		101	70 - 130	3	30
Perfluorononanoic acid (PFNA)	40.0	38.6		ng/L		97	77 - 137	0	30
Perfluorodecanoic acid (PFDA)	40.0	41.4		ng/L		103	74 - 134	8	30
Perfluoroundecanoic acid (PFUnA)	40.0	35.0		ng/L		87	68 - 128	2	30
Perfluorododecanoic acid (PFDoA)	40.0	44.4		ng/L		111	72 - 132	12	30
Perfluorotridecanoic Acid (PFTriA)	40.0	43.7		ng/L		109	56 - 163	4	30
Perfluorotetradecanoic acid (PFTeA)	40.0	35.8		ng/L		89	63 - 123	3	30
Perfluorobutanesulfonic acid (PFBS)	35.4	36.9		ng/L		104	79 ₋ 139	8	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.6		ng/L		98	77 - 137	3	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	40.1		ng/L		105	83 - 143	3	30
Perfluorooctanesulfonic acid (PFOS)	37.1	36.4		ng/L		98	74 - 134	4	30
Perfluorodecanesulfonic acid	38.6	38.6		ng/L		100	75 - 135	9	30

40.0

40.2

ng/L

(FOSA)

(PFDS)

Perfluorooctane Sulfonamide

	LCSD	LCSD	
Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	64		25 _ 150
13C4 PFBA	68		25 - 150
13C2 PFHxA	67		25 _ 150
13C4 PFOA	64		25 _ 150
13C5 PFNA	72		25 - 150
13C2 PFDA	68		25 _ 150
13C2 PFUnA	71		25 - 150
13C2 PFDoA	62		25 _ 150
1802 PFHxS	74		25 _ 150

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Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-126895-1

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCSD 320-192966/3-A	Client Sample ID: Lab Control Sample Dup
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 194032	Prep Batch: 192966
LCCD LCCD	

	LCSD	LCSD	
Isotope Dilution	%Recovery	Qualifier	Limits
13C4 PFOS	71		25 - 150
13C4-PFHpA	71		25 _ 150
13C5 PFPeA	72		25 - 150
13C3-PFBS	74		25 _ 150
13C2-PFTeDA	71		25 - 150

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QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

GC/MS VOA

Analysis Batch: 475094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126895-4	MW-7	Total/NA	Water	8260C	
480-126895-5	MW-23D	Total/NA	Water	8260C	
480-126895-7	TRIP BLANK	Total/NA	Water	8260C	
MB 490-475094/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475094/4	Lab Control Sample	Total/NA	Water	8260C	
480-126895-6 MS	MW-23S	Total/NA	Water	8260C	
480-126895-6 MSD	MW-23S	Total/NA	Water	8260C	

Analysis Batch: 475225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126895-6	MW-23S	Total/NA	Water	8260C	
MB 490-475225/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475225/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475225/4	Lab Control Sample Dup	Total/NA	Water	8260C	

LCMS

Prep Batch: 192959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126895-1	EB-01	Total/NA	Water	3535	 -
480-126895-2	EB-02	Total/NA	Water	3535	
480-126895-3	EB-03	Total/NA	Water	3535	
480-126895-4	MW-7	Total/NA	Water	3535	
480-126895-5	MW-23D	Total/NA	Water	3535	
MB 320-192959/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-192959/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-192959/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 192966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126895-6	MW-23S	Total/NA	Water	3535	
MB 320-192966/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-192966/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-192966/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 194032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-192966/1-A	Method Blank	Total/NA	Water	537 (modified)	192966
LCSD 320-192966/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	192966

Analysis Batch: 194036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126895-1	EB-01	Total/NA	Water	537 (modified)	192959
480-126895-2	EB-02	Total/NA	Water	537 (modified)	192959
480-126895-3	EB-03	Total/NA	Water	537 (modified)	192959
480-126895-4	MW-7	Total/NA	Water	537 (modified)	192959
480-126895-5	MW-23D	Total/NA	Water	537 (modified)	192959
MB 320-192959/1-A	Method Blank	Total/NA	Water	537 (modified)	192959
LCS 320-192959/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	192959
LCSD 320-192959/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	192959

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QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

LCMS (Continued)

Analysis Batch: 194470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126895-6	MW-23S	Total/NA	Water	537 (modified)	192966
LCS 320-192966/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	192966

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Δ

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1

9

10

12

4 4

15

Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Lab Sample ID: 480-126895-1

Matrix: Water

Date Collected: 10/31/17 09:20 Date Received: 11/01/17 09:30

Client Sample ID: EB-01

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			192959	11/06/17 08:43	CCB	TAL SAC
Total/NA	Analysis	537 (modified)		1	194036	11/10/17 23:50	JRB	TAL SAC

Client Sample ID: EB-02 Lab Sample ID: 480-126895-2

Date Collected: 10/31/17 09:30

Matrix: Water Date Received: 11/01/17 09:30

Batch Batch Dilution Batch Prepared Method **Prep Type** Туре Run Factor Number or Analyzed Analyst Total/NA 3535 192959 11/06/17 08:43 CCB TAL SAC Prep Total/NA 194036 TAL SAC Analysis 537 (modified) 1 11/10/17 23:58 JRB

Client Sample ID: EB-03 Lab Sample ID: 480-126895-3

Date Collected: 10/31/17 09:40

Matrix: Water Date Received: 11/01/17 09:30

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA Prep 3535 192959 11/06/17 08:43 CCB TAL SAC Total/NA JRB TAL SAC Analysis 537 (modified) 194036 11/11/17 00:06 1

Client Sample ID: MW-7 Lab Sample ID: 480-126895-4

Date Collected: 10/31/17 11:20 Matrix: Water

Date Received: 11/01/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	475094	11/11/17 11:20	S1S	TAL NSH
Total/NA	Prep	3535			192959	11/06/17 08:43	CCB	TAL SAC
Total/NA	Analysis	537 (modified)		1	194036	11/11/17 00:14	JRB	TAL SAC

Client Sample ID: MW-23D Lab Sample ID: 480-126895-5

Date Collected: 10/31/17 13:10 Matrix: Water

Date Received: 11/01/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	475094	11/11/17 10:28	S1S	TAL NSH
Total/NA	Prep	3535			192959	11/06/17 08:43	CCB	TAL SAC
Total/NA	Analysis	537 (modified)		1	194036	11/11/17 00:22	JRB	TAL SAC

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc

Client Sample ID: MW-23S

Date Collected: 10/31/17 14:50

Date Received: 11/01/17 09:30

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Lab Sample ID: 480-126895-6

Matrix: Water

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 8260C 475225 11/12/17 01:17 S1S TAL NSH 3535 Total/NA Prep 192966 11/06/17 08:49 CCB TAL SAC Total/NA Analysis 537 (modified) 194470 11/13/17 18:59 JRB TAL SAC 1

Client Sample ID: TRIP BLANK Lab Sample ID: 480-126895-7

Date Collected: 10/31/17 00:00 Matrix: Water

Date Received: 11/01/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475094	11/11/17 03:30	S1S	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

New York NELAP 2 10026 03-31-18	Authority	Program	EPA Region	Identification Number	Expiration Date
	New York	NELAP	2	10026	

Laboratory: TestAmerica Nashville

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 Dat
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	01-01-18
Arizona	State Program	9	AZ0473	05-05-18
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2L	12-31-17
Illinois	NELAP	5	A) 200010	12-09-17
lowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	12-31-17
Kentucky (UST)	State Program		19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program		TN00032	11-03-19
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP		047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA NA	02-24-20
Nevada	.	9	TN00032	07-31-18
	State Program NELAP	1	2963	10-09-18
New Hampshire New Jersey	NELAP	2	TN965	06-30-18
New York		2	11342	03-31-18
	NELAP	4	387	12-31-17
North Carolina (WW/SW)	State Program			
North Dakota	State Program	8	R-146	06-30-18
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412 TN000004	08-31-18
Oregon	NELAP	10	TN200001	04-27-18
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-18
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-18
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program A2LA	5	998020430	08-31-18

TestAmerica Buffalo

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Accreditation/Certification Summary

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-126895-1

Project/Site: Crown Dykman - Glen Cove, NY

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	UST-055	12-18-17
Arizona	State Program	9	AZ0708	08-11-18
Arkansas DEQ	State Program	6	88-0691	06-17-18
California	State Program	9	2897	01-31-18
Colorado	State Program	8	CA00044	08-31-18
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-18
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-18
Ilinois	NELAP	5	200060	03-17-18
Kansas	NELAP	7	E-10375	10-31-17 *
A-B	DoD ELAP		L2468	01-20-18
ouisiana .	NELAP	6	30612	06-30-18
Maine	State Program	1	CA0004	04-18-18
Michigan	State Program	5	9947	01-31-18
Nevada	State Program	9	CA00044	07-31-18
New Hampshire	NELAP	1	2997	04-18-18
New Jersey	NELAP	2	CA005	06-30-18
New York	NELAP	2	11666	04-01-18
Oregon	NELAP	10	4040	01-28-18
Pennsylvania	NELAP	3	68-01272	03-31-18
Texas Texas	NELAP	6	T104704399	05-31-18
JS Fish & Wildlife	Federal		LE148388-0	07-31-18
JSDA	Federal		P330-11-00436	12-30-17
JSEPA UCMR	Federal	1	CA00044	11-06-18
Jtah	NELAP	8	CA00044	02-28-18
/irginia	NELAP	3	460278	03-14-18
Vashington	State Program	10	C581	05-05-18
Vest Virginia (DW)	State Program	3	9930C	12-31-17
Nyoming	State Program	8	8TMS-L	01-28-19

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

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126895-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-126895-1	EB-01	Water	10/31/17 09:20	11/01/17 09:30
480-126895-2	EB-02	Water	10/31/17 09:30	11/01/17 09:30
480-126895-3	EB-03	Water	10/31/17 09:40	11/01/17 09:30
480-126895-4	MW-7	Water	10/31/17 11:20	11/01/17 09:30
480-126895-5	MW-23D	Water	10/31/17 13:10	11/01/17 09:30
480-126895-6	MW-23S	Water	10/31/17 14:50	11/01/17 09:30
480-126895-7	TRIP BLANK	Water	10/31/17 00:00	11/01/17 09:30

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Ver. 08/04/2016 Special Instructions/Note: - Abeduno M - Hexane 430-126895 COL Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Month 480-104070-24647.1 Preservation Codes 6.05 Page 1 of 10 I - Ice J - DI W K - EDT, L - EDA A - HCL B - NaO! C - Zn A D - Nitric E - NaH! F - MeO G - Amc B CSICO COMUNICO Total Number of containers thod of Shipment Analysis Requested Cooler Temperature(s) °C and Other Remarks Special Instructions/QC Requirements melissa deyo@testamericainc.com eceived by Lab PM. Deyo, Melissa L 1790 Company Company Anach 5 E-Mail: Water Water Water Preservation Code; Water Water Water Water Matrix Water Water Water Water Radiological Type (C=comp, amples. Alovay Thomas G=grab) (518) 3410-7296 0 0 0 0 0 0 Standard Sample 0440 1130 05H 0430 1310 10-31-17 0926 Date: Unknown AT Requested (days): Due Date Requested: PO#. 00266417.0000 Date/Time: Sample Date i to 13 s Project #. 48008440 SSOW#: A DA Poison B Skin Irritant iverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Phone (716) 691-2600 Fax (716) 691-7991 Non-Hazard Flammable May My Marin Possible Hazard Identification Nooel Crown Dykman - Glen Cove, NY YOUN DYCMEN (318) 250-1300 aaron.bobar@arcadis-us.com mpty Kit Relinquished by: Custody Seals Intact:
A Yes A No 855 Route 146 Suite 210 MW - 33D MV - AS Sample Identification Client Information EB-03 MW-7 ARCADIS U.S. Inc EB-01 Aaron Bobar Clifton Park State, Zip. NY, 12065

TestAmerica

Chain of Custody Record

TestAmerica Buffalo

Amherst, NY 14228-2298

10 Hazelwood Drive

Chain of Custody Record

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

TestAmerica Buffalo

TestAmerica

Client Information	Sampler, Allo Mul	Thomas,	Lab PM: Deyo, Melissa L	Carner Tracking No(s)	o(s): COC No: 480-104070-24647.1
Client Contact: Aaron Bobar	-	-1296	E-Mait melissa devo@te	E-Mait: melissa devo@testamericainc.com	Page Page 1 of 10
Company ARCADIS U.S. Inc	1			Anahain Dammatad	1,00b #t
Address. 855 Route 146 Suite 210	Due Date Requested:				18
Oity Clifton Park	TAT Requested (days):	-	18 li		
State, Ztp NY, 12065	Standard	2			D - Nific Acid P - Na2O4S E - NaHSO4
Prigne 150 - 1300	PO#. 00266417.0000		(0	480-126895 Chain of Custody	D
Email: aaron.bobar@arcadis-us.com	WO#.			tei	I - Ice J - DI Water
Project Name Crown Dykman - Glen Cove, NY	Project #. 48008440			J bysep	AND SERVICE
SIERCAUM OUNCEMENT	SSOW#		sp (Y	oneta ,a	of con Other:
U Sample Identification	Sample Date Time	Sample Type (C=comp,	Matrix (Wawater, Streolite, Streo	PEC_IDA - PFAS	TedmuN lato
	1	Preserva	a V	dd z	
E8-01	10-31-17 0920	<u></u>	Water NN	×	
EB - 03	0430	5	Water N N	×	C S
EB-03	0440	0	water N N	×	d
L-MW	1130	5	water NNX	×	2
MW - 35.0	1310	0	Water NN X	×	ıo
MW - 335	INSC INSC		Water NN X	· · · · · · · · · · · · · · · · · · ·	5
TAP BIANK	一一一	1	Water NNX		<u>k</u>
C. C.			Water		A
115:01 1 XX			Water		
			Water		
			Water		
Possible Hazard Identification Non-Hazard Flammable Skin Irritant Poison B	oison B Unknown	☐ Radiological	Sample	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Anchive For	iples are retained longer than 1 month) Archive For Months
			Special !	Special Instructions/QC Requirements:	and the state of t
Empty Kit Relinquished by:	Date:		ime:	Method of Shipment	pment
Relinquimed by Month	Date/Time: 10-31-17	S A	Agadis Recei	Received by.	10 SIII 16.05 Company for
Reinquished by A Decollar	Date/Time;	1700	Company Received by	・「皇家	Date/Time.
Reinquished by.	Date/Time	Š	Company Received by		
Custody Seals Intact: Custody Seal No.:			Cooler	Cooler Temperature(s) ^o C and Other Remarks:	O,
					Ver 08/04/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM -

Cooler Received/Opened On11/10/170950	
Time Samples Removed From Cooler Time Samples Placed In Storage	(2 Hour Window)
1. Tracking #(last 4 digits, FedEx) Courier:FedEx	
IR Gun ID97310166 pH Strip Lot Chlorine Strip Lot	_
2. Temperature of rep. sample or temp blank when opened: 155 Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO. (NA
4. Were custody seals on outside of cooler?	YESNONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	(ES)NONA
6. Were custody papers inside cooler?	YES(NO)NA
certify that I opened the cooler and answered questions 1-6 (intial)	es
7. Were custody seals on containers: YES NO and Intact	YESNO.(.NA)
Were these signed and dated correctly?	YESNONA
3. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Pape	r Other None
O. Cooling process: (ce Ice-pack Ice (direct contact) Dry ice	Other None
0. Did all containers arrive in good condition (unbroken)?	YES NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	YESNONA
2. Did all container labels and tags agree with custody papers?	YESNONA
3a. Were VOA vials received?	YES., NONA
b. Was there any observable headspace present in any VOA vial?	YES(10)NA
Larger than this.	
	`
4. Was there a Trip Blank in this cooler? YES, NONA If multiple coolers, sequence	e#
certify that I unloaded the cooler and answered questions 7-14 (intial)	/>
5a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO(NA)
b. Did the bottle labels indicate that the correct preservatives weré-used	ES.I.NONA
6. Was residual chlorine present?	YESNONA
certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	<u> </u>
7. Were custody papers properly filled out (ink, signed, etc)?	(ES).NONA
8. Did you sign the custody papers in the appropriate place?	(FES)NONA
9. Were correct containers used for the analysis requested?	YES NONA
0. Was sufficient amount of sample sent in each container?	YESNONA
certify that I entered this project into LIMS and answered questions 17-20 (intial)	
certify that I attached a label with the unique LIMS number to each container (intial)	<u> </u>
1. Were there Non-Conformance issues at login? YES. NO Was a NCM generated? YES. NO#	es_

BIS = Broken in shipment Cooler Receipt Fonn.doc

LF-1 End of Form Revised 8/23/17

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Phone (716) 691-2600 Fax (716) 691-7991	Chain of Custody Record	ody Record	480-126895	America 1894 INEDWIGHTERING
Client Information (Sub Contract Lab)	Sampler:	Lab PM: Deyo, Melissa L		
Client Contact: Shipping/Receiving	Phone:	E-Mail: melissa.deyo@testameric	Sainc. Con. most rom	
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - New York		Job #: 480-126895-1
Address: 2960 Foster Creighton Drive, '	Due Date Requested: 11/13/2017		Analysis Requested	
City: Nashville State, Zip:	TAT Requested (days):	で 単位 で で で で で で で で で で で で で で で で で で		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaOZ D - Nitric Acid P - Na2O4S
1N, 3/204 Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO#:	The state of the s		E - NaHSO4 F - MeOH G - Amchlor
	WO#:			H - Ascorbic Acid 1 - Ice J - DI Water
Project Name: Crown Dykman - Glen Cove, NY	Project #: 48008440	4 10 se		K - EDTA L - EDA
Site:	SSOW#:	SD (Ve		Office
Sample Identification - Client ID (Lab ID)	Sample Date Time Gentral)	Matrix (Wavener (Wave		Jedmyn leto
The state of the s	Preserva	X		.
MW-7 (480-126895-4)	1/17 11:20 Fastern	×	C C C C C C C C C C C C C C C C C C C	@8×
MW-23D (480-126895-5)	10/31/17 13:10 Fastern	Water		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
MW-23S (480-126895-6)	10/31/17 14:50 Eastern	Water		3 @10x
TRIP BLANK (480-126895-7)	10/31/17 Eastern	Water		2 TB@1x
Note: Since laboratory accreditations are subject to change. Test/merica Laboratories, inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory or of packs are of the first analysis state of the first instead aboratory or of packs the state instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, inc. aboratories, inc.	ores, inc. places the ownership of method, analyte shrarty being analyzed, the samples must be ship it to date, return the signed Chain of Custody aftest.	& accreditation compliance upon out su bed back to the TestAmerica laboratory ing to said complicance to TestAmerica	boontract laboratories. This sample shipment is forward or other instructions will be provided. Any changes to a Laboratories, Inc.	
Possible Hazard Identification		Sample Dispose	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	stained longer than 1 month)
Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	Special Instructions/QC	Disposal By Lab Requirements:	Archive For Months
Empty Kit Relinquished by:) Date:	Time:	Method of Shipment:	
Relinquished by:	Date/Time[4/13 (AN) 6	Company Received by:	Date/Ting	-10-17 C30 Company
)))	Date/Time:	Company
	Date/Time:	Company Received by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No		Cooler Tempera	Cooler Temperature(s) °C and Other Remarks.	63
				Ver. 09/20/2016

TestAmerica

THE BEADER IN ENVIRONMENTAL TESTING



Tracking # 7706 3678 263 / 5.0

And the second second	Therm. ID: AK-2 / AK-3 / HACCP /Other_	
otes:	N W Other	
	Ice X Wet X Dry Other	
	Cooler Custody Seal: 850119	
	Sample Custody Seal:	
	Cooler ID:	

*****	Temp: Observed 1.0 °C	1 1
	Corrected:	
		4
	From: Temp Blank Sample D	
	NCM Filed: Yes □ No □	
,	Yes	No NA
**	Perchlorate has headspace?	No NA
14	CoC is complete w/o discrepancies?	D D
	Samples received within holding time?	0 0
· · · · · · · · · · · · · · · · · · ·	Sample preservatives verified?	
*	Cooler compromised/tampered with?	10 8
	Samples compromised/tampered-with?	B 0
* * * * * * * * * * * * * * * * * * *	COC and Samples w/o discrepancies?	0 0
	Sample containers have legible labels?	D D
	Containers are not broken or leaking?	0 0
	Sample date/times are provided.	D D
Maryle .	Appropriate containers are used?	0 0
	Sample bottles are completely filled?	0 0
	Zero headspace?*	D 10
	Multiphasic samples are not present?	D D
	7	. 99

TO SAMPLE RECEIVING SAC **TESTAMERICA** 880 RIVERSIDE PKWY

WEST SACRAMENTO CA 95605 (906) 373-5600



TRK# 7706 3678 2631

WED - 01 NOV 3:00P STANDARD OVERNIGHT

95605 CA-US SMF



TestAmerica

Page 47 of 49

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc Job Number: 480-126895-1

Login Number: 126895 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

ordatori dantorij dari in		
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	

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Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc Job Number: 480-126895-1

Login Number: 126895 List Source: TestAmerica Sacramento

List Number: 2 List Creation: 11/03/17 04:44 PM
Creator: Her. David A

Creator: Her, David A		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	850119
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	1.0 C
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?	False	Received project as a subcontract.
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

N/A

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Residual Chlorine Checked.



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-126962-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

Melisso Deyo Authorized for release by: 11/17/2017 4:46:12 PM

Melissa Deyo, Project Manager I (716)504-9874

melissa.deyo@testamericainc.com

-----LINKS -----

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Have a Question?



Visit us at: 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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Qualifiers

GC/MS VOA

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
В	Compound was found in the blank and sample.
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect
	there may be a high bias.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

QC

RER

RPD

TEF

TEQ

RL

Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

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

TestAmerica Buffalo

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11/17/2017

Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Job ID: 480-126962-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-126962-1

Receipt

The samples were received on 11/2/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

GC/MS VOA

Method(s) 8260C: The method blank for analytical batch 490-475086 contained Methylene Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

LCMS

Method(s) 537 (modified): The following sample listed below was diluted due to the nature of the sample matrix. MW-17R (480-126962-1).

Method(s) 537 (modified): In the following sample the peak identified for Perfluorobutanoic acid (PFBA) by the data system exhibited chromatographic interferences that could not be resolved. There is reason to suspect results may be a high bias.

MW-17R (480-126962-1)

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-17R (480-126962-1) and MW-16R (480-126962-2) were decanted and centrifuged prior to preparation due to sediment being present.

Prep Batch: 320-193303 Method Code: 3535 PFC

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-193303.

Method Code: 3535_PFC

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

VOA Prep

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

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Detection Summary

Client: ARCADIS U.S. Inc

Client Sample ID: MW-17R

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Lab Sample ID: 480-126962-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.22	J	1.0	0.19	ug/L		_	8260C	Total/NA
1,2-Dichloropropane	1.3		1.0	0.25	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	0.76	J	1.0	0.17	ug/L	1		8260C	Total/NA
Acetone	6.3	J	25	2.7	ug/L	1		8260C	Total/NA
Benzene	3.8		1.0	0.20	ug/L	1		8260C	Total/NA
Chloroethane	14		1.0	0.36	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	58		1.0	0.21	ug/L	1		8260C	Total/NA
Cyclohexane	0.71	J	5.0	0.13	ug/L	1		8260C	Total/NA
Ethylbenzene	3.6		1.0	0.19	ug/L	1		8260C	Total/NA
Isopropylbenzene	27		1.0	0.33	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	12		1.0	0.17	ug/L	1		8260C	Total/NA
Methylcyclohexane	2.4	J	5.0	0.090	ug/L	1		8260C	Total/NA
Toluene	0.18	J	1.0	0.17	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.8		1.0	0.23	ug/L	1		8260C	Total/NA
Vinyl chloride	73		1.0	0.18	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	72		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	61		1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	61		1.8	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	51		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	150		1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	19		1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	13		1.8	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	20	В	1.8	0.16	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	7.1		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	450		1.8	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	6.3		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS) - DL	91	CI	18	1.8	ng/L	10		537 (modified)	Total/NA

Client Sample ID: MW-16R

Lab Sample ID: 480-126962-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.21	J	1.0	0.17	ug/L	1	_	8260C	Total/NA
Acetone	5.2	J	25	2.7	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.4		1.0	0.21	ug/L	1		8260C	Total/NA
Cyclohexane	0.20	J	5.0	0.13	ug/L	1		8260C	Total/NA
Ethylbenzene	11		1.0	0.19	ug/L	1		8260C	Total/NA
Isopropylbenzene	12		1.0	0.33	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.59	J	5.0	0.090	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.60	J	1.0	0.23	ug/L	1		8260C	Total/NA
Trichloroethene	0.43	J	1.0	0.20	ug/L	1		8260C	Total/NA
Vinyl chloride	0.47	J	1.0	0.18	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	17		1.9	0.33	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	130		1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	110		1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	96		1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	190		1.9	0.80	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	22		1.9	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	23		1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.8	J	1.9	1.0	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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Detection Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-16R (Continued)

TestAmerica Job ID: 480-126962-1

Lab Sample ID: 480-126962-2

Lab Sample ID: 480-126962-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac I	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	220		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	19	В	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	6.7		1.9	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	320		1.9	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	3.0		1.9	0.33	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-19 Lab Sample ID: 480-126962-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	11		1.0	0.21	ug/L		_	8260C	Total/NA
Tetrachloroethene	1.2		1.0	0.14	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.53	J	1.0	0.23	ug/L	1		8260C	Total/NA
Trichloroethene	0.94	J	1.0	0.20	ug/L	1		8260C	Total/NA
Vinyl chloride	0.39	J	1.0	0.18	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	4.1		1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.5		1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.5		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	3.0		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	7.0		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.77	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.76	J	1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	11		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.6	В	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.52	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	17		1.8	0.48	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TRIP BLANK

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Client Sample ID: MW-17R

Date Collected: 11/01/17 10:35 Date Received: 11/02/17 09:30 Lab Sample ID: 480-126962-1

Matrix: Water

Method: 8260C - Volatile Orgar Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L		-	11/11/17 04:18	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 04:18	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 04:18	
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 04:18	
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 04:18	
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 04:18	
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 04:18	
1,2-Dibromo-3-Chloropropane	ND		10	0.94	-			11/11/17 04:18	
1,2-Dibromoethane	ND		1.0	0.21	-			11/11/17 04:18	
1,2-Dichlorobenzene	0.22	J	1.0	0.19	-			11/11/17 04:18	
1,2-Dichloroethane	ND		1.0	0.20	-			11/11/17 04:18	
1,2-Dichloropropane	1.3		1.0	0.25	-			11/11/17 04:18	
1,3-Dichlorobenzene	ND		1.0	0.18	-			11/11/17 04:18	
1,4-Dichlorobenzene	0.76	J	1.0	0.17	-			11/11/17 04:18	
2-Butanone (MEK)	ND	-	50		ug/L			11/11/17 04:18	
2-Hexanone	ND		10		ug/L			11/11/17 04:18	
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	-			11/11/17 04:18	
Acetone	6.3	J.	25		ug/L			11/11/17 04:18	
Benzene	3.8		1.0	0.20				11/11/17 04:18	
Bromodichloromethane	ND		1.0	0.17	-			11/11/17 04:18	
Bromoform	ND		1.0	0.29	•			11/11/17 04:18	
Bromomethane	ND		1.0	0.35	-			11/11/17 04:18	
Carbon disulfide	ND		1.0	0.22	-			11/11/17 04:18	
Carbon tetrachloride	ND		1.0	0.18	-			11/11/17 04:18	
Chlorobenzene	ND		1.0	0.18	-			11/11/17 04:18	
Chloroethane	14		1.0	0.36	_			11/11/17 04:18	
Chloroform	ND		1.0	0.23	-			11/11/17 04:18	
Chloromethane	ND		1.0	0.36	-			11/11/17 04:18	
cis-1,2-Dichloroethene	58		1.0	0.30	-			11/11/17 04:18	
cis-1,3-Dichloropropene	ND		1.0	0.21	-			11/11/17 04:18	
Cyclohexane	0.71		5.0	0.17	-			11/11/17 04:18	
Dibromochloromethane	ND	3	1.0	0.15	-			11/11/17 04:18	
Dichlorodifluoromethane	ND		1.0	0.23	-			11/11/17 04:18	
	3.6		1.0	0.17	-			11/11/17 04:18	
Ethylbenzene	27		1.0	0.19	-			11/11/17 04:18	
Isopropylbenzene	ND		1.0		-				
Methyl acetate				0.58	ug/L ug/L			11/11/17 04:18	
Methyl tert-butyl ether	12		1.0		_			11/11/17 04:18 11/11/17 04:18	
Methylcyclohexane	2.4 ND	J	5.0	0.090	-				
Methylene Chloride	ND		5.0		ug/L			11/11/17 04:18	
Styrene	ND		1.0		ug/L			11/11/17 04:18	
Tetrachloroethene	ND	_	1.0	0.14	-			11/11/17 04:18	
Toluene	0.18	J	1.0	0.17	-			11/11/17 04:18	
trans-1,2-Dichloroethene	1.8		1.0		ug/L			11/11/17 04:18	
trans-1,3-Dichloropropene	ND		1.0	0.17	-			11/11/17 04:18	
Trichloroethene	ND		1.0	0.20				11/11/17 04:18	
Trichlorofluoromethane	ND		1.0		ug/L			11/11/17 04:18	
Vinyl chloride	73		1.0	0.18	-			11/11/17 04:18	
Xylenes, Total	ND		3.0	0.58	ug/L			11/11/17 04:18	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Client Sample ID: MW-17R

Date Collected: 11/01/17 10:35 Date Received: 11/02/17 09:30

Lab Sample ID: 480-126962-1

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107	70 - 130		11/11/17 04:18	1
4-Bromofluorobenzene (Surr)	125	70 - 130		11/11/17 04:18	1
Dibromofluoromethane (Surr)	107	70 - 130		11/11/17 04:18	1
Toluene-d8 (Surr)	109	70 - 130		11/11/17 04:18	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	72		1.8	0.32	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluoropentanoic acid (PFPeA)	61		1.8	0.45	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorohexanoic acid (PFHxA)	61		1.8	0.54	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluoroheptanoic acid (PFHpA)	51		1.8	0.23	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorooctanoic acid (PFOA)	150		1.8	0.78	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorononanoic acid (PFNA)	19		1.8	0.25	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorodecanoic acid (PFDA)	13		1.8	0.29	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.51	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.2	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.27	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorohexanesulfonic acid (PFHxS)	20	В	1.8	0.16	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluoroheptanesulfonic Acid (PFHpS)	7.1		1.8	0.18	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorooctanesulfonic acid (PFOS)	450		1.8	0.50	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.30	ng/L		11/07/17 14:16	11/12/17 01:18	1
Perfluorooctane Sulfonamide (FOSA)	6.3		1.8	0.32	ng/L		11/07/17 14:16	11/12/17 01:18	1
Instana Dilution	0/ Bassyary	Ouglifier	Limita				Droporod	Anglyzad	Dil Ess

(1.007)					
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	97	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C2 PFHxA	89	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C4 PFOA	95	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C5 PFNA	109	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C2 PFDA	116	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C2 PFUnA	116	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C2 PFDoA	97	25 - 150	11/07/17 14:16	11/12/17 01:18	1
18O2 PFHxS	101	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C4 PFOS	107	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C4-PFHpA	99	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C5 PFPeA	78	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C3-PFBS	99	25 - 150	11/07/17 14:16	11/12/17 01:18	1
13C2-PFTeDA	99	25 - 150	11/07/17 14:16	11/12/17 01:18	1
<u></u>					

Method: 537 (modified) - Fluorinated Alkyl Substances - DL											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Perfluorobutanesulfonic acid (PFBS)	91	CI	18	1.8	ng/L		11/07/17 14:16	11/16/17 10:34	10		
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac		
13C4 PFBA	95		25 - 150				11/07/17 14:16	11/16/17 10:34	10		

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Client Sample ID: MW-16R

Date Collected: 11/01/17 13:25 Date Received: 11/02/17 09:30 Lab Sample ID: 480-126962-2

Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 04:43	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 04:43	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 04:43	
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 04:43	
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 04:43	
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 04:43	
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 04:43	
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 04:43	
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 04:43	
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/17 04:43	
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 04:43	
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 04:43	
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 04:43	
1,4-Dichlorobenzene	0.21	J	1.0		ug/L			11/11/17 04:43	
2-Butanone (MEK)	ND		50		ug/L			11/11/17 04:43	
2-Hexanone	ND		10	1.3	ug/L			11/11/17 04:43	
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 04:43	
Acetone	5.2	J	25		ug/L			11/11/17 04:43	
Benzene	ND		1.0		ug/L			11/11/17 04:43	
Bromodichloromethane	ND		1.0	0.17	ug/L			11/11/17 04:43	
Bromoform	ND		1.0	0.29	ug/L			11/11/17 04:43	
Bromomethane	ND		1.0	0.35	ug/L			11/11/17 04:43	
Carbon disulfide	ND		1.0	0.22	ug/L			11/11/17 04:43	
Carbon tetrachloride	ND		1.0		ug/L			11/11/17 04:43	
Chlorobenzene	ND		1.0	0.18	ug/L			11/11/17 04:43	
Chloroethane	ND		1.0		ug/L			11/11/17 04:43	
Chloroform	ND		1.0		ug/L			11/11/17 04:43	
Chloromethane	ND		1.0		ug/L			11/11/17 04:43	
cis-1,2-Dichloroethene	2.4		1.0		ug/L			11/11/17 04:43	
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 04:43	
Cyclohexane	0.20	J	5.0		ug/L			11/11/17 04:43	
Dibromochloromethane	ND		1.0		ug/L			11/11/17 04:43	
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/17 04:43	
Ethylbenzene	11		1.0		ug/L			11/11/17 04:43	
Isopropylbenzene	12		1.0		ug/L			11/11/17 04:43	
Methyl acetate	ND		10		ug/L			11/11/17 04:43	
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/17 04:43	
Methylcyclohexane	0.59	J	5.0	0.090	-			11/11/17 04:43	
Methylene Chloride	ND		5.0		ug/L			11/11/17 04:43	
Styrene	ND		1.0		ug/L			11/11/17 04:43	
Tetrachloroethene	ND		1.0		ug/L			11/11/17 04:43	
Toluene	ND		1.0		ug/L			11/11/17 04:43	
trans-1,2-Dichloroethene	0.60	J	1.0		ug/L			11/11/17 04:43	
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 04:43	
Trichloroethene	0.43	J	1.0		ug/L			11/11/17 04:43	
Trichlorofluoromethane	ND		1.0		ug/L			11/11/17 04:43	
Vinyl chloride	0.47	J	1.0		ug/L			11/11/17 04:43	
Xylenes, Total	ND		3.0		ug/L			11/11/17 04:43	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Client Sample ID: MW-16R

Date Collected: 11/01/17 13:25 Date Received: 11/02/17 09:30 Lab Sample ID: 480-126962-2

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106	70 - 130		11/11/17 04:43	1
4-Bromofluorobenzene (Surr)	122	70 - 130		11/11/17 04:43	1
Dibromofluoromethane (Surr)	106	70 - 130		11/11/17 04:43	1
Toluene-d8 (Surr)	109	70 - 130		11/11/17 04:43	1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	17		1.9	0.33	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluoropentanoic acid (PFPeA)	130		1.9	0.46	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorohexanoic acid (PFHxA)	110		1.9	0.54	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluoroheptanoic acid (PFHpA)	96		1.9	0.23	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorooctanoic acid (PFOA)	190		1.9	0.80	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorononanoic acid (PFNA)	22		1.9	0.25	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorodecanoic acid (PFDA)	23		1.9	0.29	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluoroundecanoic acid (PFUnA)	1.8	J	1.9	1.0	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.52	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.27	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorobutanesulfonic acid (PFBS)	220		1.9	0.19	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorohexanesulfonic acid (PFHxS)	19	В	1.9	0.16	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	6.7		1.9	0.18	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorooctanesulfonic acid (PFOS)	320		1.9	0.51	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		11/07/17 14:16	11/12/17 01:26	1
Perfluorooctane Sulfonamide (FOSA)	3.0		1.9	0.33	ng/L		11/07/17 14:16	11/12/17 01:26	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	101		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C4 PFBA	56		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C2 PFHxA	91		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C4 PFOA	96		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C5 PFNA	112		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C2 PFDA	112		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C2 PFUnA	114		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C2 PFDoA	92		25 - 150				11/07/17 14:16	11/12/17 01:26	1
18O2 PFHxS	101		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C4 PFOS	104		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C4-PFHpA	96		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C5 PFPeA	87		25 - 150				11/07/17 14:16	11/12/17 01:26	1
13C3-PFBS	103		25 - 150				11/07/17 14:16	11/12/17 01:26	1

11/07/17 14:16 11/12/17 01:26

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11/17/2017

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Lab Sample ID: 480-126962-3

Matrix: Water

Client Sample ID: MW-19

Date Collected: 11/01/17 15:05 Date Received: 11/02/17 09:30

Method: 8260C - Volatile Organ Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 05:08	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 05:08	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 05:08	
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 05:08	
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 05:08	
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 05:08	
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 05:08	
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 05:08	
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 05:08	
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/17 05:08	•
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 05:08	•
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 05:08	•
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 05:08	
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 05:08	
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 05:08	
2-Hexanone	ND		10	1.3	ug/L			11/11/17 05:08	
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 05:08	
Acetone	ND		25	2.7	ug/L			11/11/17 05:08	
Benzene	ND		1.0	0.20	ug/L			11/11/17 05:08	· · · · · · · · ·
Bromodichloromethane	ND		1.0	0.17	ug/L			11/11/17 05:08	
Bromoform	ND		1.0	0.29	ug/L			11/11/17 05:08	
Bromomethane	ND		1.0	0.35				11/11/17 05:08	
Carbon disulfide	ND		1.0	0.22	ug/L			11/11/17 05:08	
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/11/17 05:08	
Chlorobenzene	ND		1.0	0.18	ug/L			11/11/17 05:08	· · · · · · · · ·
Chloroethane	ND		1.0	0.36	ug/L			11/11/17 05:08	
Chloroform	ND		1.0	0.23	ug/L			11/11/17 05:08	
Chloromethane	ND		1.0	0.36	ug/L			11/11/17 05:08	· · · · · · · · ·
cis-1,2-Dichloroethene	11		1.0	0.21	ug/L			11/11/17 05:08	
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 05:08	
Cyclohexane	ND		5.0	0.13	ug/L			11/11/17 05:08	
Dibromochloromethane	ND		1.0	0.25	ug/L			11/11/17 05:08	
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/11/17 05:08	
Ethylbenzene	ND		1.0	0.19	ug/L			11/11/17 05:08	
Isopropylbenzene	ND		1.0	0.33	ug/L			11/11/17 05:08	
Methyl acetate	ND		10	0.58	ug/L			11/11/17 05:08	
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/17 05:08	•
Methylcyclohexane	ND		5.0	0.090				11/11/17 05:08	
Methylene Chloride	ND		5.0		ug/L			11/11/17 05:08	
Styrene	ND		1.0	0.28				11/11/17 05:08	• • • • • • • • •
Tetrachloroethene	1.2		1.0	0.14				11/11/17 05:08	
Toluene	ND		1.0	0.17	_			11/11/17 05:08	
trans-1,2-Dichloroethene	0.53	J	1.0	0.23				11/11/17 05:08	
trans-1,3-Dichloropropene	ND		1.0	0.17				11/11/17 05:08	
Trichloroethene	0.94	J	1.0	0.20	-			11/11/17 05:08	
Trichlorofluoromethane	ND		1.0	0.21	-			11/11/17 05:08	· · · · · · .
Vinyl chloride	0.39	J	1.0	0.18				11/11/17 05:08	
Xylenes, Total	ND	-	3.0	0.58	-			11/11/17 05:08	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Client Sample ID: MW-19

Date Collected: 11/01/17 15:05 Date Received: 11/02/17 09:30

Lab Sample ID: 480-126962-3

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105	70 - 130		11/11/17 05:08	1
4-Bromofluorobenzene (Surr)	112	70 - 130		11/11/17 05:08	1
Dibromofluoromethane (Surr)	107	70 - 130		11/11/17 05:08	1
Toluene-d8 (Surr)	110	70 - 130		11/11/17 05:08	1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.1		1.8	0.31	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluoropentanoic acid (PFPeA)	4.5		1.8	0.43	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorohexanoic acid (PFHxA)	3.5		1.8	0.51	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluoroheptanoic acid (PFHpA)	3.0		1.8	0.22	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorooctanoic acid (PFOA)	7.0		1.8	0.75	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorononanoic acid (PFNA)	0.77	J	1.8	0.24	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorodecanoic acid (PFDA)	0.76	J	1.8	0.27	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.8	1.1	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorobutanesulfonic acid (PFBS)	11		1.8	0.18	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorohexanesulfonic acid (PFHxS)	3.6	В	1.8	0.15	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.52	J	1.8	0.17	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorooctanesulfonic acid (PFOS)	17		1.8	0.48	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		11/07/17 14:16	11/12/17 01:33	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.8	0.31	ng/L		11/07/17 14:16	11/12/17 01:33	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	100		25 - 150				11/07/17 14:16	11/12/17 01:33	1
13C4 PFBA	69		25 - 150				11/07/17 14:16	11/12/17 01:33	1
13C2 PFHxA	88		25 - 150				11/07/17 14:16	11/12/17 01:33	1
13C4 PFOA	96		25 - 150				11/07/17 14:16	11/12/17 01:33	1
13C5 PFNA	107		25 - 150				11/07/17 14:16	11/12/17 01:33	1
13C2 PFDA	109		25 - 150				11/07/17 14:16	11/12/17 01:33	1
13C2 PFUnA	109		25 - 150				11/07/17 14:16	11/12/17 01:33	1
13C2 PFDoA	90		25 - 150				11/07/17 14:16	11/12/17 01:33	1
1802 PFHxS	99		25 - 150				11/07/17 14:16	11/12/17 01:33	1
13C4 PFOS	104		25 - 150				11/07/17 14:16	11/12/17 01:33	1
13C4-PFHpA	91		25 - 150				11/07/17 14:16	11/12/17 01:33	1

Client Sample ID: TRIP BLANK

Date Collected: 11/01/17 00:00 Date Received: 11/02/17 09:30

13C5 PFPeA

13C3-PFBS

13C2-PFTeDA

Lab Sample ID: 480-126962-4 **Matrix: Water**

11/07/17 14:16 11/12/17 01:33

11/07/17 14:16 11/12/17 01:33

11/07/17 14:16 11/12/17 01:33

Method: 8260C - Volatile Orga	nic Compounds by GC/	MS					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND —	1.0	0.19 ug/L			11/11/17 02:36	1

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25 - 150

25 - 150

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11/17/2017

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-126962-4 Date Collected: 11/01/17 00:00

Matrix: Water Date Received: 11/02/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 02:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 02:36	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 02:36	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 02:36	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 02:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 02:36	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	-			11/11/17 02:36	1
1,2-Dibromoethane	ND		1.0	0.21	_			11/11/17 02:36	1
1,2-Dichlorobenzene	ND		1.0	0.19				11/11/17 02:36	1
1,2-Dichloroethane	ND		1.0	0.20	-			11/11/17 02:36	1
1,2-Dichloropropane	ND		1.0	0.25	-			11/11/17 02:36	1
1,3-Dichlorobenzene	ND		1.0	0.18	-			11/11/17 02:36	1
1,4-Dichlorobenzene	ND		1.0	0.17	-			11/11/17 02:36	1
2-Butanone (MEK)	ND		50		ug/L			11/11/17 02:36	1
2-Hexanone	ND		10		ug/L			11/11/17 02:36	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	-			11/11/17 02:36	1
Acetone (WIBIT)	ND		25		ug/L			11/11/17 02:36	1
Benzene	ND		1.0	0.20	-			11/11/17 02:36	
Bromodichloromethane	ND		1.0	0.17	-			11/11/17 02:36	1
Bromoform	ND		1.0	0.17	-			11/11/17 02:36	1
Bromomethane	ND		1.0	0.25	-			11/11/17 02:36	
Carbon disulfide	ND		1.0	0.33	-			11/11/17 02:36	1
	ND				-				
Carbon tetrachloride			1.0	0.18	-			11/11/17 02:36	1
Chlorosthana	ND ND		1.0	0.18	-			11/11/17 02:36	1
Chloroethane			1.0	0.36	-			11/11/17 02:36	1
Chloroform	ND		1.0	0.23	-			11/11/17 02:36	1
Chloromethane	ND		1.0	0.36	-			11/11/17 02:36	1
cis-1,2-Dichloroethene	ND		1.0	0.21	-			11/11/17 02:36	1
cis-1,3-Dichloropropene	ND		1.0	0.17				11/11/17 02:36	
Cyclohexane	ND		5.0	0.13	-			11/11/17 02:36	1
Dibromochloromethane	ND		1.0	0.25	-			11/11/17 02:36	1
Dichlorodifluoromethane	ND		1.0	0.17				11/11/17 02:36	1
Ethylbenzene	ND		1.0	0.19	•			11/11/17 02:36	1
Isopropylbenzene	ND		1.0	0.33	-			11/11/17 02:36	1
Methyl acetate	ND		10	0.58				11/11/17 02:36	1
Methyl tert-butyl ether	ND		1.0	0.17				11/11/17 02:36	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/11/17 02:36	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/11/17 02:36	1
Styrene	ND		1.0	0.28	ug/L			11/11/17 02:36	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/11/17 02:36	1
Toluene	ND		1.0	0.17	ug/L			11/11/17 02:36	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/11/17 02:36	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 02:36	1
Trichloroethene	ND		1.0	0.20	ug/L			11/11/17 02:36	1
Trichlorofluoromethane	ND		1.0	0.21				11/11/17 02:36	1
Vinyl chloride	ND		1.0	0.18				11/11/17 02:36	1
Xylenes, Total	ND		3.0		ug/L			11/11/17 02:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 130			=		11/11/17 02:36	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Client Sample ID: TRIP BLANK Lab Sample ID: 480-126962-4

Matrix: Water

Date Collected: 11/01/17 00:00 Date Received: 11/02/17 09:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130		11/11/17 02:36	1
Dibromofluoromethane (Surr)	105		70 - 130		11/11/17 02:36	1
Toluene-d8 (Surr)	108		70 - 130		11/11/17 02:36	1

Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

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

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surre	ogate Reco
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-126962-1	MW-17R	107	125	107	109
480-126962-2	MW-16R	106	122	106	109
480-126962-3	MW-19	105	112	107	110
480-126962-4	TRIP BLANK	107	111	105	108
LCS 490-475086/3	Lab Control Sample	105	110	104	110
LCSD 490-475086/4	Lab Control Sample Dup	106	111	103	109
MB 490-475086/6	Method Blank	107	112	106	109

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

TestAmerica Buffalo

Isotope Dilution Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water Prep Type: Total/NA

			Perce	ent Isotope	Dilution Re	covery (Ac	ceptance L	imits)	
		3C8 FOSA	3C4 PFB/	3C2 PFHx	3C4 PFO	3C5 PFN/	3C2 PFD/	3C2 PFUn	3C2 PFDo
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
480-126962-1	MW-17R	97		89	95	109	116	116	97
480-126962-1 - DL	MW-17R		95						
480-126962-2	MW-16R	101	56	91	96	112	112	114	92
480-126962-3	MW-19	100	69	88	96	107	109	109	90
LCS 320-193303/2-A	Lab Control Sample	96	106	106	95	103	107	105	95
LCSD 320-193303/3-A	Lab Control Sample Dup	95	79	100	93	103	99	102	91
MB 320-193303/1-A	Method Blank	98	107	109	98	108	110	107	93

Percent Isotope Dilution Recovery (Acceptance Limits)

		BO2 PFHx	3C4 PFOS	3C4-PFHp	3C5 PFPe	3C3-PFB	C2-PFTeE
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
480-126962-1	MW-17R	101	107	99	78	99	99
480-126962-1 - DL	MW-17R						
480-126962-2	MW-16R	101	104	96	87	103	89
480-126962-3	MW-19	99	104	91	89	96	93
LCS 320-193303/2-A	Lab Control Sample	101	102	104	105	102	104
LCSD 320-193303/3-A	Lab Control Sample Dup	98	100	101	101	103	100
MB 320-193303/1-A	Method Blank	103	104	112	106	109	101

Surrogate Legend

13C8 FOSA = 13C8 FOSA

13C4 PFBA = 13C4 PFBA

13C2 PFHxA = 13C2 PFHxA

13C4 PFOA = 13C4 PFOA

13C5 PFNA = 13C5 PFNA

13C2 PFDA = 13C2 PFDA

13C2 PFUnA = 13C2 PFUnA

13C2 PFDoA = 13C2 PFDoA

1802 PFHxS = 1802 PFHxS

13C4 PFOS = 13C4 PFOS

13C4-PFHpA = 13C4-PFHpA

13C5 PFPeA = 13C5 PFPeA

13C3-PFBS = 13C3-PFBS

13C2-PFTeDA = 13C2-PFTeDA

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

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

Lab Sample ID: MB 490-475086/6

Matrix: Water

Client Sample ID: Method Blank **Prep Type: Total/NA**

Analysis Batch: 475086								Tiep Type. It	otal/III/
•		МВ							
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/17 02:10	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/17 02:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/17 02:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/17 02:10	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/17 02:10	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/17 02:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 02:10	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			11/11/17 02:10	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 02:10	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/17 02:10	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 02:10	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 02:10	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 02:10	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 02:10	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 02:10	1
2-Hexanone	ND		10	1.3	ug/L			11/11/17 02:10	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 02:10	1
Acetone	ND		25	2.7	ug/L			11/11/17 02:10	1
Benzene	ND		1.0		ug/L			11/11/17 02:10	1
Bromodichloromethane	ND		1.0		ug/L			11/11/17 02:10	1
Bromoform	ND		1.0		ug/L			11/11/17 02:10	1
Bromomethane	ND		1.0		ug/L			11/11/17 02:10	1
Carbon disulfide	ND		1.0		ug/L			11/11/17 02:10	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/17 02:10	1
Chlorobenzene	ND		1.0		ug/L			11/11/17 02:10	1
Chloroethane	ND		1.0		ug/L			11/11/17 02:10	1
Chloroform	ND		1.0		ug/L			11/11/17 02:10	1
Chloromethane	ND		1.0		ug/L			11/11/17 02:10	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/17 02:10	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 02:10	1
Cyclohexane	ND		5.0		ug/L			11/11/17 02:10	1
Dibromochloromethane	ND		1.0		ug/L			11/11/17 02:10	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/17 02:10	1
Ethylbenzene	ND		1.0		ug/L			11/11/17 02:10	
Isopropylbenzene	ND		1.0	0.33	-			11/11/17 02:10	1
Methyl acetate	ND		10		ug/L			11/11/17 02:10	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/17 02:10	
Methylcyclohexane	ND		5.0	0.090				11/11/17 02:10	1
Methylene Chloride	1.57	ı	5.0		ug/L			11/11/17 02:10	1
Styrene	ND		1.0		ug/L			11/11/17 02:10	· · · · · · · · · · · · · · · · · · ·
Tetrachloroethene	ND		1.0		ug/L			11/11/17 02:10	1
Toluene	ND		1.0		ug/L ug/L			11/11/17 02:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L ug/L			11/11/17 02:10	
trans-1,3-Dichloropropene	ND		1.0		ug/L ug/L			11/11/17 02:10	1
Trichloroethene	ND ND		1.0		ug/L ug/L			11/11/17 02:10	1
Trichlorofluoromethane					ug/L ug/L				ı 1
	ND ND		1.0 1.0		ug/L ug/L			11/11/17 02:10 11/11/17 02:10	
Vinyl chloride Xylenes, Total	ND ND		3.0		ug/L ug/L			11/11/17 02:10	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Matrix: Water

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: LCS 490-475086/3

TestAmerica Job ID: 480-126962-1

	MB MB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107	70 - 130		11/11/17 02:10	1
4-Bromofluorobenzene (Surr)	112	70 - 130		11/11/17 02:10	1
Dibromofluoromethane (Surr)	106	70 - 130		11/11/17 02:10	1
Toluene-d8 (Surr)	109	70 - 130		11/11/17 02:10	1

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

C.			
40			

Analysis Batch: 475086	Spike	LCS	LCS				%Rec.	
Analyte	Added		Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	21.5		ug/L		108	78 - 135	
1,1,2,2-Tetrachloroethane	20.0	20.8		ug/L		104	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	21.7		ug/L		108	77 - 129	
ne				- 3				
1,1,2-Trichloroethane	20.0	20.3		ug/L		101	80 - 124	
1,1-Dichloroethane	20.0	19.7		ug/L		99	78 - 125	
1,1-Dichloroethene	20.0	19.8		ug/L		99	79 - 124	
1,2,4-Trichlorobenzene	20.0	17.9		ug/L		90	63 - 133	
1,2-Dibromo-3-Chloropropane	20.0	19.2		ug/L		96	54 - 125	
1,2-Dibromoethane	20.0	20.0		ug/L		100	80 - 129	
1,2-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 121	
1,2-Dichloroethane	20.0	21.5		ug/L		108	77 - 121	
1,2-Dichloropropane	20.0	19.1		ug/L		96	75 - 120	
1,3-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 122	
1,4-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120	
2-Butanone (MEK)	100	93.1		ug/L		93	62 - 133	
2-Hexanone	100	99.7		ug/L		100	60 - 142	
4-Methyl-2-pentanone (MIBK)	100	110		ug/L		110	60 - 137	
Acetone	100	111		ug/L		111	54 - 145	
Benzene	20.0	19.2		ug/L		96	80 - 121	
Bromodichloromethane	20.0	20.2		ug/L		101	75 ₋ 129	
Bromoform	20.0	18.0		ug/L		90	46 - 145	
Bromomethane	20.0	16.9		ug/L		85	41 - 150	
Carbon disulfide	20.0	18.2		ug/L		91	77 - 126	
Carbon tetrachloride	20.0	21.6		ug/L		108	64 - 147	
Chlorobenzene	20.0	19.8		ug/L		99	80 - 120	
Chloroethane	20.0	19.4		ug/L		97	72 - 120	
Chloroform	20.0	20.6		ug/L		103	73 - 129	
Chloromethane	20.0	20.4		ug/L		102	12 - 150	
cis-1,2-Dichloroethene	20.0	19.3		ug/L		96	76 - 125	
cis-1,3-Dichloropropene	20.0	20.1		ug/L		101	74 - 140	
Cyclohexane	20.0	19.0		ug/L		95	73 - 122	
Dibromochloromethane	20.0	21.0		ug/L		105	69 - 133	
Dichlorodifluoromethane	20.0	24.4		ug/L		122	37 - 127	
Ethylbenzene	20.0	19.9		ug/L		99	80 - 130	
Isopropylbenzene	20.0	18.5		ug/L		93	80 - 141	
Methyl acetate	40.0	40.9		ug/L		102	64 - 150	
Methyl tert-butyl ether	20.0	18.2		ug/L		91	72 - 133	
Methylcyclohexane	20.0	19.0		ug/L		95	71 - 129	
Methylene Chloride	20.0	19.8		ug/L		99	79 - 123	
Styrene	20.0	18.1		ug/L		91	80 ₋ 127	
Tetrachloroethene	20.0	20.1		ug/L ug/L		100	80 - 126	
Toluene	20.0	21.2		ug/L ug/L		106	80 - 126	
trans-1,2-Dichloroethene	20.0	20.0		ug/L ug/L		100	79 ₋ 126	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

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

Lab Sample ID: LCS 490-475086/3

Matrix: Water

Analysis Batch: 475086

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,3-Dichloropropene	20.0	19.0		ug/L		95	63 - 134	
Trichloroethene	20.0	19.7		ug/L		98	80 - 123	
Trichlorofluoromethane	20.0	21.4		ug/L		107	65 - 124	
Vinyl chloride	20.0	19.1		ug/L		96	68 - 120	
Xylenes, Total	40.0	37.5		ug/L		94	80 - 132	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
4-Bromofluorobenzene (Surr)	110		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	110		70 - 130

Lab Sample ID: LCSD 490-475086/4

Matrix: Water

Analysis Batch: 475086

cis-1,3-Dichloropropene

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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	22.3		ug/L		112	78 - 135	4	15
4.4.0.0 Total ablamathan	00.0	04.0		/1		400	00 404		4-

	Opine	LOOD	LOOD				/01 CC.		111 0
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	22.3		ug/L		112	78 - 135	4	15
1,1,2,2-Tetrachloroethane	20.0	21.6		ug/L		108	69 - 131	4	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.7		ug/L		114	77 - 129	5	16
ne									
1,1,2-Trichloroethane	20.0	20.7		ug/L		103	80 - 124	2	13
1,1-Dichloroethane	20.0	20.4		ug/L		102	78 - 125	4	17
1,1-Dichloroethene	20.0	20.6		ug/L		103	79 - 124	4	20
1,2,4-Trichlorobenzene	20.0	19.4		ug/L		97	63 - 133	8	15
1,2-Dibromo-3-Chloropropane	20.0	18.9		ug/L		95	54 - 125	2	19
1,2-Dibromoethane	20.0	20.4		ug/L		102	80 - 129	2	13
1,2-Dichlorobenzene	20.0	21.3		ug/L		106	80 - 121	5	12
1,2-Dichloroethane	20.0	22.1		ug/L		110	77 - 121	2	13
1,2-Dichloropropane	20.0	19.4		ug/L		97	75 - 120	2	15
1,3-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 122	5	13
1,4-Dichlorobenzene	20.0	20.9		ug/L		105	80 - 120	3	12
2-Butanone (MEK)	100	97.6		ug/L		98	62 - 133	5	19
2-Hexanone	100	105		ug/L		105	60 - 142	5	17
4-Methyl-2-pentanone (MIBK)	100	113		ug/L		113	60 - 137	3	21
Acetone	100	119		ug/L		119	54 - 145	6	23
Benzene	20.0	19.8		ug/L		99	80 - 121	3	12
Bromodichloromethane	20.0	20.8		ug/L		104	75 - 129	3	14
Bromoform	20.0	18.9		ug/L		94	46 - 145	5	14
Bromomethane	20.0	17.8		ug/L		89	41 - 150	5	19
Carbon disulfide	20.0	18.8		ug/L		94	77 - 126	3	16
Carbon tetrachloride	20.0	22.4		ug/L		112	64 - 147	3	16
Chlorobenzene	20.0	20.5		ug/L		102	80 - 120	3	12
Chloroethane	20.0	20.5		ug/L		102	72 - 120	5	15
Chloroform	20.0	21.0		ug/L		105	73 - 129	2	14
Chloromethane	20.0	21.6		ug/L		108	12 - 150	6	20
cis-1,2-Dichloroethene	20.0	20.3		ug/L		101	76 ₋ 125	5	15

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20.8

ug/L

104

74 - 140

20.0

TestAmerica Job ID: 480-126962-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCSD 490-475086/4

Matrix: Water

Analysis Batch: 475086

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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyclohexane	20.0	20.0		ug/L		100	73 - 122	5	16
Dibromochloromethane	20.0	21.6		ug/L		108	69 - 133	3	13
Dichlorodifluoromethane	20.0	25.4		ug/L		127	37 - 127	4	16
Ethylbenzene	20.0	20.6		ug/L		103	80 - 130	3	12
Isopropylbenzene	20.0	19.4		ug/L		97	80 - 141	4	13
Methyl acetate	40.0	40.2		ug/L		100	64 - 150	2	18
Methyl tert-butyl ether	20.0	18.9		ug/L		95	72 - 133	4	16
Methylcyclohexane	20.0	20.4		ug/L		102	71 - 129	7	17
Methylene Chloride	20.0	20.4		ug/L		102	79 - 123	3	15
Styrene	20.0	18.6		ug/L		93	80 - 127	3	12
Tetrachloroethene	20.0	21.0		ug/L		105	80 - 126	5	17
Toluene	20.0	21.8		ug/L		109	80 - 126	3	13
trans-1,2-Dichloroethene	20.0	20.9		ug/L		105	79 - 126	5	15
trans-1,3-Dichloropropene	20.0	20.0		ug/L		100	63 - 134	5	13
Trichloroethene	20.0	20.5		ug/L		103	80 - 123	4	14
Trichlorofluoromethane	20.0	22.1		ug/L		110	65 - 124	3	22
Vinyl chloride	20.0	19.9		ug/L		99	68 - 120	4	15
Xylenes, Total	40.0	39.2		ug/L		98	80 - 132	4	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	111		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	109		70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-193303/1-A

Matrix: Water

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 194176								Prep Batch:	193303
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorohexanesulfonic acid (PFHxS)	0.295	J	2.0	0.17	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/07/17 14:16	11/11/17 23:35	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/07/17 14:16	11/11/17 23:35	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Analysis Batch: 194176

Matrix: Water

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: MB 320-193303/1-A

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

TestAmerica Job ID: 480-126962-1

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

Prep Batch: 193303

MB MB **MDL** Unit Analyte Result Qualifier RL **Prepared** Analyzed Dil Fac Perfluorodecanesulfonic acid (PFDS) $\overline{\mathsf{ND}}$ 2.0 0.32 ng/L 11/07/17 14:16 11/11/17 23:35 Perfluorooctane Sulfonamide (FOSA) ND 2.0 0.35 ng/L 11/07/17 14:16 11/11/17 23:35

MB MB Isotope Dilution %Recovery Qualifier Limits Prepared Analyzed Dil Fac 13C8 FOSA 98 25 - 150 11/07/17 14:16 11/11/17 23:35 13C4 PFBA 107 25 - 150 11/07/17 14:16 11/11/17 23:35 13C2 PFHxA 109 11/07/17 14:16 11/11/17 23:35 25 - 150 13C4 PFOA 98 25 - 150 11/07/17 14:16 11/11/17 23:35 13C5 PFNA 108 25 - 150 11/07/17 14:16 11/11/17 23:35 13C2 PFDA 110 25 - 150 11/07/17 14:16 11/11/17 23:35 13C2 PFUnA 107 25 - 150 11/07/17 14:16 11/11/17 23:35 13C2 PFDoA 93 25 - 150 11/07/17 14:16 11/11/17 23:35 1802 PFHxS 103 25 - 150 11/07/17 14:16 11/11/17 23:35 13C4 PFOS 104 25 - 150 11/07/17 14:16 11/11/17 23:35 13C4-PFHpA 25 - 150 11/07/17 14:16 11/11/17 23:35 112 13C5 PFPeA 106 25 - 150 11/07/17 14:16 11/11/17 23:35 13C3-PFBS 109 25 - 150 11/07/17 14:16 11/11/17 23:35 13C2-PFTeDA 101 25 - 150 11/07/17 14:16 11/11/17 23:35

Lab Sample ID: LCS 320-193303/2-A

Matrix: Water

(FOSA)

Analysis Batch: 194176

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

Prep Batch: 193303

7 maryono Datom 10 1110	Spike	LCS LC	cs		%Rec.
Analyte	Added	Result Q	ualifier Unit	D %Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	38.0	ng/L	95	78 - 138
Perfluoropentanoic acid (PFPeA)	40.0	37.2	ng/L	93	66 - 136
Perfluorohexanoic acid (PFHxA)	40.0	37.3	ng/L	93	76 - 136
Perfluoroheptanoic acid (PFHpA)	40.0	37.8	ng/L	94	78 ₋ 138
Perfluorooctanoic acid (PFOA)	40.0	38.5	ng/L	96	70 - 130
Perfluorononanoic acid (PFNA)	40.0	38.8	ng/L	97	77 - 137
Perfluorodecanoic acid (PFDA)	40.0	37.2	ng/L	93	74 - 134
Perfluoroundecanoic acid (PFUnA)	40.0	35.3	ng/L	88	68 - 128
Perfluorododecanoic acid (PFDoA)	40.0	38.5	ng/L	96	72 - 132
Perfluorotridecanoic Acid (PFTriA)	40.0	41.8	ng/L	104	56 - 163
Perfluorotetradecanoic acid (PFTeA)	40.0	37.0	ng/L	93	63 - 123
Perfluorobutanesulfonic acid (PFBS)	35.4	36.3	ng/L	103	79 - 139
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.5	ng/L	92	77 - 137
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.2	ng/L	100	83 - 143
Perfluorooctanesulfonic acid (PFOS)	37.1	34.4	ng/L	93	74 - 134
Perfluorodecanesulfonic acid (PFDS)	38.6	35.3	ng/L	92	75 - 135
Perfluorooctane Sulfonamide	40.0	38.3	ng/L	96	82 - 142

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: LCSD 320-193303/3-A

TestAmerica Job ID: 480-126962-1

LCS	LCS

Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	96		25 - 150
13C4 PFBA	106		25 - 150
13C2 PFHxA	106		25 - 150
13C4 PFOA	95		25 - 150
13C5 PFNA	103		25 - 150
13C2 PFDA	107		25 - 150
13C2 PFUnA	105		25 - 150
13C2 PFDoA	95		25 - 150
18O2 PFHxS	101		25 - 150
13C4 PFOS	102		25 - 150
13C4-PFHpA	104		25 - 150
13C5 PFPeA	105		25 - 150
13C3-PFBS	102		25 - 150
13C2-PFTeDA	104		25 - 150

Client Sample ID: Lab Control Sample Dup

Matrix: Water				Jiione Ge	ampic.	ID. Luk	Prep Ty	•	
Analysis Batch: 194176	Smiles	LCCD	LCSD				Prep Ba	atch: 19	93303 RPD
Analyte	Spike Added	_	Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
Perfluorobutanoic acid (PFBA)		37.7	Qualifier	ng/L		94	78 ₋ 138	1	30
Perfluoropentanoic acid (PFPeA)	40.0	35.0		ng/L		88	66 ₋ 136	6	30
Perfluorohexanoic acid (PFHxA)	40.0	38.5		ng/L		96	76 ₋ 136	3	30
Perfluoroheptanoic acid (PFHpA)	40.0	38.9		ng/L		97	78 ₋ 138	3	30
	40.0	37.5		J		94	70 - 130 70 - 130	3	30
Perfluorooctanoic acid (PFOA)				ng/L					
Perfluorononanoic acid (PFNA)	40.0	36.9		ng/L		92	77 - 137	5	30
Perfluorodecanoic acid (PFDA)	40.0	39.5		ng/L		99	74 - 134	6	30
Perfluoroundecanoic acid (PFUnA)	40.0	35.9		ng/L		90	68 - 128	2	30
Perfluorododecanoic acid (PFDoA)	40.0	39.0		ng/L		98	72 - 132	1	30
Perfluorotridecanoic Acid (PFTriA)	40.0	42.6		ng/L		106	56 - 163	2	30
Perfluorotetradecanoic acid (PFTeA)	40.0	35.6		ng/L		89	63 - 123	4	30
Perfluorobutanesulfonic acid (PFBS)	35.4	34.0		ng/L		96	79 - 139	7	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.7		ng/L		90	77 - 137	2	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.3		ng/L		95	83 - 143	5	30
Perfluorooctanesulfonic acid (PFOS)	37.1	33.2		ng/L		90	74 - 134	3	30
Perfluorodecanesulfonic acid (PFDS)	38.6	34.5		ng/L		90	75 - 135	2	30
(23)									

40.0

37.9

ng/L

LCSD LCSD

Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	95		25 - 150
13C4 PFBA	79		25 - 150
13C2 PFHxA	100		25 - 150
13C4 PFOA	93		25 - 150
13C5 PFNA	103		25 - 150
13C2 PFDA	99		25 - 150
13C2 PFUnA	102		25 - 150
13C2 PFDoA	91		25 - 150

Perfluorooctane Sulfonamide

(FOSA)

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

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

Lab Sample ID: LCSD 320-193303/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Water Analysis Batch: 194176 Prep Batch: 193303**

	LCSD L	.CSD	
Isotope Dilution	%Recovery 0	Qualifier	Limits
1802 PFHxS	98		25 - 150
13C4 PFOS	100		25 - 150
13C4-PFHpA	101		25 - 150
13C5 PFPeA	101		25 - 150
13C3-PFBS	103		25 - 150
13C2-PFTeDA	100		25 - 150

Prep Type: Total/NA

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

GC/MS VOA

Analysis Batch: 475086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126962-1	MW-17R	Total/NA	Water	8260C	
480-126962-2	MW-16R	Total/NA	Water	8260C	
480-126962-3	MW-19	Total/NA	Water	8260C	
480-126962-4	TRIP BLANK	Total/NA	Water	8260C	
MB 490-475086/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475086/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475086/4	Lab Control Sample Dup	Total/NA	Water	8260C	

LCMS

Prep Batch: 193303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126962-1 - DL	MW-17R	Total/NA	Water	3535	_
480-126962-1	MW-17R	Total/NA	Water	3535	
480-126962-2	MW-16R	Total/NA	Water	3535	
480-126962-3	MW-19	Total/NA	Water	3535	
MB 320-193303/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-193303/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-193303/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 194176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126962-1	MW-17R	Total/NA	Water	537 (modified)	193303
480-126962-2	MW-16R	Total/NA	Water	537 (modified)	193303
480-126962-3	MW-19	Total/NA	Water	537 (modified)	193303
MB 320-193303/1-A	Method Blank	Total/NA	Water	537 (modified)	193303
LCS 320-193303/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	193303
LCSD 320-193303/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	193303

Analysis Batch: 195041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-126962-1 - DL	MW-17R	Total/NA	Water	537 (modified)	193303

TestAmerica Buffalo

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11/17/2017

Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Lab Sample ID: 480-126962-1

Matrix: Water

Date Collected: 11/01/17 10:35 Date Received: 11/02/17 09:30

Client Sample ID: MW-17R

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475086	11/11/17 04:18	AK1	TAL NSH
Total/NA	Prep	3535			193303	11/07/17 14:16	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	194176	11/12/17 01:18	JRB	TAL SAC
Total/NA	Prep	3535	DL		193303	11/07/17 14:16	TWL	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10	195041	11/16/17 10:34	TTP	TAL SAC

Lab Sample ID: 480-126962-2 **Client Sample ID: MW-16R**

Date Collected: 11/01/17 13:25 **Matrix: Water**

Date Received: 11/02/17 09:30

•	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475086	11/11/17 04:43	AK1	TAL NSH
Total/NA	Prep	3535			193303	11/07/17 14:16	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	194176	11/12/17 01:26	JRB	TAL SAC

Client Sample ID: MW-19 Lab Sample ID: 480-126962-3

Date Collected: 11/01/17 15:05 **Matrix: Water**

Date Received: 11/02/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475086	11/11/17 05:08	AK1	TAL NSH
Total/NA	Prep	3535			193303	11/07/17 14:16	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	194176	11/12/17 01:33	JRB	TAL SAC

Client Sample ID: TRIP BLANK Lab Sample ID: 480-126962-4

Date Collected: 11/01/17 00:00

Date Received: 11/02/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475086	11/11/17 02:36	AK1	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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

Matrix: Water

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-126962-1

Project/Site: Crown Dykman - Glen Cove, NY

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11342	03-31-18

Laboratory: TestAmerica Sacramento

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

thority	Program		EPA Region	Identification Number	Expiration Date
w York	NELAP		2	11666	04-01-18
The following analytes	s are included in this repo	ort, but accreditation	/certification is not off	ered by the governing author	ority:
Analysis Method	Prep Method	Matrix	Analyt	e	
537 (modified)	3535	Water	Perflu	orobutanesulfonic acid (PFI	BS)
537 (modified)	3535	Water	Perflu	orobutanoic acid (PFBA)	
537 (modified)	3535	Water	Perflu	orodecanesulfonic acid (PF	DS)
537 (modified)	3535	Water	Perflu	orodecanoic acid (PFDA)	
537 (modified)	3535	Water	Perflu	orododecanoic acid (PFDo	۹)
537 (modified)	3535	Water	Perflu	oroheptanesulfonic Acid (Pl	FHpS)
537 (modified)	3535	Water	Perflu	oroheptanoic acid (PFHpA)	
537 (modified)	3535	Water	Perflu	orohexanesulfonic acid (PF	HxS)
537 (modified)	3535	Water	Perflu	orohexanoic acid (PFHxA)	
537 (modified)	3535	Water	Perflu	orononanoic acid (PFNA)	
537 (modified)	3535	Water	Perflu	orooctane Sulfonamide (FC	SA)
537 (modified)	3535	Water	Perflu	orooctanesulfonic acid (PF0	OS)
537 (modified)	3535	Water	Perflu	orooctanoic acid (PFOA)	
537 (modified)	3535	Water	Perflu	oropentanoic acid (PFPeA)	
537 (modified)	3535	Water	Perflu	orotetradecanoic acid (PFT	eA)
537 (modified)	3535	Water	Perflu	orotridecanoic Acid (PFTriA	۸)
537 (modified)	3535	Water	Perflu	oroundecanoic acid (PFUnA	۹)

TestAmerica Buffalo

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-126962-1

Lab Sample ID	Client Sample ID	Matrix	Collected Received
480-126962-1	MW-17R	Water	11/01/17 10:35 11/02/17 09:30
480-126962-2	MW-16R	Water	11/01/17 13:25 11/02/17 09:30
480-126962-3	MW-19	Water	11/01/17 15:05 11/02/17 09:30
480-126962-4	TRIP BLANK	Water	11/01/17 00:00 11/02/17 09:30

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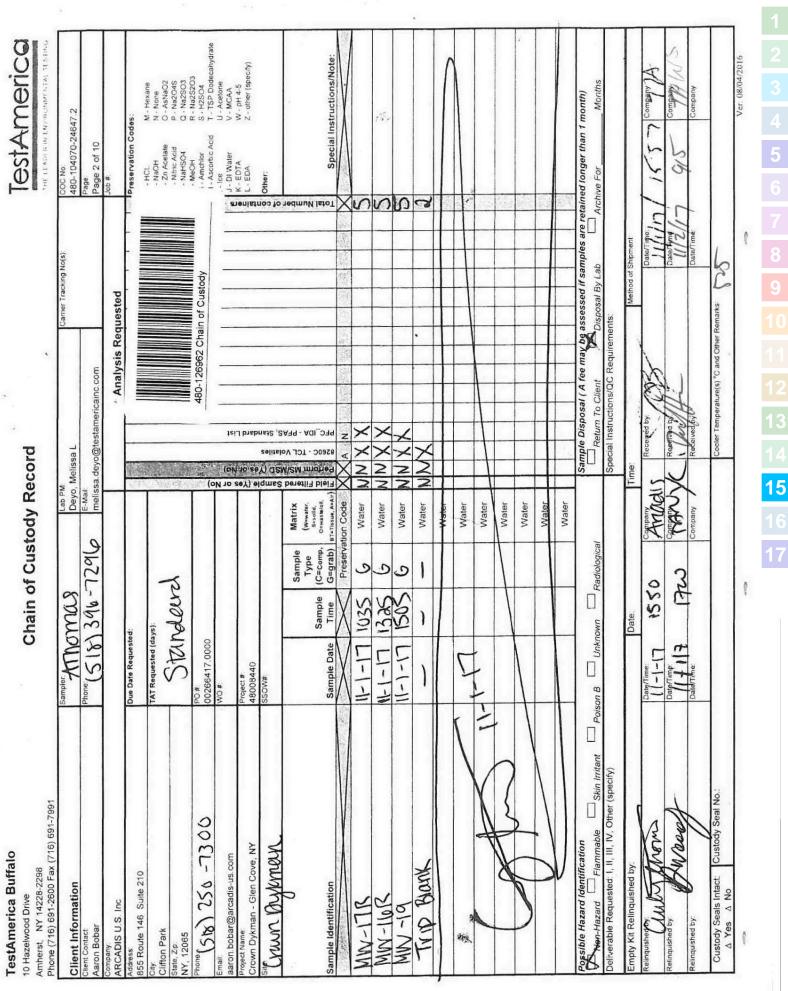
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ain of Custody Record	THE LEADER IN ENVINCEMENTAL TRESSING.
	2000 0000
Sampler Thomas Carrier Tracking No(s): Deyo, Melissa L	480-104070-24647.2
96-7296	Page. Page 2 of 10
Analysis Requested	Job #:
Due Date Requested	eservation Cod
TAT Requested (days):	B - NaOH N - None C - Zn Acetale O - AsNaO2
Standeura	Vern
5417.0000	G - Am Cahydrate
s or Wo)	
To see of	L-El 480-126962 CC-
iqms2	Other:
Sample Type (C=comp,	
dd Z	special instructions/Note:
11-1-17 1035 6 Water WN X X	
6 water NNXX	74.
05 6 water NN KK	
water NMX	
Water	
Water Water	
Water	
Water	
Water	
Water	
Water	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Radiological Archive For Mon	d longer than 1 month) ve For Months
Special Instructions/QC Requirements:	
Date Time: Method of	
-1-17 1550 Company Received by 73	1557 Company A
113 FW CANNY Received by	O4 34 Company
e: Company Received by	Company
Cooler Temperature(s) *C and Other Remarks:	7.8#1
	Company Received by Cand Other Remarks.





TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-126962 Chain of Custody

Nashville, TN

COOLER RECEIPT FORM -

0.00	
Cooler Received/Opened On11/10/170950	
Time Samples Removed From Cooler Time Samples Placed In Storage	(2 Hour Window)
1. Tracking # 5/69 (last 4 digits, FedEx) Courier:FedEx	
IR Gun ID97310166 pH Strip Lot Chlorine Strip Lot	_
2. Temperature of rep. sample or temp blank when opened: 155 Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO. (NA)
4. Were custody seals on outside of cooler?	(YES)NONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	(ES)NONA
6. Were custody papers inside cooler?	YES. (NO).NA
certify that I opened the cooler and answered questions 1-6 (initial)	es
7. Were custody seals on containers: YES NO and Intact	YESNONA
Were these signed and dated correctly?	YESNONA
8. Packing mat'l used? Bubblewrap Blastic bag Peanuts Vermiculite Foam Insert Pape	er Other None
9. Cooling process: (ce Ice-pack Ice (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	YES. NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	YESNONA
12. Did all container labels and tags agree with custody papers?	YESNONA
13a. Were VOA vials received?	YES., NONA
b. Was there any observable headspace present in any VOA vial?	YES(10).NA
	حبيك
Larger than this.	
Larger than this. 14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequence	e#
• •	e#
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequence	e # 6 YESNO. (NA)
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequence I certify that I unloaded the cooler and answered questions 7-14 (intial)	5
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequence I certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO. (NA)
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequence I certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used	YESNONA
14. Was there a Trip Blank in this cooler? VESNONA If multiple coolers, sequence I certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used 16. Was residual chlorine present?	YESNONA
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequence I certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used 16. Was residual chlorine present? I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	YESNO(NA) (ES)NONA YESNO(NA)
14. Was there a Trip Blank in this cooler? I certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used 16. Was residual chlorine present? I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 17. Were custody papers properly filled out (link, signed, etc)?	YESNONA YESNONA YESNONA
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequence of the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used 16. Was residual chlorine present? I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 17. Were custody papers properly filled out (ink, signed, etc)? 18. Did you sign the custody papers in the appropriate place?	YESNONA YESNONA YESNONA (FES)NONA
14. Was there a Trip Blank in this cooler? I certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used 16. Was residual chlorine present? I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 17. Were custody papers properly filled out (ink, signed, etc)? 18. Did you sign the custody papers in the appropriate place? 19. Were correct containers used for the analysis requested?	YESNONA YESNONA YESNONA YESNONA YESNONA
14. Was there a Trip Blank in this cooler? Certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used 16. Was residual chlorine present? Certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 17. Were custody papers properly filled out (link, signed, etc)? 18. Did you sign the custody papers in the appropriate place? 19. Were correct containers used for the analysis requested? 20. Was sufficient amount of sample sent in each container? Certify that I entered this project into LIMS and answered questions 17-20 (intial)	YESNONA YESNONA YESNONA YESNONA YESNONA
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequence I certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used 16. Was residual chlorine present? 1 certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 17. Were custody papers properly filled out (link, signed, etc)? 18. Did you sign the custody papers in the appropriate place? 19. Were correct containers used for the analysis requested? 20. Was sufficient amount of sample sent in each container? 1 certify that I entered this project into LIMS and answered questions 17-20 (intial) 1 certify that I attached a label with the unique LIMS number to each container (intial)	YESNONA YESNONA YESNONA YESNONA YESNONA
14. Was there a Trip Blank in this cooler? Certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used 16. Was residual chlorine present? Certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 17. Were custody papers properly filled out (link, signed, etc)? 18. Did you sign the custody papers in the appropriate place? 19. Were correct containers used for the analysis requested? 20. Was sufficient amount of sample sent in each container? Certify that I entered this project into LIMS and answered questions 17-20 (intial)	YESNONA YESNONA YESNONA YESNONA YESNONA

BIS = Broken in shipment Cooler Receipt Form.doc

LF-1 End of Form Revised 8/23/17

17

10 Hazelwood Drive	Chain of	Chain of Custody Record	cord	. !		Merica
Amherst, NY 14228-2298 Phone (716) 691-2600 Fax (716) 691-7991			3	480-1	480-126962	SH IN ENVIRONMENTAL TESTING
Client Information (Sub Contract Lab)	Sampler	Lab PM Deyo,	Melissa L)		3.1
Client Contact Shipping/Receiving	Phone:	E-Mail:	E-Mail: melissa.devo@testamericainc.	- deline		
Company: TestAmerica Laboratories, Inc			Accreditations Required (See note): NELAP - New York	ote):	Job # 480-	2
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 11/14/2017		A	Analysis Requested	Pres	18
čty. Nashvilie	TAT Requested (days):					A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2
State, Zip: TN, 37204		· -= **			2-Q	
Phone. 615-726-0177(Tel) 615-726-3404(Fax)	PO#:				_	~
Email:	WO#:					
Project Name: Crown Dykman - Glen Cove, NY	Project #: 48008440		10 Se			
Site:	SSOW#:		X) as		Other To	ŭ
	Sample (C)	Sample Matrix Type (Wayster, Sesolid, Gercomp, Gersolid, Celcomp,	iğə Filkərəği Μέζη Τ Οςεο3/Ος Τ		iedminN la	
Sample Identification - Client ID (Lab ID)	Sample Date Time	A 40	94 X	State of the state	or X	Special Instructions/Note:
MW-17R (480-126962-1)	11/1/17 10:35 Eastern	Water	×		(9)	
MW-16R (480-126962-2)	11/1/17 13:25 Eastern	Water	×		<u></u>	
MW-19 (480-126962-3)	11/1/17 15:05 Eastern	Water	×		m	
TRIP BLANK (480-126962-4)	11/1/17 Eastern	Water	×		2	
					() () () () () () () () () ()	
					4-12	
Alone Store laboratory accreditations are subject to charge, I estabationes, inc. places the ownership of method, analyse & accreditation compiliance upon out subcontrol are subject to charge, inc. places the ownership of method, and it alone and the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica laboratories, inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc.	tories, Inc. places the ownership of meth ts/matrix being analyzed, the samples m nt to date, return the signed Chain of Cu	od, analyte & accreditation ust be shipped back to the stody attesting to said com	compliance upon out subconts TestAmerica laboratory or othi ilicance to TestAmerica Labor	act laboratories. This sample shit ar instructions will be provided. Ar atories, Inc.	oment is forwarded under cha ny changes to accreditation s	ain-of-custody. If the laboratory does not status should be brought to TestAmerica
Possible Hazard Identification			Sample Disposal (A	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	amples are retained lo	onger than 1 month)
Unconfirmed			Return To Client	t Disposal By Lab	tb Archive For	or Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2		Special Instructions/QC Requirements:			
Empty Kit Relinquished by:	Date:		Time:	Method of	Method of Shipment:	
Relinquished by:	Water Collin		Received by:		Date/Time:	91,50
Relinquished by:	Date/Nme: ' ' '	Company ,	Received by:		Date/Time:	Company
	Date/Time:	Company	Received by:		Date/Time:	Company
Custody Seals Intact: Custody Seal No.:			Cooler Temperature(s)	Cooler Temperature(s) °C and Other Remarks:	1 × 2	
						Ver. 09/20/2016

TestAmerica Buffalo

TestAmerica

THE BEADER IN ENVIRONMENTAL TESTING

Sam



Job

Tracking # 7706 4690 7506

	Therm. ID: AK-2 / AK-3 / HACCP /Other
otes:	Ice Wet K Dry Other
	- 1
	Cooler Custody Seal:
	Sample Custody Seal:
	Cooler ID:
***	Temp: Observed 5.5
	Corrected:
	-
	From: Temp Blank 🗅 Sample 🔯
	NCM Filed: Yes D No D
	Yes No NA
	Perchlorate has headspace?
t at a	CoC is complete w/o discrepancies?
	Samples received within holding time?
	Sample preservatives verified?
	Cooler compromised/tampered with?
	Samples compromised/tampered-with?
the second second	COC and Samples w/o discrepancies?
	Sample containers have legible labels?
•	Containers are not broken or leaking?
9 a	Sample date/times are provided.
	- Appropriate containers are used?
	Sample bottles are completely filled?
	Zero headspace?*
V. J.	Multiphasic samples are not present?
	01/
	Initials: () Date: 1/2/17

ORIGIN ID TSSA (212) 643-2367

231 W. 29TH STREET, SUITE 904 NEW YORK, NY 10001 UNITED STATES US SHIP DATE 01NOV17 ACTWGT: 40.00 LB CAD: 101905570/INET3920 DIMS: 26x18x16 IN BILL THIRD PARTY

TO SAMPLE RECEIVING SAC TESTAMERICA 880 RIVERSIDE PKWY

WEST SACRAMENTO CA 95605





THU - 02 NOV 3:00P STANDARD OVERNIGHT

TRK# 7706 4690 3306

XH BLUA

95605 cā-us SMF



Client: ARCADIS U.S. Inc Job Number: 480-126962-1

Login Number: 126962 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

eroutori ourinori, ouri in		
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	

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Job Number: 480-126962-1

Client: ARCADIS U.S. Inc

Login Number: 126962 List Source: TestAmerica Sacramento List Number: 2 List Creation: 11/03/17 05:05 PM

Creator: Her. David A

Creator: Her, David A		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	N/A	
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	5.5 C
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?	False	Received project as a subcontract.
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Buffalo



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-127058-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

Melisso Deyo Authorized for release by: 11/17/2017 3:09:17 PM

Melissa Deyo, Project Manager I (716)504-9874

melissa.deyo@testamericainc.com

-----LINKS -----

Review your project results through Total Access

Have a Question?



Visit us at: 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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

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.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
LCMC	

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.
В	Compound was found in the blank and sample.

Glossary

ND PQL

QC

RER

RL RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
a	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

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

Reporting Limit or Requested Limit (Radiochemistry)

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Quality Control

TestAmerica Buffalo

11/17/2017

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Job ID: 480-127058-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-127058-1

Receipt

The samples were received on 11/3/2017 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-475225 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

LCMS

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

Organic Prep

Method(s) 3535: The following samples: MW-4R (480-127058-2), DUP-1 (480-127058-5) and MW-22(R)2 (480-127058-6) were decanted prior to preparation due to sediment that could clog the solid phase extraction columns.

3535_PFC; waters; Batch 194430

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

VOA Prep

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

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TestAmerica Job ID: 480-127058-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-1D Lab Sample ID: 480-127058-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac I) Method	Prep Type
1,1-Dichloroethane	0.33	J	1.0	0.24	ug/L		8260C	Total/NA
1,1-Dichloroethene	0.77	J	1.0	0.25	ug/L	1	8260C	Total/NA
Chloroform	0.27	J	1.0	0.23	ug/L	1	8260C	Total/NA
cis-1,2-Dichloroethene	350		1.0	0.21	ug/L	1	8260C	Total/NA
Tetrachloroethene	40		1.0	0.14	ug/L	1	8260C	Total/NA
trans-1,2-Dichloroethene	3.6		1.0	0.23	ug/L	1	8260C	Total/NA
Trichloroethene	65		1.0	0.20	ug/L	1	8260C	Total/NA
Vinyl chloride	4.8		1.0	0.18	ug/L	1	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	15		1.7	0.29	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	25		1.7	0.41	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	24		1.7	0.49	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	17		1.7	0.21	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	52		1.7	0.72	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	7.0		1.7	0.23	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	4.7		1.7	0.26	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	16		1.7	0.17	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	7.7	В	1.7	0.14	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.4	J	1.7	0.16	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	100		1.7	0.45	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.99	J	1.7	0.29	ng/L	1	537 (modified)	Total/NA

Client Sample ID: MW-4R

Lab Sample ID: 480-127058-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	0.94	J	1.0	0.21	ug/L		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	6.4		2.0	0.35	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	5.0		2.0	0.48	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	6.3		2.0	0.57	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.1		2.0	0.25	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	25		2.0	0.84	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.8	J	2.0	0.27	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.73	J	2.0	0.31	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.8		2.0	0.20	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.8	В	2.0	0.17	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.95	J	2.0	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	56		2.0	0.53	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.39	J	2.0	0.35	ng/L	1	537 (modified)	Total/NA

Client Sample ID: MW-1

Lab Sample ID: 480-127058-3

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	45	1.0	0.21	ug/L	1	_	8260C	Total/NA
Tetrachloroethene	11	1.0	0.14	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.30 J	1.0	0.23	ug/L	1		8260C	Total/NA
Trichloroethene	11	1.0	0.20	ug/L	1		8260C	Total/NA
Vinyl chloride	3.1	1.0	0.18	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	17	1.7	0.29	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	35	1.7	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	36	1.7	0.49	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

11/17/2017

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-1 (Continued)

TestAmerica Job ID: 480-127058-1

Lab Sample ID: 480-127058-3

Analyte	Result (Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	30		1.7	0.21	ng/L		_	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	86		1.7	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	14		1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	13		1.7	0.26	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.1 J	J	1.7	0.92	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	0.65 J	J	1.7	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	19		1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	11 E	В	1.7	0.14	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	3.7		1.7	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	230		1.7	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.7		1.7	0.29	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-1DD

Lab Sample ID: 480-127058-4

Analyte	Result Q	ualifier R	_ MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	140	1.	0.21	ug/L		_	8260C	Total/NA
Tetrachloroethene	65	1.	0.14	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.3	1.	0.23	ug/L	1		8260C	Total/NA
Trichloroethene	38	1.	0.20	ug/L	1		8260C	Total/NA
Vinyl chloride	4.1	1.	0.18	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	8.4	1.	7 0.29	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	10	1.	7 0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	12	1.	7 0.49	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	12	1.	7 0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	65	1.	7 0.71	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.7	1.	7 0.23	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.5 J	1.	7 0.26	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.5	1.	7 0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	7.3 B	1.	7 0.14	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.6 J	1.	7 0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	94	1.	7 0.45	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.92 J	1.	7 0.29	ng/L	1		537 (modified)	Total/NA

Client Sample ID: DUP-1

Lab Sample ID: 480-127058-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.69	J	1.0	0.21	ug/L	1	_	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	6.4		2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	6.2		2.0	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5.9		2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.1		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	25		2.0	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.8	J	2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.69	J	2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.6		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.8	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.86	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	53		2.0	0.54	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Lab Sample ID: 480-127058-7

Client Sample ID: DUP-1 (Continued) Lab Sample ID: 480-127058-5

Result Qualifier Analyte RL **MDL** Unit Dil Fac D Method **Prep Type** Total/NA 537 (modified) Perfluorooctane Sulfonamide (FOSA) 0.46 J 2.0 0.35 ng/L

Client Sample ID: MW-22(R)2 Lab Sample ID: 480-127058-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.36	J	1.0	0.24	ug/L		_	8260C	Total/NA
1,1-Dichloroethene	0.32	J	1.0	0.25	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	0.25	J	1.0	0.20	ug/L	1		8260C	Total/NA
Benzene	0.47	J	1.0	0.20	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	260		1.0	0.21	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.29	J	5.0	0.090	ug/L	1		8260C	Total/NA
Tetrachloroethene	17		1.0	0.14	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	5.5		1.0	0.23	ug/L	1		8260C	Total/NA
Trichloroethene	23		1.0	0.20	ug/L	1		8260C	Total/NA
Vinyl chloride	61		1.0	0.18	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	18		1.9	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	16		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	14		1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	9.5		1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	36		1.9	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	5.6		1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.7		1.9	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.7		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.8	В	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.9		1.9	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	140		1.9	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.83	J	1.9	0.34	ng/L	1		537 (modified)	Total/NA

Client Sample ID: RINSE WATER-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.84	J	1.7	0.30	ng/L		_	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.73	J	1.7	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.63	J	1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.36	J	1.7	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3	J	1.7	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.41	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.58	JB	1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.88	J	1.7	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	2.2		1.7	0.30	ng/L	1		537 (modified)	Total/NA

No Detections.

Client Sample ID: TRIP BLANK Lab Sample ID: 480-127058-8

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

11/17/2017

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Lab Sample ID: 480-127058-1

Matrix: Water

Client Sample ID: MW-1D
Date Collected: 11/02/17 10:50
Date Received: 11/03/17 10:00

Method: 8260C - Volatile Organ ^{Analyte}		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
I,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 18:45	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 18:45	•
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1.0	0.15	ug/L			11/11/17 18:45	•
I,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 18:45	
I,1-Dichloroethane	0.33	J	1.0	0.24	ug/L			11/11/17 18:45	
I,1-Dichloroethene	0.77	J	1.0	0.25	ug/L			11/11/17 18:45	
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 18:45	• • • • • • • •
1,2-Dibromo-3-Chloropropane	ND		10	0.94	-			11/11/17 18:45	
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 18:45	
I,2-Dichlorobenzene	ND		1.0	0.19	-			11/11/17 18:45	• • • • • • • •
I,2-Dichloroethane	ND		1.0	0.20	-			11/11/17 18:45	
I,2-Dichloropropane	ND		1.0	0.25	-			11/11/17 18:45	
I,3-Dichlorobenzene	ND		1.0	0.18	-			11/11/17 18:45	,
I,4-Dichlorobenzene	ND		1.0		ug/L			11/11/17 18:45	
2-Butanone (MEK)	ND	F1	50		ug/L			11/11/17 18:45	
2-Hexanone	ND		10		ug/L			11/11/17 18:45	
I-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/17 18:45	
Acetone	ND		25		ug/L			11/11/17 18:45	
Benzene	ND		1.0	0.20	-			11/11/17 18:45	
Bromodichloromethane	ND		1.0	0.17	-			11/11/17 18:45	
Bromoform	ND		1.0	0.29	-			11/11/17 18:45	
Bromomethane	ND		1.0	0.35	-			11/11/17 18:45	
Carbon disulfide	ND		1.0	0.22	-			11/11/17 18:45	
Carbon tetrachloride	ND		1.0	0.18	-			11/11/17 18:45	
Chlorobenzene	ND		1.0	0.18	-			11/11/17 18:45	,
Chloroethane	ND		1.0	0.36	_			11/11/17 18:45	
Chloroform	0.27		1.0	0.23	-			11/11/17 18:45	
Chloromethane	ND		1.0	0.23	-			11/11/17 18:45	,
	350		1.0	0.30	-			11/11/17 18:45	
cis-1,2-Dichloroethene cis-1,3-Dichloropropene	ND		1.0	0.21	-			11/11/17 18:45	
	ND		5.0	0.17	-			11/11/17 18:45	,
Cyclohexane Dibromochloromethane	ND ND		1.0	0.13	-			11/11/17 18:45	
	ND ND								
Dichlorodifluoromethane	ND		1.0	0.17	-			11/11/17 18:45	
Ethylbenzene	ND ND		1.0 1.0	0.19 0.33	-			11/11/17 18:45 11/11/17 18:45	
sopropylbenzene					•				
Methyl acetate	ND		10	0.58				11/11/17 18:45	
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/17 18:45	
Methylcyclohexane	ND		5.0	0.090	-			11/11/17 18:45	
Methylene Chloride	ND		5.0		ug/L			11/11/17 18:45	
Styrene	ND		1.0		ug/L			11/11/17 18:45	
Tetrachloroethene	40		1.0		ug/L			11/11/17 18:45	
Foluene	ND		1.0		ug/L			11/11/17 18:45	
rans-1,2-Dichloroethene	3.6		1.0	0.23	•			11/11/17 18:45	•
rans-1,3-Dichloropropene	ND		1.0	0.17	-			11/11/17 18:45	•
[richloroethene	65		1.0		ug/L			11/11/17 18:45	
Frichlorofluoromethane	ND		1.0		ug/L			11/11/17 18:45	•
/inyl chloride	4.8		1.0	0.18	ug/L			11/11/17 18:45	•

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-1D

Date Collected: 11/02/17 10:50 Date Received: 11/03/17 10:00 Lab Sample ID: 480-127058-1

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91	70 - 130		11/11/17 18:45	1
4-Bromofluorobenzene (Surr)	101	70 - 130		11/11/17 18:45	1
Dibromofluoromethane (Surr)	108	70 - 130		11/11/17 18:45	1
Toluene-d8 (Surr)	99	70 - 130		11/11/17 18:45	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	15		1.7	0.29	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluoropentanoic acid (PFPeA)	25		1.7	0.41	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorohexanoic acid (PFHxA)	24		1.7	0.49	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluoroheptanoic acid (PFHpA)	17		1.7	0.21	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorooctanoic acid (PFOA)	52		1.7	0.72	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorononanoic acid (PFNA)	7.0		1.7	0.23	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorodecanoic acid (PFDA)	4.7		1.7	0.26	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.93	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.24	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorobutanesulfonic acid (PFBS)	16		1.7	0.17	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorohexanesulfonic acid (PFHxS)	7.7	В	1.7	0.14	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.4	J	1.7	0.16	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorooctanesulfonic acid (PFOS)	100		1.7	0.45	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		11/13/17 17:06	11/15/17 02:32	1
Perfluorooctane Sulfonamide (FOSA)	0.99	J	1.7	0.29	ng/L		11/13/17 17:06	11/15/17 02:32	1
Isotone Dilution	%Recovery	Qualifier	l imite				Propared	Analyzed	Dil Fac

(I OSA)					
Isotope Dilution	%Recovery Quali	ifier Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	93	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C4 PFBA	65	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C2 PFHxA	90	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C4 PFOA	93	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C5 PFNA	101	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C2 PFDA	107	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C2 PFUnA	102	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C2 PFDoA	83	25 - 150	11/13/17 17:06	11/15/17 02:32	1
18O2 PFHxS	96	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C4 PFOS	99	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C4-PFHpA	93	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C5 PFPeA	87	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C3-PFBS	99	25 - 150	11/13/17 17:06	11/15/17 02:32	1
13C2-PFTeDA	91	25 - 150	11/13/17 17:06	11/15/17 02:32	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-4R

Date Collected: 11/02/17 13:00 Date Received: 11/03/17 10:00 Lab Sample ID: 480-127058-2

Matrix: Water

Analyte	Result Qu	alifier RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 19:11	
1,1,2,2-Tetrachloroethane	ND	1.0	0.19	ug/L			11/11/17 19:11	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	1.0	0.15	ug/L			11/11/17 19:11	
1,1,2-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 19:11	
1,1-Dichloroethane	ND	1.0	0.24	ug/L			11/11/17 19:11	
1,1-Dichloroethene	ND	1.0	0.25	ug/L			11/11/17 19:11	
1,2,4-Trichlorobenzene	ND	1.0	0.20	ug/L			11/11/17 19:11	
1,2-Dibromo-3-Chloropropane	ND	10	0.94	ug/L			11/11/17 19:11	
1,2-Dibromoethane	ND	1.0	0.21	ug/L			11/11/17 19:11	
1,2-Dichlorobenzene	ND	1.0	0.19	ug/L			11/11/17 19:11	•
1,2-Dichloroethane	ND	1.0	0.20	ug/L			11/11/17 19:11	
1,2-Dichloropropane	ND	1.0	0.25	ug/L			11/11/17 19:11	
1,3-Dichlorobenzene	ND	1.0	0.18	ug/L			11/11/17 19:11	· · · · · · · · ·
1,4-Dichlorobenzene	ND	1.0	0.17	ug/L			11/11/17 19:11	
2-Butanone (MEK)	ND	50		ug/L			11/11/17 19:11	
2-Hexanone	ND	10	1.3	ug/L			11/11/17 19:11	
4-Methyl-2-pentanone (MIBK)	ND	10	0.81	-			11/11/17 19:11	
Acetone	ND	25		ug/L			11/11/17 19:11	
Benzene	ND	1.0	0.20				11/11/17 19:11	
Bromodichloromethane	ND	1.0	0.17	ug/L			11/11/17 19:11	
Bromoform	ND	1.0	0.29	-			11/11/17 19:11	
Bromomethane	ND	1.0	0.35	-			11/11/17 19:11	
Carbon disulfide	ND	1.0	0.22	-			11/11/17 19:11	
Carbon tetrachloride	ND	1.0	0.18	-			11/11/17 19:11	
Chlorobenzene	ND	1.0	0.18	-			11/11/17 19:11	
Chloroethane	ND	1.0	0.36	-			11/11/17 19:11	
Chloroform	ND	1.0	0.23	-			11/11/17 19:11	
Chloromethane	ND	1.0	0.36	-			11/11/17 19:11	
cis-1,2-Dichloroethene	0.94 J	1.0	0.21	-			11/11/17 19:11	
cis-1,3-Dichloropropene	ND	1.0	0.17	-			11/11/17 19:11	
Cyclohexane	ND	5.0	0.13	-			11/11/17 19:11	
Dibromochloromethane	ND	1.0	0.25	-			11/11/17 19:11	
Dichlorodifluoromethane	ND	1.0	0.17	•			11/11/17 19:11	
Ethylbenzene	ND	1.0	0.19	-			11/11/17 19:11	
Isopropylbenzene	ND	1.0	0.33	-			11/11/17 19:11	
Methyl acetate	ND	10	0.58	-			11/11/17 19:11	
Methyl tert-butyl ether	ND	1.0	0.17				11/11/17 19:11	· · · · · .
Methylcyclohexane	ND	5.0	0.090				11/11/17 19:11	
Methylene Chloride	ND	5.0		ug/L			11/11/17 19:11	
Styrene	ND	1.0	0.28				11/11/17 19:11	· · · · · · .
Tetrachloroethene	ND	1.0	0.14				11/11/17 19:11	
Toluene	ND	1.0	0.17	-			11/11/17 19:11	
trans-1,2-Dichloroethene	ND	1.0		ug/L			11/11/17 19:11	
trans-1,3-Dichloropropene	ND	1.0	0.17				11/11/17 19:11	
Trichloroethene	ND	1.0	0.20	-			11/11/17 19:11	
Trichlorofluoromethane	ND	1.0	0.20				11/11/17 19:11	
Vinyl chloride	ND	1.0	0.21				11/11/17 19:11	
Xylenes, Total	ND	3.0		ug/L			11/11/17 19:11	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-4R

Date Collected: 11/02/17 13:00 Date Received: 11/03/17 10:00

Lab Sample ID: 480-127058-2

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94	70 - 130		11/11/17 19:11	1
4-Bromofluorobenzene (Surr)	99	70 - 130		11/11/17 19:11	1
Dibromofluoromethane (Surr)	111	70 - 130		11/11/17 19:11	1
Toluene-d8 (Surr)	97	70 - 130		11/11/17 19:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	6.4		2.0	0.35	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluoropentanoic acid (PFPeA)	5.0		2.0	0.48	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorohexanoic acid (PFHxA)	6.3		2.0	0.57	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluoroheptanoic acid (PFHpA)	5.1		2.0	0.25	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorooctanoic acid (PFOA)	25		2.0	0.84	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorononanoic acid (PFNA)	1.8	J	2.0	0.27	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorodecanoic acid (PFDA)	0.73	J	2.0	0.31	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorobutanesulfonic acid (PFBS)	2.8		2.0	0.20	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorohexanesulfonic acid (PFHxS)	5.8	В	2.0	0.17	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.95	J	2.0	0.19	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorooctanesulfonic acid (PFOS)	56		2.0	0.53	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/13/17 17:06	11/15/17 02:56	1
Perfluorooctane Sulfonamide (FOSA)	0.39	J	2.0	0.35	ng/L		11/13/17 17:06	11/15/17 02:56	1
Isotone Dilution	%Recovery	Qualifier	l imits				Prepared	Analyzed	Dil Fac

(I COA)					
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	84	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C4 PFBA	62	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C2 PFHxA	83	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C4 PFOA	87	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C5 PFNA	95	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C2 PFDA	103	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C2 PFUnA	94	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C2 PFDoA	83	25 - 150	11/13/17 17:06	11/15/17 02:56	1
18O2 PFHxS	91	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C4 PFOS	91	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C4-PFHpA	92	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C5 PFPeA	82	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C3-PFBS	95	25 - 150	11/13/17 17:06	11/15/17 02:56	1
13C2-PFTeDA	83	25 ₋ 150	11/13/17 17:06	11/15/17 02:56	1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-1

Date Collected: 11/02/17 12:35 Date Received: 11/03/17 10:00 Lab Sample ID: 480-127058-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 19:37	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 19:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1.0	0.15	ug/L			11/11/17 19:37	
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 19:37	,
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 19:37	
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 19:37	
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 19:37	
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 19:37	
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 19:37	•
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/17 19:37	•
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 19:37	
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 19:37	
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 19:37	· · · · · · · · ·
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 19:37	
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 19:37	
2-Hexanone	ND		10	1.3	ug/L			11/11/17 19:37	
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/17 19:37	
Acetone	ND		25		ug/L			11/11/17 19:37	
Benzene	ND		1.0	0.20				11/11/17 19:37	
Bromodichloromethane	ND		1.0	0.17	ug/L			11/11/17 19:37	
Bromoform	ND		1.0	0.29	-			11/11/17 19:37	
Bromomethane	ND		1.0	0.35	-			11/11/17 19:37	,
Carbon disulfide	ND		1.0	0.22	-			11/11/17 19:37	
Carbon tetrachloride	ND		1.0	0.18	-			11/11/17 19:37	
Chlorobenzene	ND		1.0	0.18	-			11/11/17 19:37	· · · · · · .
Chloroethane	ND		1.0	0.36	-			11/11/17 19:37	
Chloroform	ND		1.0	0.23	-			11/11/17 19:37	
Chloromethane	ND		1.0	0.36	-			11/11/17 19:37	· · · · · .
cis-1,2-Dichloroethene	45		1.0	0.21	-			11/11/17 19:37	
cis-1,3-Dichloropropene	ND		1.0	0.17	-			11/11/17 19:37	
Cyclohexane	ND		5.0	0.13	-			11/11/17 19:37	
Dibromochloromethane	ND		1.0	0.25	-			11/11/17 19:37	
Dichlorodifluoromethane	ND		1.0	0.17	•			11/11/17 19:37	
Ethylbenzene	ND		1.0	0.19	-			11/11/17 19:37	
Isopropylbenzene	ND		1.0	0.33	-			11/11/17 19:37	
Methyl acetate	ND		10	0.58	-			11/11/17 19:37	
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/17 19:37	
Methylcyclohexane	ND		5.0	0.090				11/11/17 19:37	
Methylene Chloride	ND		5.0		ug/L			11/11/17 19:37	
Styrene	ND		1.0		ug/L			11/11/17 19:37	,
Tetrachloroethene	11		1.0	0.14				11/11/17 19:37	
Toluene	ND		1.0	0.17	-			11/11/17 19:37	
trans-1,2-Dichloroethene	0.30		1.0		ug/L			11/11/17 19:37	
trans-1,2-Dichloropropene	0.30 ND	3	1.0	0.23				11/11/17 19:37	
Trichloroethene	11		1.0		ug/L ug/L			11/11/17 19:37	
Trichlorofluoromethane	ND		1.0					11/11/17 19:37	
	3.1		1.0	0.21	ug/L ug/L			11/11/17 19:37	
Vinyl chloride Xylenes, Total	3.1 ND		3.0		ug/L ug/L			11/11/17 19:37	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

13C4-PFHpA

13C5 PFPeA

13C3-PFBS

13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-1

Date Received: 11/03/17 10:00

Date Collected: 11/02/17 12:35

Lab Sample ID: 480-127058-3

Matrix: Water

Surrogate	%Recovery	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93	70 - 130		11/11/17 19:37	1
4-Bromofluorobenzene (Surr)	99	70 - 130		11/11/17 19:37	1
Dibromofluoromethane (Surr)	106	70 - 130		11/11/17 19:37	1
Toluene-d8 (Surr)	98	70 - 130		11/11/17 19:37	1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	17		1.7	0.29	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluoropentanoic acid (PFPeA)	35		1.7	0.41	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorohexanoic acid (PFHxA)	36		1.7	0.49	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluoroheptanoic acid (PFHpA)	30		1.7	0.21	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorooctanoic acid (PFOA)	86		1.7	0.71	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorononanoic acid (PFNA)	14		1.7	0.23	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorodecanoic acid (PFDA)	13		1.7	0.26	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluoroundecanoic acid (PFUnA)	1.1	J	1.7	0.92	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorododecanoic acid (PFDoA)	0.65	J	1.7	0.46	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.24	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorobutanesulfonic acid (PFBS)	19		1.7	0.17	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorohexanesulfonic acid (PFHxS)	11	В	1.7	0.14	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	3.7		1.7	0.16	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorooctanesulfonic acid (PFOS)	230		1.7	0.45	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		11/13/17 17:06	11/15/17 03:04	1
Perfluorooctane Sulfonamide (FOSA)	1.7		1.7	0.29	ng/L		11/13/17 17:06	11/15/17 03:04	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	100	-	25 - 150				11/13/17 17:06	11/15/17 03:04	1
13C4 PFBA	64		25 - 150				11/13/17 17:06	11/15/17 03:04	1
13C2 PFHxA	93		25 - 150				11/13/17 17:06	11/15/17 03:04	1
13C4 PFOA	94		25 - 150				11/13/17 17:06	11/15/17 03:04	1
13C5 PFNA	113		25 - 150				11/13/17 17:06	11/15/17 03:04	1
13C2 PFDA	122		25 - 150				11/13/17 17:06	11/15/17 03:04	1
13C2 PFUnA	114		25 - 150				11/13/17 17:06	11/15/17 03:04	1
13C2 PFDoA	95		25 - 150				11/13/17 17:06	11/15/17 03:04	1
1802 PFHxS	97		25 - 150				11/13/17 17:06	11/15/17 03:04	1
13C4 PFOS	103		25 - 150				11/13/17 17:06	11/15/17 03:04	1

11/13/17 17:06 11/15/17 03:04

11/13/17 17:06 11/15/17 03:04

11/13/17 17:06 11/15/17 03:04

11/13/17 17:06 11/15/17 03:04

25 - 150

25 - 150

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25 - 150

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-1DD

Date Collected: 11/02/17 13:55 Date Received: 11/03/17 10:00 Lab Sample ID: 480-127058-4

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 20:03	
1,1,2,2-Tetrachloroethane	ND	1.0	0.19	ug/L			11/11/17 20:03	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	1.0	0.15	ug/L			11/11/17 20:03	
1,1,2-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 20:03	
1,1-Dichloroethane	ND	1.0	0.24	ug/L			11/11/17 20:03	
1,1-Dichloroethene	ND	1.0	0.25	ug/L			11/11/17 20:03	
1,2,4-Trichlorobenzene	ND	1.0	0.20	ug/L			11/11/17 20:03	
1,2-Dibromo-3-Chloropropane	ND	10	0.94	ug/L			11/11/17 20:03	
1,2-Dibromoethane	ND	1.0	0.21	ug/L			11/11/17 20:03	
1,2-Dichlorobenzene	ND	1.0	0.19	ug/L			11/11/17 20:03	
1,2-Dichloroethane	ND	1.0	0.20	ug/L			11/11/17 20:03	
1,2-Dichloropropane	ND	1.0	0.25	ug/L			11/11/17 20:03	
1,3-Dichlorobenzene	ND	1.0	0.18	ug/L			11/11/17 20:03	
1,4-Dichlorobenzene	ND	1.0		ug/L			11/11/17 20:03	
2-Butanone (MEK)	ND	50		ug/L			11/11/17 20:03	
2-Hexanone	ND	10		ug/L			11/11/17 20:03	
4-Methyl-2-pentanone (MIBK)	ND	10		-			11/11/17 20:03	
Acetone	ND	25		ug/L			11/11/17 20:03	
Benzene	ND	1.0		ug/L			11/11/17 20:03	
Bromodichloromethane	ND	1.0		ug/L			11/11/17 20:03	
Bromoform	ND	1.0		ug/L			11/11/17 20:03	
Bromomethane	ND	1.0		ug/L			11/11/17 20:03	
Carbon disulfide	ND	1.0		ug/L			11/11/17 20:03	
Carbon tetrachloride	ND	1.0		ug/L			11/11/17 20:03	
Chlorobenzene	ND	1.0		ug/L			11/11/17 20:03	
Chloroethane	ND	1.0		ug/L			11/11/17 20:03	
Chloroform	ND	1.0		ug/L			11/11/17 20:03	
Chloromethane	ND	1.0		ug/L			11/11/17 20:03	
cis-1,2-Dichloroethene	140	1.0		ug/L			11/11/17 20:03	
cis-1,3-Dichloropropene	ND	1.0		ug/L			11/11/17 20:03	
Cyclohexane	ND	5.0		ug/L			11/11/17 20:03	
Dibromochloromethane	ND	1.0		ug/L			11/11/17 20:03	
Dichlorodifluoromethane	ND	1.0		ug/L			11/11/17 20:03	
Ethylbenzene	ND	1.0		ug/L			11/11/17 20:03	
Isopropylbenzene	ND	1.0		ug/L			11/11/17 20:03	
Methyl acetate	ND	10		ug/L			11/11/17 20:03	
Methyl tert-butyl ether	ND	1.0		ug/L			11/11/17 20:03	
Methylcyclohexane	ND	5.0	0.090				11/11/17 20:03	
Methylene Chloride	ND	5.0		ug/L			11/11/17 20:03	
Styrene	ND	1.0		ug/L			11/11/17 20:03	
Tetrachloroethene	65	1.0		ug/L			11/11/17 20:03	
Toluene	ND	1.0		ug/L			11/11/17 20:03	
trans-1,2-Dichloroethene	1.3	1.0		ug/L			11/11/17 20:03	
trans-1,2-Dichloropropene	ND	1.0		ug/L ug/L			11/11/17 20:03	
Trichloroethene	38	1.0		ug/L ug/L			11/11/17 20:03	
Trichloroethene Trichlorofluoromethane	ND	1.0		ug/L ug/L			11/11/17 20:03	
		1.0					11/11/17 20:03	
Vinyl chloride Xylenes, Total	4.1 ND	3.0		ug/L ug/L			11/11/17 20:03	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-1DD

Date Collected: 11/02/17 13:55 Date Received: 11/03/17 10:00

Lab Sample ID: 480-127058-4

Matrix: Water

Surrogate	%Recovery Quality	fier Limits	Prepared Analy	zed Dil Fac
1,2-Dichloroethane-d4 (Surr)	95	70 - 130	11/11/17	7 20:03 1
4-Bromofluorobenzene (Surr)	97	70 - 130	11/11/17	7 20:03 1
Dibromofluoromethane (Surr)	107	70 - 130	11/11/17	⁷ 20:03 1
Toluene-d8 (Surr)	99	70 - 130	11/11/17	7 20:03 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	8.4		1.7	0.29	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluoropentanoic acid (PFPeA)	10		1.7	0.41	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorohexanoic acid (PFHxA)	12		1.7	0.49	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluoroheptanoic acid (PFHpA)	12		1.7	0.21	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorooctanoic acid (PFOA)	65		1.7	0.71	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorononanoic acid (PFNA)	2.7		1.7	0.23	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorodecanoic acid (PFDA)	1.5	J	1.7	0.26	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.92	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.24	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorobutanesulfonic acid (PFBS)	6.5		1.7	0.17	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorohexanesulfonic acid (PFHxS)	7.3	В	1.7	0.14	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.6	J	1.7	0.16	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorooctanesulfonic acid (PFOS)	94		1.7	0.45	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		11/13/17 17:06	11/15/17 03:12	1
Perfluorooctane Sulfonamide (FOSA)	0.92	J	1.7	0.29	ng/L		11/13/17 17:06	11/15/17 03:12	1
Isotone Dilution	%Recovery	Qualifier	l imite				Propared	Analyzad	Dil Fac

(FUSA)					
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	94	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C4 PFBA	59	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C2 PFHxA	89	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C4 PFOA	94	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C5 PFNA	106	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C2 PFDA	108	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C2 PFUnA	102	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C2 PFDoA	90	25 - 150	11/13/17 17:06	11/15/17 03:12	1
18O2 PFHxS	99	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C4 PFOS	100	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C4-PFHpA	96	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C5 PFPeA	87	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C3-PFBS	96	25 - 150	11/13/17 17:06	11/15/17 03:12	1
13C2-PFTeDA	85	25 - 150	11/13/17 17:06	11/15/17 03:12	1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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TestAmerica Job ID: 480-127058-1

Lab Sample ID: 480-127058-5

Matrix: Water

Client Sample ID: DUP-1

Date Collected: 11/02/17 00:00 Date Received: 11/03/17 10:00

Resuit	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		1.0	0.19	ug/L			11/11/17 20:29	-
ND		1.0	0.19	ug/L			11/11/17 20:29	•
ND	*	1.0	0.15	ug/L			11/11/17 20:29	
ND		1.0	0.19	ug/L			11/11/17 20:29	
ND		1.0	0.24	ug/L			11/11/17 20:29	•
ND		1.0	0.25	ug/L			11/11/17 20:29	
ND		1.0	0.20	ug/L			11/11/17 20:29	
ND		10	0.94	ug/L			11/11/17 20:29	
ND		1.0	0.21	ug/L			11/11/17 20:29	
ND		1.0	0.19	ug/L			11/11/17 20:29	• • • • • • • •
ND		1.0	0.20	ug/L			11/11/17 20:29	
ND		1.0		-			11/11/17 20:29	
ND		1.0		_			11/11/17 20:29	
ND		1.0		-			11/11/17 20:29	
ND		50		-			11/11/17 20:29	
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	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND * ND * ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND	ND 1.0 0.19 ND 1.0 0.19 ND 1.0 0.15 ND 1.0 0.24 ND 1.0 0.24 ND 1.0 0.25 ND 1.0 0.20 ND 1.0 0.94 ND 1.0 0.19 ND 1.0 0.19 ND 1.0 0.19 ND 1.0 0.20 ND 1.0 0.20 ND 1.0 0.25 ND 1.0 0.17 ND 1.0 0.18 ND 1.0 0.18 ND 1.0 0.20 ND 1.0 0.21 ND 1.0 0.22 ND 1.0 0.22 ND 1.0 0.22 ND 1.0 0.23 ND 1.0 0.23 ND 1.0 0.23	ND	ND	ND	ND

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: DUP-1

Date Collected: 11/02/17 00:00 Date Received: 11/03/17 10:00 Lab Sample ID: 480-127058-5

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94	70 - 130		11/11/17 20:29	1
4-Bromofluorobenzene (Surr)	97	70 - 130		11/11/17 20:29	1
Dibromofluoromethane (Surr)	109	70 - 130		11/11/17 20:29	1
Toluene-d8 (Surr)	96	70 - 130		11/11/17 20:29	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	6.4		2.0	0.35	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluoropentanoic acid (PFPeA)	6.2		2.0	0.49	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorohexanoic acid (PFHxA)	5.9		2.0	0.58	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluoroheptanoic acid (PFHpA)	5.1		2.0	0.25	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorooctanoic acid (PFOA)	25		2.0	0.84	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorononanoic acid (PFNA)	1.8	J	2.0	0.27	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorodecanoic acid (PFDA)	0.69	J	2.0	0.31	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorobutanesulfonic acid (PFBS)	2.6		2.0	0.20	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorohexanesulfonic acid (PFHxS)	5.8	В	2.0	0.17	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.86	J	2.0	0.19	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorooctanesulfonic acid (PFOS)	53		2.0	0.54	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/13/17 17:06	11/15/17 03:20	1
Perfluorooctane Sulfonamide (FOSA)	0.46	J	2.0	0.35	ng/L		11/13/17 17:06	11/15/17 03:20	1
Isotono Dilution	% Pocovory	Ovalifier	Limite				Propared	Analyzod	Dil Esc

(FUSA)					
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	87	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C4 PFBA	64	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C2 PFHxA	86	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C4 PFOA	91	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C5 PFNA	96	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C2 PFDA	100	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C2 PFUnA	93	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C2 PFDoA	79	25 - 150	11/13/17 17:06	11/15/17 03:20	1
18O2 PFHxS	91	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C4 PFOS	94	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C4-PFHpA	92	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C5 PFPeA	86	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C3-PFBS	98	25 - 150	11/13/17 17:06	11/15/17 03:20	1
13C2-PFTeDA	82	25 - 150	11/13/17 17:06	11/15/17 03:20	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-22(R)2

Date Collected: 11/02/17 15:30 Date Received: 11/03/17 10:00 Lab Sample ID: 480-127058-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 20:55	-
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 20:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1.0	0.15	ug/L			11/11/17 20:55	
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 20:55	
1,1-Dichloroethane	0.36	J	1.0	0.24	ug/L			11/11/17 20:55	
1,1-Dichloroethene	0.32	J	1.0	0.25	ug/L			11/11/17 20:55	
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 20:55	
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 20:55	
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 20:55	
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/17 20:55	
1,2-Dichloroethane	0.25	J	1.0	0.20	ug/L			11/11/17 20:55	
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 20:55	
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 20:55	
1,4-Dichlorobenzene	ND		1.0	0.17	-			11/11/17 20:55	
2-Butanone (MEK)	ND		50		ug/L			11/11/17 20:55	
2-Hexanone	ND		10		ug/L			11/11/17 20:55	
4-Methyl-2-pentanone (MIBK)	ND		10		-			11/11/17 20:55	
Acetone	ND		25		ug/L			11/11/17 20:55	
Benzene	0.47		1.0	0.20	-			11/11/17 20:55	
Bromodichloromethane	ND		1.0	0.17	-			11/11/17 20:55	
Bromoform	ND		1.0	0.29	_			11/11/17 20:55	
Bromomethane	ND		1.0		ug/L			11/11/17 20:55	
Carbon disulfide	ND		1.0	0.22	_			11/11/17 20:55	
Carbon tetrachloride	ND		1.0	0.18	-			11/11/17 20:55	
Chlorobenzene	ND		1.0		ug/L			11/11/17 20:55	
Chloroethane	ND		1.0	0.36	-			11/11/17 20:55	
Chloroform	ND		1.0	0.23	-			11/11/17 20:55	
Chloromethane	ND		1.0		ug/L			11/11/17 20:55	
cis-1,2-Dichloroethene	260		1.0	0.21	-			11/11/17 20:55	
cis-1,3-Dichloropropene	ND		1.0	0.17	-			11/11/17 20:55	
Cyclohexane	ND		5.0		ug/L			11/11/17 20:55	
Dibromochloromethane	ND		1.0	0.25	-			11/11/17 20:55	
Dichlorodifluoromethane	ND		1.0	0.17	-			11/11/17 20:55	
Ethylbenzene	ND		1.0	0.19	-			11/11/17 20:55	
Isopropylbenzene	ND		1.0	0.33	-			11/11/17 20:55	
Methyl acetate	ND		10		ug/L			11/11/17 20:55	
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/17 20:55	
Methylcyclohexane	0.29		5.0	0.090				11/11/17 20:55	
Methylene Chloride	ND	3	5.0		ug/L			11/11/17 20:55	
Styrene	ND		1.0		ug/L			11/11/17 20:55	
Tetrachloroethene	17		1.0		ug/L			11/11/17 20:55	
Toluene	ND		1.0		ug/L			11/11/17 20:55	
trans-1,2-Dichloroethene	5.5		1.0		ug/L			11/11/17 20:55	
trans-1,3-Dichloropropene	ND		1.0		ug/L ug/L			11/11/17 20:55	
Trichloroethene	23		1.0		ug/L ug/L			11/11/17 20:55	
Trichlorofluoromethane	ND		1.0		ug/L ug/L			11/11/17 20:55	
			1.0					11/11/17 20:55	
Vinyl chloride Xylenes, Total	61 ND		3.0		ug/L ug/L			11/11/17 20:55	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-22(R)2

Date Collected: 11/02/17 15:30 Date Received: 11/03/17 10:00

Lab Sample ID: 480-127058-6

Matrix: Water

Surr	ogate	%Recovery Quali	fier Limits	Prepared	Analyzed	Dil Fac
1,2-E	Dichloroethane-d4 (Surr)	97	70 - 130		11/11/17 20:55	1
4-Bro	omofluorobenzene (Surr)	99	70 - 130		11/11/17 20:55	1
Dibro	omofluoromethane (Surr)	108	70 - 130		11/11/17 20:55	1
Tolue	ene-d8 (Surr)	96	70 - 130		11/11/17 20:55	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	18		1.9	0.34	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluoropentanoic acid (PFPeA)	16		1.9	0.47	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorohexanoic acid (PFHxA)	14		1.9	0.56	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluoroheptanoic acid (PFHpA)	9.5		1.9	0.24	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorooctanoic acid (PFOA)	36		1.9	0.82	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorononanoic acid (PFNA)	5.6		1.9	0.26	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorodecanoic acid (PFDA)	2.7		1.9	0.30	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.1	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.53	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.3	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.28	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorobutanesulfonic acid (PFBS)	5.7		1.9	0.19	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorohexanesulfonic acid (PFHxS)	6.8	В	1.9	0.16	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.9		1.9	0.18	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorooctanesulfonic acid (PFOS)	140		1.9	0.52	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.31	ng/L		11/13/17 17:06	11/15/17 03:35	1
Perfluorooctane Sulfonamide (FOSA)	0.83	J	1.9	0.34	ng/L		11/13/17 17:06	11/15/17 03:35	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

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Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	98	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C4 PFBA	63	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C2 PFHxA	91	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C4 PFOA	94	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C5 PFNA	109	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C2 PFDA	113	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C2 PFUnA	105	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C2 PFDoA	90	25 - 150	11/13/17 17:06	11/15/17 03:35	1
18O2 PFHxS	101	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C4 PFOS	104	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C4-PFHpA	97	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C5 PFPeA	90	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C3-PFBS	111	25 - 150	11/13/17 17:06	11/15/17 03:35	1
13C2-PFTeDA	101	25 - 150	11/13/17 17:06	11/15/17 03:35	1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: RINSE WATER-1

Lab Sample ID: 480-127058-7

Date Collected: 11/02/17 14:20 **Matrix: Water** Date Received: 11/03/17 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.84	J	1.7	0.30	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluoropentanoic acid (PFPeA)	0.73	J	1.7	0.43	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorohexanoic acid (PFHxA)	0.63	J	1.7	0.50	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluoroheptanoic acid (PFHpA)	0.36	J	1.7	0.22	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorooctanoic acid (PFOA)	1.3	J	1.7	0.74	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.27	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.96	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.48	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorobutanesulfonic acid (PFBS)	0.41	J	1.7	0.17	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorohexanesulfonic acid (PFHxS)	0.58	JB	1.7	0.15	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.17	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorooctanesulfonic acid (PFOS)	0.88	J	1.7	0.47	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.28	ng/L		11/13/17 17:06	11/15/17 03:43	1
Perfluorooctane Sulfonamide (FOSA)	2.2		1.7	0.30	ng/L		11/13/17 17:06	11/15/17 03:43	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	97		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C4 PFBA	107		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C2 PFHxA	105		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C4 PFOA	90		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C5 PFNA	100		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C2 PFDA	103		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C2 PFUnA	101		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C2 PFDoA	90		25 - 150				11/13/17 17:06	11/15/17 03:43	1
18O2 PFHxS	99		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C4 PFOS	99		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C4-PFHpA	103		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C5 PFPeA	104		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C3-PFBS	106		25 - 150				11/13/17 17:06	11/15/17 03:43	1
13C2-PFTeDA	95		25 - 150				11/13/17 17:06	11/15/17 03:43	1

Client Sample ID: TRIP BLANK

Date Collected: 11/02/17 00:00

Lab Sample ID: 480-127058-8 **Matrix: Water** Date Received: 11/03/17 10:00

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 17:52	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.19	ug/L			11/11/17 17:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	1.0	0.15	ug/L			11/11/17 17:52	1
1,1,2-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 17:52	1
1,1-Dichloroethane	ND	1.0	0.24	ug/L			11/11/17 17:52	1
1,1-Dichloroethene	ND	1.0	0.25	ug/L			11/11/17 17:52	1
1,2,4-Trichlorobenzene	ND	1.0	0.20	ug/L			11/11/17 17:52	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: TRIP BLANK

Date Collected: 11/02/17 00:00 Date Received: 11/03/17 10:00

Lab Sample ID: 480-127058-8 **Matrix: Water**

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)											
Analyte	Result	Qualifier	RL	MDL							
1.2-Dibromo-3-Chloropropane	ND ND		10	0.94							

Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 17:52	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 17:52	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/17 17:52	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 17:52	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 17:52	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 17:52	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 17:52	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 17:52	1
2-Hexanone	ND		10	1.3	ug/L			11/11/17 17:52	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 17:52	1
Acetone	ND		25	2.7	ug/L			11/11/17 17:52	1
Benzene	ND		1.0	0.20	ug/L			11/11/17 17:52	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/11/17 17:52	1
Bromoform	ND		1.0	0.29	ug/L			11/11/17 17:52	1
Bromomethane	ND		1.0	0.35	ug/L			11/11/17 17:52	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/11/17 17:52	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/11/17 17:52	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/11/17 17:52	1
Chloroethane	ND		1.0	0.36	ug/L			11/11/17 17:52	1
Chloroform	ND		1.0	0.23	ug/L			11/11/17 17:52	1
Chloromethane	ND		1.0	0.36	ug/L			11/11/17 17:52	1
cis-1,2-Dichloroethene	ND		1.0	0.21	ug/L			11/11/17 17:52	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 17:52	1
Cyclohexane	ND		5.0	0.13	ug/L			11/11/17 17:52	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/11/17 17:52	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/11/17 17:52	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/11/17 17:52	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/11/17 17:52	1
Methyl acetate	ND		10	0.58	ug/L			11/11/17 17:52	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/11/17 17:52	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/11/17 17:52	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/11/17 17:52	1
Styrene	ND		1.0	0.28	ug/L			11/11/17 17:52	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/11/17 17:52	1
Toluene	ND		1.0	0.17	ug/L			11/11/17 17:52	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/11/17 17:52	1
trans-1,3-Dichloropropene	ND		1.0	0.17				11/11/17 17:52	1
Trichloroethene	ND		1.0	0.20	ug/L			11/11/17 17:52	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/17 17:52	1
Vinyl chloride	ND		1.0	0.18				11/11/17 17:52	1
VIII VI CIII CIII CII CI									

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91	70 - 130		11/11/17 17:52	1
4-Bromofluorobenzene (Surr)	101	70 - 130		11/11/17 17:52	1
Dibromofluoromethane (Surr)	108	70 - 130		11/11/17 17:52	1
Toluene-d8 (Surr)	102	70 - 130		11/11/17 17:52	1

TestAmerica Buffalo

Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

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

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surro	ogate Reco
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-127058-1	MW-1D	91	101	108	99
480-127058-1 MS	MW-1D	96	93	108	97
480-127058-1 MSD	MW-1D	95	93	108	97
480-127058-2	MW-4R	94	99	111	97
480-127058-3	MW-1	93	99	106	98
480-127058-4	MW-1DD	95	97	107	99
480-127058-5	DUP-1	94	97	109	96
480-127058-6	MW-22(R)2	97	99	108	96
480-127058-8	TRIP BLANK	91	101	108	102
LCS 490-475225/3	Lab Control Sample	88	94	107	99
LCSD 490-475225/4	Lab Control Sample Dup	89	93	108	96
MB 490-475225/6	Method Blank	92	98	105	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

TestAmerica Buffalo

Isotope Dilution Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)										
		3C8 FOS/	3C4 PFB/	3C2 PFHx	3C4 PFO	3C5 PFN/	3C2 PFD/	3C2 PFUn	3C2 PFDo			
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)			
480-127058-1	MW-1D	93	65	90	93	101	107	102	83			
480-127058-1 MS	MW-1D	90	64	87	86	96	103	96	89			
480-127058-1 MSD	MW-1D	94	66	89	88	106	106	99	86			
480-127058-2	MW-4R	84	62	83	87	95	103	94	83			
480-127058-3	MW-1	100	64	93	94	113	122	114	95			
480-127058-4	MW-1DD	94	59	89	94	106	108	102	90			
480-127058-5	DUP-1	87	64	86	91	96	100	93	79			
480-127058-6	MW-22(R)2	98	63	91	94	109	113	105	90			
480-127058-7	RINSE WATER-1	97	107	105	90	100	103	101	90			
LCS 320-194430/2-A	Lab Control Sample	85	106	97	88	99	104	100	86			
MB 320-194430/1-A	Method Blank	87	104	100	89	101	94	96	86			

Percent Isotope Dilution Recovery (Acceptance Limits)

		BO2 PFHx	3C4 PFOS	3C4-PFHp	3C5 PFPe.	3C3-PFB	C2-PFTeE
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
480-127058-1	MW-1D	96	99	93	87	99	91
480-127058-1 MS	MW-1D	90	99	94	85	101	88
480-127058-1 MSD	MW-1D	91	100	96	89	106	85
480-127058-2	MW-4R	91	91	92	82	95	83
480-127058-3	MW-1	97	103	99	89	111	93
480-127058-4	MW-1DD	99	100	96	87	96	85
480-127058-5	DUP-1	91	94	92	86	98	82
480-127058-6	MW-22(R)2	101	104	97	90	111	101
480-127058-7	RINSE WATER-1	99	99	103	104	106	95
LCS 320-194430/2-A	Lab Control Sample	97	98	98	103	103	94
MB 320-194430/1-A	Method Blank	96	95	100	102	101	97

Surrogate Legend

13C8 FOSA = 13C8 FOSA

13C4 PFBA = 13C4 PFBA

13C2 PFHxA = 13C2 PFHxA

13C4 PFOA = 13C4 PFOA

13C5 PFNA = 13C5 PFNA

13C2 PFDA = 13C2 PFDA

13C2 PFUnA = 13C2 PFUnA

13C2 PFDoA = 13C2 PFDoA

18O2 PFHxS = 18O2 PFHxS

13C4 PFOS = 13C4 PFOS

13C4-PFHpA = 13C4-PFHpA

13C5 PFPeA = 13C5 PFPeA

13C3-PFBS = 13C3-PFBS

13C2-PFTeDA = 13C2-PFTeDA

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QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

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

Lab Sample ID: MB 490-475225/6

Matrix: Water

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

Analysis Batch: 475225								Trep Type. IV	otalina
-		MB							
Analyte		Qualifier	RL _	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/17 17:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/17 17:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/17 17:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/17 17:26	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/17 17:26	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/17 17:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/17 17:26	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			11/11/17 17:26	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 17:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/17 17:26	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 17:26	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 17:26	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 17:26	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 17:26	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 17:26	1
2-Hexanone	ND		10	1.3	ug/L			11/11/17 17:26	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 17:26	1
Acetone	ND		25	2.7	ug/L			11/11/17 17:26	1
Benzene	ND		1.0		ug/L			11/11/17 17:26	1
Bromodichloromethane	ND		1.0		ug/L			11/11/17 17:26	1
Bromoform	ND		1.0		ug/L			11/11/17 17:26	1
Bromomethane	ND		1.0		ug/L			11/11/17 17:26	1
Carbon disulfide	ND		1.0		ug/L			11/11/17 17:26	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/17 17:26	1
Chlorobenzene	ND		1.0		ug/L			11/11/17 17:26	1
Chloroethane	ND		1.0		ug/L			11/11/17 17:26	1
Chloroform	ND		1.0		ug/L			11/11/17 17:26	1
Chloromethane	ND		1.0		ug/L			11/11/17 17:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/17 17:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 17:26	1
Cyclohexane	ND		5.0		ug/L			11/11/17 17:26	· · · · · · · · 1
Dibromochloromethane	ND		1.0		ug/L			11/11/17 17:26	. 1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/17 17:26	1
Ethylbenzene	ND		1.0		ug/L			11/11/17 17:26	· · · · · · · · · · · · · · · · · · ·
Isopropylbenzene	ND		1.0	0.33	-			11/11/17 17:26	1
Methyl acetate	ND		1.0		ug/L			11/11/17 17:26	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/17 17:26	
Methylcyclohexane	ND ND		5.0	0.090				11/11/17 17:26	1
Methylene Chloride	ND ND		5.0		ug/L ug/L			11/11/17 17:26	1
					ug/L ug/L			11/11/17 17:26	
Styrene Tetrachloroethene	ND ND		1.0 1.0		ug/L ug/L			11/11/17 17:26	1
					-				1
Toluene	ND		1.0		ug/L			11/11/17 17:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/17 17:26	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 17:26	1
Trichloroethene	ND		1.0		ug/L			11/11/17 17:26	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/17 17:26	1
Vinyl chloride	ND		1.0		ug/L			11/11/17 17:26	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/11/17 17:26	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130		11/11/17 17:26	1
4-Bromofluorobenzene (Surr)	98		70 - 130		11/11/17 17:26	1
Dibromofluoromethane (Surr)	105		70 - 130		11/11/17 17:26	1
Toluene-d8 (Surr)	100		70 - 130		11/11/17 17:26	1

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Analysis Batch: 475225

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

 Prep Type: Total/NA	

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D %	Rec	Limits	
1,1,1-Trichloroethane	20.0	23.7		ug/L		119	78 - 135	
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		102	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.9	*	ug/L		130	77 - 129	
ne 1,1,2-Trichloroethane	20.0	22.0		ug/L		110	80 - 124	
1,1-Dichloroethane	20.0	21.5		ug/L ug/L		108	78 ₋ 125	
1,1-Dichloroethene	20.0	22.3		ug/L ug/L		112	70 - 123 79 - 124	
1,2,4-Trichlorobenzene	20.0	18.5				92	63 - 133	
1,2-Dibromo-3-Chloropropane	20.0	19.2		ug/L ug/L		96	54 ₋ 125	
1,2-Dibromoethane	20.0	22.2		ug/L ug/L		111	80 - 129	
1,2-Diblomoethane 1,2-Dichlorobenzene	20.0	22.4		ug/L ug/L		112	80 - 121	
1,2-Dichloroethane	20.0	22.4		ug/L ug/L		114	77 ₋ 121	
1,2-Dichloropropane	20.0	20.9		ug/L ug/L		105	77 - 121 75 - 120	
1,3-Dichlorobenzene	20.0	23.0		ug/L		115	80 - 122	
1.4-Dichlorobenzene	20.0	23.3		ug/L ug/L		116	80 - 120	
2-Butanone (MEK)	100	88.0		ug/L ug/L		88	62 - 133	
2-Hexanone	100	86.0		ug/L		86	60 - 142	
4-Methyl-2-pentanone (MIBK)	100	85.4		ug/L ug/L		85	60 - 142	
Acetone	100	87.4		ug/L ug/L		87	54 ₋ 145	
Benzene	20.0	20.6		ug/L		103	80 - 121	
Bromodichloromethane	20.0	23.1		ug/L ug/L		115	75 - 129	
Bromoform	20.0	21.2		ug/L ug/L		106	46 ₋ 145	
Bromomethane	20.0	21.4		ug/L ug/L		100	41 - 150	
Carbon disulfide	20.0	21.4		ug/L ug/L		107	77 ₋ 126	
Carbon tetrachloride	20.0	25.5		ug/L ug/L		128	64 - 147	
Chlorobenzene	20.0	23.1		ug/L		115	80 - 120	
Chloroethane	20.0	20.7		ug/L		103	72 - 120	
Chloroform	20.0	23.4		ug/L ug/L		117	72 - 120 73 ₋ 129	
Chloromethane	20.0	16.4		ug/L		82	12 - 150	
cis-1,2-Dichloroethene	20.0	21.8		ug/L		109	76 - 125	
cis-1,3-Dichloropropene	20.0	21.4		ug/L		107	74 - 140	
Cyclohexane	20.0	19.7		ug/L		99	73 - 122	
Dibromochloromethane	20.0	22.2		ug/L		111	69 - 133	
Dichlorodifluoromethane	20.0	23.0		ug/L		115	37 - 127	
Ethylbenzene	20.0	20.3		ug/L		101	80 - 130	
Isopropylbenzene	20.0	19.1		ug/L		95	80 - 141	
Methyl acetate	40.0	39.5		ug/L		99	64 - 150	
Methyl tert-butyl ether	20.0	20.8		ug/L		104	72 - 133	
Methylcyclohexane	20.0	21.5		ug/L		108	71 - 129	
Methylene Chloride	20.0	21.7		ug/L		108	79 - 123	
Styrene	20.0	20.2		ug/L		101	80 - 127	
Tetrachloroethene	20.0	22.8		ug/L		114	80 - 126	
Toluene	20.0	20.8		ug/L		104	80 - 126	
trans-1,2-Dichloroethene	20.0	21.3		ug/L		107	79 - 126	

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

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

Lab Sample ID: LCS 490-475225/3

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Analysis Batch: 475225

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,3-Dichloropropene	20.0	20.6		ug/L		103	63 - 134	
Trichloroethene	20.0	23.9		ug/L		120	80 - 123	
Trichlorofluoromethane	20.0	24.8		ug/L		124	65 - 124	
Vinyl chloride	20.0	20.2		ug/L		101	68 - 120	
Xylenes, Total	40.0	39.9		ug/L		100	80 - 132	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 475225							r iep iy	50. 10.	
7 maryolo Batom 47 0220	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	24.2		ug/L		121	78 - 135	2	15
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	69 - 131	2	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	26.3	*	ug/L		132	77 - 129	2	16
ne									
1,1,2-Trichloroethane	20.0	21.8		ug/L		109	80 - 124	1	13
1,1-Dichloroethane	20.0	21.9		ug/L		110	78 - 125	2	17
1,1-Dichloroethene	20.0	23.7		ug/L		118	79 - 124	6	20
1,2,4-Trichlorobenzene	20.0	18.7		ug/L		94	63 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	19.5		ug/L		98	54 - 125	2	19
1,2-Dibromoethane	20.0	21.5		ug/L		108	80 - 129	3	13
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 - 121	0	12
1,2-Dichloroethane	20.0	23.2		ug/L		116	77 - 121	2	13
1,2-Dichloropropane	20.0	21.4		ug/L		107	75 - 120	2	15
1,3-Dichlorobenzene	20.0	23.1		ug/L		116	80 - 122	1	13
1,4-Dichlorobenzene	20.0	23.2		ug/L		116	80 - 120	0	12
2-Butanone (MEK)	100	95.9		ug/L		96	62 - 133	9	19
2-Hexanone	100	86.1		ug/L		86	60 - 142	0	17
4-Methyl-2-pentanone (MIBK)	100	87.1		ug/L		87	60 - 137	2	21
Acetone	100	90.2		ug/L		90	54 - 145	3	23
Benzene	20.0	21.0		ug/L		105	80 - 121	2	12
Bromodichloromethane	20.0	23.4		ug/L		117	75 - 129	1	14
Bromoform	20.0	21.2		ug/L		106	46 - 145	0	14
Bromomethane	20.0	22.0		ug/L		110	41 - 150	3	19
Carbon disulfide	20.0	21.8		ug/L		109	77 - 126	2	16
Carbon tetrachloride	20.0	25.4		ug/L		127	64 - 147	0	16
Chlorobenzene	20.0	22.3		ug/L		111	80 - 120	3	12
Chloroethane	20.0	21.7		ug/L		108	72 - 120	5	15
Chloroform	20.0	23.8		ug/L		119	73 - 129	2	14
Chloromethane	20.0	16.4		ug/L		82	12 - 150	0	20
cis-1,2-Dichloroethene	20.0	22.1		ug/L		111	76 - 125	1	15
cis-1,3-Dichloropropene	20.0	20.9		ug/L		104	74 - 140	2	15

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

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

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Analysis Batch: 475225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyclohexane	20.0	19.9		ug/L		99	73 - 122	1	16
Dibromochloromethane	20.0	22.8		ug/L		114	69 - 133	3	13
Dichlorodifluoromethane	20.0	22.4		ug/L		112	37 - 127	2	16
Ethylbenzene	20.0	20.2		ug/L		101	80 - 130	0	12
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 141	1	13
Methyl acetate	40.0	40.4		ug/L		101	64 - 150	2	18
Methyl tert-butyl ether	20.0	21.4		ug/L		107	72 - 133	3	16
Methylcyclohexane	20.0	21.5		ug/L		107	71 - 129	0	17
Methylene Chloride	20.0	23.3		ug/L		116	79 - 123	7	15
Styrene	20.0	20.2		ug/L		101	80 - 127	0	12
Tetrachloroethene	20.0	22.5		ug/L		112	80 - 126	1	17
Toluene	20.0	20.8		ug/L		104	80 - 126	0	13
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	79 - 126	0	15
trans-1,3-Dichloropropene	20.0	20.7		ug/L		103	63 - 134	0	13
Trichloroethene	20.0	23.7		ug/L		118	80 - 123	1	14
Trichlorofluoromethane	20.0	24.5		ug/L		122	65 - 124	1	22
Vinyl chloride	20.0	20.4		ug/L		102	68 - 120	1	15
Xylenes, Total	40.0	39.5		ug/L		99	80 - 132	1	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Lab Sample ID: 480-127058-1 MS

Matrix: Water

Analysis Batch: 475225

Client Sample ID: MW-1D	
Prep Type: Total/NA	

Analysis Batch: 475225										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	ND		20.0	25.5		ug/L		127	68 - 144	
1,1,2,2-Tetrachloroethane	ND		20.0	19.0		ug/L		95	56 - 145	
1,1,2-Trichloro-1,2,2-trifluoroetha	ND	*	20.0	25.9		ug/L		130	63 - 150	
ne										
1,1,2-Trichloroethane	ND		20.0	21.8		ug/L		109	70 - 130	
1,1-Dichloroethane	0.33	J	20.0	22.3		ug/L		110	61 - 139	
1,1-Dichloroethene	0.77	J	20.0	25.7		ug/L		125	54 - 150	
1,2,4-Trichlorobenzene	ND		20.0	18.3		ug/L		91	47 - 147	
1,2-Dibromo-3-Chloropropane	ND		20.0	19.4		ug/L		97	38 - 138	
1,2-Dibromoethane	ND		20.0	21.9		ug/L		109	65 - 137	
1,2-Dichlorobenzene	ND		20.0	22.1		ug/L		110	70 - 130	
1,2-Dichloroethane	ND		20.0	22.9		ug/L		114	64 - 136	
1,2-Dichloropropane	ND		20.0	21.5		ug/L		107	67 - 130	
1,3-Dichlorobenzene	ND		20.0	22.3		ug/L		111	68 - 131	
1,4-Dichlorobenzene	ND		20.0	22.6		ug/L		113	70 - 130	
2-Butanone (MEK)	ND	F1	100	155	F1	ug/L		155	50 - 143	
2-Hexanone	ND		100	87.0		ug/L		87	44 - 150	
4-Methyl-2-pentanone (MIBK)	ND		100	89.7		ug/L		90	50 - 140	

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TestAmerica Job ID: 480-127058-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: 480-127058-1 MS

Matrix: Water

Analysis Batch: 475225

Client Sample ID: MW-1D **Prep Type: Total/NA**

-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acetone	ND		100	92.0		ug/L		92	39 - 150	
Benzene	ND		20.0	21.9		ug/L		109	55 - 147	
Bromodichloromethane	ND		20.0	23.3		ug/L		117	70 - 140	
Bromoform	ND		20.0	20.7		ug/L		103	53 - 150	
Bromomethane	ND		20.0	23.1		ug/L		116	30 - 150	
Carbon disulfide	ND		20.0	22.1		ug/L		111	35 - 150	
Carbon tetrachloride	ND		20.0	26.5		ug/L		132	56 - 150	
Chlorobenzene	ND		20.0	22.6		ug/L		113	70 - 130	
Chloroethane	ND		20.0	23.0		ug/L		115	58 - 141	
Chloroform	0.27	J	20.0	23.7		ug/L		117	66 - 138	
Chloromethane	ND		20.0	16.8		ug/L		84	10 - 150	
cis-1,2-Dichloroethene	350		20.0	358	4	ug/L		18	68 - 131	
cis-1,3-Dichloropropene	ND		20.0	20.5		ug/L		102	70 - 133	
Cyclohexane	ND		20.0	21.9		ug/L		110	48 - 150	
Dibromochloromethane	ND		20.0	22.2		ug/L		111	66 - 140	
Dichlorodifluoromethane	ND		20.0	21.7		ug/L		109	10 - 150	
Ethylbenzene	ND		20.0	21.2		ug/L		106	65 - 139	
Isopropylbenzene	ND		20.0	20.7		ug/L		103	70 - 137	
Methyl acetate	ND		40.0	39.3		ug/L		98	42 - 136	
Methyl tert-butyl ether	ND		20.0	21.3		ug/L		107	55 - 141	
Methylcyclohexane	ND		20.0	23.8		ug/L		119	59 - 150	
Methylene Chloride	ND		20.0	22.0		ug/L		110	64 - 130	
Styrene	ND		20.0	20.1		ug/L		101	70 - 130	
Tetrachloroethene	40		20.0	61.7		ug/L		110	57 - 138	
Toluene	ND		20.0	21.4		ug/L		107	64 - 136	
trans-1,2-Dichloroethene	3.6		20.0	25.1		ug/L		108	59 - 143	
trans-1,3-Dichloropropene	ND		20.0	20.6		ug/L		103	63 - 142	
Trichloroethene	65		20.0	83.3		ug/L		91	63 - 135	
Trichlorofluoromethane	ND		20.0	29.8		ug/L		149	44 - 150	
Vinyl chloride	4.8		20.0	25.6		ug/L		104	57 ₋ 150	
Xylenes, Total	ND		40.0	40.8		ug/L		102	69 - 132	
	MS	MS								

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: 480-127058-1 MSD

Matrix: Water

Analysis Batch: 475225

-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	ND		20.0	25.5		ug/L		127	68 - 144	0	17
1,1,2,2-Tetrachloroethane	ND		20.0	20.1		ug/L		100	56 - 145	6	20
1,1,2-Trichloro-1,2,2-trifluoroetha	ND	*	20.0	26.2		ug/L		131	63 - 150	1	18
ne 1,1,2-Trichloroethane	ND		20.0	22.1		ug/L		111	70 - 130	1	15

TestAmerica Buffalo

Client Sample ID: MW-1D

Prep Type: Total/NA

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11/17/2017

TestAmerica Job ID: 480-127058-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: 480-127058-1 MSD

Matrix: Water

Analysis Batch: 475225

Client Sample ID: MW-1D **Prep Type: Total/NA**

	•	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1-Dichloroethane	0.33		20.0	22.7		ug/L		112	61 - 139	2	17
1,1-Dichloroethene	0.77	J	20.0	24.4		ug/L		118	54 - 150	5	17
1,2,4-Trichlorobenzene	ND		20.0	19.0		ug/L		95	47 - 147	4	19
1,2-Dibromo-3-Chloropropane	ND		20.0	18.5		ug/L		93	38 - 138	5	24
1,2-Dibromoethane	ND		20.0	22.2		ug/L		111	65 - 137	1	15
1,2-Dichlorobenzene	ND		20.0	22.5		ug/L		113	70 - 130	2	15
1,2-Dichloroethane	ND		20.0	23.1		ug/L		115	64 - 136	1	17
1,2-Dichloropropane	ND		20.0	21.4		ug/L		107	67 - 130	0	17
1,3-Dichlorobenzene	ND		20.0	22.7		ug/L		114	68 - 131	2	15
1,4-Dichlorobenzene	ND		20.0	23.2		ug/L		116	70 - 130	2	15
2-Butanone (MEK)	ND	F1	100	164	F1	ug/L		164	50 - 143	6	19
2-Hexanone	ND		100	90.3		ug/L		90	44 - 150	4	15
4-Methyl-2-pentanone (MIBK)	ND		100	91.9		ug/L		92	50 - 140	2	17
Acetone	ND		100	88.8		ug/L		89	39 - 150	4	21
Benzene	ND		20.0	22.0		ug/L		110	55 - 147	0	17
Bromodichloromethane	ND		20.0	23.5		ug/L		118	70 - 140	1	18
Bromoform	ND		20.0	22.1		ug/L		110	53 - 150	7	16
Bromomethane	ND		20.0	24.6		ug/L		123	30 - 150	6	50
Carbon disulfide	ND		20.0	22.2		ug/L		111	35 - 150	0	21
Carbon tetrachloride	ND		20.0	26.3		ug/L		132	56 - 150	1	19
Chlorobenzene	ND		20.0	23.2		ug/L		116	70 - 130	3	14
Chloroethane	ND		20.0	21.7		ug/L		109	58 - 141	6	20
Chloroform	0.27	J	20.0	24.2		ug/L		120	66 - 138	2	18
Chloromethane	ND		20.0	17.5		ug/L		87	10 - 150	4	31
cis-1,2-Dichloroethene	350		20.0	365	4	ug/L		52	68 - 131	2	17
cis-1,3-Dichloropropene	ND		20.0	21.4		ug/L		107	70 - 133	5	15
Cyclohexane	ND		20.0	22.0		ug/L		110	48 - 150	1	16
Dibromochloromethane	ND		20.0	22.5		ug/L		112	66 - 140	1	15
Dichlorodifluoromethane	ND		20.0	23.0		ug/L		115	10 - 150	6	18
Ethylbenzene	ND		20.0	21.7		ug/L		108	65 - 139	2	15
Isopropylbenzene	ND		20.0	21.2		ug/L		106	70 - 137	3	16
Methyl acetate	ND		40.0	40.3		ug/L		101	42 - 136	2	31
Methyl tert-butyl ether	ND		20.0	21.4		ug/L		107	55 - 141	0	16
Methylcyclohexane	ND		20.0	24.4		ug/L		122	59 - 150	3	19
Methylene Chloride	ND		20.0	22.5		ug/L		112	64 - 130	2	17
Styrene	ND		20.0	20.8		ug/L		104	70 - 130	3	24
Tetrachloroethene	40		20.0	63.2		ug/L		118	57 ₋ 138	2	16
Toluene	ND		20.0	22.0		ug/L		110	64 - 136	3	15
trans-1,2-Dichloroethene	3.6		20.0	25.7		ug/L		111	59 - 143	2	16
trans-1,3-Dichloropropene	ND		20.0	21.0		ug/L		105	63 - 142	2	14
Trichloroethene	65		20.0	88.8		ug/L		118	63 - 135	6	17
Trichlorofluoromethane	ND		20.0	29.8		ug/L		149	44 - 150	0	18
Vinyl chloride	4.8		20.0	25.9		ug/L		106	57 ₋ 150	1	17
Xylenes, Total	ND		40.0	41.8		ug/L		105	69 - 132	2	15
		MSD				-					

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

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

Lab Sample ID: 480-127058-1 MSD

Matrix: Water

Analysis Batch: 475225

Client Sample ID: MW-1D Prep Type: Total/NA

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	97		70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-194430/1-A

Matrix: Water

Analysis Batch: 194735

Client Sample ID: Method Blank	
Prep Type: Total/NA	
Prep Batch: 194430	

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.35 ng/L Perfluorobutanoic acid (PFBA) 2.0 <u>11/13/17 17:06</u> <u>11/15/17 00:42</u> $\overline{\mathsf{ND}}$ Perfluoropentanoic acid (PFPeA) ND 2.0 0.49 ng/L 11/13/17 17:06 11/15/17 00:42 ND 0.58 ng/L Perfluorohexanoic acid (PFHxA) 2.0 11/13/17 17:06 11/15/17 00:42 1 Perfluoroheptanoic acid (PFHpA) ND 2.0 0.25 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorooctanoic acid (PFOA) ND 2.0 0.85 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorononanoic acid (PFNA) ND 2.0 0.27 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorodecanoic acid (PFDA) ND 2.0 11/13/17 17:06 11/15/17 00:42 0.31 ng/L Perfluoroundecanoic acid (PFUnA) ND 2.0 1.1 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorododecanoic acid (PFDoA) ND 2.0 0.55 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorotridecanoic Acid (PFTriA) ND 2.0 1.3 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorotetradecanoic acid (PFTeA) ND 2.0 0.29 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorobutanesulfonic acid (PFBS) ND 2.0 0.20 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorohexanesulfonic acid (PFHxS) 0.291 2.0 0.17 ng/L 11/13/17 17:06 11/15/17 00:42 ND 2.0 0.19 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluoroheptanesulfonic Acid (PFHpS) Perfluorooctanesulfonic acid (PFOS) ND 2.0 0.54 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorodecanesulfonic acid (PFDS) ND 2.0 0.32 ng/L 11/13/17 17:06 11/15/17 00:42 Perfluorooctane Sulfonamide (FOSA) ND 2.0 0.35 ng/L 11/13/17 17:06 11/15/17 00:42 MB MB

Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	87	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C4 PFBA	104	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C2 PFHxA	100	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C4 PFOA	89	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C5 PFNA	101	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C2 PFDA	94	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C2 PFUnA	96	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C2 PFDoA	86	25 - 150	11/13/17 17:06	11/15/17 00:42	1
1802 PFHxS	96	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C4 PFOS	95	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C4-PFHpA	100	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C5 PFPeA	102	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C3-PFBS	101	25 - 150	11/13/17 17:06	11/15/17 00:42	1
13C2-PFTeDA	97	25 - 150	11/13/17 17:06	11/15/17 00:42	1

TestAmerica Buffalo

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TestAmerica Job ID: 480-127058-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 320-194430/2-A Matrix: Water Analysis Batch: 194735				Clie	ent Sar	nple ID	Prep Type: Total/NA Prep Batch: 194430
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	43.3		ng/L		108	78 - 138
Perfluoropentanoic acid (PFPeA)	40.0	41.6		ng/L		104	66 - 136
Perfluorohexanoic acid (PFHxA)	40.0	45.3		ng/L		113	76 ₋ 136
Perfluoroheptanoic acid (PFHpA)	40.0	42.1		ng/L		105	78 ₋ 138
Perfluorooctanoic acid (PFOA)	40.0	44.2		ng/L		110	70 - 130
Perfluorononanoic acid (PFNA)	40.0	40.5		ng/L		101	77 ₋ 137
Perfluorodecanoic acid (PFDA)	40.0	40.2		ng/L		101	74 - 134
Perfluoroundecanoic acid (PFUnA)	40.0	39.6		ng/L		99	68 - 128
Perfluorododecanoic acid (PFDoA)	40.0	45.0		ng/L		112	72 - 132
Perfluorotridecanoic Acid (PFTriA)	40.0	48.2		ng/L		121	56 - 163
Perfluorotetradecanoic acid (PFTeA)	40.0	41.1		ng/L		103	63 - 123
Perfluorobutanesulfonic acid (PFBS)	35.4	38.0		ng/L		108	79 - 139
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.3		ng/L		103	77 - 137
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	42.0		ng/L		110	83 - 143
Perfluorooctanesulfonic acid (PFOS)	37.1	38.2		ng/L		103	74 - 134
Perfluorodecanesulfonic acid (PFDS)	38.6	38.5		ng/L		100	75 - 135
Perfluorooctane Sulfonamide	40.0	43.4		ng/L		109	82 - 142

(FOSA)	
	LCS LCS

Isotope Dilution	%Recovery Qualifie	r Limits
13C8 FOSA	85	25 - 150
13C4 PFBA	106	25 - 150
13C2 PFHxA	97	25 - 150
13C4 PFOA	88	25 - 150
13C5 PFNA	99	25 - 150
13C2 PFDA	104	25 - 150
13C2 PFUnA	100	25 - 150
13C2 PFDoA	86	25 - 150
1802 PFHxS	97	25 - 150
13C4 PFOS	98	25 - 150
13C4-PFHpA	98	25 - 150
13C5 PFPeA	103	25 - 150
13C3-PFBS	103	25 - 150
13C2-PFTeDA	94	25 - 150
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Lab Sample ID: 480-127058-1 MS

Matrix: water									Prep Type	e: Total/NA
Analysis Batch: 194735									Prep Bat	ch: 194430
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Perfluorobutanoic acid (PFBA)	15		33.6	55.0		ng/L		119	78 - 138	
Perfluoropentanoic acid (PFPeA)	25		33.6	57.7		ng/L		99	66 - 136	

TestAmerica Buffalo

Client Sample ID: MW-1D

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TestAmerica Job ID: 480-127058-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: 480-127058-1 MS **Client Sample ID: MW-1D Matrix: Water Prep Type: Total/NA Analysis Batch: 194735 Prep Batch: 194430**

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Perfluorohexanoic acid (PFHxA)	24		33.6	62.7	-	ng/L		114	76 - 136	
Perfluoroheptanoic acid (PFHpA)	17		33.6	49.8		ng/L		99	78 - 138	
Perfluorooctanoic acid (PFOA)	52		33.6	91.7		ng/L		117	70 - 130	
Perfluorononanoic acid (PFNA)	7.0		33.6	41.5		ng/L		103	77 - 137	
Perfluorodecanoic acid (PFDA)	4.7		33.6	39.1		ng/L		102	74 - 134	
Perfluoroundecanoic acid (PFUnA)	ND		33.6	33.6		ng/L		100	68 - 128	
Perfluorododecanoic acid (PFDoA)	ND		33.6	33.9		ng/L		101	72 - 132	
Perfluorotridecanoic Acid (PFTriA)	ND		33.6	33.7		ng/L		100	56 - 163	
Perfluorotetradecanoic acid (PFTeA)	ND		33.6	32.3		ng/L		96	63 - 123	
Perfluorobutanesulfonic acid (PFBS)	16		29.7	45.0		ng/L		97	79 - 139	
Perfluorohexanesulfonic acid (PFHxS)	7.7	В	30.6	39.3		ng/L		103	77 - 137	
Perfluoroheptanesulfonic Acid (PFHpS)	1.4	J	32.0	35.3		ng/L		106	83 - 143	
Perfluorooctanesulfonic acid (PFOS)	100		31.2	131		ng/L		94	74 - 134	
Perfluorodecanesulfonic acid (PFDS)	ND		32.4	28.5		ng/L		88	75 - 135	
Perfluorooctane Sulfonamide (FOSA)	0.99	J	33.6	35.9		ng/L		104	82 - 142	
	1/10	MC								

MS MS Isotope Dilution %Recovery Qualifier Limits 13C8 FOSA 25 - 150 90 13C4 PFBA 25 - 150 64 13C2 PFHxA 87 25 - 150 13C4 PFOA 86 25 - 150 13C5 PFNA 96 25 - 150 13C2 PFDA 103 25 - 150 13C2 PFUnA 25 - 150 96 13C2 PFDoA 89 25 - 150 1802 PFHxS 90 25 - 150 13C4 PFOS 99 25 - 150 13C4-PFHpA 94 25 - 150 13C5 PFPeA 85 25 - 150 13C3-PFBS 101 25 - 150 13C2-PFTeDA 25 - 150 88

Lab Sample ID: 480-127058-1 MSD

Matrix: Water									Prep Typ	e: Tot	al/NA
Analysis Batch: 194735									Prep Ba	itch: 19	4430
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorobutanoic acid (PFBA)	15		32.4	46.9		ng/L		99	78 - 138	16	30
Perfluoropentanoic acid (PFPeA)	25		32.4	55.1		ng/L		94	66 - 136	5	30
Perfluorohexanoic acid (PFHxA)	24		32.4	67.8		ng/L		134	76 - 136	8	30
Perfluoroheptanoic acid (PFHpA)	17		32.4	48.9		ng/L		99	78 - 138	2	30

TestAmerica Buffalo

Client Sample ID: MW-1D

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Client: ARCADIS U.S. Inc

(FOSA)

13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

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

Lab Sample ID: 480-127058	3-1 MSD							Clie	ent Sample	e ID: M	W-1D
Matrix: Water									Prep Ty	pe: Tot	al/NA
Analysis Batch: 194735									Prep Ba	atch: 19	94430
_	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorooctanoic acid (PFOA)	52		32.4	89.1		ng/L		113	70 - 130	3	30
Perfluorononanoic acid (PFNA)	7.0		32.4	38.8		ng/L		98	77 - 137	7	30
Perfluorodecanoic acid (PFDA)	4.7		32.4	37.2		ng/L		100	74 - 134	5	30
Perfluoroundecanoic acid (PFUnA)	ND		32.4	30.8		ng/L		95	68 - 128	9	30
Perfluorododecanoic acid (PFDoA)	ND		32.4	33.9		ng/L		105	72 - 132	0	30
Perfluorotridecanoic Acid (PFTriA)	ND		32.4	34.9		ng/L		108	56 - 163	4	30
Perfluorotetradecanoic acid (PFTeA)	ND		32.4	32.3		ng/L		100	63 - 123	0	30
Perfluorobutanesulfonic acid (PFBS)	16		28.6	44.5		ng/L		99	79 - 139	1	30
Perfluorohexanesulfonic acid (PFHxS)	7.7	В	29.5	38.8		ng/L		106	77 - 137	1	30
Perfluoroheptanesulfonic Acid (PFHpS)	1.4	J	30.8	35.1		ng/L		110	83 - 143	0	30
Perfluorooctanesulfonic acid (PFOS)	100		30.1	130		ng/L		93	74 - 134	1	30
Perfluorodecanesulfonic acid (PFDS)	ND		31.2	28.1		ng/L		90	75 - 135	1	30
Perfluorooctane Sulfonamide	0.99	J	32.4	34.8		ng/L		104	82 - 142	3	30

,	MSD	MSD	
Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	94		25 - 150
13C4 PFBA	66		25 - 150
13C2 PFHxA	89		25 - 150
13C4 PFOA	88		25 - 150
13C5 PFNA	106		25 - 150
13C2 PFDA	106		25 - 150
13C2 PFUnA	99		25 - 150
13C2 PFDoA	86		25 - 150
1802 PFHxS	91		25 - 150
13C4 PFOS	100		25 - 150
13C4-PFHpA	96		25 - 150
13C5 PFPeA	89		25 - 150
13C3-PFBS	106		25 - 150

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TestAmerica Buffalo

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QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

GC/MS VOA

Analysis Batch: 475225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127058-1	MW-1D	Total/NA	Water	8260C	
480-127058-2	MW-4R	Total/NA	Water	8260C	
480-127058-3	MW-1	Total/NA	Water	8260C	
480-127058-4	MW-1DD	Total/NA	Water	8260C	
480-127058-5	DUP-1	Total/NA	Water	8260C	
480-127058-6	MW-22(R)2	Total/NA	Water	8260C	
480-127058-8	TRIP BLANK	Total/NA	Water	8260C	
MB 490-475225/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475225/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475225/4	Lab Control Sample Dup	Total/NA	Water	8260C	
480-127058-1 MS	MW-1D	Total/NA	Water	8260C	
480-127058-1 MSD	MW-1D	Total/NA	Water	8260C	

LCMS

Prep Batch: 194430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127058-1	MW-1D	Total/NA	Water	3535	-
480-127058-2	MW-4R	Total/NA	Water	3535	
480-127058-3	MW-1	Total/NA	Water	3535	
480-127058-4	MW-1DD	Total/NA	Water	3535	
480-127058-5	DUP-1	Total/NA	Water	3535	
480-127058-6	MW-22(R)2	Total/NA	Water	3535	
480-127058-7	RINSE WATER-1	Total/NA	Water	3535	
MB 320-194430/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-194430/2-A	Lab Control Sample	Total/NA	Water	3535	
480-127058-1 MS	MW-1D	Total/NA	Water	3535	
480-127058-1 MSD	MW-1D	Total/NA	Water	3535	

Analysis Batch: 194735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127058-1	MW-1D	Total/NA	Water	537 (modified)	194430
480-127058-2	MW-4R	Total/NA	Water	537 (modified)	194430
480-127058-3	MW-1	Total/NA	Water	537 (modified)	194430
480-127058-4	MW-1DD	Total/NA	Water	537 (modified)	194430
480-127058-5	DUP-1	Total/NA	Water	537 (modified)	194430
480-127058-6	MW-22(R)2	Total/NA	Water	537 (modified)	194430
480-127058-7	RINSE WATER-1	Total/NA	Water	537 (modified)	194430
MB 320-194430/1-A	Method Blank	Total/NA	Water	537 (modified)	194430
LCS 320-194430/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	194430
480-127058-1 MS	MW-1D	Total/NA	Water	537 (modified)	194430
480-127058-1 MSD	MW-1D	Total/NA	Water	537 (modified)	194430

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Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-1D Lab Sample ID: 480-127058-1

Date Collected: 11/02/17 10:50 **Matrix: Water**

Date Received: 11/03/17 10:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	475225	11/11/17 18:45	S1S	TAL NSH
Total/NA	Prep	3535			194430	11/13/17 17:06	JER	TAL SAC
Total/NA	Analysis	537 (modified)		1	194735	11/15/17 02:32	ABH	TAL SAC

Client Sample ID: MW-4R Lab Sample ID: 480-127058-2

Date Collected: 11/02/17 13:00 **Matrix: Water**

Date Received: 11/03/17 10:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475225	11/11/17 19:11	S1S	TAL NSH
Total/NA	Prep	3535			194430	11/13/17 17:06	JER	TAL SAC
Total/NA	Analysis	537 (modified)		1	194735	11/15/17 02:56	ABH	TAL SAC

Client Sample ID: MW-1 Lab Sample ID: 480-127058-3

Date Collected: 11/02/17 12:35 **Matrix: Water**

Date Received: 11/03/17 10:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475225	11/11/17 19:37	S1S	TAL NSH
Total/NA	Prep	3535			194430	11/13/17 17:06	JER	TAL SAC
Total/NA	Analysis	537 (modified)		1	194735	11/15/17 03:04	ABH	TAL SAC

Client Sample ID: MW-1DD Lab Sample ID: 480-127058-4 **Matrix: Water**

Date Collected: 11/02/17 13:55

Date Received: 11/03/17 10:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	475225	11/11/17 20:03	S1S	TAL NSH
Total/NA	Prep	3535			194430	11/13/17 17:06	JER	TAL SAC
Total/NA	Analysis	537 (modified)		1	194735	11/15/17 03:12	ABH	TAL SAC

Client Sample ID: DUP-1 Lab Sample ID: 480-127058-5

Date Collected: 11/02/17 00:00 **Matrix: Water**

Date Received: 11/03/17 10:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475225	11/11/17 20:29	S1S	TAL NSH
Total/NA	Prep	3535			194430	11/13/17 17:06	JER	TAL SAC
Total/NA	Analysis	537 (modified)		1	194735	11/15/17 03:20	ABH	TAL SAC

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Client Sample ID: MW-22(R)2 Lab Sample ID: 480-127058-6 Date Collected: 11/02/17 15:30

Matrix: Water

Date Received: 11/03/17 10:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	475225	11/11/17 20:55	S1S	TAL NSH
Total/NA	Prep	3535			194430	11/13/17 17:06	JER	TAL SAC
Total/NA	Analysis	537 (modified)		1	194735	11/15/17 03:35	ABH	TAL SAC

Client Sample ID: RINSE WATER-1 Lab Sample ID: 480-127058-7

Date Collected: 11/02/17 14:20 **Matrix: Water**

Date Received: 11/03/17 10:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			194430	11/13/17 17:06	JER	TAL SAC
Total/NA	Analysis	537 (modified)		1	194735	11/15/17 03:43	ABH	TAL SAC

Lab Sample ID: 480-127058-8 **Client Sample ID: TRIP BLANK**

Date Collected: 11/02/17 00:00 **Matrix: Water**

Date Received: 11/03/17 10:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475225	11/11/17 17:52	S1S	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-127058-1

Project/Site: Crown Dykman - Glen Cove, NY

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Autho	ority	Program	EPA Region	Identification Number	Expiration Date
New \	/ork	NELAP	2	11342	03-31-18

Laboratory: TestAmerica Sacramento

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	11666	04-01-18	
The following analytes	are included in this repo	rt, but accreditation/	/certification is not off	ered by the governing author	ority:	
Analysis Method	Prep Method	Matrix	Analy	te		
537 (modified)	3535	Water	Perflu	orobutanesulfonic acid (PFE	BS)	
537 (modified)	3535	Water	Perflu	orobutanoic acid (PFBA)		
537 (modified)	3535	Water	Perflu	orodecanesulfonic acid (PF	DS)	
537 (modified)	3535	Water	Water Perfluorodecanoic acid (PFDA)			
537 (modified)	3535	Water	Perflu	orododecanoic acid (PFDoA	A)	
537 (modified)	3535	Water	Water Perfluoroheptanesulfonic Acid (PFHpS)			
537 (modified)	3535	Water	Perflu	oroheptanoic acid (PFHpA)		
537 (modified)	3535	Water	Perflu	orohexanesulfonic acid (PF	HxS)	
537 (modified)	3535	Water	Perflu	orohexanoic acid (PFHxA)		
537 (modified)	3535	Water	Perflu	orononanoic acid (PFNA)		
537 (modified)	3535	Water	Perflu	orooctane Sulfonamide (FO	SA)	
537 (modified)	3535	Water	Perflu	orooctanesulfonic acid (PF0	OS)	
537 (modified)	3535	Water	Perflu	orooctanoic acid (PFOA)		
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)			
537 (modified)	3535	Water	Perflu	orotetradecanoic acid (PFT	eA)	
537 (modified)	3535	Water	Perflu	orotridecanoic Acid (PFTriA)	
537 (modified)	3535	Water	Perflu	oroundecanoic acid (PFUnA	A)	

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

11/17/2017

Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127058-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-127058-1	MW-1D	Water	11/02/17 10:50	11/03/17 10:00
480-127058-2	MW-4R	Water	11/02/17 13:00	11/03/17 10:00
480-127058-3	MW-1	Water	11/02/17 12:35	11/03/17 10:00
480-127058-4	MW-1DD	Water	11/02/17 13:55	11/03/17 10:00
480-127058-5	DUP-1	Water	11/02/17 00:00	11/03/17 10:00
480-127058-6	MW-22(R)2	Water	11/02/17 15:30	11/03/17 10:00
480-127058-7	RINSE WATER-1	Water	11/02/17 14:20	11/03/17 10:00
480-127058-8	TRIP BLANK	Water	11/02/17 00:00	11/03/17 10:00

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N - None
O - ANADOZ
P - Nu2O4S
Q - Nu2O4S
Q - Nu2SO3
R - Nu2SO3
S - H2SO4
U - Acctione
U - Acctione
W - PH 4-5
Z - other (specify) Special Instructions/Note: Sample Disposal (A fee may boassessed if samples are retained longer than 1 month)
Return To Client

Montained Samples are retained for a month of the samples are re 480-104070-24647.3 Preservation Codes 436 40 4 - HCL NadoH Natic Acid Natic Acid Natic Acid Natic Acid Natic Acid Natic Acid Acorbic Acid - Accorbic Acid - Ice 1540 Page 3 of 10 ろろろろろんろ 5 11317 3. 480-127058 Chain of Custody Analysis Requested ooler Temperature(s) °C and Other Remarks Special Instructions/QC Requirements Lab PM.
Deyo, Meltssa L
E-Mail:
meltssa deyo@testamericainc.com XX Perform MS/MSD (Yes or No) Art adis Field Fiftered Sample (Yes or No) Company Sample Matrix
Type (Wawater, Gasolid, Cecomp, Owwasteiol), Gegrab) BTOTISSUE, APAN) Water Water Preservation Code Water Water Water Water Water Water Water Water Water Avoin Themas Radiological 9 0 9 1 0 545 J266-01296 MAC **1530** Sample 11-2-17 1050 Standard Unknown Due Date Requested: Jate Time 12(7 00266417,0000 Sample Date -277 11-2-17 11-8-11 11-8-11 11-B-11 レーセーリ 1 48008440 SSOW# Poison B Skin Irritant 10 Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Phone (716) 691-2600 Fax (716) 691-7991 RINSE WATER Possible Mazard Identification Crown Dykman - Glen Cove, NY BLANK JOSE (818) 256-7360 aaron.bobar@arcadis-us.com MENTY DUKINGIN Empty Kit Relinquished by Custody Seals Intact: 855 Route 146 Suite 210 Sample Identification Client Information MN-4R MW - 7 MW-7 Company.
ARCADIS U.S. Inc Non-Hazard TAID yd barshed by Aaron Bobar City. Clifton Park State, Zip: NY, 12065

TestAmerica

Chain of Custody Record

TestAmerica Buffalo

Amherst, NY 14228-2298

10 Hazelwood Drive



Nashville, TN

COOLER RECEIPT FORM -

Cooler Received/Opened On11/10/170950	
Time Samples Removed From Cooler Time Samples Placed In Storage	(2 Hour Window)
1. Tracking #	
IR Gun ID97310166 pH Strip Lot Chlorine Strip Lot	_
2. Temperature of rep. sample or temp blank when opened: 15 Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO. (NA)
4. Were custody seals on outside of cooler?	YESNONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	ES)NONA
6. Were custody papers inside cooler?	YES(NO).NA
certify that I opened the cooler and answered questions 1-6 (intial)	es
7. Were custody seals on containers: YES NO and Intact	YESNO.(.NA)
Were these signed and dated correctly?	YESNO(NA
8. Packing mat'l used? Bubblewrap Blastic bag Peanuts Vermiculite Foam Insert Pape	r Other None
9. Cooling process: (ce Ice-pack Ice (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	YES, NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	YE9NONA
12. Did all container labels and tags agree with custody papers?	YESNONA
13a. Were VOA vials received?	YES. NONA
b. Was there any observable headspace present in any VOA vial?	YESNONA
Larger than this.	_
14. Was there a Trip Blank in this cooler?	e #
I certify that I unloaded the cooler and answered questions 7-14 (initial)	5_
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO. (NA)
b. Did the bottle labels indicate that the correct preservatives were used	(YES)NONA
16. Was residual chlorine present?	YESNO(NA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	_65
17. Were custody papers properly filled out (ink, signed, etc)?	YES NONA
18. Did you sign the custody papers in the appropriate place?	ESNONA
19. Were correct containers used for the analysis requested?	ESNONA
20. Was sufficient amount of sample sent in each container?	YESNONA
certify that I entered this project into LIMS and answered questions 17-20 (intial)	es
certify that I attached a label with the unique LIMS number to each container (intial)	es
21. Were there Non-Conformance issues at login? YES. NO Was a NCM generated? YES. NO#	<u>es</u>

BIS = Broken in shipment Cooler Receipt Form.doc

LF-1 End of Form

Revised 8/23/17

Comparison Contract Lab Contra	Client Information (Sub Contract Lab) Sample: Due Due Due Due Due Due Due Due Due Due	Lab PW: Deyo, Melissa L E-Melissa L E-Melissa deyo@testamericalinc.com New York Accreditations Required (See note): NELAP - New York New York New
Particular Par	State Contact	E-Mail: Reduced New York Plage 1 of 1 New York NELAP - New York Analysis Requested New York Analysis Requested New York Analysis Requested New York Analysis Requested New York Analysis Requested New York Analysis Requested New York Analysis Requested New York Analysis Requested New York New York Analysis Requested New York
Company Comp	Triff Four Part	NELAP - New York
Part Part	11/15/2017 TAT Requested (day): TAT Req	Matrix definition Code: Matrix Mat
Name	Company Comp	Matrix (weater
1	Piche	Matrix Matrix
The Color Color	Project Name: Project Name	Matrix (www.ns. to No.) Matrix (www.ns. to No.) Water W
Sample Generative Clean Cove, NY Second Sample Cover Sample	Project Name: Project #	Matrix Matrix Matrix Matrix Matrix Mater Mate
Sample Month Garden Sample Month Garden Sample Month Garden Sample Month Garden Sample Coperation Coperation Copera	Sample Date Time Sample Sample Cacomp. Sample Cacomp. Sample Cacomp. Cacom	Matrix (wowars (wowars) (wowar
Sample Identification - Client ID (Lab ID)	Sample Identification - Client ID (Lab ID)	Matrix (www.ns., community of the commun
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Primary Deliverable Rank: 2 Special Instructions/QC Requirements: Date:	Primary Deliverable Rank: 2 Date/Time	ee may be assessed if samples are re
Date/Time: Dat	Date: Date/Time: Date:	
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		Cooler Temperature(s) *C and Other Remarks:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Samp



Job:

Tracking # 7706 5858 5364 S. O.

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC. Therm. ID: AK-2 / AK-3 / HACCP /Other___ Notes: Cooler Custody Seal: Sample Custody Seal: Cooler ID: Temp: Observed 3.10 Corrected: Sample & From: Temp Blank D Yes D No D NCM Filed: No Yes Perchlorate has headspace? ---CoC is complete w/o discrepancies? Samples received within holding time? Sample preservatives verified? Cooler compromised/tampered with? Samples compromised/tampered-with? COC and Samples w/o discrepancies? Sample containers have legible labels? Containers are not broken or leaking? Sample date/times are provided. Appropriate containers are used? D Sample bottles are completely filled? Zero headspace?* D Multiphasic samples are not present? Initials: Date: 11 (3117) *Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")



SAMPLE RECEIVING SAC TESTAMERICA 880 RIVERSIDE PKWY

WEST SACRAMENTO CA 95605 (906) 373-5600



FRI - 0

TRK# 7706 5858 5364

STANDARD



Page 45 of 47

Client: ARCADIS U.S. Inc Job Number: 480-127058-1

Login Number: 127058 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Creator: Janish, Cari M		
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	

TestAmerica Buffalo

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc Job Number: 480-127058-1

List Source: TestAmerica Sacramento
List Number: 2
List Source: TestAmerica Sacramento
List Creation: 11/04/17 06:14 PM

Creator: Hytrek, Cheryl

Question Answer Comment Radioactivity wasn't checked or is = background as measured by a survey meter. True The cooler's custody seal, if present, is intact. N/A 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 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 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 <-fi>-form (1/4"). True Multiphasic sam	Creator: Hytrek, Cheryl		
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<6mm (1/4").		True	
Multiphasic samples are not present.		True	
	Multiphasic samples are not present.	True	

True

N/A

_

5

10

12

13

15

17

Samples do not require splitting or compositing.

Residual Chlorine Checked.



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-127094-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

Melisso Deyo Authorized for release by: 11/20/2017 8:24:32 AM

Melissa Deyo, Project Manager I (716)504-9874

melissa.deyo@testamericainc.com

-----LINKS -----

Review your project results through Total Access

Have a Question?



Visit us at: 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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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.	
В	Compound was found in the blank and sample.	
LCMS		

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.
В	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

ND PQL

QC

RER

RL RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

Reporting Limit or Requested Limit (Radiochemistry)

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Quality Control

TestAmerica Buffalo

11/20/2017

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Job ID: 480-127094-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-127094-1

Receipt

The samples were received on 11/4/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-475225 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-475277 recovered outside control limits for the following analytes: Trichlorofluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 490-474930 recovered outside control limits for the following analytes: Dichlorodifluoromethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The method blank for analytical batch 490-474930 contained Methylene Chloride above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction or re-analysis of samples was not performed.

Method(s) 8260C: The following sample was diluted due to the nature of the sample matrix: MW-22(R)D (480-127094-1). 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.

LCMS

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

Organic Prep

Method(s) 3535: The following samples: MW-22(R)D (480-127094-1), MW-21S (480-127094-2), MW-21S (480-127094-2[MS]) and MW-21S (480-127094-2[MSD]) were decanted prior to preparation due to sediment.

Prep batch 320-194293

Method code 3535 PFC

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

VOA Prep

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

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Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY TestAmerica Job ID: 480-127094-1

Client Sample ID: MW-22(R)D

Lab Sample ID: 480-127094-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	2200		20	4.2	ug/L		8260C	Total/NA
Cyclohexane	4.7	J	100	2.6	ug/L	20	8260C	Total/NA
Methylene Chloride	33	JB	100	20	ug/L	20	8260C	Total/NA
trans-1,2-Dichloroethene	33		20	4.6	ug/L	20	8260C	Total/NA
Vinyl chloride	66		20	3.6	ug/L	20	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	20		1.9	0.34	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	17		1.9	0.47	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	10		1.9	0.56	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	8.2		1.9	0.24	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	42		1.9	0.82	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.0		1.9	0.26	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.2	J	1.9	0.30	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	7.4		1.9	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.1	В	1.9	0.16	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.0	J	1.9	0.18	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	86		1.9	0.52	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.1	JB	1.9	0.34	ng/L	1	537 (modified)	Total/NA

Client Sample ID: MW-21S

Lab Sample ID: 480-127094-2

Sherit Gampie IB. IIIII-210	one oumpio 15: 1111 210						Lab Gampie ID: 400-1		
- Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type	
Chloroform	0.39	J	1.0	0.23	ug/L		8260C	Total/NA	
cis-1,2-Dichloroethene	57		1.0	0.21	ug/L	1	8260C	Total/NA	
Tetrachloroethene	58		1.0	0.14	ug/L	1	8260C	Total/NA	
trans-1,2-Dichloroethene	0.32	J	1.0	0.23	ug/L	1	8260C	Total/NA	
Trichloroethene	22		1.0	0.20	ug/L	1	8260C	Total/NA	
Vinyl chloride	8.3		1.0	0.18	ug/L	1	8260C	Total/NA	
Perfluorobutanoic acid (PFBA)	26		2.2	0.39	ng/L	1	537 (modified)	Total/NA	
Perfluoropentanoic acid (PFPeA)	74		2.2	0.54	ng/L	1	537 (modified)	Total/NA	
Perfluorohexanoic acid (PFHxA)	66		2.2	0.64	ng/L	1	537 (modified)	Total/NA	
Perfluoroheptanoic acid (PFHpA)	48		2.2	0.28	ng/L	1	537 (modified)	Total/NA	
Perfluorooctanoic acid (PFOA)	110		2.2	0.94	ng/L	1	537 (modified)	Total/NA	
Perfluorononanoic acid (PFNA)	29		2.2	0.30	ng/L	1	537 (modified)	Total/NA	
Perfluorodecanoic acid (PFDA)	87		2.2	0.34	ng/L	1	537 (modified)	Total/NA	
Perfluoroundecanoic acid (PFUnA)	7.6		2.2	1.2	ng/L	1	537 (modified)	Total/NA	
Perfluorododecanoic acid (PFDoA)	2.4		2.2	0.61	ng/L	1	537 (modified)	Total/NA	
Perfluorobutanesulfonic acid (PFBS)	35		2.2	0.22	ng/L	1	537 (modified)	Total/NA	
Perfluorohexanesulfonic acid (PFHxS)	8.8	В	2.2	0.19	ng/L	1	537 (modified)	Total/NA	
Perfluoroheptanesulfonic Acid (PFHpS)	3.7		2.2	0.21	ng/L	1	537 (modified)	Total/NA	
Perfluorooctanesulfonic acid (PFOS)	480		2.2	0.60	ng/L	1	537 (modified)	Total/NA	
Perfluorooctane Sulfonamide (FOSA)	4.5	В	2.2	0.39	ng/L	1	537 (modified)	Total/NA	
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Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-127094-3

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Client Sample ID: MW-22(R)D Lab Sample ID: 480-127094-1

Date Collected: 11/03/17 09:35 Matrix: Water Date Received: 11/04/17 09:00

1,1,1-Trichloroethane		RL	MDL		Prepared	Analyzed	Dil Fa
i, i, i i i i i i i i i i i i i i i i i	ND -	20	3.8	ug/L		11/10/17 21:31	2
,1,2,2-Tetrachloroethane	ND	20	3.8	ug/L		11/10/17 21:31	2
,1,2-Trichloro-1,2,2-trifluoroethane	ND	20	3.0	ug/L		11/10/17 21:31	2
,1,2-Trichloroethane	ND	20	3.8	ug/L		11/10/17 21:31	2
,1-Dichloroethane	ND	20		ug/L		11/10/17 21:31	2
,1-Dichloroethene	ND	20		ug/L		11/10/17 21:31	2
,2,4-Trichlorobenzene	ND	20		ug/L		11/10/17 21:31	
,2-Dibromo-3-Chloropropane	ND	200		ug/L		11/10/17 21:31	2
,2-Dibromoethane	ND	20		ug/L		11/10/17 21:31	2
,2-Dichlorobenzene	ND	20		ug/L		11/10/17 21:31	:
,2-Dichloroethane	ND	20		ug/L		11/10/17 21:31	:
,2-Dichloropropane	ND	20		ug/L		11/10/17 21:31	:
,3-Dichlorobenzene	ND	20		ug/L		11/10/17 21:31	
,4-Dichlorobenzene	ND	20		ug/L		11/10/17 21:31	
-Butanone (MEK)	ND	1000		ug/L		11/10/17 21:31	:
-Hexanone	ND	200		ug/L		11/10/17 21:31	
-Methyl-2-pentanone (MIBK)	ND	200		ug/L		11/10/17 21:31	
cetone	ND	500		ug/L		11/10/17 21:31	
Benzene	ND	20		ug/L		11/10/17 21:31	
romodichloromethane	ND	20		ug/L		11/10/17 21:31	
romoform	ND	20		ug/L		11/10/17 21:31	
romomethane	ND	20		ug/L ug/L		11/10/17 21:31	
Carbon disulfide	ND ND	20		ug/L ug/L		11/10/17 21:31	
				-			
carbon tetrachloride	ND	20		ug/L		11/10/17 21:31	
Chlorobenzene	ND	20		ug/L		11/10/17 21:31	
Chloroethane	ND	20		ug/L		11/10/17 21:31	
Chloroform	ND	20		ug/L		11/10/17 21:31	
Chloromethane	ND	20		ug/L		11/10/17 21:31	
is-1,2-Dichloroethene	2200	20		ug/L		11/10/17 21:31	
is-1,3-Dichloropropene	ND	20		ug/L		11/10/17 21:31	
Syclohexane	4.7 J	100		ug/L		11/10/17 21:31	
Dibromochloromethane	ND	20		ug/L		11/10/17 21:31	
Dichlorodifluoromethane	ND *	20		ug/L		11/10/17 21:31	
thylbenzene	ND	20		ug/L		11/10/17 21:31	
sopropylbenzene	ND	20		ug/L		11/10/17 21:31	
lethyl acetate	ND	200		ug/L		11/10/17 21:31	
lethyl tert-butyl ether	ND	20		ug/L		11/10/17 21:31	
lethylcyclohexane	ND	100		ug/L		11/10/17 21:31	
lethylene Chloride	33 JB	100		ug/L		11/10/17 21:31	
tyrene	ND	20		ug/L		11/10/17 21:31	
etrachloroethene	ND	20		ug/L		11/10/17 21:31	
oluene	ND	20		ug/L		11/10/17 21:31	
ans-1,2-Dichloroethene	33	20	4.6	ug/L		11/10/17 21:31	
ans-1,3-Dichloropropene	ND	20	3.4	ug/L		11/10/17 21:31	
richloroethene	ND	20	4.0	ug/L		11/10/17 21:31	
richlorofluoromethane	ND	20	4.2	ug/L		11/10/17 21:31	
'inyl chloride	66	20		ug/L		11/10/17 21:31	
Xylenes, Total	ND	60		ug/L		11/10/17 21:31	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-127094-1

TestAmerica Job ID: 480-127094-1

Matrix: Water

Client Sample ID: MW-22(R)D

Date Collected: 11/03/17 09:35 Date Received: 11/04/17 09:00

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105	70 - 130		11/10/17 21:31	20
4-Bromofluorobenzene (Surr)	113	70 - 130		11/10/17 21:31	20
Dibromofluoromethane (Surr)	105	70 - 130		11/10/17 21:31	20
Toluene-d8 (Surr)	109	70 - 130		11/10/17 21:31	20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	20		1.9	0.34	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluoropentanoic acid (PFPeA)	17		1.9	0.47	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorohexanoic acid (PFHxA)	10		1.9	0.56	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluoroheptanoic acid (PFHpA)	8.2		1.9	0.24	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorooctanoic acid (PFOA)	42		1.9	0.82	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorononanoic acid (PFNA)	3.0		1.9	0.26	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorodecanoic acid (PFDA)	1.2	J	1.9	0.30	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.1	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.53	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.3	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.28	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorobutanesulfonic acid (PFBS)	7.4		1.9	0.19	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorohexanesulfonic acid (PFHxS)	6.1	В	1.9	0.16	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.0	J	1.9	0.18	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorooctanesulfonic acid (PFOS)	86		1.9	0.52	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.31	ng/L		11/13/17 10:03	11/14/17 18:55	1
Perfluorooctane Sulfonamide (FOSA)	1.1	JB	1.9	0.34	ng/L		11/13/17 10:03	11/14/17 18:55	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
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(FUSA)					
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	81	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C4 PFBA	60	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C2 PFHxA	80	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C4 PFOA	83	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C5 PFNA	92	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C2 PFDA	97	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C2 PFUnA	86	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C2 PFDoA	76	25 - 150	11/13/17 10:03	11/14/17 18:55	1
1802 PFHxS	83	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C4 PFOS	84	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C4-PFHpA	85	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C5 PFPeA	80	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C3-PFBS	91	25 - 150	11/13/17 10:03	11/14/17 18:55	1
13C2-PFTeDA	89	25 - 150	11/13/17 10:03	11/14/17 18:55	1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Client Sample ID: MW-21S

Date Collected: 11/03/17 11:40 Date Received: 11/04/17 09:00 Lab Sample ID: 480-127094-2

Matrix: Water

Analyte	Result Quali	fier RL	MDL		D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	1.0	0.19	ug/L			11/12/17 06:56	
1,1,2,2-Tetrachloroethane	ND	1.0	0.19	ug/L			11/12/17 06:56	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.15	ug/L			11/12/17 06:56	
1,1,2-Trichloroethane	ND	1.0	0.19	ug/L			11/12/17 06:56	
1,1-Dichloroethane	ND	1.0	0.24	ug/L			11/12/17 06:56	
1,1-Dichloroethene	ND	1.0	0.25	ug/L			11/12/17 06:56	
1,2,4-Trichlorobenzene	ND	1.0	0.20	ug/L			11/12/17 06:56	
1,2-Dibromo-3-Chloropropane	ND	10	0.94	ug/L			11/12/17 06:56	
1,2-Dibromoethane	ND	1.0	0.21	ug/L			11/12/17 06:56	
1,2-Dichlorobenzene	ND	1.0	0.19	ug/L			11/12/17 06:56	
1,2-Dichloroethane	ND	1.0	0.20	ug/L			11/12/17 06:56	
1,2-Dichloropropane	ND	1.0	0.25	ug/L			11/12/17 06:56	
1,3-Dichlorobenzene	ND	1.0	0.18	ug/L			11/12/17 06:56	
1,4-Dichlorobenzene	ND	1.0	0.17	ug/L			11/12/17 06:56	
2-Butanone (MEK)	ND	50		ug/L			11/12/17 06:56	
2-Hexanone	ND	10	1.3	ug/L			11/12/17 06:56	
4-Methyl-2-pentanone (MIBK)	ND	10	0.81	ug/L			11/12/17 06:56	
Acetone	ND	25	2.7	ug/L			11/12/17 06:56	
Benzene	ND	1.0		ug/L			11/12/17 06:56	
Bromodichloromethane	ND	1.0		ug/L			11/12/17 06:56	
Bromoform	ND	1.0		ug/L			11/12/17 06:56	
Bromomethane	ND	1.0	0.35	ug/L			11/12/17 06:56	
Carbon disulfide	ND	1.0	0.22	ug/L			11/12/17 06:56	
Carbon tetrachloride	ND	1.0		ug/L			11/12/17 06:56	
Chlorobenzene	ND	1.0		ug/L			11/12/17 06:56	
Chloroethane	ND	1.0		ug/L			11/12/17 06:56	
Chloroform	0.39 J	1.0		ug/L			11/12/17 06:56	
Chloromethane	ND	1.0	0.36	ug/L			11/12/17 06:56	
cis-1,2-Dichloroethene	57	1.0		ug/L			11/12/17 06:56	
cis-1,3-Dichloropropene	ND	1.0	0.17	ug/L			11/12/17 06:56	
Cyclohexane	ND	5.0		ug/L			11/12/17 06:56	
Dibromochloromethane	ND	1.0	0.25	ug/L			11/12/17 06:56	
Dichlorodifluoromethane	ND	1.0		ug/L			11/12/17 06:56	
Ethylbenzene	ND	1.0		ug/L			11/12/17 06:56	
Isopropylbenzene	ND	1.0		ug/L			11/12/17 06:56	
Methyl acetate	ND	10		ug/L			11/12/17 06:56	
Methyl tert-butyl ether	ND	1.0		ug/L			11/12/17 06:56	
Methylcyclohexane	ND	5.0	0.090	-			11/12/17 06:56	
Methylene Chloride	ND	5.0		ug/L			11/12/17 06:56	
Styrene	ND	1.0		ug/L			11/12/17 06:56	
Tetrachloroethene	58	1.0		ug/L			11/12/17 06:56	
Toluene	ND	1.0		ug/L			11/12/17 06:56	
trans-1,2-Dichloroethene	0.32 J	1.0		ug/L			11/12/17 06:56	
trans-1,3-Dichloropropene	ND	1.0		ug/L			11/12/17 06:56	
Trichloroethene	22	1.0		ug/L			11/12/17 06:56	
Trichlorofluoromethane	ND *	1.0		ug/L			11/12/17 06:56	
Vinyl chloride	8.3	1.0		ug/L			11/12/17 06:56	
Xylenes, Total	ND	3.0	0.58	ug/L			11/12/17 06:56	

TestAmerica Buffalo

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13

Client: ARCADIS U.S. Inc

13C4 PFOS

13C4-PFHpA

13C5 PFPeA

13C3-PFBS

13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Client Sample ID: MW-21S

Date Collected: 11/03/17 11:40 Date Received: 11/04/17 09:00

Lab Sample ID: 480-127094-2

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100	70 - 130		11/12/17 06:56	1
4-Bromofluorobenzene (Surr)	98	70 - 130		11/12/17 06:56	1
Dibromofluoromethane (Surr)	110	70 - 130		11/12/17 06:56	1
Toluene-d8 (Surr)	98	70 - 130		11/12/17 06:56	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	26		2.2	0.39	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluoropentanoic acid (PFPeA)	74		2.2	0.54	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorohexanoic acid (PFHxA)	66		2.2	0.64	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluoroheptanoic acid (PFHpA)	48		2.2	0.28	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorooctanoic acid (PFOA)	110		2.2	0.94	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorononanoic acid (PFNA)	29		2.2	0.30	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorodecanoic acid (PFDA)	87		2.2	0.34	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluoroundecanoic acid (PFUnA)	7.6		2.2		ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorododecanoic acid (PFDoA)	2.4		2.2		ng/L			11/14/17 19:03	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.2	1.4	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.2	0.32	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorobutanesulfonic acid (PFBS)	35		2.2	0.22	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorohexanesulfonic acid (PFHxS)	8.8	В	2.2	0.19	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluoroheptanesulfonic Acid (PFHpS)	3.7		2.2	0.21	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorooctanesulfonic acid (PFOS)	480		2.2	0.60	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.2	0.35	ng/L		11/13/17 10:03	11/14/17 19:03	1
Perfluorooctane Sulfonamide (FOSA)	4.5	В	2.2	0.39	ng/L		11/13/17 10:03	11/14/17 19:03	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	88		25 - 150				11/13/17 10:03	11/14/17 19:03	1
13C4 PFBA	67		25 - 150				11/13/17 10:03	11/14/17 19:03	1
13C2 PFHxA	84		25 - 150				11/13/17 10:03	11/14/17 19:03	1
13C4 PFOA	84		25 - 150				11/13/17 10:03	11/14/17 19:03	1
13C5 PFNA	97		25 - 150				11/13/17 10:03	11/14/17 19:03	1
13C2 PFDA	110		25 - 150				11/13/17 10:03	11/14/17 19:03	1
13C2 PFUnA	102		25 - 150				11/13/17 10:03	11/14/17 19:03	1
13C2 PFDoA	89		25 - 150				11/13/17 10:03	11/14/17 19:03	1
18O2 PFHxS	85		25 - 150				11/13/17 10:03	11/14/17 19:03	1

11/13/17 10:03 11/14/17 19:03

11/13/17 10:03 11/14/17 19:03

11/13/17 10:03 11/14/17 19:03

11/13/17 10:03 11/14/17 19:03

11/13/17 10:03 11/14/17 19:03

25 - 150

25 - 150

25 - 150

25 - 150

25 - 150

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Client Sample ID: TRIP BLANKS

Date Collected: 11/03/17 00:00 Date Received: 11/04/17 09:00 Lab Sample ID: 480-127094-3

Matrix: Water

Analyte	Result Qualifie	r RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 18:19	
1,1,2,2-Tetrachloroethane	ND	1.0	0.19	ug/L			11/11/17 18:19	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	1.0	0.15	ug/L			11/11/17 18:19	•
1,1,2-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 18:19	
1,1-Dichloroethane	ND	1.0	0.24	ug/L			11/11/17 18:19	•
1,1-Dichloroethene	ND	1.0	0.25	ug/L			11/11/17 18:19	
1,2,4-Trichlorobenzene	ND	1.0	0.20	ug/L			11/11/17 18:19	
1,2-Dibromo-3-Chloropropane	ND	10	0.94	ug/L			11/11/17 18:19	
1,2-Dibromoethane	ND	1.0	0.21	ug/L			11/11/17 18:19	
1,2-Dichlorobenzene	ND	1.0	0.19	ug/L			11/11/17 18:19	
1,2-Dichloroethane	ND	1.0	0.20	ug/L			11/11/17 18:19	
1,2-Dichloropropane	ND	1.0	0.25	ug/L			11/11/17 18:19	
1,3-Dichlorobenzene	ND	1.0	0.18	ug/L			11/11/17 18:19	• • • • • • • •
1,4-Dichlorobenzene	ND	1.0		ug/L			11/11/17 18:19	
2-Butanone (MEK)	ND	50		ug/L			11/11/17 18:19	
2-Hexanone	ND	10		ug/L			11/11/17 18:19	
4-Methyl-2-pentanone (MIBK)	ND	10		ug/L			11/11/17 18:19	
Acetone	ND	25		ug/L			11/11/17 18:19	
Benzene	ND	1.0		ug/L			11/11/17 18:19	· · · · · · .
Bromodichloromethane	ND	1.0		ug/L			11/11/17 18:19	
Bromoform	ND	1.0		ug/L			11/11/17 18:19	
Bromomethane	ND	1.0		ug/L			11/11/17 18:19	
Carbon disulfide	ND	1.0		ug/L			11/11/17 18:19	
Carbon tetrachloride	ND	1.0		ug/L			11/11/17 18:19	
Chlorobenzene	ND	1.0		ug/L			11/11/17 18:19	
Chloroethane	ND	1.0		ug/L			11/11/17 18:19	
Chloroform	ND	1.0		ug/L			11/11/17 18:19	
Chloromethane	ND	1.0		ug/L			11/11/17 18:19	
cis-1,2-Dichloroethene	ND	1.0		ug/L			11/11/17 18:19	
cis-1,3-Dichloropropene	ND	1.0		ug/L			11/11/17 18:19	
Cyclohexane	ND	5.0		ug/L			11/11/17 18:19	· · · · · .
Dibromochloromethane	ND	1.0		ug/L			11/11/17 18:19	
Dichlorodifluoromethane	ND	1.0		ug/L			11/11/17 18:19	
Ethylbenzene	ND	1.0		ug/L			11/11/17 18:19	· · · · · .
Isopropylbenzene	ND	1.0		ug/L			11/11/17 18:19	
Methyl acetate	ND	10		ug/L			11/11/17 18:19	
Methyl tert-butyl ether	ND	1.0		ug/L			11/11/17 18:19	
Methylcyclohexane	ND	5.0	0.090				11/11/17 18:19	
Methylene Chloride	ND	5.0		ug/L			11/11/17 18:19	
Styrene	ND	1.0		ug/L			11/11/17 18:19	· · · · · .
Tetrachloroethene	ND	1.0		ug/L ug/L			11/11/17 18:19	
Toluene	ND	1.0		ug/L ug/L			11/11/17 18:19	
trans-1,2-Dichloroethene	ND	1.0		ug/L ug/L			11/11/17 18:19	· · · · · .
·	ND ND						11/11/17 18:19	
trans-1,3-Dichloropropene		1.0		ug/L				
Trichloroethene Trichlorofluoromethane	ND	1.0		ug/L			11/11/17 18:19	
	ND ND	1.0		ug/L			11/11/17 18:19	
Vinyl chloride Xylenes, Total	ND ND	1.0 3.0		ug/L ug/L			11/11/17 18:19 11/11/17 18:19	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Client Sample ID: TRIP BLANKS Lab Sample ID: 480-127094-3

Date Collected: 11/03/17 00:00
Date Received: 11/04/17 09:00

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95	70 - 130		11/11/17 18:19	1
4-Bromofluorobenzene (Surr)	100	70 - 130		11/11/17 18:19	1
Dibromofluoromethane (Surr)	108	70 - 130		11/11/17 18:19	1
Toluene-d8 (Surr)	100	70 - 130		11/11/17 18:19	1

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Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		12DCE	BFB	DBFM	TOL		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)		
480-127094-1	MW-22(R)D	105	113	105	109		
480-127094-2	MW-21S	100	98	110	98		
480-127094-2 MS	MW-21S	98	91	109	96		
480-127094-2 MSD	MW-21S	100	89	108	99		
480-127094-3	TRIP BLANKS	95	100	108	100		
LCS 490-474930/3	Lab Control Sample	106	110	103	110		
LCS 490-475225/3	Lab Control Sample	88	94	107	99		
LCS 490-475277/3	Lab Control Sample	92	91	108	96		
LCSD 490-474930/4	Lab Control Sample Dup	106	110	104	110		
LCSD 490-475225/4	Lab Control Sample Dup	89	93	108	96		
LCSD 490-475277/4	Lab Control Sample Dup	97	91	109	100		
MB 490-474930/6	Method Blank	107	110	106	109		
MB 490-475225/6	Method Blank	92	98	105	100		
MB 490-475277/6	Method Blank	99	96	110	96		

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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Isotope Dilution Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water Prep Type: Total/NA

			Perce	ent Isotope	Dilution Re	covery (Ac	ceptance L	imits)	
		3C8 FOSA	3C4 PFB/	3C2 PFHx	3C4 PFO	3C5 PFN/	3C2 PFD/	3C2 PFUn	3C2 PFDo
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
480-127094-1	MW-22(R)D	81	60	80	83	92	97	86	76
480-127094-2	MW-21S	88	67	84	84	97	110	102	89
480-127094-2 MS	MW-21S	87	66	83	84	94	109	100	90
480-127094-2 MSD	MW-21S	88	66	86	85	94	107	105	91
LCS 320-194293/2-A	Lab Control Sample	90	108	102	89	101	102	98	87
LCSD 320-194293/3-A	Lab Control Sample Dup	88	103	98	90	97	97	98	88
MB 320-194293/1-A	Method Blank	89	104	95	89	97	103	99	91

Percent Isotope Dilution Recovery (Acceptance Limits)

		BO2 PFHx	3C4 PFOS	3C4-PFHp	3C5 PFPe	3C3-PFB	C2-PFTeE
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
480-127094-1	MW-22(R)D	83	84	85	80	91	89
480-127094-2	MW-21S	85	89	87	85	98	94
480-127094-2 MS	MW-21S	85	89	88	82	93	93
480-127094-2 MSD	MW-21S	88	90	87	85	92	92
LCS 320-194293/2-A	Lab Control Sample	94	96	102	102	99	94
LCSD 320-194293/3-A	Lab Control Sample Dup	89	89	96	101	104	100
MB 320-194293/1-A	Method Blank	93	92	99	102	97	103

Surrogate Legend

13C8 FOSA = 13C8 FOSA

13C4 PFBA = 13C4 PFBA

13C2 PFHxA = 13C2 PFHxA

13C4 PFOA = 13C4 PFOA

13C5 PFNA = 13C5 PFNA

13C2 PFDA = 13C2 PFDA

13C2 PFUnA = 13C2 PFUnA

13C2 PFDoA = 13C2 PFDoA

1302 FFD0A = 1302 FFD0A

1802 PFHxS = 1802 PFHxS

13C4 PFOS = 13C4 PFOS

13C4-PFHpA = 13C4-PFHpA

13C5 PFPeA = 13C5 PFPeA

13C3-PFBS = 13C3-PFBS

13C2-PFTeDA = 13C2-PFTeDA

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: MB 490-474930/6

Matrix: Water

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

Analysis Batch: 474930	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 13:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/10/17 13:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/10/17 13:28	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 13:28	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/10/17 13:28	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/10/17 13:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/10/17 13:28	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/10/17 13:28	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/10/17 13:28	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/10/17 13:28	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/10/17 13:28	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/10/17 13:28	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/10/17 13:28	1
1,4-Dichlorobenzene	ND		1.0	0.17	-			11/10/17 13:28	1
2-Butanone (MEK)	ND		50		ug/L			11/10/17 13:28	1
2-Hexanone	ND		10	1.3	ug/L			11/10/17 13:28	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	-			11/10/17 13:28	1
Acetone	ND		25		ug/L			11/10/17 13:28	1
Benzene	ND		1.0	0.20	-			11/10/17 13:28	1
Bromodichloromethane	ND		1.0	0.17	_			11/10/17 13:28	1
Bromoform	ND		1.0	0.29	-			11/10/17 13:28	1
Bromomethane	ND		1.0	0.35	-			11/10/17 13:28	1
Carbon disulfide	ND		1.0	0.22	-			11/10/17 13:28	1
Carbon tetrachloride	ND		1.0	0.18	_			11/10/17 13:28	1
Chlorobenzene	ND		1.0	0.18	•			11/10/17 13:28	1
Chloroethane	ND		1.0	0.36	-			11/10/17 13:28	1
Chloroform	ND		1.0	0.23	-			11/10/17 13:28	1
Chloromethane	ND		1.0	0.36	-			11/10/17 13:28	1
cis-1,2-Dichloroethene	ND		1.0	0.21	-			11/10/17 13:28	1
cis-1,3-Dichloropropene	ND		1.0	0.17	-			11/10/17 13:28	1
Cyclohexane	ND		5.0	0.13				11/10/17 13:28	1
Dibromochloromethane	ND		1.0	0.25	•			11/10/17 13:28	1
Dichlorodifluoromethane	ND		1.0	0.17	_			11/10/17 13:28	1
Ethylbenzene	ND		1.0	0.19				11/10/17 13:28	
Isopropylbenzene	ND		1.0	0.33	_			11/10/17 13:28	1
Methyl acetate	ND		10	0.58	•			11/10/17 13:28	1
Methyl tert-butyl ether	ND		1.0	0.17				11/10/17 13:28	1
Methylcyclohexane	ND		5.0	0.090				11/10/17 13:28	1
Methylene Chloride	1.07	J	5.0		ug/L			11/10/17 13:28	1
Styrene	ND		1.0	0.28	-			11/10/17 13:28	1
Tetrachloroethene	ND		1.0	0.14				11/10/17 13:28	1
Toluene	ND		1.0	0.17	_			11/10/17 13:28	1
trans-1,2-Dichloroethene	ND		1.0	0.23	-			11/10/17 13:28	
trans-1,3-Dichloropropene	ND		1.0	0.17				11/10/17 13:28	1
Trichloroethene	ND		1.0	0.20				11/10/17 13:28	1
Trichlorofluoromethane	ND		1.0	0.21				11/10/17 13:28	
Vinyl chloride	ND		1.0	0.18				11/10/17 13:28	1
Xylenes, Total	ND		3.0	0.58	-			11/10/17 13:28	-

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

	MB MB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107	70 - 130		11/10/17 13:28	1
4-Bromofluorobenzene (Surr)	110	70 - 130		11/10/17 13:28	1
Dibromofluoromethane (Surr)	106	70 - 130		11/10/17 13:28	1
Toluene-d8 (Surr)	109	70 - 130		11/10/17 13:28	1

Lab Sample ID: LCS 490-474930/3

Matrix: Water

Analysis Batch: 474930

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

_	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	22.1		ug/L		111	78 - 135	
1,1,2,2-Tetrachloroethane	20.0	22.1		ug/L		111	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.8		ug/L		114	77 - 129	
ne 1,1,2-Trichloroethane	20.0	20.4		ug/L		102	80 - 124	
1,1-Dichloroethane	20.0	20.5		ug/L		102	78 ₋ 125	
1,1-Dichloroethene	20.0	20.5		ug/L		103	79 - 124	
1,2,4-Trichlorobenzene	20.0	19.0		ug/L		95	63 - 133	
1,2-Dibromo-3-Chloropropane	20.0	18.8		ug/L		94	54 ₋ 125	
1,2-Dibromoethane	20.0	20.2		ug/L		101	80 - 129	
1,2-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 121	
1,2-Dichloroethane	20.0	22.2		ug/L		111	77 - 121	
1,2-Dichloropropane	20.0	19.9		ug/L		100	75 - 120	
1,3-Dichlorobenzene	20.0	20.7		ug/L		104	80 - 122	
1,4-Dichlorobenzene	20.0	21.0		ug/L		105	80 - 120	
2-Butanone (MEK)	100	98.7		ug/L		99	62 - 133	
2-Hexanone	100	103		ug/L		103	60 - 142	
4-Methyl-2-pentanone (MIBK)	100	110		ug/L		110	60 - 137	
Acetone	100	115		ug/L		115	54 - 145	
Benzene	20.0	20.0		ug/L		100	80 - 121	
Bromodichloromethane	20.0	20.6		ug/L		103	75 ₋ 129	
Bromoform	20.0	18.5		ug/L		93	46 - 145	
Bromomethane	20.0	18.4		ug/L		92	41 - 150	
Carbon disulfide	20.0	18.8		ug/L		94	77 - 126	
Carbon tetrachloride	20.0	22.7		ug/L		113	64 - 147	
Chlorobenzene	20.0	20.5		ug/L		102	80 - 120	
Chloroethane	20.0	20.3		ug/L		102	72 - 120	
Chloroform	20.0	21.2		ug/L		106	73 - 129	
Chloromethane	20.0	21.8		ug/L		109	12 - 150	
cis-1,2-Dichloroethene	20.0	20.0		ug/L		100	76 - 125	
cis-1,3-Dichloropropene	20.0	21.3		ug/L		107	74 ₋ 140	
Cyclohexane	20.0	20.5		ug/L		102	73 - 122	
Dibromochloromethane	20.0	21.6		ug/L		108	69 - 133	
Dichlorodifluoromethane	20.0	25.5		ug/L		127	37 - 127	
Ethylbenzene	20.0	20.6		ug/L		103	80 - 130	
Isopropylbenzene	20.0	19.4		ug/L		97	80 - 141	
Methyl acetate	40.0	42.8		ug/L		107	64 - 150	
Methyl tert-butyl ether	20.0	19.4		ug/L		97	72 - 133	
Methylcyclohexane	20.0	20.6		ug/L		103	71 - 129	
Methylene Chloride	20.0	20.1		ug/L		101	79 - 123	
Styrene	20.0	18.7		ug/L		93	80 - 127	
Tetrachloroethene	20.0	21.0		ug/L		105	80 - 126	
Toluene	20.0	22.0		ug/L		110	80 - 126	
trans-1,2-Dichloroethene	20.0	20.9		ug/L		105	79 - 126	

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39.4

ug/L

ug/L

Spike

Added

20.0

20.0

20.0

20.0

40.0

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: LCS 490-474930/3

Lab Sample ID: LCSD 490-474930/4

Matrix: Water

Trichloroethene

Vinyl chloride

Xylenes, Total

Analyte

Analysis Batch: 474930

trans-1,3-Dichloropropene

Trichlorofluoromethane

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

68 - 120

80 - 132

LCS	LCS				%Rec.	
Result	Qualifier	Unit	D	%Rec	Limits	
19.9		ug/L	_	100	63 - 134	
20.1		ug/L		100	80 - 123	
22.2		ug/L		111	65 - 124	

99

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	110		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	110		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 474930								•	
•	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	22.4		ug/L		112	78 - 135	1	15
1,1,2,2-Tetrachloroethane	20.0	22.1		ug/L		111	69 - 131	0	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	23.0		ug/L		115	77 - 129	1	16
ne									
1,1,2-Trichloroethane	20.0	20.7		ug/L		103	80 - 124	1	13
1,1-Dichloroethane	20.0	20.5		ug/L		102	78 - 125	0	17
1,1-Dichloroethene	20.0	21.1		ug/L		106	79 - 124	3	20
1,2,4-Trichlorobenzene	20.0	19.3		ug/L		97	63 - 133	2	15
1,2-Dibromo-3-Chloropropane	20.0	18.9		ug/L		94	54 - 125	0	19
1,2-Dibromoethane	20.0	20.7		ug/L		103	80 - 129	2	13
1,2-Dichlorobenzene	20.0	21.1		ug/L		106	80 - 121	2	12
1,2-Dichloroethane	20.0	22.6		ug/L		113	77 - 121	2	13
1,2-Dichloropropane	20.0	19.8		ug/L		99	75 - 120	0	15
1,3-Dichlorobenzene	20.0	20.9		ug/L		104	80 - 122	1	13
1,4-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120	2	12
2-Butanone (MEK)	100	94.7		ug/L		95	62 - 133	4	19
2-Hexanone	100	102		ug/L		102	60 - 142	1	17
4-Methyl-2-pentanone (MIBK)	100	111		ug/L		111	60 - 137	1	21
Acetone	100	111		ug/L		111	54 - 145	3	23
Benzene	20.0	20.1		ug/L		100	80 - 121	0	12
Bromodichloromethane	20.0	20.8		ug/L		104	75 - 129	1	14
Bromoform	20.0	18.8		ug/L		94	46 - 145	2	14
Bromomethane	20.0	18.7		ug/L		93	41 - 150	1	19
Carbon disulfide	20.0	19.0		ug/L		95	77 - 126	1	16
Carbon tetrachloride	20.0	22.7		ug/L		113	64 - 147	0	16
Chlorobenzene	20.0	20.3		ug/L		101	80 - 120	1	12
Chloroethane	20.0	20.7		ug/L		103	72 - 120	2	15
Chloroform	20.0	21.3		ug/L		106	73 - 129	0	14
Chloromethane	20.0	21.8		ug/L		109	12 - 150	0	20
cis-1,2-Dichloroethene	20.0	19.9		ug/L		100	76 ₋ 125	1	15
cis-1,3-Dichloropropene	20.0	21.3		ug/L		107	74 - 140	0	15

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: LCSD 490-474930/4

Matrix: Water

Analysis Batch: 474930

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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyclohexane	20.0	20.1		ug/L		100	73 - 122	2	16
Dibromochloromethane	20.0	21.5		ug/L		107	69 - 133	0	13
Dichlorodifluoromethane	20.0	25.6	*	ug/L		128	37 - 127	0	16
Ethylbenzene	20.0	20.6		ug/L		103	80 - 130	0	12
Isopropylbenzene	20.0	19.2		ug/L		96	80 - 141	1	13
Methyl acetate	40.0	44.0		ug/L		110	64 - 150	3	18
Methyl tert-butyl ether	20.0	19.6		ug/L		98	72 - 133	1	16
Methylcyclohexane	20.0	20.3		ug/L		102	71 - 129	2	17
Methylene Chloride	20.0	20.6		ug/L		103	79 - 123	2	15
Styrene	20.0	18.8		ug/L		94	80 - 127	1	12
Tetrachloroethene	20.0	20.8		ug/L		104	80 - 126	1	17
Toluene	20.0	21.7		ug/L		109	80 - 126	1	13
trans-1,2-Dichloroethene	20.0	21.3		ug/L		107	79 - 126	2	15
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	63 - 134	2	13
Trichloroethene	20.0	20.0		ug/L		100	80 - 123	0	14
Trichlorofluoromethane	20.0	22.1		ug/L		111	65 - 124	0	22
Vinyl chloride	20.0	20.0		ug/L		100	68 - 120	1	15
Xylenes, Total	40.0	39.4		ug/L		99	80 - 132	0	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	110		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	110		70 - 130

Lab Sample ID: MB 490-475225/6

Matrix: Water

Analysis Batch: 475225

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

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	MB MB							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 17:26	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.19	ug/L			11/11/17 17:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.15	ug/L			11/11/17 17:26	1
1,1,2-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 17:26	1
1,1-Dichloroethane	ND	1.0	0.24	ug/L			11/11/17 17:26	1
1,1-Dichloroethene	ND	1.0	0.25	ug/L			11/11/17 17:26	1
1,2,4-Trichlorobenzene	ND	1.0	0.20	ug/L			11/11/17 17:26	1
1,2-Dibromo-3-Chloropropane	ND	10	0.94	ug/L			11/11/17 17:26	1
1,2-Dibromoethane	ND	1.0	0.21	ug/L			11/11/17 17:26	1
1,2-Dichlorobenzene	ND	1.0	0.19	ug/L			11/11/17 17:26	1
1,2-Dichloroethane	ND	1.0	0.20	ug/L			11/11/17 17:26	1
1,2-Dichloropropane	ND	1.0	0.25	ug/L			11/11/17 17:26	1
1,3-Dichlorobenzene	ND	1.0	0.18	ug/L			11/11/17 17:26	1
1,4-Dichlorobenzene	ND	1.0	0.17	ug/L			11/11/17 17:26	1
2-Butanone (MEK)	ND	50	2.6	ug/L			11/11/17 17:26	1
2-Hexanone	ND	10	1.3	ug/L			11/11/17 17:26	1
4-Methyl-2-pentanone (MIBK)	ND	10	0.81	ug/L			11/11/17 17:26	1
Acetone	ND	25	2.7	ug/L			11/11/17 17:26	1
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TestAmerica Job ID: 480-127094-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 490-475225/6

Matrix: Water

Analysis Batch: 475225

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

MB MB **MDL** Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Benzene $\overline{\mathsf{ND}}$ 1.0 0.20 ug/L 11/11/17 17:26 Bromodichloromethane ND 1.0 0.17 ug/L 11/11/17 17:26 **Bromoform** ND 1.0 0.29 ug/L 11/11/17 17:26 Bromomethane ND 1.0 0.35 ug/L 11/11/17 17:26 Carbon disulfide ND 1.0 0.22 ug/L 11/11/17 17:26 Carbon tetrachloride ND 1.0 0.18 ug/L 11/11/17 17:26 Chlorobenzene ND 1.0 0.18 ug/L 11/11/17 17:26 Chloroethane ND 1.0 0.36 ug/L 11/11/17 17:26 Chloroform ND 1.0 0.23 ug/L 11/11/17 17:26 ND Chloromethane 1.0 0.36 ug/L 11/11/17 17:26 cis-1,2-Dichloroethene ND 1.0 0.21 ug/L 11/11/17 17:26 ND 0.17 ug/L cis-1,3-Dichloropropene 1.0 11/11/17 17:26 ND 5.0 Cyclohexane 0.13 ug/L 11/11/17 17:26 Dibromochloromethane ND 1.0 0.25 ug/L 11/11/17 17:26 Dichlorodifluoromethane ND 1.0 0.17 ug/L 11/11/17 17:26 Ethylbenzene ND 1.0 0.19 ug/L 11/11/17 17:26 Isopropylbenzene ND 1.0 0.33 ug/L 11/11/17 17:26 ND 10 Methyl acetate 0.58 ug/L 11/11/17 17:26 Methyl tert-butyl ether ND 1.0 0.17 ug/L 11/11/17 17:26 Methylcyclohexane ND 5.0 0.090 ug/L 11/11/17 17:26 Methylene Chloride ND 5.0 1.0 ug/L 11/11/17 17:26 Styrene ND 1.0 0.28 ug/L 11/11/17 17:26 Tetrachloroethene ND 1.0 0.14 ug/L 11/11/17 17:26 Toluene ND 1.0 0.17 ug/L 11/11/17 17:26 ND trans-1,2-Dichloroethene 1.0 0.23 ug/L 11/11/17 17:26 trans-1,3-Dichloropropene ND 1.0 0.17 ug/L 11/11/17 17:26 Trichloroethene ND 0.20 ug/L 1.0 11/11/17 17:26 Trichlorofluoromethane ND 1.0 0.21 ug/L 11/11/17 17:26 ND Vinyl chloride 1.0 0.18 ug/L 11/11/17 17:26 Xylenes, Total ND 3.0 0.58 ug/L 11/11/17 17:26

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92	70 - 130		11/11/17 17:26	1
4-Bromofluorobenzene (Surr)	98	70 - 130	1	11/11/17 17:26	1
Dibromofluoromethane (Surr)	105	70 - 130	1	11/11/17 17:26	1
Toluene-d8 (Surr)	100	70 - 130		11/11/17 17:26	1

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Analysis Batch: 475225

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

•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	20.0	23.7		ug/L		119	78 - 135
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		102	69 - 131
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.9	*	ug/L		130	77 - 129
ne							
1,1,2-Trichloroethane	20.0	22.0		ug/L		110	80 - 124
1,1-Dichloroethane	20.0	21.5		ug/L		108	78 ₋ 125

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Analysis Batch: 475225

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

Analysis Batch: 475225	Spike Added	_	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	22.3		ug/L		112	79 - 124
1,2,4-Trichlorobenzene	20.0	18.5		ug/L		92	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	19.2		ug/L		96	54 - 125
1,2-Dibromoethane	20.0	22.2		ug/L		111	80 - 129
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 - 121
1,2-Dichloroethane	20.0	22.7		ug/L		114	77 - 121
1,2-Dichloropropane	20.0	20.9		ug/L		105	75 ₋ 120
1,3-Dichlorobenzene	20.0	23.0		ug/L		115	80 - 122
1,4-Dichlorobenzene	20.0	23.3		ug/L		116	80 - 120
2-Butanone (MEK)	100	88.0		ug/L		88	62 - 133
2-Hexanone	100	86.0		ug/L		86	60 - 142
4-Methyl-2-pentanone (MIBK)	100	85.4		ug/L		85	60 - 137
Acetone	100	87.4		ug/L		87	54 - 145
Benzene	20.0	20.6		ug/L		103	80 - 121
Bromodichloromethane	20.0	23.1		ug/L		115	75 - 129
Bromoform	20.0	21.2		ug/L		106	46 - 145
Bromomethane	20.0	21.4		ug/L		107	41 - 150
Carbon disulfide	20.0	21.4		ug/L		107	77 - 126
Carbon tetrachloride	20.0	25.5		ug/L		128	64 - 147
Chlorobenzene	20.0	23.1		ug/L		115	80 - 120
Chloroethane	20.0	20.7		ug/L		103	72 - 120
Chloroform	20.0	23.4		ug/L		117	73 - 129
Chloromethane	20.0	16.4		ug/L		82	12 - 150
cis-1,2-Dichloroethene	20.0	21.8		ug/L		109	76 - 125
cis-1,3-Dichloropropene	20.0	21.4		ug/L		107	74 - 140
Cyclohexane	20.0	19.7		ug/L		99	73 - 122
Dibromochloromethane	20.0	22.2		ug/L		111	69 - 133
Dichlorodifluoromethane	20.0	23.0		ug/L		115	37 - 127
Ethylbenzene	20.0	20.3		ug/L		101	80 - 130
sopropylbenzene	20.0	19.1		ug/L		95	80 - 141
Methyl acetate	40.0	39.5		ug/L		99	64 - 150
Methyl tert-butyl ether	20.0	20.8		ug/L		104	72 - 133
Methylcyclohexane	20.0	21.5		ug/L		108	71 - 129
Methylene Chloride	20.0	21.7		ug/L		108	79 - 123
Styrene	20.0	20.2		ug/L		101	80 - 127
Tetrachloroethene	20.0	22.8		ug/L		114	80 - 126
Toluene	20.0	20.8		ug/L		104	80 - 126
trans-1,2-Dichloroethene	20.0	21.3		ug/L		107	79 - 126
trans-1,3-Dichloropropene	20.0	20.6		ug/L		103	63 - 134
Trichloroethene	20.0	23.9		ug/L		120	80 - 123
Trichlorofluoromethane	20.0	24.8		ug/L		124	65 - 124
Vinyl chloride	20.0	20.2		ug/L		101	68 - 120
Xylenes, Total	40.0	39.9		ug/L		100	80 - 132

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: LCS 490-475225/3

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Matrix: Water

Analysis Batch: 475225

LCS LCS

Surrogate %Recovery Qualifier Limits Toluene-d8 (Surr) 70 - 130 99

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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 475225	0 11-		1.005				0/ D		D05
Analyte	Spike Added		LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane		24.2	Qualifier	ug/L		121	78 ₋ 135	2	15
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	69 - 131	2	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	26.3	*	ug/L		132	77 - 129	2	16
ne	20.0	20.0		ug/L		102	77 - 123	2	10
1,1,2-Trichloroethane	20.0	21.8		ug/L		109	80 - 124	1	13
1,1-Dichloroethane	20.0	21.9		ug/L		110	78 ₋ 125	2	17
1,1-Dichloroethene	20.0	23.7		ug/L		118	79 - 124	6	20
1,2,4-Trichlorobenzene	20.0	18.7		ug/L		94	63 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	19.5		ug/L		98	54 - 125	2	19
1,2-Dibromoethane	20.0	21.5		ug/L		108	80 - 129	3	13
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 - 121	0	12
1,2-Dichloroethane	20.0	23.2		ug/L		116	77 - 121	2	13
1,2-Dichloropropane	20.0	21.4		ug/L		107	75 - 120	2	15
1,3-Dichlorobenzene	20.0	23.1		ug/L		116	80 - 122	1	13
1,4-Dichlorobenzene	20.0	23.2		ug/L		116	80 - 120	0	12
2-Butanone (MEK)	100	95.9		ug/L		96	62 - 133	9	19
2-Hexanone	100	86.1		ug/L		86	60 - 142	0	17
4-Methyl-2-pentanone (MIBK)	100	87.1		ug/L		87	60 - 137	2	21
Acetone	100	90.2		ug/L		90	54 ₋ 145	3	23
Benzene	20.0	21.0		ug/L		105	80 - 121	2	12
Bromodichloromethane	20.0	23.4		ug/L		117	75 ₋ 129	1	14
Bromoform	20.0	21.2		ug/L		106	46 - 145	0	14
Bromomethane	20.0	22.0		ug/L		110	41 - 150	3	19
Carbon disulfide	20.0	21.8		ug/L		109	77 - 126	2	16
Carbon tetrachloride	20.0	25.4		ug/L		127	64 - 147	0	16
Chlorobenzene	20.0	22.3		ug/L		111	80 - 120	3	12
Chloroethane	20.0	21.7		ug/L		108	72 - 120	5	15
Chloroform	20.0	23.8		ug/L		119	73 - 129	2	14
Chloromethane	20.0	16.4		ug/L		82	12 - 150	0	20
cis-1,2-Dichloroethene	20.0	22.1		ug/L		111	76 - 125	1	15
cis-1,3-Dichloropropene	20.0	20.9		ug/L		104	74 - 140	2	15
Cyclohexane	20.0	19.9		ug/L		99	73 - 122	1	16
Dibromochloromethane	20.0	22.8		ug/L		114	69 - 133	3	13
Dichlorodifluoromethane	20.0	22.4		ug/L		112	37 - 127	2	16
Ethylbenzene	20.0	20.2		ug/L		101	80 - 130	0	12
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 141	1	13
Methyl acetate	40.0	40.4		ug/L		101	64 - 150	2	18
Methyl tert-butyl ether	20.0	21.4		ug/L		107	72 - 133	3	16
Methylcyclohexane	20.0	21.5		ug/L		107	71 - 129	0	17
Methylene Chloride	20.0	23.3		ug/L		116	79 - 123	7	15
Styrene	20.0	20.2		ug/L		101	80 - 127	0	12

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Analysis Batch: 475225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Tetrachloroethene	20.0	22.5		ug/L		112	80 - 126	1	17
Toluene	20.0	20.8		ug/L		104	80 - 126	0	13
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	79 - 126	0	15
trans-1,3-Dichloropropene	20.0	20.7		ug/L		103	63 - 134	0	13
Trichloroethene	20.0	23.7		ug/L		118	80 - 123	1	14
Trichlorofluoromethane	20.0	24.5		ug/L		122	65 - 124	1	22
Vinyl chloride	20.0	20.4		ug/L		102	68 - 120	1	15
Xylenes, Total	40.0	39.5		ug/L		99	80 - 132	1	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Lab Sample ID: MB 490-475277/6

Matrix: Water

Chloromethane

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 475277									
•	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/12/17 06:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/12/17 06:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/12/17 06:30	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/12/17 06:30	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/12/17 06:30	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/12/17 06:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/12/17 06:30	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/12/17 06:30	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/12/17 06:30	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/17 06:30	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/12/17 06:30	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/12/17 06:30	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/12/17 06:30	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/12/17 06:30	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/12/17 06:30	1
2-Hexanone	ND		10	1.3	ug/L			11/12/17 06:30	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/12/17 06:30	1
Acetone	ND		25	2.7	ug/L			11/12/17 06:30	1
Benzene	ND		1.0	0.20	ug/L			11/12/17 06:30	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/12/17 06:30	1
Bromoform	ND		1.0	0.29	ug/L			11/12/17 06:30	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/17 06:30	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/12/17 06:30	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/12/17 06:30	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/12/17 06:30	1
Chloroethane	ND		1.0	0.36	ug/L			11/12/17 06:30	1
Chloroform	ND		1.0	0.23	ug/L			11/12/17 06:30	1

TestAmerica Buffalo

11/12/17 06:30

1.0

0.36 ug/L

ND

Client: ARCADIS U.S. Inc

Analysis Batch: 475277

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: MB 490-475277/6

TestAmerica Job ID: 480-127094-1

Client Sample ID: Method Blank

p Type: Total/NA

Matrix: Water	Prep
Analysis Batch: 475277	
MP MP	

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.21	ug/L			11/12/17 06:30	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/12/17 06:30	1
Cyclohexane	ND		5.0	0.13	ug/L			11/12/17 06:30	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/12/17 06:30	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/12/17 06:30	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/12/17 06:30	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/12/17 06:30	1
Methyl acetate	ND		10	0.58	ug/L			11/12/17 06:30	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/12/17 06:30	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/12/17 06:30	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/12/17 06:30	1
Styrene	ND		1.0	0.28	ug/L			11/12/17 06:30	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/12/17 06:30	1
Toluene	ND		1.0	0.17	ug/L			11/12/17 06:30	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/12/17 06:30	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/12/17 06:30	1
Trichloroethene	ND		1.0	0.20	ug/L			11/12/17 06:30	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/12/17 06:30	1
Vinyl chloride	ND		1.0	0.18	ug/L			11/12/17 06:30	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/12/17 06:30	1

	MB	MB					
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	_		11/12/17 06:30	1
4-Bromofluorobenzene (Surr)	96		70 - 130			11/12/17 06:30	1
Dibromofluoromethane (Surr)	110		70 - 130			11/12/17 06:30	1
Toluene-d8 (Surr)	96		70 - 130			11/12/17 06:30	1

Lab Sample ID: LCS 490-475277/3 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

•	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	22.2		ug/L		111	78 - 135	
1,1,2,2-Tetrachloroethane	20.0	18.3		ug/L		92	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	23.1		ug/L		115	77 - 129	
ne								
1,1,2-Trichloroethane	20.0	19.9		ug/L		100	80 - 124	
1,1-Dichloroethane	20.0	20.3		ug/L		101	78 - 125	
1,1-Dichloroethene	20.0	21.4		ug/L		107	79 - 124	
1,2,4-Trichlorobenzene	20.0	17.0		ug/L		85	63 - 133	
1,2-Dibromo-3-Chloropropane	20.0	17.6		ug/L		88	54 - 125	
1,2-Dibromoethane	20.0	20.4		ug/L		102	80 - 129	
1,2-Dichlorobenzene	20.0	20.5		ug/L		102	80 - 121	
1,2-Dichloroethane	20.0	22.0		ug/L		110	77 - 121	
1,2-Dichloropropane	20.0	19.8		ug/L		99	75 - 120	
1,3-Dichlorobenzene	20.0	20.9		ug/L		105	80 - 122	
1,4-Dichlorobenzene	20.0	21.1		ug/L		106	80 - 120	
2-Butanone (MEK)	100	96.1		ug/L		96	62 - 133	

TestAmerica Buffalo

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TestAmerica Job ID: 480-127094-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 490-475277/3

Matrix: Water

Analysis Batch: 475277

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

7 maryolo Batom 47 0277	Spike	LCS	LCS		%Rec.
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits
2-Hexanone	100	82.1	ug/L	82	60 - 142
4-Methyl-2-pentanone (MIBK)	100	83.3	ug/L	83	60 - 137
Acetone	100	89.1	ug/L	89	54 ₋ 145
Benzene	20.0	20.0	ug/L	100	80 - 121
Bromodichloromethane	20.0	22.1	ug/L	111	75 ₋ 129
Bromoform	20.0	20.2	ug/L	101	46 - 145
Bromomethane	20.0	21.8	ug/L	109	41 - 150
Carbon disulfide	20.0	19.8	ug/L	99	77 ₋ 126
Carbon tetrachloride	20.0	23.2	ug/L	116	64 - 147
Chlorobenzene	20.0	21.3	ug/L	106	80 - 120
Chloroethane	20.0	21.0	ug/L	105	72 - 120
Chloroform	20.0	22.1	ug/L	111	73 - 129
Chloromethane	20.0	16.7	ug/L	83	12 - 150
cis-1,2-Dichloroethene	20.0	21.1	ug/L	106	76 ₋ 125
cis-1,3-Dichloropropene	20.0	19.0	ug/L	95	74 ₋ 140
Cyclohexane	20.0	18.3	ug/L	91	73 - 122
Dibromochloromethane	20.0	20.6	ug/L	103	69 - 133
Dichlorodifluoromethane	20.0	22.9	ug/L	114	37 - 127
Ethylbenzene	20.0	19.5	ug/L	97	80 - 130
Isopropylbenzene	20.0	19.0	ug/L	95	80 - 141
Methyl acetate	40.0	38.7	ug/L	97	64 - 150
Methyl tert-butyl ether	20.0	19.7	ug/L	98	72 ₋ 133
Methylcyclohexane	20.0	21.0	ug/L	105	71 - 129
Methylene Chloride	20.0	22.1	ug/L	110	79 ₋ 123
Styrene	20.0	19.0	ug/L	95	80 - 127
Tetrachloroethene	20.0	21.4	ug/L	107	80 - 126
Toluene	20.0	19.6	ug/L	98	80 - 126
trans-1,2-Dichloroethene	20.0	19.6	ug/L	98	79 - 126
trans-1,3-Dichloropropene	20.0	18.9	ug/L	95	63 - 134
Trichloroethene	20.0	22.8	ug/L	114	80 - 123
Trichlorofluoromethane	20.0	26.1	* ug/L	131	65 - 124
Vinyl chloride	20.0	19.4	ug/L	97	68 ₋ 120
Xylenes, Total	40.0	37.8	ug/L	95	80 - 132

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 130
4-Bromofluorobenzene (Surr)	91		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Lab Sample ID: LCSD 490-475277/4

Matrix: Water

Analysis Batch: 475277

Client Sample	ID: Lab	Contro	l Samp	ole Dup
		Prep Ty	/pe: To	otal/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane		22.4		ug/L		112	78 - 135	1	15
1,1,2,2-Tetrachloroethane	20.0	16.8		ug/L		84	69 - 131	8	15

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: LCSD 490-475277/4

Matrix: Water

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

Analysis Batch: 475277	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.8		ug/L		114	77 - 129	1	16
ne 1,1,2-Trichloroethane	20.0	19.9		ua/l		99	80 - 124	0	13
				ug/L			78 ₋ 125		
1,1-Dichloroethane	20.0	20.0		ug/L		100		1	17
1,1-Dichloroethene	20.0	21.1		ug/L		106	79 - 124	1	20
1,2,4-Trichlorobenzene	20.0	16.8		ug/L		84	63 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	17.8		ug/L		89 403	54 ₋ 125	1	19
1,2-Dibromoethane	20.0	20.4		ug/L		102	80 - 129	0	13
1,2-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 121	1	12
1,2-Dichloroethane	20.0	21.5		ug/L		107	77 ₋ 121	3	13
1,2-Dichloropropane	20.0	19.9		ug/L		100	75 - 120	1	15
1,3-Dichlorobenzene	20.0	20.4		ug/L		102	80 - 122	3	13
1,4-Dichlorobenzene	20.0	20.7		ug/L		104	80 - 120	2	12
2-Butanone (MEK)	100	92.2		ug/L		92	62 - 133	4	19
2-Hexanone	100	83.1		ug/L		83	60 - 142	1	17
4-Methyl-2-pentanone (MIBK)	100	82.3		ug/L		82	60 - 137	1	21
Acetone	100	90.4		ug/L		90	54 - 145	1	23
Benzene	20.0	19.6		ug/L		98	80 - 121	2	12
Bromodichloromethane	20.0	22.1		ug/L		111	75 - 129	0	14
Bromoform	20.0	20.7		ug/L		103	46 - 145	2	14
Bromomethane	20.0	22.2		ug/L		111	41 - 150	2	19
Carbon disulfide	20.0	19.5		ug/L		98	77 - 126	1	16
Carbon tetrachloride	20.0	23.2		ug/L		116	64 - 147	0	16
Chlorobenzene	20.0	20.8		ug/L		104	80 - 120	2	12
Chloroethane	20.0	21.0		ug/L		105	72 - 120	0	15
Chloroform	20.0	21.9		ug/L		109	73 - 129	1	14
Chloromethane	20.0	16.1		ug/L		80	12 - 150	4	20
cis-1,2-Dichloroethene	20.0	20.3		ug/L		101	76 - 125	4	15
cis-1,3-Dichloropropene	20.0	18.5		ug/L		93	74 - 140	3	15
Cyclohexane	20.0	18.5		ug/L		92	73 - 122	1	16
Dibromochloromethane	20.0	20.5		ug/L		103	69 - 133	0	13
Dichlorodifluoromethane	20.0	22.4		ug/L		112	37 - 127	2	16
Ethylbenzene	20.0	19.1		ug/L		95	80 - 130	2	12
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 141	0	13
Methyl acetate	40.0	37.8		ug/L		94	64 - 150	2	18
Methyl tert-butyl ether	20.0	19.9		ug/L		99	72 - 133	1	16
Methylcyclohexane	20.0	20.9		ug/L		104	71 - 129	1	17
Methylene Chloride	20.0	21.7		ug/L		108	79 - 123	2	15
Styrene	20.0	18.8		ug/L		94	80 - 127	1	12
Tetrachloroethene	20.0	21.1		ug/L		105	80 - 126	1	17
Toluene	20.0	19.5		ug/L		98	80 - 126	0	13
trans-1,2-Dichloroethene	20.0	19.2		ug/L		96	79 - 126	2	15
trans-1,3-Dichloropropene	20.0	18.7		ug/L		94	63 - 134	1	13
Trichloroethene	20.0	23.4		ug/L		117	80 - 123	3	14
Trichlorofluoromethane	20.0	26.0	*	ug/L		130	65 - 124	0	22
Vinyl chloride	20.0	19.1		ug/L		96	68 - 120	1	15
Xylenes, Total	40.0	37.0		ug/L		93	80 - 132	2	11

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: LCSD 490-475277/4

Matrix: Water

Analysis Batch: 475277

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

LCSD LCSD %Recovery Qualifier Surrogate Limits 1,2-Dichloroethane-d4 (Surr) 97 70 - 130 4-Bromofluorobenzene (Surr) 91 70 - 130 Dibromofluoromethane (Surr) 109 70 - 130 Toluene-d8 (Surr) 70 - 130 100

Lab Sample ID: 480-127094-2 MS

Matrix: Water

2-Hexanone

Analysis Batch: 475277

Client Sample ID: MW-21S Prep Type: Total/NA

MS MS %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 1,1,1-Trichloroethane ND 20.0 23.7 119 68 - 144 ug/L 1,1,2,2-Tetrachloroethane ND 20.0 19.6 ug/L 98 56 - 145 1,1,2-Trichloro-1,2,2-trifluoroetha ND 20.0 23.7 ug/L 118 63 - 150

20.0 20.7 104 70 - 130 1,1,2-Trichloroethane ND ug/L 1,1-Dichloroethane ND 20.0 20.6 ug/L 103 61 - 1391,1-Dichloroethene ND 20.0 21.5 ug/L 108 54 - 150 ND 20.0 81 47 - 147 1,2,4-Trichlorobenzene 16.1 ug/L 1,2-Dibromo-3-Chloropropane ND 20.0 18.3 ug/L 91 38 - 138

ND 20.0 105 1,2-Dibromoethane 21 1 ug/L 65 - 1371,2-Dichlorobenzene ND 20.0 20.7 ug/L 104 70 - 1301.2-Dichloroethane ND 20.0 22.8 ug/L 114 64 - 1361,2-Dichloropropane ND 20.0 20.6 ug/L 103 67 - 1301,3-Dichlorobenzene ND 20.0 20.8 ug/L 104 68 - 131

1,4-Dichlorobenzene ND 20.0 21.2 ug/L 106 70 - 130 2-Butanone (MEK) ND 100 109 ug/L 109 50 - 14387 44 - 150 ND 100 87.4 ug/L 100 4-Methyl-2-pentanone (MIBK) ND 87.5 ug/L 88 50 - 140

100 Acetone NΩ 92.1 ug/L 92 39 - 150 Benzene ND 20.0 20.3 ug/L 101 55 - 147 Bromodichloromethane ND 20.0 23 1 116 70 - 140 ug/L Bromoform ND 20.0 21.1 ug/L 105 53 - 150 Bromomethane ND 20.0 18.7 ug/L 93 30 - 150 Carbon disulfide ND 20.0 20.3 ug/L 102 35 - 150ug/L Carbon tetrachloride ND 20.0 24.3 121 56 - 150

ND 20.0 70 - 130 Chlorobenzene 21.4 ug/L 107 Chloroethane ND 20.0 20.9 ug/L 105 58 - 141 Chloroform 20.0 0.39 23.6 ug/L 116 66 - 138Chloromethane 20.0 77 ND 15.3 ug/L 10 - 150 cis-1,2-Dichloroethene 57 20.0 74.6 ug/L 89 68 - 131 cis-1,3-Dichloropropene ND 20.0 92 18.4 ug/L 70 - 133

ND 96 Cyclohexane 20.0 19.3 ug/L 48 - 150Dibromochloromethane ND 20.0 21.7 ug/L 108 66 - 140 Dichlorodifluoromethane ND 20.0 18.8 ug/L 94 10 - 150

Ethylbenzene ND 20.0 20.0 100 65 - 139 ug/L ug/L ND 20.0 19.3 96 70 - 137 Isopropylbenzene Methyl acetate ND 40.0 35.4 ug/L 88 42 - 136 Methyl tert-butyl ether ND 20.0 20.2 ug/L 101 55 - 141

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: 480-127094-2 MS

Client	Sam	ple ID:	MW-21S
	Prep	Type:	Total/NA

Matrix: Water Analysis Batch: 475277 Sample Sample Spike MS MS %Rec.

	Campic	Campic	Opike	1410	1410				/UINCC.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Methylcyclohexane	ND		20.0	21.2		ug/L		106	59 - 150	
Methylene Chloride	ND		20.0	21.6		ug/L		108	64 - 130	
Styrene	ND		20.0	17.8		ug/L		89	70 - 130	
Tetrachloroethene	58		20.0	78.5		ug/L		100	57 - 138	
Toluene	ND		20.0	19.9		ug/L		100	64 - 136	
trans-1,2-Dichloroethene	0.32	J	20.0	20.8		ug/L		102	59 - 143	
trans-1,3-Dichloropropene	ND		20.0	18.7		ug/L		93	63 - 142	
Trichloroethene	22		20.0	45.2		ug/L		117	63 - 135	
Trichlorofluoromethane	ND	*	20.0	27.0		ug/L		135	44 - 150	
Vinyl chloride	8.3		20.0	27.8		ug/L		98	57 - 150	
Xylenes, Total	ND		40.0	39.5		ug/L		99	69 - 132	

MS MS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 98 70 - 130 4-Bromofluorobenzene (Surr) 91 70 - 130 Dibromofluoromethane (Surr) 109 70 - 130 Toluene-d8 (Surr) 96 70 - 130

Lab Sample ID: 480-127094-2 MSD

Matrix: Water

Analysis Batch: 475277

Client Sample ID: MW-21S	
Prep Type: Total/NA	

•	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	ND		20.0	24.5		ug/L		123	68 - 144	3	17
1,1,2,2-Tetrachloroethane	ND		20.0	19.4		ug/L		97	56 - 145	1	20
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		20.0	23.8		ug/L		119	63 - 150	1	18
ne											
1,1,2-Trichloroethane	ND		20.0	21.6		ug/L		108	70 - 130	4	15
1,1-Dichloroethane	ND		20.0	21.5		ug/L		107	61 - 139	4	17
1,1-Dichloroethene	ND		20.0	22.5		ug/L		113	54 - 150	5	17
1,2,4-Trichlorobenzene	ND		20.0	17.4		ug/L		87	47 - 147	8	19
1,2-Dibromo-3-Chloropropane	ND		20.0	18.8		ug/L		94	38 - 138	3	24
1,2-Dibromoethane	ND		20.0	21.6		ug/L		108	65 - 137	2	15
1,2-Dichlorobenzene	ND		20.0	21.5		ug/L		107	70 - 130	3	15
1,2-Dichloroethane	ND		20.0	22.4		ug/L		112	64 - 136	2	17
1,2-Dichloropropane	ND		20.0	20.7		ug/L		103	67 - 130	0	17
1,3-Dichlorobenzene	ND		20.0	21.4		ug/L		107	68 - 131	3	15
1,4-Dichlorobenzene	ND		20.0	22.1		ug/L		110	70 - 130	4	15
2-Butanone (MEK)	ND		100	113		ug/L		113	50 - 143	3	19
2-Hexanone	ND		100	91.5		ug/L		92	44 - 150	5	15
4-Methyl-2-pentanone (MIBK)	ND		100	91.2		ug/L		91	50 - 140	4	17
Acetone	ND		100	93.3		ug/L		93	39 - 150	1	21
Benzene	ND		20.0	21.0		ug/L		105	55 - 147	4	17
Bromodichloromethane	ND		20.0	23.0		ug/L		115	70 - 140	1	18
Bromoform	ND		20.0	21.4		ug/L		107	53 - 150	2	16
Bromomethane	ND		20.0	20.8		ug/L		104	30 - 150	11	50
Carbon disulfide	ND		20.0	20.9		ug/L		105	35 - 150	3	21
Carbon tetrachloride	ND		20.0	25.4		ug/L		127	56 - 150	5	19
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TestAmerica Job ID: 480-127094-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: 480-127094-2 MSD

Matrix: Water

Analysis Batch: 475277

Client Sample ID: MW-21S **Prep Type: Total/NA**

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chlorobenzene	ND		20.0	22.3		ug/L		112	70 - 130	4	14
Chloroethane	ND		20.0	21.5		ug/L		107	58 - 141	3	20
Chloroform	0.39	J	20.0	23.8		ug/L		117	66 - 138	1	18
Chloromethane	ND		20.0	16.1		ug/L		80	10 - 150	5	31
cis-1,2-Dichloroethene	57		20.0	76.7		ug/L		99	68 - 131	3	17
cis-1,3-Dichloropropene	ND		20.0	19.5		ug/L		98	70 - 133	6	15
Cyclohexane	ND		20.0	20.1		ug/L		100	48 - 150	4	16
Dibromochloromethane	ND		20.0	22.4		ug/L		112	66 - 140	3	15
Dichlorodifluoromethane	ND		20.0	20.4		ug/L		102	10 - 150	8	18
Ethylbenzene	ND		20.0	21.0		ug/L		105	65 - 139	5	15
Isopropylbenzene	ND		20.0	20.2		ug/L		101	70 - 137	5	16
Methyl acetate	ND		40.0	34.2		ug/L		85	42 - 136	3	31
Methyl tert-butyl ether	ND		20.0	21.1		ug/L		106	55 - 141	5	16
Methylcyclohexane	ND		20.0	22.7		ug/L		114	59 - 150	7	19
Methylene Chloride	ND		20.0	22.4		ug/L		112	64 - 130	4	17
Styrene	ND		20.0	18.0		ug/L		90	70 - 130	1	24
Tetrachloroethene	58		20.0	80.5		ug/L		110	57 ₋ 138	3	16
Toluene	ND		20.0	21.2		ug/L		106	64 - 136	6	15
trans-1,2-Dichloroethene	0.32	J	20.0	21.3		ug/L		105	59 - 143	2	16
trans-1,3-Dichloropropene	ND		20.0	19.3		ug/L		97	63 - 142	3	14
Trichloroethene	22		20.0	44.4		ug/L		113	63 - 135	2	17
Trichlorofluoromethane	ND	*	20.0	28.1		ug/L		140	44 - 150	4	18
Vinyl chloride	8.3		20.0	28.8		ug/L		103	57 ₋ 150	3	17
Xylenes, Total	ND		40.0	40.1		ug/L		100	69 - 132	2	15
	1400										

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	89		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-194293/1-A

Matrix: Water

Analysis Batch: 194694

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

Prep Batch: 194293

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/13/17 10:03	11/14/17 17:05	1

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Client: ARCADIS U.S. Inc

13C3-PFBS 13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

11/13/17 10:03 11/14/17 17:05

11/13/17 10:03 11/14/17 17:05

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

Lab Sample ID: MB 320-194293/1-A **Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA**

matrix: Trator								. lop lypo. I	
Analysis Batch: 194694								Prep Batch:	194293
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorohexanesulfonic acid (PFHxS)	0.272	J	2.0	0.17	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/13/17 10:03	11/14/17 17:05	1
Perfluorooctane Sulfonamide (FOSA)	0.370	J	2.0	0.35	ng/L		11/13/17 10:03	11/14/17 17:05	1
	MB	MB							
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	89		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C4 PFBA	104		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C2 PFHxA	95		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C4 PFOA	89		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C5 PFNA	97		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C2 PFDA	103		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C2 PFUnA	99		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C2 PFDoA	91		25 - 150				11/13/17 10:03	11/14/17 17:05	1
1802 PFHxS	93		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C4 PFOS	92		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C4-PFHpA	99		25 - 150				11/13/17 10:03	11/14/17 17:05	1
13C5 PFPeA	102		25 - 150				11/13/17 10:03	11/14/17 17:05	1

Lab Sample ID: LCS 320-194293/2-A **Client Sample ID: Lab Control Sample Matrix: Water**

97

103

Prep Type: Total/NA Analysis Batch: 194694 **Prep Batch: 194293** LCS LCS Spike %Rec.

25 - 150

25 - 150

	Opino						/0.100.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Perfluorobutanoic acid (PFBA)	40.0	40.4		ng/L		101	78 - 138	
Perfluoropentanoic acid (PFPeA)	40.0	38.8		ng/L		97	66 - 136	
Perfluorohexanoic acid (PFHxA)	40.0	38.9		ng/L		97	76 ₋ 136	
Perfluoroheptanoic acid (PFHpA)	40.0	40.0		ng/L		100	78 ₋ 138	
Perfluorooctanoic acid (PFOA)	40.0	41.6		ng/L		104	70 - 130	
Perfluorononanoic acid (PFNA)	40.0	39.5		ng/L		99	77 - 137	
Perfluorodecanoic acid (PFDA)	40.0	40.3		ng/L		101	74 - 134	
Perfluoroundecanoic acid (PFUnA)	40.0	39.1		ng/L		98	68 - 128	
Perfluorododecanoic acid (PFDoA)	40.0	42.5		ng/L		106	72 - 132	
Perfluorotridecanoic Acid (PFTriA)	40.0	46.8		ng/L		117	56 - 163	
Perfluorotetradecanoic acid (PFTeA)	40.0	39.9		ng/L		100	63 - 123	
Perfluorobutanesulfonic acid (PFBS)	35.4	36.3		ng/L		103	79 - 139	
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.4		ng/L		95	77 - 137	

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: LCS 320-194293/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Analysis Batch: 194694 Prep Batch: 194293**

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Perfluoroheptanesulfonic Acid	38.1	38.6		ng/L		101	83 - 143	
(PFHpS)								
Perfluorooctanesulfonic acid	37.1	36.1		ng/L		97	74 - 134	
(PFOS)								
Perfluorodecanesulfonic acid	38.6	36.4		ng/L		94	75 ₋ 135	
(PFDS)								
Perfluorooctane Sulfonamide	40.0	41.3		ng/L		103	82 - 142	
(FOSA)								

(FOSA)			
	LCS	LCS	
Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	90		25 - 150
13C4 PFBA	108		25 - 150
13C2 PFHxA	102		25 - 150
13C4 PFOA	89		25 - 150
13C5 PFNA	101		25 - 150
13C2 PFDA	102		25 - 150
13C2 PFUnA	98		25 - 150
13C2 PFDoA	87		25 - 150
1802 PFHxS	94		25 - 150
13C4 PFOS	96		25 - 150
13C4-PFHpA	102		25 - 150
13C5 PFPeA	102		25 - 150
13C3-PFBS	99		25 - 150
13C2-PFTeDA	94		25 - 150

Lab Sample ID: LCSD 320-194293/3-A Client Sample ID: Lab Control Sample Dup

Perfluoroheptanesulfonic Acid

(PFHpS)

Matrix: Water Prep Type: Total/NA Analysis Batch: 194694 Prep Batch: 194293 Spike LCSD LCSD %Rec. **RPD** Added **Analyte** Result Qualifier Unit Limits RPD D %Rec Limit Perfluorobutanoic acid (PFBA) 40.0 41.6 ng/L 104 78 - 138 3 30 Perfluoropentanoic acid (PFPeA) 40.0 38.5 ng/L 96 66 - 136 30 Perfluorohexanoic acid (PFHxA) 40.0 40.3 101 30 ng/L 76 - 136 30 Perfluoroheptanoic acid (PFHpA) 40.0 40.6 ng/L 102 78 - 138 Perfluorooctanoic acid (PFOA) 40.0 39.8 ng/L 100 70 - 130 30 40.0 Perfluorononanoic acid (PFNA) 38.7 ng/L 97 77 - 137 2 30 Perfluorodecanoic acid (PFDA) 40.0 30 39.9 ng/L 100 74 - 134 40.0 38.0 95 68 - 128 3 30 Perfluoroundecanoic acid ng/L (PFUnA) 40.0 40.8 ng/L 102 72 - 132 30 Perfluorododecanoic acid (PFDoA) Perfluorotridecanoic Acid 40.0 47.1 ng/L 118 56 - 163 30 (PFTriA) 40.0 39.0 ng/L 98 63 - 1232 30 Perfluorotetradecanoic acid (PFTeA) 35.4 34.4 ng/L 97 79 - 139 5 30 Perfluorobutanesulfonic acid (PFBS) 36.4 36.0 99 77 - 137 30 ng/L Perfluorohexanesulfonic acid (PFHxS)

TestAmerica Buffalo

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41.5

ng/L

109

83 - 143

38.1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: LCSD 320-194293/3-A

TestAmerica Job ID: 480-127094-1

Client Sample ID: Lab Control Sample Dup

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

Matrix: Water Analysis Batch: 194694							Prep Typ Prep Ba		
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorooctanesulfonic acid (PFOS)	37.1	36.4		ng/L		98	74 - 134	1	30
Perfluorodecanesulfonic acid (PFDS)	38.6	38.1		ng/L		99	75 - 135	5	30
Perfluorooctane Sulfonamide (FOSA)	40.0	42.2		ng/L		106	82 - 142	2	30

	LCSD	LCSD	
Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	88		25 - 150
13C4 PFBA	103		25 - 150
13C2 PFHxA	98		25 - 150
13C4 PFOA	90		25 - 150
13C5 PFNA	97		25 - 150
13C2 PFDA	97		25 - 150
13C2 PFUnA	98		25 - 150
13C2 PFDoA	88		25 - 150
1802 PFHxS	89		25 - 150
13C4 PFOS	89		25 - 150
13C4-PFHpA	96		25 - 150
13C5 PFPeA	101		25 - 150
13C3-PFBS	104		25 - 150
13C2-PFTeDA	100		25 - 150

Lab Sample ID: 480-127094-2 MS

Matrix: Water Analysis Batch: 194694	Sample	Sample	Spike	MS	MS				Prep Type: Total/NA Prep Batch: 194293 %Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	26		43.6	72.5		ng/L		107	78 - 138
Perfluoropentanoic acid (PFPeA)	74		43.6	120		ng/L		107	66 - 136
Perfluorohexanoic acid (PFHxA)	66		43.6	116		ng/L		116	76 ₋ 136
Perfluoroheptanoic acid (PFHpA)	48		43.6	86.6		ng/L		89	78 ₋ 138
Perfluorooctanoic acid (PFOA)	110		43.6	154		ng/L		94	70 - 130
Perfluorononanoic acid (PFNA)	29		43.6	71.3		ng/L		96	77 - 137
Perfluorodecanoic acid (PFDA)	87		43.6	131		ng/L		101	74 ₋ 134
Perfluoroundecanoic acid (PFUnA)	7.6		43.6	48.5		ng/L		94	68 - 128
Perfluorododecanoic acid (PFDoA)	2.4		43.6	46.1		ng/L		100	72 - 132
Perfluorotridecanoic Acid (PFTriA)	ND		43.6	49.6		ng/L		114	56 - 163
Perfluorotetradecanoic acid (PFTeA)	ND		43.6	41.5		ng/L		95	63 - 123
Perfluorobutanesulfonic acid (PFBS)	35		38.5	77.0		ng/L		109	79 - 139
Perfluorohexanesulfonic acid (PFHxS)	8.8	В	39.7	46.3		ng/L		95	77 - 137
Perfluoroheptanesulfonic Acid (PFHpS)	3.7		41.5	46.3		ng/L		103	83 - 143
Perfluorooctanesulfonic acid	480		40.5	517	4	ng/L		96	74 - 134

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Client Sample ID: MW-21S

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

Lab Sample ID: 480-1270 Matrix: Water	94-2 MS							Clier	nt Sample ID: MW-21S Prep Type: Total/NA
Analysis Batch: 194694									Prep Batch: 194293
	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Perfluorodecanesulfonic acid (PFDS)	ND		42.0	40.2		ng/L		96	75 - 135
Perfluorooctane Sulfonamide (FOSA)	4.5	В	43.6	49.5		ng/L		103	82 - 142
(,	MS	MS							
Isotope Dilution	%Recovery	Qualifier	Limits						
13C8 FOSA	87		25 - 150						
13C4 PFBA	66		25 - 150						
13C2 PFHxA	83		25 - 150						
13C4 PFOA	84		25 - 150						
13C5 PFNA	94		25 - 150						
13C2 PFDA	109		25 - 150						
13C2 PFUnA	100		25 - 150						
13C2 PFDoA	90		25 - 150						
18O2 PFHxS	85		25 - 150						
13C4 PFOS	89		25 - 150						
13C4-PFHpA	88		25 - 150						
13C5 PFPeA	82		25 - 150						
13C3-PFBS	93		25 - 150						
13C2-PFTeDA	93		25 - 150						

Lab Sample ID: 480-127094-2 MSD

Matrix: Water									Prep Ty	pe: Tot	al/NA
Analysis Batch: 194694									Prep Ba	itch: 19) 4293
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorobutanoic acid (PFBA)	26		41.1	70.3		ng/L		108	78 - 138	3	30
Perfluoropentanoic acid (PFPeA)	74		41.1	116		ng/L		103	66 - 136	4	30
Perfluorohexanoic acid (PFHxA)	66		41.1	108		ng/L		103	76 - 136	7	30
Perfluoroheptanoic acid (PFHpA)	48		41.1	89.2		ng/L		101	78 - 138	3	30
Perfluorooctanoic acid (PFOA)	110		41.1	151		ng/L		93	70 - 130	2	30
Perfluorononanoic acid (PFNA)	29		41.1	73.3		ng/L		107	77 - 137	3	30
Perfluorodecanoic acid (PFDA)	87		41.1	134		ng/L		114	74 - 134	2	30
Perfluoroundecanoic acid	7.6		41.1	49.0		ng/L		101	68 - 128	1	30
(PFUnA) Perfluorododecanoic acid (PFDoA)	2.4		41.1	46.8		ng/L		108	72 - 132	2	30
Perfluorotridecanoic Acid (PFTriA)	ND		41.1	46.6		ng/L		114	56 - 163	6	30
Perfluorotetradecanoic acid (PFTeA)	ND		41.1	40.6		ng/L		99	63 - 123	2	30
Perfluorobutanesulfonic acid (PFBS)	35		36.3	78.1		ng/L		118	79 - 139	1	30
Perfluorohexanesulfonic acid (PFHxS)	8.8	В	37.4	46.4		ng/L		101	77 - 137	0	30
Perfluoroheptanesulfonic Acid (PFHpS)	3.7		39.1	48.2		ng/L		114	83 - 143	4	30
Perfluorooctanesulfonic acid (PFOS)	480		38.1	514	4	ng/L		97	74 - 134	0	30
Perfluorodecanesulfonic acid (PFDS)	ND		39.6	39.6		ng/L		100	75 - 135	2	30

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Client Sample ID: MW-21S

Client: ARCADIS U.S. Inc

13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

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

92

Lab Sample ID: 480-12709 Matrix: Water Analysis Batch: 194694	94-2 MSD							Clier	nt Sample Prep Ty Prep Ba	pe: Tot	al/NA
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorooctane Sulfonamide (FOSA)	4.5	В	41.1	48.5		ng/L		107	82 - 142	2	30
,	MSD	MSD									
Isotope Dilution	%Recovery	Qualifier	Limits								
13C8 FOSA	88		25 - 150								
13C4 PFBA	66		25 - 150								
13C2 PFHxA	86		25 - 150								
13C4 PFOA	85		25 - 150								
13C5 PFNA	94		25 - 150								
13C2 PFDA	107		25 - 150								
13C2 PFUnA	105		25 - 150								
13C2 PFDoA	91		25 - 150								
1802 PFHxS	88		25 - 150								
13C4 PFOS	90		25 - 150								
13C4-PFHpA	87		25 - 150								
13C5 PFPeA	85		25 - 150								
13C3-PFBS	92		25 - 150								

25 - 150

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

GC/MS VOA

Analysis Batch: 474930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
480-127094-1	MW-22(R)D	Total/NA	Water	8260C
MB 490-474930/6	Method Blank	Total/NA	Water	8260C
LCS 490-474930/3	Lab Control Sample	Total/NA	Water	8260C
LCSD 490-474930/4	Lab Control Sample Dup	Total/NA	Water	8260C

Analysis Batch: 475225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127094-3	TRIP BLANKS	Total/NA	Water	8260C	
MB 490-475225/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475225/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475225/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 475277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127094-2	MW-21S	Total/NA	Water	8260C	_
MB 490-475277/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475277/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475277/4	Lab Control Sample Dup	Total/NA	Water	8260C	
480-127094-2 MS	MW-21S	Total/NA	Water	8260C	
480-127094-2 MSD	MW-21S	Total/NA	Water	8260C	

LCMS

Prep Batch: 194293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127094-1	MW-22(R)D	Total/NA	Water	3535	
480-127094-2	MW-21S	Total/NA	Water	3535	
MB 320-194293/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-194293/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-194293/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
480-127094-2 MS	MW-21S	Total/NA	Water	3535	
480-127094-2 MSD	MW-21S	Total/NA	Water	3535	

Analysis Batch: 194694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127094-1	MW-22(R)D	Total/NA	Water	537 (modified)	194293
480-127094-2	MW-21S	Total/NA	Water	537 (modified)	194293
MB 320-194293/1-A	Method Blank	Total/NA	Water	537 (modified)	194293
LCS 320-194293/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	194293
LCSD 320-194293/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	194293
480-127094-2 MS	MW-21S	Total/NA	Water	537 (modified)	194293
480-127094-2 MSD	MW-21S	Total/NA	Water	537 (modified)	194293

TestAmerica Buffalo

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11/20/2017

Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Lab Sample ID: 480-127094-1

Matrix: Water

Client Sample ID: MW-22(R)D Date Collected: 11/03/17 09:35 Date Received: 11/04/17 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	474930	11/10/17 21:31	P1B	TAL NSH
Total/NA	Prep	3535			194293	11/13/17 10:03	CCB	TAL SAC
Total/NA	Analysis	537 (modified)		1	194694	11/14/17 18:55	ABH	TAL SAC

Client Sample ID: MW-21S Lab Sample ID: 480-127094-2

Date Collected: 11/03/17 11:40 Matrix: Water

Date Received: 11/04/17 09:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475277	11/12/17 06:56	AK1	TAL NSH
Total/NA	Prep	3535			194293	11/13/17 10:03	CCB	TAL SAC
Total/NA	Analysis	537 (modified)		1	194694	11/14/17 19:03	ABH	TAL SAC

Client Sample ID: TRIP BLANKS Lab Sample ID: 480-127094-3

Date Collected: 11/03/17 00:00 Matrix: Water

Date Received: 11/04/17 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	-		475225	11/11/17 18:19	S1S	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

Laboratory: TestAmerica Nashville

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 Dat
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	01-01-18
Arizona	State Program	9	AZ0473	05-05-18
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2L A)	12-31-17
Illinois	NELAP	5	200010	12-09-17
lowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	12-31-17
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-18
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	<u> </u>	8	R-146	06-30-18
Ohio VAP	State Program	5	CL0033	07-06-19
	State Program		9412	
Oklahoma	State Program	6		08-31-18
Oregon	NELAP	10	TN200001	04-27-18
Pennsylvania Blacks Island	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-18
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-18
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-18
Wyoming (UST)	A2LA	8	453.07	12-31-17

TestAmerica Buffalo

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Accreditation/Certification Summary

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-127094-1

Project/Site: Crown Dykman - Glen Cove, NY

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	UST-055 12-18-17 AZ0708 08-11-18	
Arizona	State Program	9	88-0691 06-17-18	
Arkansas DEQ	State Program	6	88-0691	06-17-18
California	State Program	9	2897	01-31-18
Colorado	State Program	8	CA00044	08-31-18
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-18
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-18
Illinois	NELAP	5	200060	03-17-18
Kansas	NELAP	7	E-10375	10-31-17 *
L-A-B	DoD ELAP		L2468	01-20-18
Louisiana	NELAP	6	30612	06-30-18
Maine	State Program	1	CA0004	04-18-18
Michigan	State Program	5	9947	01-31-18
Nevada	State Program	9	CA00044	07-31-18
New Hampshire	NELAP	1	2997	04-18-18
New Jersey	NELAP	2	CA005	06-30-18
New York	NELAP	2	11666	04-01-18
Oregon	NELAP	10	4040	01-28-18
Pennsylvania	NELAP	3	68-01272	03-31-18
Texas	NELAP	6	T104704399	05-31-18
US Fish & Wildlife	Federal		LE148388-0	07-31-18
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-18
Virginia	NELAP	3	460278	03-14-18
Washington	State Program	10	C581	05-05-18
West Virginia (DW)	State Program	3	9930C	12-31-17
Wyoming	State Program	8	8TMS-L	01-28-19

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

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127094-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-127094-1	MW-22(R)D	Water	11/03/17 09:35	11/04/17 09:00
480-127094-2	MW-21S	Water	11/03/17 11:40	11/04/17 09:00
480-127094-3	TRIP BLANKS	Water	11/03/17 00:00	11/04/17 09:00

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10 Hazelwood Drive Amherst, NY 14228-2298 Phone (716) 691-2600 Fax (716) 891-7991	Chain of Custody Record	tody Record	TestAmerico
Client Information	Sampler AThomas	Lab PM Deyo, Melissa L	Coc No. (20c No.) (480-104070-24647.4
Client Contact Aaron Bobar	Pronof (518) 396 7296	E-Mail. melissa deyo@testamericainc.com	Page Page 4 of 10
Company ARCADIS U.S. Inc		Analysis Requested	Job#:
Address. 855 Route 146 Suite 210	Due Date Requested:		
Griy Clifton Park	TAT Requested (days):		A - HCL B - NaOH C - Zn Acetate
State, Zip. NY, 12065	Stangara		D - Nitric Acid E - Nat/504
(San 360-7300	PO# 00266417.0000	(0	F - MeOH G - Amchior H - Assorbite A
Email aaron.bobar@arcadis-us.com	#OM	(on	J. Di Water 480.
Project Name. Crown Dykman - Glen Cove, NY	Project # 48008440	10 50	
"Crawn Byloman	SSOW#.	Y) OSI	of cor
0	Sample Type	Matrix (Www.mm. MS/M.) Escolid Fillsoned TCL Vo.	1edmuM
Sample Identification		Field Perio	ह्य Special Instructions/Note:
() () () () () () () () () ()	X:	Preservation Code: X A N	
MW-AACKID	-170935	water NNX X	S
MW-AIS	11-3-17 1140 6	water MYXX	\$2 <u></u>
Trip Blanks	1	water M N X	೧೯
		Water	
	- 1	Water	
1	11/5-1	Water	
1		Water	
		Water	
ant	☐ Poison B ☐ Unknown ☐ Radiological	Sample Disposal (A fee may be	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Months
ested: I, II, III, IV, Other (specify)		Requirem	
Empty Kit Relinquished by:	Date:	0	Method of Shipment
Reinquisted by	1330	adis	Date/This/, 7/ 15,71 Company
Reimquished by Wood 94	Date Time	Company Recovered Company	Company (17 09W) Company
100			
			AU TI

Phone (716) 691-2600 Fax (716) 691-7991				THE LEADER IN ERVISONMENTAL TESTING
Client Information	AThoma	Melissa L	Camer Tracking No(s):	COC No 480-104070-24647.4
Client Contact Aaron Bobar	Phone (518) 396 7296	E-Mail: melissa deyo@testamericainc.com		Page 4 of 10
Company ARCADIS U.S. Inc		Analysis Requested	sted	Job #
Address: 855 Route 146 Suite 210	Due Date Requested:			:sep
City Cuffron Park State, Zip No. 4 onder	TAT Requested (days): Stannolous			A - HCL. M - Hazane B - NaOH N - None C - Zn Acetate O - ANAOCZ D - Nitric Acid P - Na2O4S E - NaHSO4 O - Na2S63
(SIN 360-1300	PO#: 00266417.0000	(6		F - MeOH R - Na2S203 G - Amchlor S - H2SO4 H - Assorbic Acid T - TSP Dodecahudrate
Email: aaron.bobar@arcadis-us.com	WO#	ION		1 - Ice J - DI Water
Project Name Crown Dykman - Glen Cove, NY	Project #: 48008440	Jo se	ienist	K-EDTA L-EDA
"Eraun Bytemain	SSOW#:	ISD (Y	100 10	Other:
	Sample (C=comp.	Matrix (Www.su.) (Www.su.) Saranda Saranda (Www.su.) Saranda (Ww.su.) Saranda (Www.su.) Saranda (Www.su.) Saranda (Www.su.) Saranda (Ww.su.) Saranda (Ww.su.) Saranda (Ww.su.) Saranda (Ww.su.)	Tedmu N ista	
Sample Identification	G=grab)	1 H	17	Special Instructions/Note:
MW-AALA)D	11-3-170935 G	X	n	
MW-AIS	11-3-17 1140 6	Water NY X X	92	Z.
Trip Blanks	1	water MNX		78
		Water		
	1.2.0	Water	0000	
JAY -		Water		
		Water		
		Water		
		Water	480-127094	480-127094 Chain of Custody
		Water	1 1 1 18	5
Possible Hazard Identification Skin Irritant Politocoblo Douged II III W. Ottor (specific)	☐ Poison B ☐ Unknown ☐ Radiological	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Social Instructional D. Benuiroments. Mon	assessed if samples are retai	stained longer than 1 month) Archive For Months
Deliverable requested. J. III, IV, Other (specify) Emoty Kit Relinquished by:	Date	Time:	Method of Shipment	
Relinquished by:	47 (220)	Company Cod Co Received by Co	/ C. / Sm/Tmg	18.31 Company
Relinquished by Woogly	3/17 (70	Company Received by:	Date/Time Date/Time	430 Company
Custody Seals Intact Custody Seal No.		Cooler Temperature(s) °C and Other Remarks	C.0	



THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM -

Cooler Received/Opened On11/10/170950	
Time Samples Removed From Cooler Time Samples Placed In Storage	(2 Hour Window)
1. Tracking #(last 4 digits, FedEx) Courier:FedEx	
IR Gun ID97310166 pH Strip Lot Chlorine Strip Lot	_
2. Temperature of rep. sample or temp blank when opened: 155 Degrees Celsius	
3. If Item #2 temperature is 0° C or less, was the representative sample or temp blank frozen?	YES NO. (NA
4. Were custody seals on outside of cooler?	YESNONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	(ES)NONA
6. Were custody papers inside cooler?	YES(NO)NA
I certify that I opened the cooler and answered questions 1-6 (intial)	es
7. Were custody seals on containers: YES (NO) and Intact	YESNO.(.NA
Were these signed and dated correctly?	YESNONA
8. Packing mat'l used? Bubblewrap Blastic bag Peanuts Vermiculite Foam Insert Pape	r Other None
9. Cooling process: (Ice Ice-pack Ice (direct contact) Dry Ice	Other None
10. Did all containers arrive in good condition (unbroken)?	(YES),.NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	YE9NONA
12. Did all container labels and tags agree with custody papers?	YES. NONA
13a. Were VOA vials received?	YES. NONA
b. Was there any observable headspace present in any VOA vial?	YESNONA
Larger than this.	
	,
14. Was there a Trip Blank in this cooler? (FS)NONA If multiple coolers, sequence	
I certify that I unloaded the cooler and answered questions 7-14 (intial)	
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO.(NA)
b. Did the bottle labels indicate that the correct preservatives were used	YES)NONA
16. Was residual chlorine present?	YESNO. NA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	<u>es</u>
17. Were custody papers properly filled out (ink, signed, etc)?	YES. NONA
18. Did you sign the custody papers in the appropriate place?	YES).NONA
19. Were correct containers used for the analysis requested?	YE9NONA
20. Was sufficient amount of sample sent in each container?	YE8NONA
1 certify that I entered this project into LIMS and answered questions 17-20 (intial)	es
certify that I attached a label with the unique LIMS number to each container (intial)	es_
21. Were there Non-Conformance issues at login? YES. NO Was a NCM generated? YES. NO	# <u>es</u>

BIS = Broken in shipment Cooler Receipt Form.doc

LF-1 End of Form Revised 8/23/17

480-127094 FestAmerica	OC NO:	New York Page:		Preservation Codes:	A-HCL	D - NaCon C - Zn Actatre O - AsNaCO D - Nitric Acid P - Na2O4S	E - NaHSO4 F - MeOH	.0	I - Ice J - Di Water	K-EDTA L-EDA	O too to	JedimuM lei	Special Instructions/Note:	C.	en	, m	, o	- Z-	Sec. 1		Note: Since laboratory accreditations are subject to change. Test/America Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the Sites date above for can analysishesstrative bride above for analysishesstrative bride. Shipped backs for the TestArmerica Laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, inc. at la requested accreditations are current to date, return the signed Chain of Custody streeting to said complicance to TestAmerica.	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	Disposal By Lab Archive For Months			Datarfine: Company	Date/Time: Company	ar Remarks:
	Lab PM: Deyo, Melissa L	E-Mail: melissa devo@testamericainc.com	Accrediations Required (See note):	Action of a state of a	Alalysis	The state of the s		- (c		1 10 Se	sp (Ye	Matrix (www.matrix Sassida, Sa	z8 ×	X XXXX	Water	Water	Water	Water			accreditation compliance upon out subcontract laboratori b back for the TestAmerical aboratory or other instructions to said complicance to TestAmerica Laboratories. Inc.	Sample Disposal (A fee may b	Return To Client Disp. Special Instructions/OC Requirements:		I Ime: Received by:	Company Received by:	Company Received by:	Cooler Temperature(s) °C and Other Remarks:
Chain of Custody Record	er:			Due Date Requested:	TAT Requested (days):					t#: 8440	#	Sample Type Sample (C=comp,	G=grab) Preserva	+		WS	11/3/17 11:40 MSD v				nc. places the ownership of method, analyte & a x being analyzed, the samples must be shipped ke return the signed Chain of Ouslooky attesting		Primary Deliverable Rank: 2	9	Index 1 Comp	20/1 20/1		
TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Phone (716) 691-2600 Fax (716) 691-7991	Client Information (Sub Contract Lab)	ł	Company: TestAmerics I aboratories Inc		-	hville , Zip.	I.N, 37204	PIORE: 615-726-0177(Tel) 615-726-3404(Fax)	Email: WO#:	Project Name: Project Name: Crown Dykman - Glen Cove, NY 48008440			Sample Identification - Client ID (Lab ID)	MW-22(R)D (480-127094-1)	MW-21S (480-127094-2)	MW-21S (480-127094-2MS)	MW-21S (480-127094-2MSD)	TRIP BLANKS (480-127094-3)			Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, In currently maintain accreditation in the State of Origin listed above for enalysishestshmetry (Laboratories, Inc., attention immediately. If all requested accreditations are current to data	Possible Hazard Identification	Unconfirmed Deliverable Requested: 1. II. IV. Other (specify) Prima		Empty Kit Kelinquished by: Relinquished by:	Relinquished by: Cate/Time	Relinquished by: Date/Time:	Custody Seals Infact: Custody Seal No.:

Testamerica THE BEADER IN ENVIRONMENTAL TESTING

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Job:

Tracking # 7706 68 16 6976 P. O Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC. ID: AK-2 / AK-3 / HACCP /Other Notes: Cooler Custody Seal: Sample Custody Seal: Cooler ID: Temp: Observed_ Corrected: Sample A From: Temp Blank No D NCM Filed: Yes D Perchlorate has headspace? ---Ø CoC is complete w/o discrepancies? Samples received within holding time? À Sample preservatives verified? Cooler compromised/tampered with? Samples compromised/tampered-with? COC and Samples w/o discrepancies? Sample containers have legible labels? Containers are not broken or leaking? Sample date/times are provided. D Appropriate containers are used? Sample bottles are completely filled? Zero headspace?* Multiphasic samples are not present? Date: 1/04/17

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

RIGIN ID:TSSA ESTAMERICA NYC

(212) 643-2367

SHIP DATE 03NOV17 ACTWGT: 10.00 LB CAD 101905570/INET392

BAL THURD PARTY

TO SAMPLE RECEIVING SAC TESTAMERICA 880 RIVERSIDE PKWY

WEST SACRAMENTO CA 95605

PO PO

End Ev





RK# 7706 6816 6976

SATURDAY 12:00P PRIORITY OVERNIGHT

X0 BLUA

95605 CA-US SMF



Client: ARCADIS U.S. Inc Job Number: 480-127094-1

Login Number: 127094 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

eroutori aumoni aum m		
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	

TestAmerica BuffaloPage 45 of 46

11/20/2017

Client: ARCADIS U.S. Inc Job Number: 480-127094-1

List Source: TestAmerica Sacramento
List Number: 2
List Source: TestAmerica Sacramento
List Creation: 11/07/17 01:52 PM

Creator: Turpen, Trov

Creator: Turpen, Troy		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	N/A	
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	
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	
lultiphasic samples are not present. amples do not require splitting or compositing.	True	

TestAmerica Buffalo



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-127162-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

Melisso Deyo Authorized for release by: 11/22/2017 9:57:26 AM

Melissa Deyo, Project Manager I (716)504-9874

melissa.deyo@testamericainc.com

-----LINKS -----

Review your project results through Total Access

Have a Question?



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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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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.
В	Compound was found in the blank and sample.
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect
	there may be a high bias.

Glossary

RL

RPD

TEF

TEQ

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

Reporting Limit or Requested Limit (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Relative Percent Difference, a measure of the relative difference between two points

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Job ID: 480-127162-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-127162-1

Receipt

The samples were received on 11/7/2017 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-475225 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following samples was diluted due to the nature of the sample matrix: MW-10S (480-127162-1), MW-10D (480-127162-3), MW-18 (480-127162-4) and MW-11 (480-127162-6). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-474935 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane, Dichlorodifluoromethane and Trichlorofluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following sample was diluted due to the nature of the sample matrix: MW-8 (480-127162-5). 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.

LCMS

Method(s) 537 (modified): The following samples were diluted to bring the concentration of Perfluorooctanesulfonic acid (PFOS) within the calibration range: MW-8 (480-127162-5) and MW-11 (480-127162-6). Elevated reporting limits (RLs) are provided.

Method(s) 537 (modified): The peak identified by the data system exhibited chromatographic interference that could not be resolved for Perfluorobutanoic acid (PFBA). There is reason to suspect there my be a high bias in the following samples: MW-10D (480-127162-3), MW-8 (480-127162-5) and MW-11 (480-127162-6).

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-10D (480-127162-3), MW-18 (480-127162-4), MW-8 (480-127162-5) and MW-11 (480-127162-6) were decanted prior to preparation due to containing excess sediment that had the potential to clog the solid-phase column.

Prep Batch: 320-194884 Method Code: 3535 PFC

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

VOA Prep

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

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TestAmerica Job ID: 480-127162-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-10S

Lab Sample ID: 480-127162-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	550		5.0	1.1	ug/L	5	8260C	Total/NA
Tetrachloroethene	560		5.0	0.70	ug/L	5	8260C	Total/NA
trans-1,2-Dichloroethene	2.9	J	5.0	1.2	ug/L	5	8260C	Total/NA
Trichloroethene	210		5.0	1.0	ug/L	5	8260C	Total/NA
Vinyl chloride	33		5.0	0.90	ug/L	5	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	21		2.1	0.36	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	14		2.1	0.51	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	15		2.1	0.60	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	13		2.1	0.26	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	38		2.1	0.88	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	5.0		2.1	0.28	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	9.5		2.1	0.32	ng/L	1	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.1	J	2.1	1.1	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	9.8		2.1	0.21	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	7.3	В	2.1	0.18	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.2	J	2.1	0.20	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	120		2.1	0.56	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.1	J	2.1	0.36	ng/L	1	537 (modified)	Total/NA

Client Sample ID: MW-5R

Lab Sample ID: 480-127162-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.31	J	1.0	0.24	ug/L		_	8260C	Total/NA
1,1-Dichloroethene	0.38	J	1.0	0.25	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.1		1.0	0.21	ug/L	1		8260C	Total/NA
Trichloroethene	0.26	J	1.0	0.20	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	28		2.1	0.36	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	30		2.1	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	41		2.1	0.60	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	44		2.1	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	120		2.1	0.88	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	5.8		2.1	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.55	J	2.1	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.6	J	2.1	1.1	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	53		2.1	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	25	В	2.1	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	2.1		2.1	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	52		2.1	0.56	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-10D

Lab Sample ID: 480-127162-3

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
1,1-Dichloroethene	2.2 J	5.0	1.3	ug/L	5	8260C	Total/NA
cis-1,2-Dichloroethene	830	5.0	1.1	ug/L	5	8260C	Total/NA
Tetrachloroethene	400	5.0	0.70	ug/L	5	8260C	Total/NA
trans-1,2-Dichloroethene	5.1	5.0	1.2	ug/L	5	8260C	Total/NA
Trichloroethene	420	5.0	1.0	ug/L	5	8260C	Total/NA
Vinyl chloride	4.3 J	5.0	0.90	ug/L	5	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	32 CI	2.0	0.35	ng/L	1	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-10D (Continued)

TestAmerica Job ID: 480-127162-1

Lab Sample ID: 480-127162-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	5.6		2.0	0.49	ng/L	1	_	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	11		2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	7.4		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	31		2.0	0.85	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.2		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.2	J	2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.5		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.5	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.92	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	75		2.0	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.66	J	2.0	0.35	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-18 Lab Sample ID: 480-127162-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	940		5.0	1.1	ug/L		8260C	Total/NA
Tetrachloroethene	78		5.0	0.70	ug/L	5	8260C	Total/NA
trans-1,2-Dichloroethene	5.6		5.0	1.2	ug/L	5	8260C	Total/NA
Trichloroethene	520		5.0	1.0	ug/L	5	8260C	Total/NA
Vinyl chloride	40		5.0	0.90	ug/L	5	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	20		2.0	0.35	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	24		2.0	0.48	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	23		2.0	0.57	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	17		2.0	0.25	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	49		2.0	0.84	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	7.5		2.0	0.27	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	12		2.0	0.31	ng/L	1	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.3	J	2.0	1.1	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	15		2.0	0.20	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.8	В	2.0	0.17	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.3	J	2.0	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	150		2.0	0.53	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.81	J	2.0	0.35	ng/L	1	537 (modified)	Total/NA

Client Sample ID: MW-8 Lab Sample ID: 480-127162-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	86		10	2.1	ug/L		8260C	Total/NA
Ethylbenzene	120		10	1.9	ug/L	10	8260C	Total/NA
Isopropylbenzene	66		10	3.3	ug/L	10	8260C	Total/NA
Methylcyclohexane	9.8	J	50	0.90	ug/L	10	8260C	Total/NA
Methylene Chloride	10	J	50	10	ug/L	10	8260C	Total/NA
Toluene	58		10	1.7	ug/L	10	8260C	Total/NA
Vinyl chloride	13		10	1.8	ug/L	10	8260C	Total/NA
Xylenes, Total	1100		30	5.8	ug/L	10	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	190	CI	2.1	0.36	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	13		2.1	0.60	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	13		2.1	0.26	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	93		2.1	0.88	ng/L	1	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

11/22/2017

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-8 (Continued)

TestAmerica Job ID: 480-127162-1

Lab Sample ID: 480-127162-5

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Perfluorononanoic acid (PFNA)	16	2.1	0.28	ng/L		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	6.7	2.1	0.32	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	13	2.1	0.21	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	20 B	2.1	0.18	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	13	2.1	0.20	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	3.9	2.1	0.36	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) -	1700	21	5.6	ng/L	10	537 (modified)	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 480-127162-6

							•			
- Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type	
Benzene	21		5.0	1.0	ug/L	5	_	8260C	Total/NA	
cis-1,2-Dichloroethene	650		5.0	1.1	ug/L	5		8260C	Total/NA	
Ethylbenzene	47		5.0	0.95	ug/L	5		8260C	Total/NA	
Isopropylbenzene	15		5.0	1.7	ug/L	5		8260C	Total/NA	
Methyl tert-butyl ether	63		5.0	0.85	ug/L	5		8260C	Total/NA	
Tetrachloroethene	3.2	J	5.0	0.70	ug/L	5		8260C	Total/NA	
Toluene	36		5.0	0.85	ug/L	5		8260C	Total/NA	
trans-1,2-Dichloroethene	9.6		5.0	1.2	ug/L	5		8260C	Total/NA	
Vinyl chloride	370		5.0	0.90	ug/L	5		8260C	Total/NA	
Xylenes, Total	210		15	2.9	ug/L	5		8260C	Total/NA	
Perfluorobutanoic acid (PFBA)	450	CI	2.0	0.35	ng/L	1		537 (modified)	Total/NA	
Perfluorohexanoic acid (PFHxA)	18		2.0	0.58	ng/L	1		537 (modified)	Total/NA	
Perfluoroheptanoic acid (PFHpA)	16		2.0	0.25	ng/L	1		537 (modified)	Total/NA	
Perfluorooctanoic acid (PFOA)	120		2.0	0.85	ng/L	1		537 (modified)	Total/NA	
Perfluorononanoic acid (PFNA)	26		2.0	0.27	ng/L	1		537 (modified)	Total/NA	
Perfluorodecanoic acid (PFDA)	6.9		2.0	0.31	ng/L	1		537 (modified)	Total/NA	
Perfluorobutanesulfonic acid (PFBS)	14		2.0	0.20	ng/L	1		537 (modified)	Total/NA	
Perfluorohexanesulfonic acid (PFHxS)	28	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA	
Perfluoroheptanesulfonic Acid (PFHpS)	13		2.0	0.19	ng/L	1		537 (modified)	Total/NA	
Perfluorooctane Sulfonamide (FOSA)	1.2	J	2.0	0.35	ng/L	1		537 (modified)	Total/NA	
Perfluorooctanesulfonic acid (PFOS) - DL	1800		20	5.4	ng/L	10		537 (modified)	Total/NA	

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-127162-7

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Lab Sample ID: 480-127162-1

Matrix: Water

Client Sample ID: MW-10S Date Collected: 11/06/17 12:15 Date Received: 11/07/17 10:30

Method: 8260C - Volatile Orgar			.		_			
Analyte	Result Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	5.0	0.95	-			11/11/17 22:40	
1,1,2,2-Tetrachloroethane	ND	5.0	0.95	-			11/11/17 22:40	,
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	5.0	0.75	-			11/11/17 22:40	
1,1,2-Trichloroethane	ND	5.0	0.95	-			11/11/17 22:40	
1,1-Dichloroethane	ND	5.0		ug/L			11/11/17 22:40	;
1,1-Dichloroethene	ND	5.0		ug/L			11/11/17 22:40	
1,2,4-Trichlorobenzene	ND	5.0		ug/L			11/11/17 22:40	;
1,2-Dibromo-3-Chloropropane	ND	50		ug/L			11/11/17 22:40	
1,2-Dibromoethane	ND	5.0		ug/L			11/11/17 22:40	
1,2-Dichlorobenzene	ND	5.0	0.95	-			11/11/17 22:40	
1,2-Dichloroethane	ND	5.0		ug/L			11/11/17 22:40	
1,2-Dichloropropane	ND	5.0		ug/L			11/11/17 22:40	
1,3-Dichlorobenzene	ND	5.0	0.90	-			11/11/17 22:40	
1,4-Dichlorobenzene	ND	5.0	0.85	-			11/11/17 22:40	
2-Butanone (MEK)	ND	250	13	ug/L			11/11/17 22:40	
2-Hexanone	ND	50	6.4	ug/L			11/11/17 22:40	
4-Methyl-2-pentanone (MIBK)	ND	50	4.1	ug/L			11/11/17 22:40	
Acetone	ND	130	13	ug/L			11/11/17 22:40	
3enzene	ND	5.0	1.0	ug/L			11/11/17 22:40	
Bromodichloromethane	ND	5.0	0.85	ug/L			11/11/17 22:40	
Bromoform	ND	5.0	1.5	ug/L			11/11/17 22:40	
Bromomethane	ND	5.0	1.8	ug/L			11/11/17 22:40	
Carbon disulfide	ND	5.0	1.1	ug/L			11/11/17 22:40	
Carbon tetrachloride	ND	5.0	0.90	ug/L			11/11/17 22:40	
Chlorobenzene	ND	5.0	0.90	ug/L			11/11/17 22:40	
Chloroethane	ND	5.0	1.8	ug/L			11/11/17 22:40	
Chloroform	ND	5.0	1.2	ug/L			11/11/17 22:40	
Chloromethane	ND	5.0		ug/L			11/11/17 22:40	
cis-1,2-Dichloroethene	550	5.0		ug/L			11/11/17 22:40	
cis-1,3-Dichloropropene	ND	5.0	0.85	-			11/11/17 22:40	
Cyclohexane	ND	25	0.65	-			11/11/17 22:40	
Dibromochloromethane	ND	5.0		ug/L			11/11/17 22:40	
Dichlorodifluoromethane	ND	5.0	0.85	_			11/11/17 22:40	
Ethylbenzene	ND	5.0	0.95	•			11/11/17 22:40	
sopropylbenzene	ND	5.0		ug/L			11/11/17 22:40	
Methyl acetate	ND	50		ug/L			11/11/17 22:40	
Methyl tert-butyl ether	ND	5.0	0.85	-			11/11/17 22:40	
Methylcyclohexane	ND	25		ug/L			11/11/17 22:40	
Methylene Chloride	ND	25		ug/L			11/11/17 22:40	
Styrene	ND	5.0		ug/L			11/11/17 22:40	
Tetrachloroethene	560	5.0	0.70				11/11/17 22:40	
Toluene	ND	5.0		ug/L			11/11/17 22:40	
rans-1,2-Dichloroethene	2.9 J	5.0		ug/L			11/11/17 22:40	
rans-1,3-Dichloropropene	ND	5.0	0.85				11/11/17 22:40	
Frichloroethene	210	5.0		ug/L ug/L			11/11/17 22:40	
Trichlorofluoromethane								
	ND	5.0 5.0		ug/L			11/11/17 22:40	:
Vinyl chloride	33 ND	ე.0		ug/L ug/L			11/11/17 22:40 11/11/17 22:40	:

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Lab Sample ID: 480-127162-1 **Client Sample ID: MW-10S**

Date Collected: 11/06/17 12:15 **Matrix: Water** Date Received: 11/07/17 10:30

S	urrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,	2-Dichloroethane-d4 (Surr)	93	70 - 130		11/11/17 22:40	5
4	Bromofluorobenzene (Surr)	94	70 - 130		11/11/17 22:40	5
D	ibromofluoromethane (Surr)	110	70 - 130		11/11/17 22:40	5
Т	oluene-d8 (Surr)	97	70 - 130		11/11/17 22:40	5

- Toldene-do (dull)	37		70 - 700					11/11/11/22.40	J
Method: 537 (modified) - Fluor Analyte		/I Substan Qualifier	ces RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	21	Qualifier	2.1		ng/L		•	11/17/17 10:14	1
Perfluoropentanoic acid (PFPeA)	14		2.1		ng/L			11/17/17 10:14	1
Perfluorohexanoic acid (PFHxA)	15		2.1	0.60	•			11/17/17 10:14	1
Perfluoroheptanoic acid (PFHpA)	13		2.1	0.26				11/17/17 10:14	· · · · · · · · · · · · · · · · · · ·
Perfluorooctanoic acid (PFOA)	38		2.1		ng/L			11/17/17 10:14	1
Perfluorononanoic acid (PFNA)	5.0		2.1		ng/L			11/17/17 10:14	1
Perfluorodecanoic acid (PFDA)	9.5		2.1		ng/L			11/17/17 10:14	1
Perfluoroundecanoic acid (PFUnA)	1.1	J	2.1		ng/L		11/15/17 12:46	11/17/17 10:14	1
Perfluorododecanoic acid (PFDoA)	ND		2.1	0.57	ng/L		11/15/17 12:46	11/17/17 10:14	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.1	1.3	ng/L		11/15/17 12:46	11/17/17 10:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.1	0.30	ng/L		11/15/17 12:46	11/17/17 10:14	1
Perfluorobutanesulfonic acid (PFBS)	9.8		2.1	0.21	ng/L		11/15/17 12:46	11/17/17 10:14	1
Perfluorohexanesulfonic acid (PFHxS)	7.3	В	2.1	0.18	ng/L		11/15/17 12:46	11/17/17 10:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.2	J	2.1	0.20	ng/L		11/15/17 12:46	11/17/17 10:14	1
Perfluorooctanesulfonic acid (PFOS)	120		2.1	0.56	ng/L		11/15/17 12:46	11/17/17 10:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.1	0.33	ng/L		11/15/17 12:46	11/17/17 10:14	1
Perfluorooctane Sulfonamide (FOSA)	1.1	J	2.1	0.36	ng/L		11/15/17 12:46	11/17/17 10:14	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	94		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C4 PFBA	62		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C2 PFHxA	84		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C4 PFOA	89		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C5 PFNA	98		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C2 PFDA	108		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C2 PFUnA	101		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C2 PFDoA	86		25 - 150				11/15/17 12:46	11/17/17 10:14	1
1802 PFHxS	93		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C4 PFOS	96		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C4-PFHpA	92		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C5 PFPeA	86		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C3-PFBS	89		25 - 150				11/15/17 12:46	11/17/17 10:14	1
13C2-PFTeDA									

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: MW-5R

Date Collected: 11/06/17 12:05
Date Received: 11/07/17 10:30

Lab Sample ID: 480-127162-2

Matrix: Water

Result Qualifier	RL			D	Prepared	Analyzed	Dil Fa
	1.0		-			11/11/17 21:22	
	1.0		-			11/11/17 21:22	
ND *	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
0.31 J	1.0	0.24	ug/L			11/11/17 21:22	
0.38 J	1.0	0.25	ug/L			11/11/17 21:22	
ND	1.0	0.20	ug/L			11/11/17 21:22	
ND	10	0.94	ug/L			11/11/17 21:22	
ND	1.0	0.21	ug/L			11/11/17 21:22	
ND	1.0	0.19	ug/L			11/11/17 21:22	
ND	1.0	0.20	ug/L			11/11/17 21:22	
ND	1.0	0.25	ug/L			11/11/17 21:22	
ND	1.0	0.18	ug/L			11/11/17 21:22	
ND	1.0	0.17	ug/L			11/11/17 21:22	
ND	50	2.6	ug/L			11/11/17 21:22	
ND	10		-			11/11/17 21:22	
ND	10	0.81	ug/L			11/11/17 21:22	
ND	25	2.7	ug/L			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
			-			11/11/17 21:22	
ND	1.0		-			11/11/17 21:22	
ND	5.0		-			11/11/17 21:22	
			-				
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	Result Qualifier ND	ND	Result Qualifier RL MDL ND 1.0 0.19 ND 1.0 0.19 ND 1.0 0.15 ND 1.0 0.24 0.31 J 1.0 0.24 0.38 J 1.0 0.25 ND 1.0 0.20 0.0 ND 1.0 0.20 ND 1.0 0.21 ND 1.0 0.22 ND 1.0 0.25 ND 1.0 0.25 ND 1.0 0.25 ND 1.0 0.18 ND 1.0 0.18 ND 1.0 0.81 ND 1.0 0.20 ND 1.0 0.22 ND 1.0 0.22 ND 1.0 0.22 ND 1.0 0.18 ND 1.0 0.18 ND 1.0 0.23	Result Qualifier RL MDL Unit	Result Qualifier RL MDL Unit D	Result Qualifier RL	ND

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: MW-5R

Date Collected: 11/06/17 12:05 Date Received: 11/07/17 10:30 Lab Sample ID: 480-127162-2

Matrix: Water

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97	70 - 130		11/11/17 21:22	1
4-Bromofluorobenzene (Surr)	99	70 - 130	7	11/11/17 21:22	1
Dibromofluoromethane (Surr)	110	70 - 130	7	11/11/17 21:22	1
Toluene-d8 (Surr)	97	70 - 130		11/11/17 21:22	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	28		2.1	0.36	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluoropentanoic acid (PFPeA)	30		2.1	0.50	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorohexanoic acid (PFHxA)	41		2.1	0.60	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluoroheptanoic acid (PFHpA)	44		2.1	0.26	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorooctanoic acid (PFOA)	120		2.1	0.88	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorononanoic acid (PFNA)	5.8		2.1	0.28	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorodecanoic acid (PFDA)	0.55	J	2.1	0.32	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluoroundecanoic acid (PFUnA)	1.6	J	2.1	1.1	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorododecanoic acid (PFDoA)	ND		2.1	0.57	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.1	1.3	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.1	0.30	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorobutanesulfonic acid (PFBS)	53		2.1	0.21	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorohexanesulfonic acid (PFHxS)	25	В	2.1	0.18	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	2.1		2.1	0.20	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorooctanesulfonic acid (PFOS)	52		2.1	0.56	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.1	0.33	ng/L		11/15/17 12:46	11/17/17 10:22	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.1	0.36	ng/L		11/15/17 12:46	11/17/17 10:22	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	86		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C4 PFBA	43		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C2 PFHxA	75		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C4 PFOA	81		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C5 PFNA	99		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C2 PFDA	98		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C2 PFUnA	92		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C2 PFDoA	77		25 - 150				11/15/17 12:46	11/17/17 10:22	1
1802 PFHxS	94		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C4 PFOS	93		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C4-PFHpA	80		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C5 PFPeA	69		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C3-PFBS	88		25 - 150				11/15/17 12:46	11/17/17 10:22	1
13C2-PFTeDA	76		25 - 150				11/15/17 12:46	11/17/17 10:22	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: MW-10D

Date Collected: 11/06/17 13:15 Date Received: 11/07/17 10:30 Lab Sample ID: 480-127162-3

Matrix: Water

Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		5.0	0.95	ug/L			11/11/17 23:06	
1,1,2,2-Tetrachloroethane	ND		5.0	0.95	ug/L			11/11/17 23:06	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.0	0.75	ug/L			11/11/17 23:06	
1,1,2-Trichloroethane	ND		5.0	0.95	ug/L			11/11/17 23:06	
1,1-Dichloroethane	ND		5.0	1.2	ug/L			11/11/17 23:06	
1,1-Dichloroethene	2.2	J	5.0	1.3	ug/L			11/11/17 23:06	
1,2,4-Trichlorobenzene	ND		5.0	1.0	ug/L			11/11/17 23:06	
1,2-Dibromo-3-Chloropropane	ND		50	4.7	ug/L			11/11/17 23:06	
1,2-Dibromoethane	ND		5.0		ug/L			11/11/17 23:06	
1,2-Dichlorobenzene	ND		5.0	0.95	ug/L			11/11/17 23:06	
1,2-Dichloroethane	ND		5.0	1.0	ug/L			11/11/17 23:06	
1,2-Dichloropropane	ND		5.0	1.3	ug/L			11/11/17 23:06	
1,3-Dichlorobenzene	ND		5.0	0.90	ug/L			11/11/17 23:06	
1,4-Dichlorobenzene	ND		5.0	0.85	ug/L			11/11/17 23:06	
2-Butanone (MEK)	ND		250	13	ug/L			11/11/17 23:06	
2-Hexanone	ND		50	6.4	ug/L			11/11/17 23:06	
4-Methyl-2-pentanone (MIBK)	ND		50	4.1	ug/L			11/11/17 23:06	
Acetone	ND		130	13	ug/L			11/11/17 23:06	
Benzene	ND		5.0	1.0	ug/L			11/11/17 23:06	
Bromodichloromethane	ND		5.0	0.85	ug/L			11/11/17 23:06	
Bromoform	ND		5.0	1.5	ug/L			11/11/17 23:06	
Bromomethane	ND		5.0	1.8	ug/L			11/11/17 23:06	
Carbon disulfide	ND		5.0	1.1	ug/L			11/11/17 23:06	
Carbon tetrachloride	ND		5.0	0.90	ug/L			11/11/17 23:06	
Chlorobenzene	ND		5.0	0.90	ug/L			11/11/17 23:06	
Chloroethane	ND		5.0	1.8	ug/L			11/11/17 23:06	
Chloroform	ND		5.0	1.2	ug/L			11/11/17 23:06	
Chloromethane	ND		5.0	1.8	ug/L			11/11/17 23:06	
cis-1,2-Dichloroethene	830		5.0	1.1	ug/L			11/11/17 23:06	
cis-1,3-Dichloropropene	ND		5.0	0.85	ug/L			11/11/17 23:06	
Cyclohexane	ND		25	0.65	ug/L			11/11/17 23:06	
Dibromochloromethane	ND		5.0	1.3	ug/L			11/11/17 23:06	
Dichlorodifluoromethane	ND		5.0	0.85	ug/L			11/11/17 23:06	
Ethylbenzene	ND		5.0	0.95	ug/L			11/11/17 23:06	
Isopropylbenzene	ND		5.0	1.7	ug/L			11/11/17 23:06	
Methyl acetate	ND		50		ug/L			11/11/17 23:06	
Methyl tert-butyl ether	ND		5.0		ug/L			11/11/17 23:06	
Methylcyclohexane	ND		25		ug/L			11/11/17 23:06	
Methylene Chloride	ND		25		ug/L			11/11/17 23:06	
Styrene	ND		5.0		ug/L			11/11/17 23:06	
Tetrachloroethene	400		5.0		ug/L			11/11/17 23:06	
Toluene	ND		5.0		ug/L			11/11/17 23:06	
trans-1,2-Dichloroethene	5.1		5.0		ug/L			11/11/17 23:06	
rans-1,3-Dichloropropene	ND		5.0		ug/L			11/11/17 23:06	
Trichloroethene	420		5.0		ug/L			11/11/17 23:06	
Trichlorofluoromethane	ND		5.0		ug/L			11/11/17 23:06	
Vinyl chloride	4.3	J	5.0		ug/L			11/11/17 23:06	
Xylenes, Total	ND	-	15		ug/L			11/11/17 23:06	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

13C4 PFOS

13C4-PFHpA

13C5 PFPeA

13C3-PFBS

13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: MW-10D

Date Collected: 11/06/17 13:15 Date Received: 11/07/17 10:30

Lab Sample ID: 480-127162-3

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94	70 - 130	11/11/17 23:0	5 5
4-Bromofluorobenzene (Surr)	98	70 - 130	11/11/17 23:0	5 5
Dibromofluoromethane (Surr)	107	70 - 130	11/11/17 23:0	5 5
Toluene-d8 (Surr)	96	70 - 130	11/11/17 23:0	5 5

Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	32	CI	2.0	0.35	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluoropentanoic acid (PFPeA)	5.6		2.0	0.49	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorohexanoic acid (PFHxA)	11		2.0	0.58	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluoroheptanoic acid (PFHpA)	7.4		2.0	0.25	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorooctanoic acid (PFOA)	31		2.0	0.85	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorononanoic acid (PFNA)	2.2		2.0	0.27	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorodecanoic acid (PFDA)	1.2	J	2.0	0.31	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorobutanesulfonic acid (PFBS)	6.5		2.0	0.20	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorohexanesulfonic acid (PFHxS)	6.5	В	2.0	0.17	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.92	J	2.0	0.19	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorooctanesulfonic acid	75		2.0	0.54	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/15/17 12:46	11/17/17 10:30	1
Perfluorooctane Sulfonamide (FOSA)	0.66	J	2.0	0.35	ng/L		11/15/17 12:46	11/17/17 10:30	1
sotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	95	-	25 - 150				11/15/17 12:46	11/17/17 10:30	1
13C4 PFBA	63		25 - 150				11/15/17 12:46	11/17/17 10:30	1
13C2 PFHxA	84		25 - 150				11/15/17 12:46	11/17/17 10:30	1
13C4 PFOA	88		25 - 150				11/15/17 12:46	11/17/17 10:30	1
13C5 PFNA	98		25 - 150				11/15/17 12:46	11/17/17 10:30	1
13C2 PFDA	106		25 - 150				11/15/17 12:46	11/17/17 10:30	1
13C2 PFUnA	103		25 - 150				11/15/17 12:46	11/17/17 10:30	1
13C2 PFDoA	89		25 - 150				11/15/17 12:46	11/17/17 10:30	1

11/15/17 12:46 11/17/17 10:30

11/15/17 12:46 11/17/17 10:30

11/15/17 12:46 11/17/17 10:30

11/15/17 12:46 11/17/17 10:30

11/15/17 12:46 11/17/17 10:30

25 - 150

25 - 150

25 - 150

25 - 150

25 - 150

98

92

87

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Lab Sample ID: 480-127162-4

Matrix: Water

Client Sample ID: MW-18
Date Collected: 11/06/17 14:15
Date Received: 11/07/17 10:30

Analyte	Result (Qualifier I	RL MD	L	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		0.9	5	ug/L			11/11/17 23:32	
1,1,2,2-Tetrachloroethane	ND	5	5.0 0.9	5	ug/L			11/11/17 23:32	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	*	5.0 0.7	5	ug/L			11/11/17 23:32	:
1,1,2-Trichloroethane	ND	5	5.0 0.9	5	ug/L			11/11/17 23:32	
1,1-Dichloroethane	ND	5	5.0 1	2	ug/L			11/11/17 23:32	:
1,1-Dichloroethene	ND	Ę	5.0 1	.3	ug/L			11/11/17 23:32	
1,2,4-Trichlorobenzene	ND		5.0 1	0	ug/L			11/11/17 23:32	
1,2-Dibromo-3-Chloropropane	ND		50 4	7	ug/L			11/11/17 23:32	
1,2-Dibromoethane	ND	Ę	5.0 1	.1	ug/L			11/11/17 23:32	
1,2-Dichlorobenzene	ND				ug/L			11/11/17 23:32	;
1,2-Dichloroethane	ND	5			ug/L			11/11/17 23:32	
1,2-Dichloropropane	ND				ug/L			11/11/17 23:32	
1,3-Dichlorobenzene	ND				ug/L			11/11/17 23:32	;
1,4-Dichlorobenzene	ND				ug/L			11/11/17 23:32	
2-Butanone (MEK)	ND				ug/L			11/11/17 23:32	
2-Hexanone	ND				ug/L			11/11/17 23:32	
4-Methyl-2-pentanone (MIBK)	ND				ug/L			11/11/17 23:32	
Acetone	ND				ug/L			11/11/17 23:32	
Benzene	ND				ug/L			11/11/17 23:32	
Bromodichloromethane	ND				ug/L			11/11/17 23:32	
Bromoform	ND				ug/L			11/11/17 23:32	
Bromomethane	ND				ug/L			11/11/17 23:32	
Carbon disulfide	ND				ug/L			11/11/17 23:32	,
Carbon tetrachloride	ND				ug/L			11/11/17 23:32	·
Chlorobenzene	ND							11/11/17 23:32	
Chloroethane	ND ND				ug/L ug/L			11/11/17 23:32	,
Chloroform	ND ND				ug/L ug/L			11/11/17 23:32	,
					-			11/11/17 23:32	
Chloromethane	ND				ug/L				
cis-1,2-Dichloroethene	940				ug/L			11/11/17 23:32	
cis-1,3-Dichloropropene	ND				ug/L			11/11/17 23:32	
Cyclohexane	ND				ug/L			11/11/17 23:32	
Dibromochloromethane	ND				ug/L			11/11/17 23:32	
Dichlorodifluoromethane	ND				ug/L			11/11/17 23:32	
Ethylbenzene 	ND				ug/L			11/11/17 23:32	
sopropylbenzene	ND				ug/L			11/11/17 23:32	,
Methyl acetate	ND				ug/L			11/11/17 23:32	
Methyl tert-butyl ether	ND				ug/L			11/11/17 23:32	
Methylcyclohexane	ND				ug/L			11/11/17 23:32	
Methylene Chloride	ND				ug/L			11/11/17 23:32	
Styrene	ND				ug/L			11/11/17 23:32	
Tetrachloroethene	78				ug/L			11/11/17 23:32	
Toluene	ND				ug/L			11/11/17 23:32	
rans-1,2-Dichloroethene	5.6				ug/L			11/11/17 23:32	
rans-1,3-Dichloropropene	ND	5			ug/L			11/11/17 23:32	
Trichloroethene	520	Ę			ug/L			11/11/17 23:32	;
Trichlorofluoromethane	ND	5	5.0 1	1	ug/L			11/11/17 23:32	
Vinyl chloride	40	5	5.0 0.9	0	ug/L			11/11/17 23:32	:
Xylenes, Total	ND		15 2	9	ug/L			11/11/17 23:32	

TestAmerica Buffalo

11/22/2017

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-127162-4

TestAmerica Job ID: 480-127162-1

Matrix: Water

Client Sample ID: MW-18
Date Collected: 11/06/17 14:15
Date Received: 11/07/17 10:30

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96	70 - 130		11/11/17 23:32	5
4-Bromofluorobenzene (Surr)	97	70 - 130		11/11/17 23:32	5
Dibromofluoromethane (Surr)	108	70 - 130		11/11/17 23:32	5
Toluene-d8 (Surr)	97	70 - 130		11/11/17 23:32	5

- Tolache-ad (Ball)	37		70 - 700					11/11/11 25.52	9
Method: 537 (modified) - Fluo Analyte		<mark>/I Substan</mark> Qualifier	ces RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	20	Qualifier	2.0	0.35			•	11/17/17 10:38	1
Perfluoropentanoic acid (PFPeA)	24		2.0		ng/L			11/17/17 10:38	1
Perfluorohexanoic acid (PFHxA)	23		2.0	0.57	-			11/17/17 10:38	1
Perfluoroheptanoic acid (PFHpA)	17		2.0		ng/L			11/17/17 10:38	
Perfluorooctanoic acid (PFOA)	49		2.0		ng/L			11/17/17 10:38	1
Perfluorononanoic acid (PFNA)	7.5		2.0		ng/L			11/17/17 10:38	1
Perfluorodecanoic acid (PFDA)	12		2.0		ng/L			11/17/17 10:38	
Perfluoroundecanoic acid	1.3	1	2.0		ng/L			11/17/17 10:38	1
(PFUnA)	1.3	J	2.0	1.1	TIG/L		11/13/17 12.40	11/1//1/ 10.50	'
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/15/17 12:46	11/17/17 10:38	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/15/17 12:46	11/17/17 10:38	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/15/17 12:46	11/17/17 10:38	1
Perfluorobutanesulfonic acid (PFBS)	15		2.0	0.20	ng/L		11/15/17 12:46	11/17/17 10:38	1
Perfluorohexanesulfonic acid (PFHxS)	6.8	В	2.0	0.17	ng/L		11/15/17 12:46	11/17/17 10:38	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.3	J	2.0	0.19	ng/L		11/15/17 12:46	11/17/17 10:38	1
Perfluorooctanesulfonic acid (PFOS)	150		2.0	0.53	ng/L		11/15/17 12:46	11/17/17 10:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/15/17 12:46	11/17/17 10:38	1
Perfluorooctane Sulfonamide (FOSA)	0.81	J	2.0	0.35	ng/L		11/15/17 12:46	11/17/17 10:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	99		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C4 PFBA	65		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C2 PFHxA	86		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C4 PFOA	92		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C5 PFNA	102		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C2 PFDA	104		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C2 PFUnA	98		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C2 PFDoA	91		25 - 150				11/15/17 12:46	11/17/17 10:38	1
18O2 PFHxS	98		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C4 PFOS	99		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C4-PFHpA	92		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C5 PFPeA	89		25 - 150				11/15/17 12:46	11/17/17 10:38	1
13C3-PFBS	99						11/15/17 10:16	11/17/17 10:38	1
	99		25 - 150				11/15/1/ 12.40	11/1//1/ 10.36	,

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: MW-8

Lab Sample ID: 480-127162-5

Matrix: Water

Date Collected: 11/06/17 14:10 Date Received: 11/07/17 10:30

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	10	1.9	ug/L			11/10/17 18:48	1
1,1,2,2-Tetrachloroethane	ND	10	1.9	ug/L			11/10/17 18:48	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	10	1.5	ug/L			11/10/17 18:48	10
1,1,2-Trichloroethane	ND	10	1.9	ug/L			11/10/17 18:48	10
1,1-Dichloroethane	ND	10	2.4	ug/L			11/10/17 18:48	10
1,1-Dichloroethene	ND	10	2.5	ug/L			11/10/17 18:48	10
1,2,4-Trichlorobenzene	ND	10	2.0	ug/L			11/10/17 18:48	10
1,2-Dibromo-3-Chloropropane	ND	100	9.4	ug/L			11/10/17 18:48	10
1,2-Dibromoethane	ND	10	2.1	ug/L			11/10/17 18:48	10
1,2-Dichlorobenzene	ND	10	1.9	ug/L			11/10/17 18:48	10
1,2-Dichloroethane	ND	10	2.0	ug/L			11/10/17 18:48	10
1,2-Dichloropropane	ND	10		ug/L			11/10/17 18:48	10
1,3-Dichlorobenzene	ND	10		ug/L			11/10/17 18:48	10
1,4-Dichlorobenzene	ND	10		ug/L			11/10/17 18:48	10
2-Butanone (MEK)	ND	500		ug/L			11/10/17 18:48	10
2-Hexanone	ND	100		ug/L			11/10/17 18:48	10
4-Methyl-2-pentanone (MIBK)	ND	100		ug/L			11/10/17 18:48	10
Acetone	ND	250		ug/L			11/10/17 18:48	10
Benzene	ND	10		ug/L			11/10/17 18:48	10
Bromodichloromethane	ND	10		ug/L			11/10/17 18:48	10
Bromoform	ND	10		ug/L			11/10/17 18:48	10
Bromomethane	ND	10		ug/L			11/10/17 18:48	10
Carbon disulfide	ND	10		ug/L			11/10/17 18:48	10
Carbon tetrachloride	ND	10		ug/L			11/10/17 18:48	10
Chlorobenzene	ND	10		ug/L			11/10/17 18:48	10
Chloroethane	ND	10		ug/L			11/10/17 18:48	1(
Chloroform	ND	10		ug/L			11/10/17 18:48	10
Chloromethane	ND	10		ug/L			11/10/17 18:48	
cis-1,2-Dichloroethene	86	10		ug/L			11/10/17 18:48	10
cis-1,3-Dichloropropene	ND	10		ug/L			11/10/17 18:48	10
Cyclohexane	ND	50		ug/L			11/10/17 18:48	
Dibromochloromethane	ND	10		ug/L			11/10/17 18:48	1(
Dichlorodifluoromethane	ND *	10		ug/L			11/10/17 18:48	1(
Ethylbenzene	120	10		ug/L			11/10/17 18:48	 1(
Isopropylbenzene	66	10		ug/L			11/10/17 18:48	10
Methyl acetate	ND	100		ug/L			11/10/17 18:48	10
Methyl tert-butyl ether	ND	10		ug/L			11/10/17 18:48	1(
•	9.8 J	50		ug/L			11/10/17 18:48	10
Methylcyclohexane Methylene Chloride	9.6 J 10 J	50 50		ug/L ug/L			11/10/17 18:48	10
Styrene	ND	10		ug/L ug/L			11/10/17 18:48	10
Tetrachloroethene	ND ND	10		ug/L ug/L			11/10/17 18:48	10
Toluene		10		-			11/10/17 18:48	10
trans-1,2-Dichloroethene	58 ND			ug/L ug/L			11/10/17 18:48	10
·		10 10						
trans-1,3-Dichloropropene	ND ND	10		ug/L			11/10/17 18:48	10
Trichloroethene	ND *	10		ug/L			11/10/17 18:48	10
Trichlorofluoromethane	ND *	10		ug/L			11/10/17 18:48	10
Vinyl chloride Xylenes, Total	13 1100	10 30		ug/L ug/L			11/10/17 18:48 11/10/17 18:48	10 10

TestAmerica Buffalo

11/22/2017

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Lab Sample ID: 480-127162-5

Matrix: Water

Date Collected: 11/06/17 14:10 Date Received: 11/07/17 10:30

Client Sample ID: MW-8

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95	70 - 130		11/10/17 18:48	10
4-Bromofluorobenzene (Surr)	88	70 - 130		11/10/17 18:48	10
Dibromofluoromethane (Surr)	113	70 - 130		11/10/17 18:48	10
Toluene-d8 (Surr)	99	70 - 130		11/10/17 18:48	10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	190	CI	2.1	0.36	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluoropentanoic acid (PFPeA)	ND		2.1	0.51	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorohexanoic acid (PFHxA)	13		2.1	0.60	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluoroheptanoic acid (PFHpA)	13		2.1	0.26	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorooctanoic acid (PFOA)	93		2.1	0.88	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorononanoic acid (PFNA)	16		2.1	0.28	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorodecanoic acid (PFDA)	6.7		2.1	0.32	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluoroundecanoic acid (PFUnA)	ND		2.1	1.1	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorododecanoic acid (PFDoA)	ND		2.1	0.57	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.1	1.3	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.1	0.30	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorobutanesulfonic acid (PFBS)	13		2.1	0.21	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorohexanesulfonic acid (PFHxS)	20	В	2.1	0.18	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	13		2.1	0.20	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.1	0.33	ng/L		11/15/17 12:46	11/17/17 10:45	1
Perfluorooctane Sulfonamide (FOSA)	3.9		2.1	0.36	ng/L		11/15/17 12:46	11/17/17 10:45	1
Isotone Dilution	%Pocovory	Qualifier	l imite				Propared	Analyzod	Dil Eac

(FUSA)					
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	81	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C4 PFBA	39	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C2 PFHxA	79	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C4 PFOA	85	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C5 PFNA	97	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C2 PFDA	112	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C2 PFUnA	100	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C2 PFDoA	81	25 - 150	11/15/17 12:46	11/17/17 10:45	1
1802 PFHxS	117	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C4 PFOS	118	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C4-PFHpA	90	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C5 PFPeA	67	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C3-PFBS	103	25 - 150	11/15/17 12:46	11/17/17 10:45	1
13C2-PFTeDA	79	25 - 150	11/15/17 12:46	11/17/17 10:45	1

Method: 537 (modified) - Flu	orinated Alky	/I Substan	ces - DL						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	1700		21	5.6	ng/L		11/15/17 12:46	11/20/17 12:22	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFOS	102		25 - 150				11/15/17 12:46	11/20/17 12:22	10

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: MW-11

Date Received: 11/07/17 10:30

Date Collected: 11/06/17 15:35

Lab Sample ID: 480-127162-6

Matrix: Water

Method: 8260C - Volatile Orgar Analyte	Result Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	5.0	0.95	ug/L			11/11/17 23:58	
1,1,2,2-Tetrachloroethane	ND	5.0	0.95	ug/L			11/11/17 23:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	5.0	0.75	ug/L			11/11/17 23:58	
1,1,2-Trichloroethane	ND	5.0	0.95	ug/L			11/11/17 23:58	
1,1-Dichloroethane	ND	5.0	1.2	ug/L			11/11/17 23:58	
1,1-Dichloroethene	ND	5.0	1.3	ug/L			11/11/17 23:58	
1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/L			11/11/17 23:58	
1,2-Dibromo-3-Chloropropane	ND	50	4.7	ug/L			11/11/17 23:58	
1,2-Dibromoethane	ND	5.0	1.1	ug/L			11/11/17 23:58	
1,2-Dichlorobenzene	ND	5.0	0.95	ug/L			11/11/17 23:58	
1,2-Dichloroethane	ND	5.0	1.0	ug/L			11/11/17 23:58	
1,2-Dichloropropane	ND	5.0	1.3	ug/L			11/11/17 23:58	
1,3-Dichlorobenzene	ND	5.0	0.90	ug/L			11/11/17 23:58	
1,4-Dichlorobenzene	ND	5.0		ug/L			11/11/17 23:58	
2-Butanone (MEK)	ND	250		ug/L			11/11/17 23:58	
2-Hexanone	ND	50		ug/L			11/11/17 23:58	
4-Methyl-2-pentanone (MIBK)	ND	50		ug/L			11/11/17 23:58	
Acetone	ND	130		ug/L			11/11/17 23:58	
Benzene	21	5.0		ug/L			11/11/17 23:58	
Bromodichloromethane	ND	5.0		ug/L			11/11/17 23:58	
Bromoform	ND	5.0		ug/L			11/11/17 23:58	
Bromomethane	ND	5.0		ug/L			11/11/17 23:58	
Carbon disulfide	ND	5.0		ug/L			11/11/17 23:58	
Carbon tetrachloride	ND	5.0		ug/L			11/11/17 23:58	
Chlorobenzene	ND	5.0		ug/L			11/11/17 23:58	
Chloroethane	ND	5.0		ug/L			11/11/17 23:58	
Chloroform	ND	5.0		ug/L			11/11/17 23:58	
Chloromethane	ND	5.0		ug/L			11/11/17 23:58	
cis-1,2-Dichloroethene	650	5.0		ug/L			11/11/17 23:58	
cis-1,3-Dichloropropene	ND	5.0	0.85	-			11/11/17 23:58	
Cyclohexane	ND	25		ug/L			11/11/17 23:58	
Dibromochloromethane	ND	5.0		ug/L			11/11/17 23:58	
Dichlorodifluoromethane	ND	5.0		ug/L			11/11/17 23:58	
	47	5.0		ug/L ug/L			11/11/17 23:58	
Ethylbenzene	47 15	5.0		-			11/11/17 23:58	
Isopropylbenzene				ug/L				
Methyl acetate	ND	50		ug/L			11/11/17 23:58	
Methyl tert-butyl ether	63 ND	5.0		ug/L			11/11/17 23:58	
Methylcyclohexane	ND	25		ug/L			11/11/17 23:58	
Methylene Chloride	ND	25		ug/L			11/11/17 23:58	
Styrene	ND	5.0		ug/L			11/11/17 23:58	
Tetrachloroethene	3.2 J	5.0		ug/L			11/11/17 23:58	
Toluene	36	5.0		ug/L			11/11/17 23:58	
trans-1,2-Dichloroethene	9.6	5.0		ug/L			11/11/17 23:58	
trans-1,3-Dichloropropene	ND	5.0		ug/L			11/11/17 23:58	
Trichloroethene	ND	5.0		ug/L			11/11/17 23:58	
Trichlorofluoromethane	ND	5.0		ug/L			11/11/17 23:58	
Vinyl chloride	370	5.0		ug/L			11/11/17 23:58	
Xylenes, Total	210	15	2.9	ug/L			11/11/17 23:58	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: MW-11

Lab Sample ID: 480-127162-6

Matrix: Water

Date Collected: 11/06/17 15:35 Date Received: 11/07/17 10:30

Surrogate	%Recovery Quali	fier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96	70 - 130		11/11/17 23:58	5
4-Bromofluorobenzene (Surr)	95	70 - 130	1	11/11/17 23:58	5
Dibromofluoromethane (Surr)	108	70 - 130	1	11/11/17 23:58	5
Toluene-d8 (Surr)	98	70 - 130	1	11/11/17 23:58	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	450	CI	2.0	0.35	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorohexanoic acid (PFHxA)	18		2.0	0.58	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluoroheptanoic acid (PFHpA)	16		2.0	0.25	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorooctanoic acid (PFOA)	120		2.0	0.85	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorononanoic acid (PFNA)	26		2.0	0.27	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorodecanoic acid (PFDA)	6.9		2.0	0.31	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorobutanesulfonic acid (PFBS)	14		2.0	0.20	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorohexanesulfonic acid (PFHxS)	28	В	2.0	0.17	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluoroheptanesulfonic Acid (PFHpS)	13		2.0	0.19	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/15/17 12:46	11/17/17 10:53	1
Perfluorooctane Sulfonamide (FOSA)	1.2	J	2.0	0.35	ng/L		11/15/17 12:46	11/17/17 10:53	1
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Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	71	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C4 PFBA	31	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C2 PFHxA	78	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C4 PFOA	86	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C5 PFNA	98	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C2 PFDA	105	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C2 PFUnA	79	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C2 PFDoA	95	25 - 150	11/15/17 12:46	11/17/17 10:53	1
1802 PFHxS	114	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C4 PFOS	112	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C4-PFHpA	85	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C5 PFPeA	63	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C3-PFBS	118	25 - 150	11/15/17 12:46	11/17/17 10:53	1
13C2-PFTeDA	103	25 - 150	11/15/17 12:46	11/17/17 10:53	1
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Method: 537 (modified) - Flu	orinated Alky	/I Substan	ces - DL						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	1800		20	5.4	ng/L		11/15/17 12:46	11/20/17 12:30	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFOS	100		25 - 150				11/15/17 12:46	11/20/17 12:30	10

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: TRIP BLANKS Lab Sample ID: 480-127162-7

Date Collected: 11/06/17 00:00 Matrix: Water Date Received: 11/07/17 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 15:45	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/10/17 15:45	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1.0	0.15	ug/L			11/10/17 15:45	
I,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 15:45	
1,1-Dichloroethane	ND		1.0		ug/L			11/10/17 15:45	
1,1-Dichloroethene	ND		1.0	0.25	_			11/10/17 15:45	
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/10/17 15:45	
1,2-Dibromo-3-Chloropropane	ND		10	0.94	-			11/10/17 15:45	
1,2-Dibromoethane	ND		1.0	0.21	-			11/10/17 15:45	
1,2-Dichlorobenzene	ND		1.0		ug/L			11/10/17 15:45	
1,2-Dichloroethane	ND		1.0	0.20	_			11/10/17 15:45	
1,2-Dichloropropane	ND		1.0	0.25	-			11/10/17 15:45	
1,3-Dichlorobenzene	ND		1.0	0.18	-			11/10/17 15:45	
1,4-Dichlorobenzene	ND		1.0	0.17	-			11/10/17 15:45	
2-Butanone (MEK)	ND		50		ug/L			11/10/17 15:45	
2-Hexanone	ND		10		ug/L			11/10/17 15:45	
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	-			11/10/17 15:45	
Acetone	ND		25		ug/L			11/10/17 15:45	
Benzene	ND		1.0	0.20	-			11/10/17 15:45	
Bromodichloromethane	ND ND		1.0	0.20	-			11/10/17 15:45	
Bromoform	ND ND		1.0	0.17	-			11/10/17 15:45	
Bromomethane					-				
	ND		1.0		ug/L			11/10/17 15:45	
Carbon disulfide	ND		1.0	0.22	-			11/10/17 15:45	
Carbon tetrachloride	ND		1.0	0.18	-			11/10/17 15:45	
Chlorobenzene	ND		1.0	0.18	-			11/10/17 15:45	
Chloroethane	ND		1.0	0.36	-			11/10/17 15:45	
Chloroform	ND		1.0	0.23	-			11/10/17 15:45	
Chloromethane	ND		1.0		ug/L			11/10/17 15:45	
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/10/17 15:45	
cis-1,3-Dichloropropene	ND		1.0	0.17	•			11/10/17 15:45	
Cyclohexane	ND		5.0		ug/L			11/10/17 15:45	
Dibromochloromethane	ND		1.0	0.25	•			11/10/17 15:45	
Dichlorodifluoromethane	ND	*	1.0	0.17	-			11/10/17 15:45	
Ethylbenzene	ND		1.0	0.19	ug/L			11/10/17 15:45	
sopropylbenzene	ND		1.0	0.33	-			11/10/17 15:45	
Methyl acetate	ND		10		ug/L			11/10/17 15:45	
Methyl tert-butyl ether	ND		1.0		ug/L			11/10/17 15:45	
Methylcyclohexane	ND		5.0	0.090	ug/L			11/10/17 15:45	
Methylene Chloride	ND		5.0	1.0	ug/L			11/10/17 15:45	
Styrene	ND		1.0	0.28	ug/L			11/10/17 15:45	
Tetrachloroethene	ND		1.0	0.14	ug/L			11/10/17 15:45	
Toluene	ND		1.0	0.17	ug/L			11/10/17 15:45	
rans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/10/17 15:45	
rans-1,3-Dichloropropene	ND		1.0		ug/L			11/10/17 15:45	
Trichloroethene	ND		1.0		ug/L			11/10/17 15:45	
Trichlorofluoromethane	ND	*	1.0		ug/L			11/10/17 15:45	
√inyl chloride	ND		1.0		ug/L			11/10/17 15:45	
Xylenes, Total	ND		3.0		ug/L			11/10/17 15:45	

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Lab Sample ID: 480-127162-7 **Client Sample ID: TRIP BLANKS**

Date Collected: 11/06/17 00:00 Date Received: 11/07/17 10:30

Matrix: Water

Surrogate	%Recovery Qualifi	er Limits	Pre	epared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	96	70 - 130		11	/10/17 15:45	1	
4-Bromofluorobenzene (Surr)	122	70 - 130		11	/10/17 15:45	1	
Dibromofluoromethane (Surr)	114	70 - 130		11	/10/17 15:45	1	
Toluene-d8 (Surr)	98	70 - 130		11	/10/17 15:45	1	

Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Matrix: Water Prep Type: Total/NA

			Pe	rcent Surro	ogate Recov
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-127162-1	MW-10S	93	94	110	97
480-127162-2	MW-5R	97	99	110	97
480-127162-3	MW-10D	94	98	107	96
480-127162-4	MW-18	96	97	108	97
480-127162-5	MW-8	95	88	113	99
480-127162-6	MW-11	96	95	108	98
480-127162-7	TRIP BLANKS	96	122	114	98
LCS 490-474935/3	Lab Control Sample	97	94	110	95
LCS 490-475225/3	Lab Control Sample	88	94	107	99
LCSD 490-474935/4	Lab Control Sample Dup	100	89	109	99
LCSD 490-475225/4	Lab Control Sample Dup	89	93	108	96
MB 490-474935/6	Method Blank	94	101	108	99
MB 490-475225/6	Method Blank	92	98	105	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

TestAmerica Buffalo

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Isotope Dilution Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water Prep Type: Total/NA

Watiix. Water							ГІС	sp Type.	TOtal/NA
			Perc	ent Isotope	Dilution Re	covery (Ac	ceptance L	imits)	
		3C8 FOS/	3C4 PFB/	3C2 PFHx	3C4 PFO	3C5 PFN/	3C2 PFD/	3C2 PFUn	3C2 PFDo
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
480-127162-1	MW-10S	94	62	84	89	98	108	101	86
480-127162-2	MW-5R	86	43	75	81	99	98	92	77
480-127162-3	MW-10D	95	63	84	88	98	106	103	89
480-127162-4	MW-18	99	65	86	92	102	104	98	91
480-127162-5	MW-8	81	39	79	85	97	112	100	81
480-127162-5 - DL	MW-8								
480-127162-6	MW-11	71	31	78	86	98	105	79	95
480-127162-6 - DL	MW-11								
LCS 320-194884/2-A	Lab Control Sample	92	101	102	88	98	102	100	93
LCSD 320-194884/3-A	Lab Control Sample Dup	94	106	101	85	102	102	102	95
MB 320-194884/1-A	Method Blank	92	102	104	87	103	101	109	96
			Perc	ent Isotope	Dilution Re	covery (Ac	ceptance L	imits)	
		BO2 PFHx	3C4 PFOS	3C4-PFHp	3C5 PFPe.	3C3-PFB	C2-PFTeE	•	
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)		
480-127162-1	MW-10S	93	96	92	86	89	86		
480-127162-2	MW-5R	94	93	80	69	88	76		
480-127162-3	MW-10D	96	98	92	87	96	90		
480-127162-4	MW-18	98	99	92	89	99	90		

		BO2 PFHX	3C4 PFO	3C4-PFHp	3C5 PFPe	3C3-PFB	C2-PFTeL	
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	
480-127162-1	MW-10S	93	96	92	86	89	86	
480-127162-2	MW-5R	94	93	80	69	88	76	
480-127162-3	MW-10D	96	98	92	87	96	90	
480-127162-4	MW-18	98	99	92	89	99	90	
480-127162-5	MW-8	117	118	90	67	103	79	
480-127162-5 - DL	MW-8		102					
480-127162-6	MW-11	114	112	85	63	118	103	
480-127162-6 - DL	MW-11		100					
LCS 320-194884/2-A	Lab Control Sample	106	99	102	101	105	95	
LCSD 320-194884/3-A	Lab Control Sample Dup	104	100	102	100	104	94	
MB 320-194884/1-A	Method Blank	105	102	108	103	104	92	

Surrogate Legend

13C8 FOSA = 13C8 FOSA

13C4 PFBA = 13C4 PFBA

13C2 PFHxA = 13C2 PFHxA

13C4 PFOA = 13C4 PFOA

13C5 PFNA = 13C5 PFNA

13C2 PFDA = 13C2 PFDA

13C2 PFUnA = 13C2 PFUnA

13C2 PFDoA = 13C2 PFDoA

1802 PFHxS = 1802 PFHxS 13C4 PFOS = 13C4 PFOS

13C4-PFHpA = 13C4-PFHpA

13C5 PFPeA = 13C5 PFPeA

13C3-PFBS = 13C3-PFBS

13C2-PFTeDA = 13C2-PFTeDA

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Lab Sample ID: MB 490-474935/6

Matrix: Water

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

Analysis Batch: 474935	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 13:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/10/17 13:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/10/17 13:34	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 13:34	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/10/17 13:34	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/10/17 13:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/10/17 13:34	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/10/17 13:34	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/10/17 13:34	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/10/17 13:34	1
1,2-Dichloroethane	ND		1.0	0.20	-			11/10/17 13:34	1
1,2-Dichloropropane	ND		1.0	0.25	-			11/10/17 13:34	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/10/17 13:34	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/10/17 13:34	1
2-Butanone (MEK)	ND		50		ug/L			11/10/17 13:34	1
2-Hexanone	ND		10		ug/L			11/10/17 13:34	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	-			11/10/17 13:34	1
Acetone	ND		25		ug/L			11/10/17 13:34	1
Benzene	ND		1.0	0.20	-			11/10/17 13:34	1
Bromodichloromethane	ND		1.0	0.17				11/10/17 13:34	1
Bromoform	ND		1.0	0.29	-			11/10/17 13:34	1
Bromomethane	ND		1.0		ug/L			11/10/17 13:34	1
Carbon disulfide	ND		1.0	0.22	-			11/10/17 13:34	1
Carbon tetrachloride	ND		1.0	0.18	_			11/10/17 13:34	1
Chlorobenzene	ND		1.0	0.18	•			11/10/17 13:34	1
Chloroethane	ND		1.0	0.36	-			11/10/17 13:34	1
Chloroform	ND		1.0	0.23	-			11/10/17 13:34	1
Chloromethane	ND		1.0	0.36	-			11/10/17 13:34	1
cis-1,2-Dichloroethene	ND		1.0	0.21	_			11/10/17 13:34	1
cis-1,3-Dichloropropene	ND		1.0	0.17	-			11/10/17 13:34	1
Cyclohexane	ND		5.0	0.13				11/10/17 13:34	1
Dibromochloromethane	ND		1.0	0.25				11/10/17 13:34	1
Dichlorodifluoromethane	ND		1.0	0.17	_			11/10/17 13:34	1
Ethylbenzene	ND		1.0	0.19	-			11/10/17 13:34	1
Isopropylbenzene	ND		1.0	0.33				11/10/17 13:34	1
Methyl acetate	ND		10		ug/L			11/10/17 13:34	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/10/17 13:34	1
Methylcyclohexane	ND		5.0	0.090				11/10/17 13:34	1
Methylene Chloride	ND		5.0		ug/L			11/10/17 13:34	1
Styrene	ND		1.0		ug/L			11/10/17 13:34	1
Tetrachloroethene	ND		1.0		ug/L			11/10/17 13:34	1
Toluene	ND		1.0		ug/L			11/10/17 13:34	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/10/17 13:34	· · · · · · · · · · · · · · · · · · ·
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/10/17 13:34	1
Trichloroethene	ND		1.0		ug/L			11/10/17 13:34	1
Trichlorofluoromethane	ND		1.0		ug/L			11/10/17 13:34	
Vinyl chloride	ND		1.0		ug/L			11/10/17 13:34	1
Xylenes, Total	ND		3.0		ug/L			11/10/17 13:34	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		11/10/17 13:34	1
4-Bromofluorobenzene (Surr)	101		70 - 130		11/10/17 13:34	1
Dibromofluoromethane (Surr)	108		70 - 130		11/10/17 13:34	1
Toluene-d8 (Surr)	99		70 - 130		11/10/17 13:34	1

Lab Sample ID: LCS 490-474935/3

Matrix: Water

Analysis Batch: 474935

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	24.0		ug/L		120	78 - 135	
1,1,2,2-Tetrachloroethane	20.0	19.7		ug/L		98	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.8		ug/L		129	77 - 129	
ne								
1,1,2-Trichloroethane	20.0	20.9		ug/L		104	80 - 124	
1,1-Dichloroethane	20.0	21.0		ug/L		105	78 - 125	
1,1-Dichloroethene	20.0	23.2		ug/L		116	79 - 124	
1,2,4-Trichlorobenzene	20.0	15.6		ug/L		78	63 - 133	
1,2-Dibromo-3-Chloropropane	20.0	17.4		ug/L		87	54 - 125	
1,2-Dibromoethane	20.0	21.5		ug/L		107	80 - 129	
1,2-Dichlorobenzene	20.0	21.3		ug/L		106	80 - 121	
1,2-Dichloroethane	20.0	22.6		ug/L		113	77 - 121	
1,2-Dichloropropane	20.0	19.7		ug/L		99	75 - 120	
1,3-Dichlorobenzene	20.0	21.5		ug/L		108	80 - 122	
1,4-Dichlorobenzene	20.0	21.8		ug/L		109	80 - 120	
2-Butanone (MEK)	100	93.9		ug/L		94	62 - 133	
2-Hexanone	100	85.7		ug/L		86	60 - 142	
4-Methyl-2-pentanone (MIBK)	100	85.1		ug/L		85	60 - 137	
Acetone	100	90.2		ug/L		90	54 - 145	
Benzene	20.0	21.1		ug/L		105	80 - 121	
Bromodichloromethane	20.0	22.9		ug/L		115	75 - 129	
Bromoform	20.0	21.8		ug/L		109	46 - 145	
Bromomethane	20.0	23.9		ug/L		119	41 - 150	
Carbon disulfide	20.0	22.1		ug/L		110	77 - 126	
Carbon tetrachloride	20.0	25.6		ug/L		128	64 - 147	
Chlorobenzene	20.0	21.6		ug/L		108	80 - 120	
Chloroethane	20.0	21.3		ug/L		107	72 - 120	
Chloroform	20.0	22.1		ug/L		111	73 - 129	
Chloromethane	20.0	18.3		ug/L		91	12 - 150	
cis-1,2-Dichloroethene	20.0	21.4		ug/L		107	76 - 125	
cis-1,3-Dichloropropene	20.0	20.3		ug/L		101	74 - 140	
Cyclohexane	20.0	20.5		ug/L		102	73 - 122	
Dibromochloromethane	20.0	21.9		ug/L		109	69 - 133	
Dichlorodifluoromethane	20.0	29.8	*	ug/L		149	37 - 127	
Ethylbenzene	20.0	20.1		ug/L		100	80 - 130	
Isopropylbenzene	20.0	20.7		ug/L		104	80 - 141	
Methyl acetate	40.0	39.8		ug/L		100	64 - 150	
Methyl tert-butyl ether	20.0	21.1		ug/L		106	72 - 133	
Methylcyclohexane	20.0	23.3		ug/L		117	71 - 129	
Methylene Chloride	20.0	22.7		ug/L		114	79 - 123	
Styrene	20.0	20.2		ug/L		101	80 - 127	
Tetrachloroethene	20.0	22.7		ug/L		113	80 - 126	
Toluene	20.0	20.4		ug/L		102	80 - 126	
trans-1,2-Dichloroethene	20.0	20.6		ug/L		103	79 - 126	
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TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Lab Sample ID: LCS 490-474935/3

Lab Sample ID: LCSD 490-474935/4

Matrix: Water

Analysis Batch: 474935

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,3-Dichloropropene	20.0	19.9		ug/L		100	63 - 134	
Trichloroethene	20.0	23.4		ug/L		117	80 - 123	
Trichlorofluoromethane	20.0	26.1	*	ug/L		130	65 - 124	
Vinyl chloride	20.0	20.8		ug/L		104	68 - 120	
Xylenes, Total	40.0	39.8		ug/L		100	80 - 132	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130
Dibromofluoromethane (Surr)	110		70 - 130
Toluene-d8 (Surr)	95		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 474935							r iep iy	,	
7 maryolo Batom 47 4000	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	24.4		ug/L		122	78 - 135	1	15
1,1,2,2-Tetrachloroethane	20.0	17.9		ug/L		90	69 - 131	9	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	26.4	*	ug/L		132	77 - 129	2	16
ne									
1,1,2-Trichloroethane	20.0	21.2		ug/L		106	80 - 124	1	13
1,1-Dichloroethane	20.0	21.6		ug/L		108	78 - 125	3	17
1,1-Dichloroethene	20.0	24.3		ug/L		122	79 - 124	5	20
1,2,4-Trichlorobenzene	20.0	17.9		ug/L		89	63 - 133	14	15
1,2-Dibromo-3-Chloropropane	20.0	18.4		ug/L		92	54 - 125	5	19
1,2-Dibromoethane	20.0	21.5		ug/L		108	80 - 129	0	13
1,2-Dichlorobenzene	20.0	21.8		ug/L		109	80 - 121	2	12
1,2-Dichloroethane	20.0	22.8		ug/L		114	77 - 121	1	13
1,2-Dichloropropane	20.0	20.8		ug/L		104	75 - 120	5	15
1,3-Dichlorobenzene	20.0	22.0		ug/L		110	80 - 122	2	13
1,4-Dichlorobenzene	20.0	22.6		ug/L		113	80 - 120	4	12
2-Butanone (MEK)	100	91.1		ug/L		91	62 - 133	3	19
2-Hexanone	100	80.8		ug/L		81	60 - 142	6	17
4-Methyl-2-pentanone (MIBK)	100	82.8		ug/L		83	60 - 137	3	21
Acetone	100	83.5		ug/L		83	54 ₋ 145	8	23
Benzene	20.0	21.2		ug/L		106	80 - 121	0	12
Bromodichloromethane	20.0	22.9		ug/L		114	75 - 129	0	14
Bromoform	20.0	21.8		ug/L		109	46 - 145	0	14
Bromomethane	20.0	23.2		ug/L		116	41 - 150	3	19
Carbon disulfide	20.0	22.0		ug/L		110	77 ₋ 126	0	16
Carbon tetrachloride	20.0	26.0		ug/L		130	64 - 147	2	16
Chlorobenzene	20.0	22.2		ug/L		111	80 - 120	2	12
Chloroethane	20.0	23.3		ug/L		117	72 - 120	9	15
Chloroform	20.0	23.0		ug/L		115	73 - 129	4	14
Chloromethane	20.0	19.0		ug/L		95	12 - 150	4	20
cis-1,2-Dichloroethene	20.0	21.9		ug/L		109	76 - 125	2	15
cis-1,3-Dichloropropene	20.0	20.5		ug/L		102	74 - 140	1	15

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Lab Sample ID: LCSD 490-474935/4

Matrix: Water

Analysis Batch: 474935

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch. 474000	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyclohexane	20.0	21.0		ug/L		105	73 - 122	3	16
Dibromochloromethane	20.0	21.9		ug/L		110	69 - 133	0	13
Dichlorodifluoromethane	20.0	30.6	*	ug/L		153	37 - 127	3	16
Ethylbenzene	20.0	20.4		ug/L		102	80 - 130	2	12
Isopropylbenzene	20.0	21.3		ug/L		107	80 - 141	3	13
Methyl acetate	40.0	40.9		ug/L		102	64 - 150	3	18
Methyl tert-butyl ether	20.0	21.3		ug/L		107	72 - 133	1	16
Methylcyclohexane	20.0	24.1		ug/L		121	71 - 129	3	17
Methylene Chloride	20.0	23.0		ug/L		115	79 - 123	1	15
Styrene	20.0	20.5		ug/L		102	80 - 127	1	12
Tetrachloroethene	20.0	23.2		ug/L		116	80 - 126	2	17
Toluene	20.0	21.0		ug/L		105	80 - 126	3	13
trans-1,2-Dichloroethene	20.0	20.9		ug/L		104	79 - 126	1	15
trans-1,3-Dichloropropene	20.0	20.4		ug/L		102	63 - 134	3	13
Trichloroethene	20.0	23.6		ug/L		118	80 - 123	1	14
Trichlorofluoromethane	20.0	28.2	*	ug/L		141	65 - 124	8	22
Vinyl chloride	20.0	21.3		ug/L		106	68 - 120	2	15
Xylenes, Total	40.0	41.1		ug/L		103	80 - 132	3	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	89		70 - 130
Dibromofluoromethane (Surr)	109		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: MB 490-475225/6

Matrix: Water

Analysis Batch: 475225

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

Alialysis Dalcii. 47 3223								
	MB MB							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 17:26	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.19	ug/L			11/11/17 17:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.15	ug/L			11/11/17 17:26	1
1,1,2-Trichloroethane	ND	1.0	0.19	ug/L			11/11/17 17:26	1
1,1-Dichloroethane	ND	1.0	0.24	ug/L			11/11/17 17:26	1
1,1-Dichloroethene	ND	1.0	0.25	ug/L			11/11/17 17:26	1
1,2,4-Trichlorobenzene	ND	1.0	0.20	ug/L			11/11/17 17:26	1
1,2-Dibromo-3-Chloropropane	ND	10	0.94	ug/L			11/11/17 17:26	1
1,2-Dibromoethane	ND	1.0	0.21	ug/L			11/11/17 17:26	1
1,2-Dichlorobenzene	ND	1.0	0.19	ug/L			11/11/17 17:26	1
1,2-Dichloroethane	ND	1.0	0.20	ug/L			11/11/17 17:26	1
1,2-Dichloropropane	ND	1.0	0.25	ug/L			11/11/17 17:26	1
1,3-Dichlorobenzene	ND	1.0	0.18	ug/L			11/11/17 17:26	1
1,4-Dichlorobenzene	ND	1.0	0.17	ug/L			11/11/17 17:26	1
2-Butanone (MEK)	ND	50	2.6	ug/L			11/11/17 17:26	1
2-Hexanone	ND	10	1.3	ug/L			11/11/17 17:26	1
4-Methyl-2-pentanone (MIBK)	ND	10	0.81	ug/L			11/11/17 17:26	1
Acetone	ND	25	2.7	ug/L			11/11/17 17:26	1
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TestAmerica Job ID: 480-127162-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 490-475225/6

Matrix: Water

Analysis Batch: 475225

Client Sample ID: Method Blank **Prep Type: Total/NA**

MB MB **MDL** Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Benzene $\overline{\mathsf{ND}}$ 1.0 0.20 ug/L 11/11/17 17:26 Bromodichloromethane ND 1.0 0.17 ug/L 11/11/17 17:26 **Bromoform** ND 1.0 0.29 ug/L 11/11/17 17:26 Bromomethane ND 1.0 0.35 ug/L 11/11/17 17:26 Carbon disulfide ND 1.0 0.22 ug/L 11/11/17 17:26 Carbon tetrachloride ND 1.0 0.18 ug/L 11/11/17 17:26 Chlorobenzene ND 1.0 0.18 ug/L 11/11/17 17:26 Chloroethane ND 1.0 0.36 ug/L 11/11/17 17:26 Chloroform ND 1.0 0.23 ug/L 11/11/17 17:26 ND Chloromethane 1.0 0.36 ug/L 11/11/17 17:26 cis-1,2-Dichloroethene ND 1.0 0.21 ug/L 11/11/17 17:26 ND 0.17 ug/L cis-1,3-Dichloropropene 1.0 11/11/17 17:26 ND 5.0 Cyclohexane 0.13 ug/L 11/11/17 17:26 Dibromochloromethane ND 1.0 0.25 ug/L 11/11/17 17:26 Dichlorodifluoromethane ND 1.0 0.17 ug/L 11/11/17 17:26 Ethylbenzene ND 1.0 0.19 ug/L 11/11/17 17:26 Isopropylbenzene ND 1.0 0.33 ug/L 11/11/17 17:26 ND 10 Methyl acetate 0.58 ug/L 11/11/17 17:26 Methyl tert-butyl ether ND 1.0 0.17 ug/L 11/11/17 17:26 Methylcyclohexane ND 5.0 0.090 ug/L 11/11/17 17:26 Methylene Chloride ND 5.0 1.0 ug/L 11/11/17 17:26 Styrene ND 1.0 0.28 ug/L 11/11/17 17:26 Tetrachloroethene ND 1.0 0.14 ug/L 11/11/17 17:26 Toluene ND 1.0 0.17 ug/L 11/11/17 17:26 ND trans-1,2-Dichloroethene 1.0 0.23 ug/L 11/11/17 17:26 trans-1,3-Dichloropropene ND 1.0 0.17 ug/L 11/11/17 17:26 Trichloroethene ND 0.20 ug/L 1.0 11/11/17 17:26 Trichlorofluoromethane ND 1.0 0.21 ug/L 11/11/17 17:26 ND Vinyl chloride 1.0 0.18 ug/L 11/11/17 17:26 Xylenes, Total ND 3.0 0.58 ug/L 11/11/17 17:26

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92	70 - 130		11/11/17 17:26	1
4-Bromofluorobenzene (Surr)	98	70 - 130	1	11/11/17 17:26	1
Dibromofluoromethane (Surr)	105	70 - 130	1	11/11/17 17:26	1
Toluene-d8 (Surr)	100	70 - 130		11/11/17 17:26	1

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Analysis Batch: 475225

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	23.7		ug/L		119	78 - 135	_
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		102	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.9	*	ug/L		130	77 - 129	
ne								
1,1,2-Trichloroethane	20.0	22.0		ug/L		110	80 - 124	
1,1-Dichloroethane	20.0	21.5		ug/L		108	78 ₋ 125	

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Analysis Batch: 475225

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

Analysis Batch: 4/5225	Spike	LCS	LCS			%Rec.
Analyte	Added	Result	Qualifier	Unit	D %Rec	Limits
1,1-Dichloroethene	20.0	22.3		ug/L	112	79 - 124
1,2,4-Trichlorobenzene	20.0	18.5		ug/L	92	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	19.2		ug/L	96	54 - 125
1,2-Dibromoethane	20.0	22.2		ug/L	111	80 - 129
1,2-Dichlorobenzene	20.0	22.4		ug/L	112	80 - 121
1,2-Dichloroethane	20.0	22.7		ug/L	114	77 - 121
1,2-Dichloropropane	20.0	20.9		ug/L	105	75 ₋ 120
1,3-Dichlorobenzene	20.0	23.0		ug/L	115	80 - 122
1,4-Dichlorobenzene	20.0	23.3		ug/L	116	80 - 120
2-Butanone (MEK)	100	88.0		ug/L	88	62 - 133
2-Hexanone	100	86.0		ug/L	86	60 - 142
4-Methyl-2-pentanone (MIBK)	100	85.4		ug/L	85	60 - 137
Acetone	100	87.4		ug/L	87	54 ₋ 145
Benzene	20.0	20.6		ug/L	103	80 - 121
Bromodichloromethane	20.0	23.1		ug/L	115	75 ₋ 129
Bromoform	20.0	21.2		ug/L	106	46 - 145
Bromomethane	20.0	21.4		ug/L	107	41 - 150
Carbon disulfide	20.0	21.4		ug/L	107	77 ₋ 126
Carbon tetrachloride	20.0	25.5		ug/L	128	64 - 147
Chlorobenzene	20.0	23.1		ug/L	115	80 - 120
Chloroethane	20.0	20.7		ug/L	103	72 - 120
Chloroform	20.0	23.4		ug/L	117	73 - 129
Chloromethane	20.0	16.4		ug/L	82	12 - 150
cis-1,2-Dichloroethene	20.0	21.8		ug/L	109	76 ₋ 125
cis-1,3-Dichloropropene	20.0	21.4		ug/L	107	74 ₋ 140
Cyclohexane	20.0	19.7		ug/L	99	73 - 122
Dibromochloromethane	20.0	22.2		ug/L	111	69 ₋ 133
Dichlorodifluoromethane	20.0	23.0		ug/L	115	37 ₋ 127
Ethylbenzene	20.0	20.3		ug/L	101	80 - 130
Isopropylbenzene	20.0	19.1		ug/L	95	80 - 141
Methyl acetate	40.0	39.5		ug/L	99	64 - 150
Methyl tert-butyl ether	20.0	20.8		ug/L	104	72 - 133
Methylcyclohexane	20.0	21.5		ug/L	108	71 - 129
Methylene Chloride	20.0	21.7		ug/L	108	79 ₋ 123
Styrene	20.0	20.2		ug/L	101	80 - 127
Tetrachloroethene	20.0	22.8		ug/L	114	80 - 126
Toluene	20.0	20.8		ug/L	104	80 - 126
trans-1,2-Dichloroethene	20.0	21.3		ug/L	107	79 - 126
trans-1,3-Dichloropropene	20.0	20.6		ug/L	103	63 - 134
Trichloroethene	20.0	23.9		ug/L	120	80 - 123
Trichlorofluoromethane	20.0	24.8		ug/L	124	65 - 124
Vinyl chloride	20.0	20.2		ug/L	101	68 - 120
Xylenes, Total	40.0	39.9		ug/L	100	80 - 132
	70.0	00.0		~9, -	100	30 - 102

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Lab Sample ID: LCS 490-475225/3

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Matrix: Water

Analysis Batch: 475225

LCS LCS

Surrogate %Recovery Qualifier Limits Toluene-d8 (Surr) 70 - 130 99

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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 475225	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	_	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	24.2		ug/L		121	78 - 135	2	15
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	69 - 131	2	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	26.3	*	ug/L		132	77 - 129	2	16
ne									
1,1,2-Trichloroethane	20.0	21.8		ug/L		109	80 - 124	1	13
1,1-Dichloroethane	20.0	21.9		ug/L		110	78 - 125	2	17
1,1-Dichloroethene	20.0	23.7		ug/L		118	79 - 124	6	20
1,2,4-Trichlorobenzene	20.0	18.7		ug/L		94	63 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	19.5		ug/L		98	54 - 125	2	19
1,2-Dibromoethane	20.0	21.5		ug/L		108	80 - 129	3	13
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 - 121	0	12
1,2-Dichloroethane	20.0	23.2		ug/L		116	77 - 121	2	13
1,2-Dichloropropane	20.0	21.4		ug/L		107	75 - 120	2	15
1,3-Dichlorobenzene	20.0	23.1		ug/L		116	80 - 122	1	13
1,4-Dichlorobenzene	20.0	23.2		ug/L		116	80 - 120	0	12
2-Butanone (MEK)	100	95.9		ug/L		96	62 - 133	9	19
2-Hexanone	100	86.1		ug/L		86	60 - 142	0	17
4-Methyl-2-pentanone (MIBK)	100	87.1		ug/L		87	60 - 137	2	21
Acetone	100	90.2		ug/L		90	54 - 145	3	23
Benzene	20.0	21.0		ug/L		105	80 - 121	2	12
Bromodichloromethane	20.0	23.4		ug/L		117	75 - 129	1	14
Bromoform	20.0	21.2		ug/L		106	46 - 145	0	14
Bromomethane	20.0	22.0		ug/L		110	41 - 150	3	19
Carbon disulfide	20.0	21.8		ug/L		109	77 - 126	2	16
Carbon tetrachloride	20.0	25.4		ug/L		127	64 - 147	0	16
Chlorobenzene	20.0	22.3		ug/L		111	80 - 120	3	12
Chloroethane	20.0	21.7		ug/L		108	72 - 120	5	15
Chloroform	20.0	23.8		ug/L		119	73 - 129	2	14
Chloromethane	20.0	16.4		ug/L		82	12 - 150	0	20
cis-1,2-Dichloroethene	20.0	22.1		ug/L		111	76 - 125	1	15
cis-1,3-Dichloropropene	20.0	20.9		ug/L		104	74 - 140	2	15
Cyclohexane	20.0	19.9		ug/L		99	73 - 122	1	16
Dibromochloromethane	20.0	22.8		ug/L		114	69 - 133	3	13
Dichlorodifluoromethane	20.0	22.4		ug/L		112	37 - 127	2	16
Ethylbenzene	20.0	20.2		ug/L		101	80 - 130	0	12
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 141	1	13
Methyl acetate	40.0	40.4		ug/L		101	64 - 150	2	18
Methyl tert-butyl ether	20.0	21.4		ug/L		107	72 - 133	. 3	16
Methylcyclohexane	20.0	21.5		ug/L		107	71 - 129	0	17
Methylene Chloride	20.0	23.3		ug/L		116	79 - 123	7	15
Styrene	20.0	20.2		ug/L		101	80 - 127		12

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Analysis Batch: 475225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Tetrachloroethene	20.0	22.5		ug/L		112	80 - 126	1	17
Toluene	20.0	20.8		ug/L		104	80 - 126	0	13
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	79 - 126	0	15
trans-1,3-Dichloropropene	20.0	20.7		ug/L		103	63 - 134	0	13
Trichloroethene	20.0	23.7		ug/L		118	80 - 123	1	14
Trichlorofluoromethane	20.0	24.5		ug/L		122	65 - 124	1	22
Vinyl chloride	20.0	20.4		ug/L		102	68 - 120	1	15
Xylenes, Total	40.0	39.5		ug/L		99	80 - 132	1	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-194884/1-A

Matrix: Water

Analysis Batch: 195605

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

Prep Batch: 194884

7 many one Buttonn 100000									op Batom	
	-	MB	MB							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorohexanesulfonic acid (PFHxS)	0.293	J	2.0	0.17	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/15/17 12:46	11/17/17 08:39	1
	Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		11/15/17 12:46	11/17/17 08:39	1
		MB	MB							

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	92		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C4 PFBA	102		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C2 PFHxA	104		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C4 PFOA	87		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C5 PFNA	103		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C2 PFDA	101		25 - 150	11/15/17 12:46	11/17/17 08:39	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Lab Sample ID: MB 320-194884/1-A

Matrix: Water

Analysis Batch: 195605

Client Sample ID: Method Blank **Prep Type: Total/NA Prep Batch: 194884**

	MB	MB				
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	109	-	25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C2 PFDoA	96		25 - 150	11/15/17 12:46	11/17/17 08:39	1
1802 PFHxS	105		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C4 PFOS	102		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C4-PFHpA	108		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C5 PFPeA	103		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C3-PFBS	104		25 - 150	11/15/17 12:46	11/17/17 08:39	1
13C2-PFTeDA	92		25 - 150	11/15/17 12:46	11/17/17 08:39	1

Lab Sample ID: LCS 320-194884/2-A

Matrix: Water

Analysis Batch: 195605

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

Prep Batch: 194884

Analysis Batch: 195605	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	40.5		ng/L		101	78 - 138
Perfluoropentanoic acid (PFPeA)	40.0	38.7		ng/L		97	66 - 136
Perfluorohexanoic acid (PFHxA)	40.0	38.1		ng/L		95	76 - 136
Perfluoroheptanoic acid (PFHpA)	40.0	40.3		ng/L		101	78 - 138
Perfluorooctanoic acid (PFOA)	40.0	41.3		ng/L		103	70 - 130
Perfluorononanoic acid (PFNA)	40.0	41.8		ng/L		104	77 - 137
Perfluorodecanoic acid (PFDA)	40.0	41.0		ng/L		102	74 - 134
Perfluoroundecanoic acid (PFUnA)	40.0	39.1		ng/L		98	68 - 128
Perfluorododecanoic acid (PFDoA)	40.0	41.8		ng/L		104	72 - 132
Perfluorotridecanoic Acid (PFTriA)	40.0	38.1		ng/L		95	56 - 163
Perfluorotetradecanoic acid (PFTeA)	40.0	38.8		ng/L		97	63 - 123
Perfluorobutanesulfonic acid (PFBS)	35.4	36.6		ng/L		103	79 - 139
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.7		ng/L		93	77 - 137
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	40.1		ng/L		105	83 - 143
Perfluorooctanesulfonic acid (PFOS)	37.1	36.9		ng/L		99	74 - 134
Perfluorodecanesulfonic acid (PFDS)	38.6	39.6		ng/L		103	75 - 135
Perfluorooctane Sulfonamide (FOSA)	40.0	40.5		ng/L		101	82 - 142

LCS LCS

Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	92		25 - 150
13C4 PFBA	101		25 - 150
13C2 PFHxA	102		25 - 150
13C4 PFOA	88		25 - 150
13C5 PFNA	98		25 - 150
13C2 PFDA	102		25 - 150
13C2 PFUnA	100		25 - 150
13C2 PFDoA	93		25 - 150

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Prep Batch: 194884

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

Lab Sample ID: LCS 320-194884/2-A Matrix: Water

Analysis Batch: 195605

LCS	LCS	
Recovery	Qualifier	Limits
106		25 - 150
99		25 - 150
102		25 - 150
101		25 - 150
105		25 - 150
95		25 - 150
	106 99 102 101 105	99 102 101 105

Lab Sample ID: LCSD 320-194884/3-A

Matrix: Water

Analysis Batch: 195605

Client Sample	ID: I	Lab	Contro	l Sam	ple D	up
			Prep Ty	/ne: T	otal/l	NA

Prep Type: Total/NA Prep Batch: 194884

Analysis Batch: 195605	Cn: 195605 Spike LCSD		LCSD				Prep Batch: 194884 %Rec. RPI		94884 RPD
Analyte	Added	_	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorobutanoic acid (PFBA)	40.0	40.1		ng/L		100	78 - 138	1	30
Perfluoropentanoic acid (PFPeA)	40.0	40.3		ng/L		101	66 - 136	4	30
Perfluorohexanoic acid (PFHxA)	40.0	40.4		ng/L		101	76 ₋ 136	6	30
Perfluoroheptanoic acid (PFHpA)	40.0	41.5		ng/L		104	78 - 138	3	30
Perfluorooctanoic acid (PFOA)	40.0	41.7		ng/L		104	70 - 130	1	30
Perfluorononanoic acid (PFNA)	40.0	39.4		ng/L		99	77 - 137	6	30
Perfluorodecanoic acid (PFDA)	40.0	42.0		ng/L		105	74 - 134	2	30
Perfluoroundecanoic acid (PFUnA)	40.0	38.9		ng/L		97	68 - 128	0	30
Perfluorododecanoic acid (PFDoA)	40.0	42.1		ng/L		105	72 - 132	1	30
Perfluorotridecanoic Acid (PFTriA)	40.0	39.1		ng/L		98	56 - 163	3	30
Perfluorotetradecanoic acid (PFTeA)	40.0	38.6		ng/L		96	63 - 123	1	30
Perfluorobutanesulfonic acid (PFBS)	35.4	36.4		ng/L		103	79 - 139	0	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.7		ng/L		98	77 - 137	6	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	39.8		ng/L		105	83 - 143	1	30
Perfluorooctanesulfonic acid (PFOS)	37.1	39.7		ng/L		107	74 - 134	7	30
Perfluorodecanesulfonic acid (PFDS)	38.6	40.3		ng/L		105	75 - 135	2	30
Perfluorooctane Sulfonamide (FOSA)	40.0	41.8		ng/L		105	82 - 142	3	30

LCSD LCSD

Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	94		25 - 150
13C4 PFBA	106		25 - 150
13C2 PFHxA	101		25 - 150
13C4 PFOA	85		25 - 150
13C5 PFNA	102		25 - 150
13C2 PFDA	102		25 - 150
13C2 PFUnA	102		25 - 150
13C2 PFDoA	95		25 - 150
18O2 PFHxS	104		25 - 150
13C4 PFOS	100		25 - 150

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

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

Lab Sample ID: LCSD 320-194884/3-A

Matrix: Water

Analysis Batch: 195605

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

Prep Batch: 194884

	LCSD	LUSD	
Isotope Dilution	%Recovery	Qualifier	Limits
13C4-PFHpA	102		25 - 150
13C5 PFPeA	100		25 - 150
13C3-PFBS	104		25 - 150
13C2-PFTeDA	94		25 - 150

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

GC/MS VOA

Analysis Batch: 474935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127162-5	MW-8	Total/NA	Water	8260C	
480-127162-7	TRIP BLANKS	Total/NA	Water	8260C	
MB 490-474935/6	Method Blank	Total/NA	Water	8260C	
LCS 490-474935/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-474935/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 475225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127162-1	MW-10S	Total/NA	Water	8260C	_
480-127162-2	MW-5R	Total/NA	Water	8260C	
480-127162-3	MW-10D	Total/NA	Water	8260C	
480-127162-4	MW-18	Total/NA	Water	8260C	
480-127162-6	MW-11	Total/NA	Water	8260C	
MB 490-475225/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475225/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475225/4	Lab Control Sample Dup	Total/NA	Water	8260C	

LCMS

Prep Batch: 194884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127162-1	MW-10S	Total/NA	Water	3535	
480-127162-2	MW-5R	Total/NA	Water	3535	
480-127162-3	MW-10D	Total/NA	Water	3535	
480-127162-4	MW-18	Total/NA	Water	3535	
480-127162-5 - DL	MW-8	Total/NA	Water	3535	
480-127162-5	MW-8	Total/NA	Water	3535	
480-127162-6 - DL	MW-11	Total/NA	Water	3535	
480-127162-6	MW-11	Total/NA	Water	3535	
MB 320-194884/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-194884/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-194884/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 195605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127162-1	MW-10S	Total/NA	Water	537 (modified)	194884
480-127162-2	MW-5R	Total/NA	Water	537 (modified)	194884
480-127162-3	MW-10D	Total/NA	Water	537 (modified)	194884
480-127162-4	MW-18	Total/NA	Water	537 (modified)	194884
480-127162-5	MW-8	Total/NA	Water	537 (modified)	194884
480-127162-6	MW-11	Total/NA	Water	537 (modified)	194884
MB 320-194884/1-A	Method Blank	Total/NA	Water	537 (modified)	194884
LCS 320-194884/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	194884
LCSD 320-194884/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	194884

Analysis Batch: 195797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127162-5 - DL	MW-8	Total/NA	Water	537 (modified)	194884
480-127162-6 - DL	MW-11	Total/NA	Water	537 (modified)	194884

TestAmerica Buffalo

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Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: MW-10S Lab Sample ID: 480-127162-1

Date Collected: 11/06/17 12:15 **Matrix: Water** Date Received: 11/07/17 10:30

Batch Dilution Batch Prepared Batch **Prep Type** Method Run Factor Number or Analyzed Type Analyst Lab Total/NA Analysis 8260C 5 475225 11/11/17 22:40 S1S TAL NSH

Total/NA 3535 TAL SAC Prep 194884 11/15/17 12:46 KMK Total/NA Analysis 537 (modified) 195605 11/17/17 10:14 AAR TAL SAC 1

Client Sample ID: MW-5R Lab Sample ID: 480-127162-2

Date Collected: 11/06/17 12:05 Date Received: 11/07/17 10:30

Batch Batch Dilution **Batch** Prepared Method Number **Prep Type** Type Run Factor or Analyzed Analyst Lab Total/NA 8260C TAL NSH Analysis 475225 11/11/17 21:22 S1S Total/NA Prep 3535 194884 11/15/17 12:46 KMK TAL SAC Total/NA 195605 11/17/17 10:22 AAR TAL SAC Analysis 537 (modified) 1

Client Sample ID: MW-10D Lab Sample ID: 480-127162-3

Date Collected: 11/06/17 13:15 **Matrix: Water**

Date Received: 11/07/17 10:30

Batch Batch Dilution Batch **Prepared Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA 8260C 5 11/11/17 23:06 S1S TAL NSH Analysis 475225 Total/NA Prep 3535 194884 11/15/17 12:46 KMK TAL SAC Total/NA Analysis 537 (modified) 1 195605 11/17/17 10:30 AAR TAL SAC

Lab Sample ID: 480-127162-4 Client Sample ID: MW-18

Date Collected: 11/06/17 14:15

Date Received: 11/07/17 10:30

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	475225	11/11/17 23:32	S1S	TAL NSH
Total/NA	Prep	3535			194884	11/15/17 12:46	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195605	11/17/17 10:38	AAR	TAL SAC

Client Sample ID: MW-8 Lab Sample ID: 480-127162-5

Date Collected: 11/06/17 14:10 **Matrix: Water**

Date Received: 11/07/17 10:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	474935	11/10/17 18:48	C1A	TAL NSH
Total/NA	Prep	3535			194884	11/15/17 12:46	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195605	11/17/17 10:45	AAR	TAL SAC
Total/NA	Prep	3535	DL		194884	11/15/17 12:46	KMK	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10	195797	11/20/17 12:22	AAR	TAL SAC

TestAmerica Buffalo

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Matrix: Water

Matrix: Water

Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Client Sample ID: MW-11 Lab Sample ID: 480-127162-6

Date Collected: 11/06/17 15:35 Matrix: Water

Date Received: 11/07/17 10:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	-	5	475225	11/11/17 23:58	S1S	TAL NSH
Total/NA	Prep	3535			194884	11/15/17 12:46	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195605	11/17/17 10:53	AAR	TAL SAC
Total/NA	Prep	3535	DL		194884	11/15/17 12:46	KMK	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10	195797	11/20/17 12:30	AAR	TAL SAC

Client Sample ID: TRIP BLANKS Lab Sample ID: 480-127162-7

Date Collected: 11/06/17 00:00 Eab Sample 15: 400-127 102-7

Date Received: 11/07/17 10:30

	Batch	Batch	atch Dilution		Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	474935	11/10/17 15:45	C1A	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11342	03-31-18

Laboratory: TestAmerica Sacramento

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

Authority	Program		EPA Region	Identification Number	r Expiration Date	
lew York	NELAP		2	11666	04-01-18	
The following analytes	s are included in this repo	rt, but accreditation	/certification is not off	fered by the governing au	thority:	
Analysis Method	Prep Method	Matrix	Analy	te		
537 (modified)	3535	Water	Perflu	orobutanesulfonic acid (P	FBS)	
537 (modified)	3535	Water	Perflu	orobutanoic acid (PFBA)		
537 (modified)	3535	Water	Perflu	orodecanesulfonic acid (F	PFDS)	
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)			
537 (modified)	3535	Water	Perflu	orododecanoic acid (PFD	oA)	
537 (modified) 3535		Water	Perfluoroheptanesulfonic Acid (PFHpS)			
537 (modified) 3535		Water	Perflu	Perfluoroheptanoic acid (PFHpA)		
537 (modified)	3535	Water	Perflu	orohexanesulfonic acid (F	PFHxS)	
537 (modified)	3535	Water	Perflu	orohexanoic acid (PFHxA	a)	
537 (modified)	3535	Water	Perflu	orononanoic acid (PFNA)		
537 (modified)	3535	Water	Perflu	orooctane Sulfonamide (F	FOSA)	
537 (modified)	3535	Water	Perflu	orooctanesulfonic acid (P	FOS)	
537 (modified)	3535	Water	Perflu	orooctanoic acid (PFOA)		
537 (modified)	3535	Water	Perflu	oropentanoic acid (PFPe	۹)	
537 (modified)	3535	Water	Perflu	orotetradecanoic acid (PF	TeA)	
537 (modified)	3535	Water	Perflu	orotridecanoic Acid (PFT)	riA)	
537 (modified)	3535	Water	Perflu	oroundecanoic acid (PFU	nA)	

TestAmerica Buffalo

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Method	Method Description	Protocol	Laboratory	
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH	
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC	

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127162-1

Lab Sample ID	Client Sample ID	Matrix	Collected Recei	ved
480-127162-1	MW-10S	Water	11/06/17 12:15 11/07/17	10:30
480-127162-2	MW-5R	Water	11/06/17 12:05 11/07/17	10:30
480-127162-3	MW-10D	Water	11/06/17 13:15 11/07/17	10:30
480-127162-4	MW-18	Water	11/06/17 14:15 11/07/17	10:30
480-127162-5	MW-8	Water	11/06/17 14:10 11/07/17	10:30
480-127162-6	MW-11	Water	11/06/17 15:35 11/07/17	10:30
480-127162-7	TRIP BLANKS	Water	11/06/17 00:00 11/07/17	10:30

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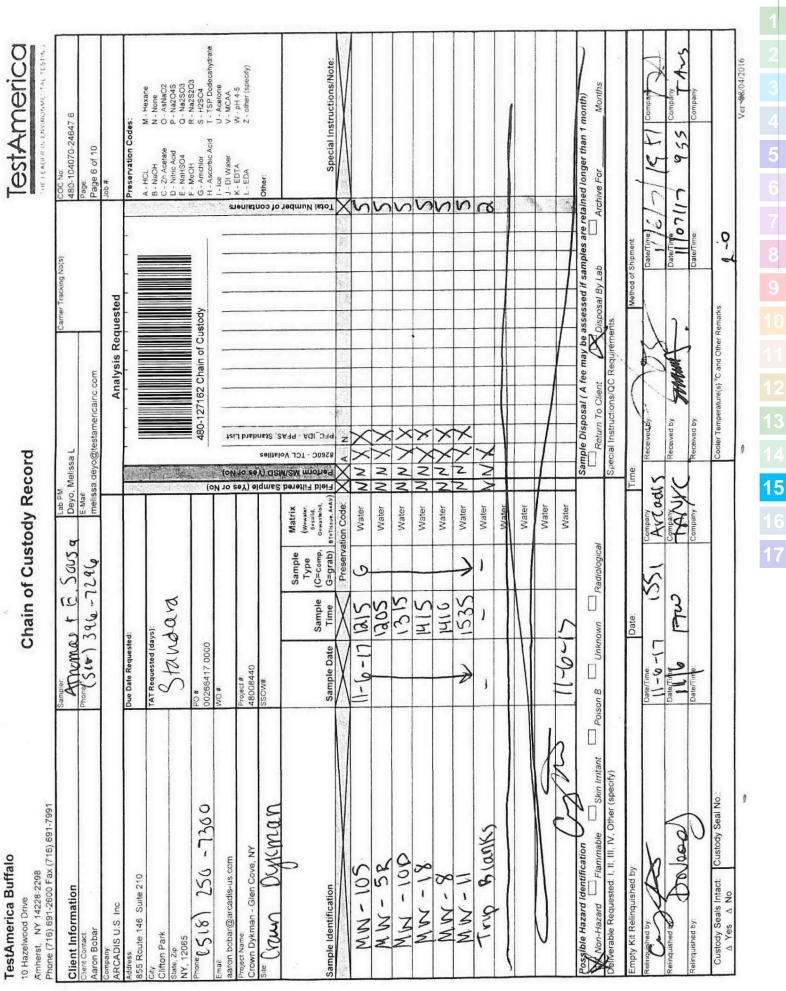
11

10

TestAmerica Buffalo

TestAmerica

Client Information Client Contact Aaron Bobar Company. ARCADIS U.S. Inc Address 855 Route 146 Suite 210 City City City City Contact Co				
e 210	Amomas + E. Saus	0	Camer Tracking No(s)	COC No: 480-104070-24647.6
RCADIS U.S. Inc dress S Route 146 Suite 210 y ifton Park	Phone (Str.) 396 -7296	E-Mail: melissa.deyo@testamericainc.com	nc.com	Page Page 6 of 10
dress. 25 Route 146 Suite 210 y Iffon Park			Analysis Requested	# qor
y ifton Park sie, Zie	Due Date Requested:			tion Code
	TAT Requested (days): Standara			A HCL M-Hexane B-NaOr N None C-Zn D-Nit
18/ 256 -7360	PO# 00266417,0000	(c		F - Mei G - Arr H - Asr
Email aaron bobar@arcadis-us.com	WO#	(ON		1- loe 1- Di 1
Project Name Crown Dykman - Glen Cove, NY	Project # 48008440	10 50		
sie: Crown Duncman	SSOW#	Solitati		Other:
0	Sample			nedmuN letc
Sample Identification	Sample Date Time G=grab)	ation Code:		Special instructions/Note:
MW - 105	-	XXX		2
1		Water N N X		\sqr
ML - 100	(315)	Water N N X		S
MW-18	MIS	water NNX X		8
WW - 8	1416	Water NNXX		2
MW-W	♦ 1535 ♦	Water NNXX		2
Try Blanks)	Water NNX		78
	1	Water		
		Water		
		Water		
(CX M	11-6-17	Water		
Possible Hazard Identification Non-Hazard Plammable Skin Irritant Poison B	son B Unknown Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Olisposal By Lab One Mont	Archive For Months
ssted 1, II, III, IV, Other (specify)		Special Instructions	Special Instructions/QC Requirements:	
Empty Kit Relinquished by:	Date:	Time	Method of Shipment	5
Reinquished by	1) SS1 L1-0-11	345	DateTime	(1 19 KI COMPAN)
Relinquished by Association	Some of the	5	T Datediale	7 17 (630 company
	Date/Time.	Company (Received by	Date/Time	Company
Custody Seals Intact Custody Seal No.		Cooler Temperatur	Cooler Temperature(s) °C and Other Remarks:	





THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN

COOLER RECEIPT FORM -

Cooler Received/Opened On11/10/170950	
Time Samples Removed From Cooler Time Samples Placed In Storage (2 Hour N	Window)
1. Tracking #	
IR Gun ID97310166 pH Strip Lot Chlorine Strip Lot	
2. Temperature of rep. sample or temp blank when opened: 15 Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES N	10.4NA
4. Were custody seals on outside of cooler?	NOOA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	AMON
6. Were custody papers inside cooler?	AN. (OV
I certify that I opened the cooler and answered questions 1-6 (Intial)	_
7. Were custody seals on containers: YES NO and Intact YES	10.(NA)
Were these signed and dated correctly? YESN	10NA
8. Packing mat'l used? Bubblewrap Flastic bag Peanuts Vermiculite Foam Insert Paper Other	None
9. Cooling process: (ce Ice-pack Ice (direct contact) Dry Ice Other I	None
10. Did all containers arrive in good condition (unbroken)?	NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	NONA
12. Did all container labels and tags agree with custody papers?	NONA
13a. Were VOA vials received?	AMO
b. Was there any observable headspace present in any VOA vial?	ANQ
Larger than this.	•
14. Was there a Trip Blank in this cooler? YES. NA If multiple coolers, sequence #	_
I certify that I unloaded the cooler and answered questions 7-14 (initial)	(A)
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? b. Did the bottle labels indicate that the correct preservatives were used YESN	1
	ANO
16. Was residual chlorine present? YESN	OINA)
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	2
	NONA
	10NA
	NONA
	NONA
I certify that I entered this project into LIMS and answered questions 17-20 (intial)	-
I certify that I attached a label with the unique LIMS number to each container (intial)	-
21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO	-
BIS = Broken in shipment	

Cooler Receipt Form.doc

LF-1 End of Form Revised 8/23/17

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298	Chain of C	Chain of Custody Record	ord	197169 stAmerica	2716	STATE COLUMN	stAmerica
Phone (716) 691-2600 Fax (716) 691-7991	Sampler.	Lab PM:			2 / 7	7	Demos Versus
Client Information (Sub Contract Lab)		Deyo, Me	lissa L			76.1	
Client Contact: Shipping/Receiving	Phone:	E-Mail: melissa.d	eyo@testamerica	inc.com prewrong ==	:	1 ogo 1 of 1	
Company: TestAmerica Laboratories, Inc		Acore	Accreditations Required (See note): NELAP - New York			Job #: 480-127162-1	
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 11/17/2017			Analysis Reguested		Ŋ	
City: Nashville	TAT Requested (days):		526				M - Hexane N - None
State, Zip: TN, 37204	T					D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO#:	(e	Single			F - MeOH G - Amchlor H - Assomic Acid	R - Na2S203 S - H2S04 F - TSD Dodecehudeste
Email:	WO#;		(o)		, i, s	I - Ice J - DI Water	U - Acetone V - MCAA
Project Name: Crown Dykman - Glen Cove, NY	Project #: 48008440				nenist	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site:	SSOW#:		15 31		uoo jõ	Other:	
		Matrix (w=water; Esolid, o=waste/oil, o=wast	70 (10 MS/M)		<u>ที่ย</u> ผู้ผู้ผู้ปฏิจ		
Sample Identification - Client ID (Lab ID)	Sample Date Time	BT=Tissue, A=Air)	_		Å	S	Special Instructions/Note:
MW-10S (480-127162-1)	11/6/17	Water	×	700 P			1 (14) (N) (1)
MW-5R (480-127162-2)	11/6/17 Eastern	Water	×		- m	\$5 -a	
MW-10D (480-127162-3)	11/6/17 Fastern	Water	×				
MW-18 (480-127162-4)	11/6/17 14:15 Eastern	Water	×		က		
MW-8 (480-127162-5)	11/6/17 14:10 Eastern	Water	×		. (0)		
MW-11 (480-127162-6)	11/6/17 15:35 Eastern	Water	×		е .		
TRIP BLANKS (480-127162-7)	11/6/17 Eastern	Water	×		, CI		
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyta & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not custody maintain accreditation in the State of Origin Islaed above for analysis/testshmatry being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be broughit to TestAmerica Laboratories, inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc.	ttories, Inc. places the ownership of method, sts/matrix being analyzed, the samples must nnt to date, return the signed Chain of Custod	analyte & accreditation con se shipped back to the Tes y attesting to said complica	ipliance upon out subc America laboratory or nce to TestAmerica La	contract laboratories. This sample shi other instructions will be provided. A aboratories, Inc.	ipment is forwarded un	der chain-of-custody. If ation status should be b	the laboratory does not rought to TestAmerica
Possible Hazard Identification Unconfirmed			sample Disposal (A f	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Mon	amples are retair	re retained longer than 1 r	nonth) Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2		special Instruction	. Requirem			
Empty Kit Relinquished by:	Date	Time:	1	Method o	Method of Shipment:		
Relinquished by:	Date/Time/9/18 (780)	Standard (Received by:		Date/Time: パープのイン	25:5	Сотралу
Relinquished by:	Date/fimė: ′ ′ ° ′ ° ′ ° ′ ° ′ ° ′ ° ′ ° ′ ° ′ °	Company	Received by:	2	Date/Time:		Company
	Date/Time:	Сотрапу	Received by:		Date/Time:		Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No			Cooler Temperatu	Cooler Temperature(s) °C and Other Remarks:	51		
					i.		Ver: 09/20/2016

Sar



480-127162 Field She

Job:

Tracking # 7706 6189 2969 5.0

	Therm. ID: AK-2 / AK-3 / HACCP /Other	
otes:	Ice Wet Dry Other	
	- Ice Sty Strict	
	Cooler Custody Seal:	
	Sample Custody Seal:	
	Cooler ID:	
	Temp: Observed 2.0°(
****	Corrected:	
		~
	From: Temp Blank Sample D	
	NCM Filed: Yes D No D	
		010
	Yes No	
	Perchlorate has headspace? D	مر
	CoC is complete w/o discrepancies?	
	Samples received within holding time?	
	Sample preservatives verified?	, pd ii
	Cooler compromised/tampered with?	
	Samples compromised/tampered-with?	
7	COC and Samples w/o discrepancies?	
	Sample containers have legible labels?	
	Containers are not broken or leaking?	D
	Sample date/times are provided.	D -
No. of the second secon	Appropriate containers are used?	D
	Sample bottles are completely filled?	0
	Zero headspace?*	X
	Multiphasic samples are not present?	Ď
	manifeliation activities are tracking and	99
	Initials: AA Date: 11/07(17	91 3



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.

2. Fold the printed page along the horizontal line

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

11/6/291/22/2017

Client: ARCADIS U.S. Inc

Job Number: 480-127162-1

Login Number: 127162 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

eroutori ourinori, ouri in		
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	

TestAmerica Buffalo

Client: ARCADIS U.S. Inc Job Number: 480-127162-1

List Source: TestAmerica Sacramento
List Number: 2
List Source: TestAmerica Sacramento
List Creation: 11/07/17 11:16 AM

Creator: Turpen, Troy

Creator: Turpen, Troy		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	N/A	
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	2.0 °C
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

N/A

TestAmerica Buffalo

Residual Chlorine Checked.

Client: ARCADIS U.S. Inc Job Number: 480-127162-1

List Source: TestAmerica Sacramento
List Number: 3
List Source: TestAmerica Sacramento
List Creation: 11/07/17 11:18 AM

Creator: Turpen, Trov

Creator: Turpen, Troy	_	_
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	N/A	
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	2.0 °C
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

N/A

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Residual Chlorine Checked.



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-127283-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

7

Authorized for release by: 11/24/2017 9:50:01 AM Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I (716)504-9874 melissa.deyo@testamericainc.com

·····LINKS ······

Review your project results through

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Have a Question?



Visit us at: 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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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.
В	Compound was found in the blank and sample.
LCMS	

Qualifier	Qualifier Description
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect
	there may be a high bias.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
В	Compound was found in the blank and sample.

Glossary

ND

PQL

QC

RER

RLRPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

Reporting Limit or Requested Limit (Radiochemistry)

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Quality Control

11/24/2017

Page 3 of 62

Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Job ID: 480-127283-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-127283-1

Receipt

The samples were received on 11/9/2017 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.6° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-475225 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: MW-6R (480-127283-1) and MW-25D (480-127283-7).

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-474935 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane, Dichlorodifluoromethane and Trichlorofluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: TRIP BLANKS (480-127283-8).

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 490-474930 recovered outside control limits for the following analytes: Dichlorodifluoromethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported: DW-03 (480-127283-2), MW-29 (480-127283-3), MW-2 (480-127283-4), MW-14R (480-127283-5) and MW-15R (480-127283-6).

Method(s) 8260C: The following samples was diluted due to the nature of the sample matrix: DW-03 (480-127283-2), MW-29 (480-127283-3) and MW-14R (480-127283-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples was diluted due to target analytes: MW-6R (480-127283-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following volatile sample was analyzed with significant headspace in the sample Container(s): TRIP BLANKS (480-127283-8). Significant headspace is defined as a bubble greater than 6 mm in diameter.

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

LCMS

Method(s) 537 (modified): The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias for Perfluorobutanoic acid (PFBA) in the following samples:

MW-6R (480-127283-1), DW-03 (480-127283-2), MW-29 (480-127283-3), MW-2 (480-127283-4), MW-14R (480-127283-5), MW-15R (480-127283-6) and MW-25D (480-127283-7).

Method(s) 537 (modified): The following sample was diluted to bring the concentration of Perfluorooctanesulfonic acid (PFOS) within the calibration range: MW-14R (480-127283-5). Elevated reporting limits (RLs) are provided.

Method(s) 537 (modified): The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias for Perfluoropentanoic acid (PFPeA) in the following samples: MW-29 (480-127283-3).

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-6R (480-127283-1), DW-03 (480-127283-2), MW-29 (480-127283-3), MW-2 (480-127283-4), MW-14R (480-127283-5), MW-15R (480-127283-6) and MW-25D (480-127283-7) were decanted prior to preparation due to sediment being present.

Prep batch 320-195067

Method code 3535_PFC, waters

TestAmerica Buffalo 11/24/2017 2

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Job ID: 480-127283-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

VOA Prep

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

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TestAmerica Job ID: 480-127283-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-6R Lab Sample ID: 480-127283-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
1,1-Dichloroethene	1.6		1.0	0.25	ug/L		8260C	Total/NA
1,2-Dichloropropane	0.57	J	1.0	0.25	ug/L	1	8260C	Total/NA
1,4-Dichlorobenzene	0.41	J	1.0	0.17	ug/L	1	8260C	Total/NA
Benzene	1.6		1.0	0.20	ug/L	1	8260C	Total/NA
Chloroethane	1.3		1.0	0.36	ug/L	1	8260C	Total/NA
Ethylbenzene	26		1.0	0.19	ug/L	1	8260C	Total/NA
Isopropylbenzene	18		1.0	0.33	ug/L	1	8260C	Total/NA
Methyl tert-butyl ether	7.2		1.0	0.17	ug/L	1	8260C	Total/NA
Methylcyclohexane	2.2	J	5.0	0.090	ug/L	1	8260C	Total/NA
Tetrachloroethene	2.9		1.0	0.14	ug/L	1	8260C	Total/NA
trans-1,2-Dichloroethene	3.3		1.0	0.23	ug/L	1	8260C	Total/NA
Trichloroethene	9.7		1.0	0.20	ug/L	1	8260C	Total/NA
Vinyl chloride	270		1.0	0.18	ug/L	1	8260C	Total/NA
Xylenes, Total	6.6		3.0	0.58	ug/L	1	8260C	Total/NA
cis-1,2-Dichloroethene - DL	740		10	2.1	ug/L	10	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	170	CI	1.9	0.34	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	62		1.9	0.48	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	61		1.9	0.57	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	60		1.9	0.24	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	150		1.9	0.83	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	17	В	1.9	0.26	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	15		1.9	0.30	ng/L	1	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.2	J	1.9	1.1	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	140		1.9	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	23	В	1.9	0.17	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	6.9		1.9	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	510		1.9	0.53	ng/L	1	537 (modified)	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.31	J	1.9	0.31	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	6.1		1.9	0.34	ng/L	1	537 (modified)	Total/NA

Client Sample ID: DW-03 Lab Sample ID: 480-127283-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.6	J	10	2.5	ug/L	10	_	8260C	Total/NA
Benzene	3.3	J	10	2.0	ug/L	10		8260C	Total/NA
Chloroethane	8.2	J	10	3.6	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	1400		10	2.1	ug/L	10		8260C	Total/NA
Isopropylbenzene	7.9	J	10	3.3	ug/L	10		8260C	Total/NA
Methyl tert-butyl ether	9.7	J	10	1.7	ug/L	10		8260C	Total/NA
Methylcyclohexane	1.5	J	50	0.90	ug/L	10		8260C	Total/NA
Methylene Chloride	14	JB	50	10	ug/L	10		8260C	Total/NA
Tetrachloroethene	1.9	J	10	1.4	ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	19		10	2.3	ug/L	10		8260C	Total/NA
Trichloroethene	6.3	J	10	2.0	ug/L	10		8260C	Total/NA
Vinyl chloride	640		10	1.8	ug/L	10		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	120	CI	1.9	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	23		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	29		1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	24		1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	100		1.9	0.82	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: DW-03 (Continued)

TestAmerica Job ID: 480-127283-1

Lab Sample ID: 480-127283-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorononanoic acid (PFNA)	11	В	1.9	0.26	ng/L		_	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	7.1		1.9	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.57	J	1.9	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	67		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	21	В	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	7.4		1.9	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	550		1.9	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	2.3		1.9	0.34	ng/L	1		537 (modified)	Total/NA

Chent Sample ID: MVV-29				Lab Sample ID: 4	8U-121283-3
Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
1,1-Dichloroethene	2.7	J	10	2.5	ug/L		8260C	Total/NA
cis-1,2-Dichloroethene	900		10	2.1	ug/L	10	8260C	Total/NA
Ethylbenzene	10		10	1.9	ug/L	10	8260C	Total/NA
Isopropylbenzene	8.0	J	10	3.3	ug/L	10	8260C	Total/NA
Methylene Chloride	14	JB	50	10	ug/L	10	8260C	Total/NA
Tetrachloroethene	25		10	1.4	ug/L	10	8260C	Total/NA
trans-1,2-Dichloroethene	18		10	2.3	ug/L	10	8260C	Total/NA
Trichloroethene	52		10	2.0	ug/L	10	8260C	Total/NA
Vinyl chloride	190		10	1.8	ug/L	10	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	490	CI	1.9	0.34	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	41		1.9	0.47	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	57		1.9	0.56	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	55		1.9	0.24	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	180		1.9	0.82	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	16	В	1.9	0.26	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	17		1.9	0.30	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	96		1.9	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	28	В	1.9	0.16	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	7.0		1.9	0.18	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	590		1.9	0.52	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	6.8		1.9	0.34	ng/L	1	537 (modified)	Total/NA

Client Sample ID: MW-2 Lab Sample ID: 480-127283-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.1		1.0	0.21	ug/L		_	8260C	Total/NA
Tetrachloroethene	17		1.0	0.14	ug/L	1		8260C	Total/NA
Trichloroethene	3.5		1.0	0.20	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	2.5	CI	2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.5		2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.9	J	2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	6.8		2.0	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.1	JB	2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.60	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.1	J	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	JB	2.0	0.17	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-2 (Continued)

Lab Sample ID: 480-127283-4

AnalyteResult Perfluorooctanesulfonic acid (PFOS)Result QualifierRLMDL Unit ng/LUnit ng/LDil Fac pilor ng/LD Method ng/LPrep Type notal/NA

Client Sample ID: MW-14R Lab Sample ID: 480-127283-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
1,1-Dichloroethene	1.5	J	5.0	1.3	ug/L		8260C	Total/NA
1,2-Dichloropropane	1.5	J	5.0	1.3	ug/L	5	8260C	Total/NA
Benzene	5.1		5.0	1.0	ug/L	5	8260C	Total/NA
cis-1,2-Dichloroethene	1500		5.0	1.1	ug/L	5	8260C	Total/NA
Cyclohexane	0.83	J	25	0.65	ug/L	5	8260C	Total/NA
Ethylbenzene	65		5.0	0.95	ug/L	5	8260C	Total/NA
Isopropylbenzene	34		5.0	1.7	ug/L	5	8260C	Total/NA
Methyl tert-butyl ether	1.4	J	5.0	0.85	ug/L	5	8260C	Total/NA
Methylcyclohexane	2.7	J	25	0.45	ug/L	5	8260C	Total/NA
Methylene Chloride	6.6	JB	25	5.0	ug/L	5	8260C	Total/NA
Toluene	120		5.0	0.85	ug/L	5	8260C	Total/NA
trans-1,2-Dichloroethene	43		5.0	1.2	ug/L	5	8260C	Total/NA
Vinyl chloride	700		5.0	0.90	ug/L	5	8260C	Total/NA
Xylenes, Total	450		15	2.9	ug/L	5	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	410	CI	2.0	0.35	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	7.2		2.0	0.48	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	25		2.0	0.57	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	25		2.0	0.25	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	130		2.0	0.84	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	10	В	2.0	0.27	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	3.5		2.0	0.31	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	190		2.0	0.20	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	52	В	2.0	0.17	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	15		2.0	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.89	J	2.0	0.35	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	1200		9.9	2.7	ng/L	5	537 (modified)	Total/NA

Client Sample ID: MW-15R Lab Sample ID: 480-127283-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.7		1.0	0.21	ug/L	1	_	8260C	Total/NA
Cyclohexane	0.66	J	5.0	0.13	ug/L	1		8260C	Total/NA
Ethylbenzene	4.6		1.0	0.19	ug/L	1		8260C	Total/NA
Isopropylbenzene	12		1.0	0.33	ug/L	1		8260C	Total/NA
Methylcyclohexane	4.4	J	5.0	0.090	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.38	J	1.0	0.14	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.34	J	1.0	0.23	ug/L	1		8260C	Total/NA
Trichloroethene	0.20	J	1.0	0.20	ug/L	1		8260C	Total/NA
Vinyl chloride	5.3		1.0	0.18	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	70	CI	1.9	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	28		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	29		1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	29		1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	100		1.9	0.82	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-15R (Continued)

TestAmerica Job ID: 480-127283-1

Lab Sample ID: 480-127283-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac [Method	Prep Type
Perfluorononanoic acid (PFNA)	12	В	1.9	0.26	ng/L		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	26		1.9	0.30	ng/L	1	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	8.0		1.9	1.1	ng/L	1	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	5.5		1.9	0.53	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	40		1.9	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	14	В	1.9	0.16	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	4.6		1.9	0.18	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	380		1.9	0.52	ng/L	1	537 (modified)	Total/NA
Perfluorodecanesulfonic acid (PFDS)	3.9		1.9	0.31	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	12		1.9	0.34	ng/L	1	537 (modified)	Total/NA

Client Sample ID: MW-25D

Lab Sample ID: 480-127283-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.97	J –	1.0	0.24	ug/L		_	8260C	Total/NA
1,1-Dichloroethene	0.46	J	1.0	0.25	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	1.1		1.0	0.20	ug/L	1		8260C	Total/NA
Benzene	0.98	J	1.0	0.20	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	150		1.0	0.21	ug/L	1		8260C	Total/NA
Methylcyclohexane	1.4	J	5.0	0.090	ug/L	1		8260C	Total/NA
Tetrachloroethene	3.2		1.0	0.14	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	2.3		1.0	0.23	ug/L	1		8260C	Total/NA
Trichloroethene	3.8		1.0	0.20	ug/L	1		8260C	Total/NA
Vinyl chloride	330		1.0	0.18	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	33	CI	2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	11		2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	15		2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	11		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	34		2.0	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.4	В	2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.4		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	9.7		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.3	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.1	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	100		2.0	0.53	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-127283-8

No Detections.

Client Sample ID: EB-04 Lab Sample ID: 480-127283-9

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.24 JB	2.0	0.17 ng/L	1 537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

11/24/2017

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-6R Lab Sample ID: 480-127283-1

Date Collected: 11/07/17 16:10 **Matrix: Water**

Date Received: 11/09/17 01:00

Method: 8260C - Volatile Orgar ^{Analyte}		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0	0.19		— <u> </u>		11/12/17 02:09	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	-			11/12/17 02:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1.0	0.15	-			11/12/17 02:09	
1,1,2-Trichloroethane	ND		1.0	0.19	-			11/12/17 02:09	
1,1-Dichloroethane	ND		1.0	0.24	-			11/12/17 02:09	
1,1-Dichloroethene	1.6		1.0	0.25	-			11/12/17 02:09	
1,2,4-Trichlorobenzene	ND		1.0	0.20	-			11/12/17 02:09	
1,2-Dibromo-3-Chloropropane	ND		10	0.94	-			11/12/17 02:09	
1,2-Dibromoethane	ND		1.0	0.21	-			11/12/17 02:09	
1,2-Dichlorobenzene	ND		1.0	0.19	ū			11/12/17 02:09	
1,2-Dichloroethane	ND		1.0	0.20	-			11/12/17 02:09	
1,2-Dichloropropane	0.57		1.0	0.25	ū			11/12/17 02:09	
1,3-Dichlorobenzene	ND		1.0	0.18	-			11/12/17 02:09	
1,4-Dichlorobenzene	0.41	J	1.0	0.17	-			11/12/17 02:09	
2-Butanone (MEK)	ND		50		ug/L			11/12/17 02:09	
2-Hexanone	ND		10		ug/L			11/12/17 02:09	
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	-			11/12/17 02:09	
Acetone	ND		25		ug/L			11/12/17 02:09	
Benzene	1.6		1.0	0.20	-			11/12/17 02:09	
Bromodichloromethane	ND		1.0	0.17	-			11/12/17 02:09	
Bromoform	ND		1.0	0.29	-			11/12/17 02:09	
Bromomethane	ND		1.0	0.35	-			11/12/17 02:09	
Carbon disulfide	ND		1.0	0.22	-			11/12/17 02:09	
Carbon tetrachloride	ND		1.0	0.18	-			11/12/17 02:09	
Chlorobenzene	ND		1.0	0.18	-			11/12/17 02:09	
Chloroethane	1.3		1.0	0.36	-			11/12/17 02:09	
Chloroform	ND		1.0	0.23	-			11/12/17 02:09	
Chloromethane	ND		1.0	0.36	-			11/12/17 02:09	
cis-1,3-Dichloropropene	ND		1.0	0.30	-			11/12/17 02:09	
Cyclohexane	ND		5.0	0.17				11/12/17 02:09	
Dibromochloromethane	ND		1.0	0.13	-			11/12/17 02:09	
Dichlorodifluoromethane	ND		1.0		-			11/12/17 02:09	
	26		1.0	0.17 0.19				11/12/17 02:09	
Ethylbenzene	18		1.0	0.19	-			11/12/17 02:09	
sopropylbenzene Methyl acetate	ND		1.0	0.58	-			11/12/17 02:09	
•			1.0	0.36	-				
Methyl tert-butyl ether	7.2			0.090	-			11/12/17 02:09	
Methylcyclohexane Methylene Chloride	2.2 ND	J	5.0 5.0		ug/L ug/L			11/12/17 02:09 11/12/17 02:09	
-	ND ND		1.0		-			11/12/17 02:09	
Styrene				0.28	-			11/12/17 02:09	
Tetrachloroethene	2.9		1.0	0.14					
Toluene	ND		1.0	0.17	-			11/12/17 02:09	
trans-1,2-Dichloroethene	3.3		1.0	0.23				11/12/17 02:09	
trans-1,3-Dichloropropene	ND		1.0	0.17				11/12/17 02:09	
Trichloroethene	9.7		1.0	0.20	-			11/12/17 02:09	
Trichlorofluoromethane	ND		1.0	0.21				11/12/17 02:09	
Vinyl chloride	270		1.0	0.18	ug/L			11/12/17 02:09	

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-6R

Date Collected: 11/07/17 16:10 Date Received: 11/09/17 01:00

Lab Sample ID: 480-127283-1

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95	70 - 130		11/12/17 02:09	1
4-Bromofluorobenzene (Surr)	105	70 - 130		11/12/17 02:09	1
Dibromofluoromethane (Surr)	106	70 - 130		11/12/17 02:09	1
Toluene-d8 (Surr)	95	70 - 130		11/12/17 02:09	1

Method: 8260C - Volatile O	rganic Compo	unds by G	C/MS - DL						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	740		10	2.1	ug/L			11/13/17 13:07	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130			•		11/13/17 13:07	10
4-Bromofluorobenzene (Surr)	94		70 - 130					11/13/17 13:07	10
Dibromofluoromethane (Surr)	114		70 - 130					11/13/17 13:07	10
Toluene-d8 (Surr)	98		70 - 130					11/13/17 13:07	10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	170	CI	1.9	0.34	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluoropentanoic acid (PFPeA)	62		1.9	0.48	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorohexanoic acid (PFHxA)	61		1.9	0.57	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluoroheptanoic acid (PFHpA)	60		1.9	0.24	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorooctanoic acid (PFOA)	150		1.9	0.83	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorononanoic acid (PFNA)	17	В	1.9	0.26	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorodecanoic acid (PFDA)	15		1.9	0.30	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluoroundecanoic acid (PFUnA)	1.2	J	1.9	1.1	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.54	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.3	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.28	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorobutanesulfonic acid (PFBS)	140		1.9	0.19	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorohexanesulfonic acid (PFHxS)	23	В	1.9	0.17	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	6.9		1.9	0.19	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorooctanesulfonic acid (PFOS)	510		1.9	0.53	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorodecanesulfonic acid (PFDS)	0.31	J	1.9	0.31	ng/L		11/16/17 10:19	11/18/17 02:15	1
Perfluorooctane Sulfonamide (FOSA)	6.1		1.9	0.34	ng/L		11/16/17 10:19	11/18/17 02:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
12C8 EOSA	0.0		25 150				11/16/17 10:10	11/19/17 02:15	

Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	98	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C4 PFBA	48	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C2 PFHxA	85	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C4 PFOA	91	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C5 PFNA	104	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C2 PFDA	115	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C2 PFUnA	110	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C2 PFDoA	97	25 - 150	11/16/17 10:19	11/18/17 02:15	1
1802 PFHxS	100	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C4 PFOS	110	25 - 150	11/16/17 10:19	11/18/17 02:15	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-6R

Date Collected: 11/07/17 16:10 Date Received: 11/09/17 01:00 Lab Sample ID: 480-127283-1

Matrix: Water

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

Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4-PFHpA	88	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C5 PFPeA	80	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C3-PFBS	109	25 - 150	11/16/17 10:19	11/18/17 02:15	1
13C2-PFTeDA	92	25 - 150	11/16/17 10:19	11/18/17 02:15	1

Client Sample ID: DW-03

Date Collected: 11/08/17 08:30

Lab Sample ID: 480-127283-2

Matrix: Water

Date Collected: 11/08/17 08:30
Date Received: 11/09/17 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		10	1.9	ug/L			11/10/17 20:40	1
1,1,2,2-Tetrachloroethane	ND		10	1.9	ug/L			11/10/17 20:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	1.5	ug/L			11/10/17 20:40	1
1,1,2-Trichloroethane	ND		10	1.9	ug/L			11/10/17 20:40	1
1,1-Dichloroethane	ND		10	2.4	ug/L			11/10/17 20:40	1
1,1-Dichloroethene	2.6	J	10	2.5	ug/L			11/10/17 20:40	1
1,2,4-Trichlorobenzene	ND		10	2.0	ug/L			11/10/17 20:40	1
1,2-Dibromo-3-Chloropropane	ND		100	9.4	ug/L			11/10/17 20:40	1
1,2-Dibromoethane	ND		10	2.1	ug/L			11/10/17 20:40	1
1,2-Dichlorobenzene	ND		10	1.9	ug/L			11/10/17 20:40	1
1,2-Dichloroethane	ND		10	2.0	ug/L			11/10/17 20:40	1
1,2-Dichloropropane	ND		10	2.5	ug/L			11/10/17 20:40	1
1,3-Dichlorobenzene	ND		10	1.8	ug/L			11/10/17 20:40	1
1,4-Dichlorobenzene	ND		10		ug/L			11/10/17 20:40	1
2-Butanone (MEK)	ND		500		ug/L			11/10/17 20:40	1
2-Hexanone	ND		100	13	ug/L			11/10/17 20:40	1
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			11/10/17 20:40	1
Acetone	ND		250		ug/L			11/10/17 20:40	1
Benzene	3.3		10	2.0	ug/L			11/10/17 20:40	1
Bromodichloromethane	ND		10	1.7	ug/L			11/10/17 20:40	1
Bromoform	ND		10	2.9	ug/L			11/10/17 20:40	1
Bromomethane	ND		10	3.5	ug/L			11/10/17 20:40	1
Carbon disulfide	ND		10	2.2	ug/L			11/10/17 20:40	1
Carbon tetrachloride	ND		10	1.8	ug/L			11/10/17 20:40	1
Chlorobenzene	ND		10	1.8	ug/L			11/10/17 20:40	1
Chloroethane	8.2	J	10	3.6	ug/L			11/10/17 20:40	1
Chloroform	ND		10	2.3	ug/L			11/10/17 20:40	1
Chloromethane	ND		10	3.6	ug/L			11/10/17 20:40	1
cis-1,2-Dichloroethene	1400		10	2.1	ug/L			11/10/17 20:40	1
cis-1,3-Dichloropropene	ND		10	1.7	ug/L			11/10/17 20:40	1
Cyclohexane	ND		50	1.3	ug/L			11/10/17 20:40	1
Dibromochloromethane	ND		10	2.5	ug/L			11/10/17 20:40	1
Dichlorodifluoromethane	ND	*	10	1.7	ug/L			11/10/17 20:40	1
Ethylbenzene	ND		10		ug/L			11/10/17 20:40	10
Isopropylbenzene	7.9	J	10		ug/L			11/10/17 20:40	1
Methyl acetate	ND		100	5.8	ug/L			11/10/17 20:40	1
Methyl tert-butyl ether	9.7		10		ug/L			11/10/17 20:40	10
Methylcyclohexane	1.5		50	0.90				11/10/17 20:40	1
Methylene Chloride	14	JB	50	10	ug/L			11/10/17 20:40	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: DW-03

Lab Sample ID: 480-127283-2 Date Collected: 11/08/17 08:30

Matrix: Water

Date Received: 11/09/17 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		10	2.8	ug/L			11/10/17 20:40	10
Tetrachloroethene	1.9	J	10	1.4	ug/L			11/10/17 20:40	10
Toluene	ND		10	1.7	ug/L			11/10/17 20:40	10
trans-1,2-Dichloroethene	19		10	2.3	ug/L			11/10/17 20:40	10
trans-1,3-Dichloropropene	ND		10	1.7	ug/L			11/10/17 20:40	10
Trichloroethene	6.3	J	10	2.0	ug/L			11/10/17 20:40	10
Trichlorofluoromethane	ND		10	2.1	ug/L			11/10/17 20:40	10
Vinyl chloride	640		10	1.8	ug/L			11/10/17 20:40	10
Xylenes, Total	ND		30	5.8	ug/L			11/10/17 20:40	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130					11/10/17 20:40	10
4-Bromofluorobenzene (Surr)	113		70 - 130					11/10/17 20:40	10
Dibromofluoromethane (Surr)	104		70 - 130					11/10/17 20:40	10
Toluene-d8 (Surr)	109		70 - 130					11/10/17 20:40	10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	120	CI	1.9	0.34	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluoropentanoic acid (PFPeA)	23		1.9	0.47	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorohexanoic acid (PFHxA)	29		1.9	0.56	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluoroheptanoic acid (PFHpA)	24		1.9	0.24	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorooctanoic acid (PFOA)	100		1.9	0.82	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorononanoic acid (PFNA)	11	В	1.9	0.26	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorodecanoic acid (PFDA)	7.1		1.9	0.30	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.1	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.53	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.2	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorotetradecanoic acid (PFTeA)	0.57	J	1.9	0.28	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorobutanesulfonic acid (PFBS)	67		1.9	0.19	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorohexanesulfonic acid (PFHxS)	21	В	1.9	0.16	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluoroheptanesulfonic Acid (PFHpS)	7.4		1.9	0.18	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorooctanesulfonic acid (PFOS)	550		1.9	0.52	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.31	ng/L		11/16/17 10:19	11/18/17 02:23	1
Perfluorooctane Sulfonamide (FOSA)	2.3		1.9	0.34	ng/L		11/16/17 10:19	11/18/17 02:23	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
									

Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	92	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C4 PFBA	46	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C2 PFHxA	81	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C4 PFOA	86	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C5 PFNA	99	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C2 PFDA	108	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C2 PFUnA	105	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C2 PFDoA	96	25 - 150	11/16/17 10:19	11/18/17 02:23	1
1802 PFHxS	100	25 - 150	11/16/17 10:19	11/18/17 02:23	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: DW-03

Date Collected: 11/08/17 08:30

Lab Sample ID: 480-127283-2

Matrix: Water

Date Received: 11/09/17 01:00

Method: 537 (modified	d) - Fluorinated Alkyl Substa	nces (Continued)			
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	105	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C4-PFHpA	87	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C5 PFPeA	79	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C3-PFBS	94	25 - 150	11/16/17 10:19	11/18/17 02:23	1
13C2-PFTeDA	92	25 - 150	11/16/17 10:19	11/18/17 02:23	1

Client Sample ID: MW-29 Lab Sample ID: 480-127283-3

Date Collected: 11/08/17 09:55 Matrix: Water

Date Received: 11/09/17 01:00

Analyte	Result Qua	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	10	1.9	ug/L			11/10/17 21:05	10
1,1,2,2-Tetrachloroethane	ND	10	1.9	ug/L			11/10/17 21:05	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	1.5	ug/L			11/10/17 21:05	10
1,1,2-Trichloroethane	ND	10	1.9	ug/L			11/10/17 21:05	10
1,1-Dichloroethane	ND	10	2.4	ug/L			11/10/17 21:05	10
1,1-Dichloroethene	2.7 J	10	2.5	ug/L			11/10/17 21:05	10
1,2,4-Trichlorobenzene	ND	10	2.0	ug/L			11/10/17 21:05	10
1,2-Dibromo-3-Chloropropane	ND	100	9.4	ug/L			11/10/17 21:05	10
1,2-Dibromoethane	ND	10	2.1	ug/L			11/10/17 21:05	10
1,2-Dichlorobenzene	ND	10	1.9	ug/L			11/10/17 21:05	10
1,2-Dichloroethane	ND	10	2.0	ug/L			11/10/17 21:05	10
1,2-Dichloropropane	ND	10	2.5	ug/L			11/10/17 21:05	10
1,3-Dichlorobenzene	ND	10	1.8	ug/L			11/10/17 21:05	10
1,4-Dichlorobenzene	ND	10	1.7	ug/L			11/10/17 21:05	10
2-Butanone (MEK)	ND	500	26	ug/L			11/10/17 21:05	10
2-Hexanone	ND	100	13	ug/L			11/10/17 21:05	10
4-Methyl-2-pentanone (MIBK)	ND	100	8.1	ug/L			11/10/17 21:05	10
Acetone	ND	250	27	ug/L			11/10/17 21:05	10
Benzene	ND	10	2.0	ug/L			11/10/17 21:05	10
Bromodichloromethane	ND	10	1.7	ug/L			11/10/17 21:05	10
Bromoform	ND	10	2.9	ug/L			11/10/17 21:05	10
Bromomethane	ND	10	3.5	ug/L			11/10/17 21:05	10
Carbon disulfide	ND	10	2.2	ug/L			11/10/17 21:05	10
Carbon tetrachloride	ND	10	1.8	ug/L			11/10/17 21:05	10
Chlorobenzene	ND	10		ug/L			11/10/17 21:05	10
Chloroethane	ND	10	3.6	ug/L			11/10/17 21:05	10
Chloroform	ND	10	2.3	ug/L			11/10/17 21:05	10
Chloromethane	ND	10	3.6	ug/L			11/10/17 21:05	10
cis-1,2-Dichloroethene	900	10		ug/L			11/10/17 21:05	10
cis-1,3-Dichloropropene	ND	10	1.7	ug/L			11/10/17 21:05	10
Cyclohexane	ND	50		ug/L			11/10/17 21:05	10
Dibromochloromethane	ND	10		ug/L			11/10/17 21:05	10
Dichlorodifluoromethane	ND *	10		ug/L			11/10/17 21:05	10
Ethylbenzene	10	10		ug/L			11/10/17 21:05	10
Isopropylbenzene	8.0 J	10		ug/L			11/10/17 21:05	10
Methyl acetate	ND	100		ug/L			11/10/17 21:05	10
Methyl tert-butyl ether	ND	10		ug/L			11/10/17 21:05	10
Methylcyclohexane	ND	50	0.90				11/10/17 21:05	10

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-127283-3

TestAmerica Job ID: 480-127283-1

Matrix: Water

Client Sample ID: MW-29
Date Collected: 11/08/17 09:55
Date Received: 11/09/17 01:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued) Dil Fac Analyte Result Qualifier **MDL** Unit RL D Prepared **Analyzed** 50 **Methylene Chloride** 14 JB 10 ug/L 11/10/17 21:05 10 10 Styrene ND 2.8 ug/L 11/10/17 21:05 10 10 **Tetrachloroethene** 25 1.4 ug/L 11/10/17 21:05 10 Toluene ND 10 1.7 ug/L 11/10/17 21:05 10 10 2.3 ug/L 11/10/17 21:05 10 trans-1,2-Dichloroethene 18 ND 10 trans-1,3-Dichloropropene 1.7 ug/L 11/10/17 21:05 10 **Trichloroethene 52** 10 2.0 ug/L 11/10/17 21:05 10 Trichlorofluoromethane ND 10 10 2.1 ug/L 11/10/17 21:05 10 Vinyl chloride 1.8 ug/L 11/10/17 21:05 10 190 Xylenes, Total ND 30 5.8 ug/L 11/10/17 21:05 10 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 106 70 - 130 11/10/17 21:05 10 4-Bromofluorobenzene (Surr) 70 - 130 10 112 11/10/17 21:05 Dibromofluoromethane (Surr) 106 70 - 130 11/10/17 21:05 10 Toluene-d8 (Surr) 70 - 130 109 11/10/17 21:05 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	490	CI	1.9	0.34	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluoropentanoic acid (PFPeA)	41		1.9	0.47	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorohexanoic acid (PFHxA)	57		1.9	0.56	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluoroheptanoic acid (PFHpA)	55		1.9	0.24	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorooctanoic acid (PFOA)	180		1.9	0.82	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorononanoic acid (PFNA)	16	В	1.9	0.26	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorodecanoic acid (PFDA)	17		1.9	0.30	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.1	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.53	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.3	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.28	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorobutanesulfonic acid (PFBS)	96		1.9	0.19	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorohexanesulfonic acid (PFHxS)	28	В	1.9	0.16	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	7.0		1.9	0.18	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorooctanesulfonic acid (PFOS)	590		1.9	0.52	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.31	ng/L		11/16/17 10:19	11/18/17 02:31	1
Perfluorooctane Sulfonamide (FOSA)	6.8		1.9	0.34	ng/L		11/16/17 10:19	11/18/17 02:31	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	103	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C4 PFBA	39	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C2 PFHxA	81	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C4 PFOA	86	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C5 PFNA	105	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C2 PFDA	114	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C2 PFUnA	111	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C2 PFDoA	100	25 - 150	11/16/17 10:19	11/18/17 02:31	1
1802 PFHxS	99	25 - 150	11/16/17 10:19	11/18/17 02:31	1
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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-29

Date Collected: 11/08/17 09:55 Date Received: 11/09/17 01:00 Lab Sample ID: 480-127283-3

Matrix: Water

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

Isotope Dilution `	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	108	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C4-PFHpA	84	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C5 PFPeA	65	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C3-PFBS	106	25 - 150	11/16/17 10:19	11/18/17 02:31	1
13C2-PFTeDA	89	25 - 150	11/16/17 10:19	11/18/17 02:31	1

Client Sample ID: MW-2 Lab Sample ID: 480-127283-4

Date Collected: 11/08/17 08:05 Matrix: Water

Date Received: 11/09/17 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 18:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/10/17 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/10/17 18:58	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 18:58	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/10/17 18:58	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/10/17 18:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/10/17 18:58	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/10/17 18:58	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/10/17 18:58	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/10/17 18:58	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/10/17 18:58	1
1,2-Dichloropropane	ND		1.0	0.25	_			11/10/17 18:58	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/10/17 18:58	1
1,4-Dichlorobenzene	ND		1.0	0.17	_			11/10/17 18:58	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/10/17 18:58	1
2-Hexanone	ND		10	1.3	ug/L			11/10/17 18:58	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	-			11/10/17 18:58	1
Acetone	ND		25	2.7	ug/L			11/10/17 18:58	1
Benzene	ND		1.0	0.20	ug/L			11/10/17 18:58	
Bromodichloromethane	ND		1.0	0.17	ug/L			11/10/17 18:58	1
Bromoform	ND		1.0	0.29	ug/L			11/10/17 18:58	1
Bromomethane	ND		1.0	0.35	ug/L			11/10/17 18:58	1
Carbon disulfide	ND		1.0	0.22	_			11/10/17 18:58	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/10/17 18:58	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/10/17 18:58	1
Chloroethane	ND		1.0	0.36	ug/L			11/10/17 18:58	1
Chloroform	ND		1.0	0.23	-			11/10/17 18:58	1
Chloromethane	ND		1.0	0.36	-			11/10/17 18:58	1
cis-1,2-Dichloroethene	1.1		1.0	0.21	_			11/10/17 18:58	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/10/17 18:58	1
Cyclohexane	ND		5.0	0.13				11/10/17 18:58	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/10/17 18:58	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			11/10/17 18:58	1
Ethylbenzene	ND		1.0	0.19				11/10/17 18:58	1
Isopropylbenzene	ND		1.0	0.33	•			11/10/17 18:58	1
Methyl acetate	ND		10		ug/L			11/10/17 18:58	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/10/17 18:58	1
Methylcyclohexane	ND		5.0	0.090				11/10/17 18:58	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-2 Lab Sample ID: 480-127283-4 Date Collected: 11/08/17 08:05

Matrix: Water

Date Received: 11/09/17 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	1.0	ug/L			11/10/17 18:58	1
Styrene	ND		1.0	0.28	ug/L			11/10/17 18:58	1
Tetrachloroethene	17		1.0	0.14	ug/L			11/10/17 18:58	1
Toluene	ND		1.0	0.17	ug/L			11/10/17 18:58	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/10/17 18:58	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/10/17 18:58	1
Trichloroethene	3.5		1.0	0.20	ug/L			11/10/17 18:58	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/10/17 18:58	1
Vinyl chloride	ND		1.0	0.18	ug/L			11/10/17 18:58	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/10/17 18:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130			-		11/10/17 18:58	1
4-Bromofluorobenzene (Surr)	111		70 - 130					11/10/17 18:58	1
Dibromofluoromethane (Surr)	102		70 - 130					11/10/17 18:58	1
Toluene-d8 (Surr)	109		70 - 130					11/10/17 18:58	1

-	700		70 - 700					717 107 17 10:00	,
Method: 537 (modified) - Fluor Analyte		/I Substan Qualifier	ices RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.5	CI	2.0	0.35	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluoropentanoic acid (PFPeA)	2.5		2.0	0.48	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorohexanoic acid (PFHxA)	2.2		2.0	0.57	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluoroheptanoic acid (PFHpA)	1.9	J	2.0	0.25	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorooctanoic acid (PFOA)	6.8		2.0	0.84	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorononanoic acid (PFNA)	1.1	JB	2.0	0.27	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorotetradecanoic acid (PFTeA)	0.60	J	2.0	0.29	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorobutanesulfonic acid (PFBS)	1.1	J	2.0	0.20	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorohexanesulfonic acid (PFHxS)	1.4	JB	2.0	0.17	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorooctanesulfonic acid (PFOS)	15		2.0	0.53	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 10:19	11/18/17 02:39	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		11/16/17 10:19	11/18/17 02:39	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	97		25 - 150				11/16/17 10:19	11/18/17 02:39	1
13C4 PFBA	81		25 - 150				11/16/17 10:19	11/18/17 02:39	1
13C2 PFHxA	93		25 - 150				11/16/17 10:19	11/18/17 02:39	1
13C4 PFOA	87		25 - 150				11/16/17 10:19	11/18/17 02:39	1
13C5 PFNA	100		25 - 150				11/16/17 10:19	11/18/17 02:39	1
13C2 PFDA	102		25 - 150				11/16/17 10:19	11/18/17 02:39	1
13C2 PFUnA	98		25 - 150				11/16/17 10:19	11/18/17 02:39	1
13C2 PFDoA	86		25 - 150				11/16/17 10:19	11/18/17 02:39	1
18O2 PFHxS	98								

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-2

Lab Sample ID: 480-127283-4 Date Collected: 11/08/17 08:05

Matrix: Water

Date Received: 11/09/17 01:00

Method: 537 (modified) - F	luorinated Alkyl Substan	ces (Continued)			
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	106	25 - 150	11/16/17 10:19	11/18/17 02:39	1
13C4-PFHpA	100	25 - 150	11/16/17 10:19	11/18/17 02:39	1
13C5 PFPeA	91	25 - 150	11/16/17 10:19	11/18/17 02:39	1
13C3-PFBS	100	25 - 150	11/16/17 10:19	11/18/17 02:39	1
13C2-PFTeDA	89	25 - 150	11/16/17 10:19	11/18/17 02:39	1

Lab Sample ID: 480-127283-5 **Client Sample ID: MW-14R**

Date Collected: 11/08/17 10:15 **Matrix: Water**

Date Received: 11/09/17 01:00

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	5.0	0.95	ug/L			11/10/17 19:49	- 5
1,1,2,2-Tetrachloroethane	ND	5.0	0.95	ug/L			11/10/17 19:49	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	0.75	ug/L			11/10/17 19:49	5
1,1,2-Trichloroethane	ND	5.0	0.95	ug/L			11/10/17 19:49	5
1,1-Dichloroethane	ND	5.0	1.2	ug/L			11/10/17 19:49	5
1,1-Dichloroethene	1.5 J	5.0	1.3	ug/L			11/10/17 19:49	5
1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/L			11/10/17 19:49	5
1,2-Dibromo-3-Chloropropane	ND	50	4.7	ug/L			11/10/17 19:49	5
1,2-Dibromoethane	ND	5.0	1.1	ug/L			11/10/17 19:49	5
1,2-Dichlorobenzene	ND	5.0	0.95	ug/L			11/10/17 19:49	5
1,2-Dichloroethane	ND	5.0	1.0	ug/L			11/10/17 19:49	5
1,2-Dichloropropane	1.5 J	5.0	1.3	ug/L			11/10/17 19:49	5
1,3-Dichlorobenzene	ND	5.0	0.90	ug/L			11/10/17 19:49	5
1,4-Dichlorobenzene	ND	5.0	0.85	ug/L			11/10/17 19:49	5
2-Butanone (MEK)	ND	250	13	ug/L			11/10/17 19:49	5
2-Hexanone	ND	50	6.4	ug/L			11/10/17 19:49	5
4-Methyl-2-pentanone (MIBK)	ND	50	4.1	ug/L			11/10/17 19:49	5
Acetone	ND	130	13	ug/L			11/10/17 19:49	5
Benzene	5.1	5.0	1.0	ug/L			11/10/17 19:49	5
Bromodichloromethane	ND	5.0	0.85	ug/L			11/10/17 19:49	5
Bromoform	ND	5.0	1.5	ug/L			11/10/17 19:49	5
Bromomethane	ND	5.0	1.8	ug/L			11/10/17 19:49	5
Carbon disulfide	ND	5.0	1.1	ug/L			11/10/17 19:49	5
Carbon tetrachloride	ND	5.0	0.90	ug/L			11/10/17 19:49	5
Chlorobenzene	ND	5.0	0.90	ug/L			11/10/17 19:49	5
Chloroethane	ND	5.0	1.8	ug/L			11/10/17 19:49	5
Chloroform	ND	5.0	1.2	ug/L			11/10/17 19:49	5
Chloromethane	ND	5.0	1.8	ug/L			11/10/17 19:49	5
cis-1,2-Dichloroethene	1500	5.0	1.1	ug/L			11/10/17 19:49	5
cis-1,3-Dichloropropene	ND	5.0	0.85	ug/L			11/10/17 19:49	5
Cyclohexane	0.83 J	25	0.65	ug/L			11/10/17 19:49	5
Dibromochloromethane	ND	5.0	1.3	ug/L			11/10/17 19:49	5
Dichlorodifluoromethane	ND *	5.0	0.85	ug/L			11/10/17 19:49	5
Ethylbenzene	65	5.0	0.95	ug/L			11/10/17 19:49	5
Isopropylbenzene	34	5.0		ug/L			11/10/17 19:49	5
Methyl acetate	ND	50	2.9	ug/L			11/10/17 19:49	5
Methyl tert-butyl ether	1.4 J	5.0	0.85	ug/L			11/10/17 19:49	5
Methylcyclohexane	2.7 J	25	0.45				11/10/17 19:49	5

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-14R

Date Collected: 11/08/17 10:15 Date Received: 11/09/17 01:00 Lab Sample ID: 480-127283-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	6.6	JB	25	5.0	ug/L			11/10/17 19:49	5
Styrene	ND		5.0	1.4	ug/L			11/10/17 19:49	5
Tetrachloroethene	ND		5.0	0.70	ug/L			11/10/17 19:49	5
Toluene	120		5.0	0.85	ug/L			11/10/17 19:49	5
trans-1,2-Dichloroethene	43		5.0	1.2	ug/L			11/10/17 19:49	5
trans-1,3-Dichloropropene	ND		5.0	0.85	ug/L			11/10/17 19:49	5
Trichloroethene	ND		5.0	1.0	ug/L			11/10/17 19:49	5
Trichlorofluoromethane	ND		5.0	1.1	ug/L			11/10/17 19:49	5
Vinyl chloride	700		5.0	0.90	ug/L			11/10/17 19:49	5
Xylenes, Total	450		15	2.9	ug/L			11/10/17 19:49	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130			-		11/10/17 19:49	5
4-Bromofluorobenzene (Surr)	110		70 - 130					11/10/17 19:49	5
Dibromofluoromethane (Surr)	103		70 - 130					11/10/17 19:49	5
Toluene-d8 (Surr)	109		70 - 130					11/10/17 19:49	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	410	CI	2.0	0.35	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluoropentanoic acid (PFPeA)	7.2		2.0	0.48	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorohexanoic acid (PFHxA)	25		2.0	0.57	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluoroheptanoic acid (PFHpA)	25		2.0	0.25	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorooctanoic acid (PFOA)	130		2.0	0.84	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorononanoic acid (PFNA)	10	В	2.0	0.27	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorodecanoic acid (PFDA)	3.5		2.0	0.31	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorobutanesulfonic acid (PFBS)	190		2.0	0.20	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorohexanesulfonic acid (PFHxS)	52	В	2.0	0.17	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluoroheptanesulfonic Acid (PFHpS)	15		2.0	0.19	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 10:19	11/18/17 02:47	1
Perfluorooctane Sulfonamide (FOSA)	0.89	J	2.0	0.35	ng/L		11/16/17 10:19	11/18/17 02:47	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

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Isotope Dilution	%Recovery G	Qualifier Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	90	25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C4 PFBA	27	25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C2 PFHxA	73	25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C4 PFOA	84	25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C5 PFNA	100	25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C2 PFDA	121	25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C2 PFUnA	109	25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C2 PFDoA	98	25 - 150	11/16/17 10:19	11/18/17 02:47	1
1802 PFHxS	111	25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C4 PFOS	112	25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C4-PFHpA	81	25 - 150	11/16/17 10:19	11/18/17 02:47	1
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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-14R

Date Collected: 11/08/17 10:15 Date Received: 11/09/17 01:00 Lab Sample ID: 480-127283-5

Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFPeA	58		25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C3-PFBS	113		25 - 150	11/16/17 10:19	11/18/17 02:47	1
13C2-PFTeDA	93		25 - 150	11/16/17 10:19	11/18/17 02:47	1

Metho	d: 537 (modified) - Flu	orinated Alky	/I Substan	ces - DL						
Analyte	•	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluc (PFOS)	prooctanesulfonic acid	1200		9.9	2.7	ng/L		11/16/17 10:19	11/21/17 16:37	5
Isotope	Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 P	FOS	99		25 - 150				11/16/17 10:19	11/21/17 16:37	5

Client Sample ID: MW-15R Lab Sample ID: 480-127283-6

Date Collected: 11/08/17 11:25 Matrix: Water

Date Received: 11/09/17 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 19:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/10/17 19:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/10/17 19:24	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 19:24	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/10/17 19:24	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/10/17 19:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/10/17 19:24	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/10/17 19:24	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/10/17 19:24	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/10/17 19:24	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/10/17 19:24	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/10/17 19:24	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/10/17 19:24	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/10/17 19:24	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/10/17 19:24	1
2-Hexanone	ND		10	1.3	ug/L			11/10/17 19:24	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/10/17 19:24	1
Acetone	ND		25	2.7	ug/L			11/10/17 19:24	1
Benzene	ND		1.0	0.20	ug/L			11/10/17 19:24	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/10/17 19:24	1
Bromoform	ND		1.0	0.29	ug/L			11/10/17 19:24	1
Bromomethane	ND		1.0	0.35	ug/L			11/10/17 19:24	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/10/17 19:24	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/10/17 19:24	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/10/17 19:24	1
Chloroethane	ND		1.0	0.36	ug/L			11/10/17 19:24	1
Chloroform	ND		1.0	0.23	ug/L			11/10/17 19:24	1
Chloromethane	ND		1.0	0.36	ug/L			11/10/17 19:24	1
cis-1,2-Dichloroethene	3.7		1.0	0.21	ug/L			11/10/17 19:24	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/10/17 19:24	1
Cyclohexane	0.66	J	5.0	0.13	ug/L			11/10/17 19:24	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/10/17 19:24	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			11/10/17 19:24	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-15R

Date Collected: 11/08/17 11:25 Date Received: 11/09/17 01:00 Lab Sample ID: 480-127283-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	4.6		1.0	0.19	ug/L			11/10/17 19:24	1
Isopropylbenzene	12		1.0	0.33	ug/L			11/10/17 19:24	1
Methyl acetate	ND		10	0.58	ug/L			11/10/17 19:24	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/10/17 19:24	1
Methylcyclohexane	4.4	J	5.0	0.090	ug/L			11/10/17 19:24	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/10/17 19:24	1
Styrene	ND		1.0	0.28	ug/L			11/10/17 19:24	1
Tetrachloroethene	0.38	J	1.0	0.14	ug/L			11/10/17 19:24	1
Toluene	ND		1.0	0.17	ug/L			11/10/17 19:24	1
trans-1,2-Dichloroethene	0.34	J	1.0	0.23	ug/L			11/10/17 19:24	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/10/17 19:24	1
Trichloroethene	0.20	J	1.0	0.20	ug/L			11/10/17 19:24	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/10/17 19:24	1
Vinyl chloride	5.3		1.0	0.18	ug/L			11/10/17 19:24	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/10/17 19:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130			-		11/10/17 19:24	1
4-Bromofluorobenzene (Surr)	124		70 - 130					11/10/17 19:24	1
Dibromofluoromethane (Surr)	102		70 - 130					11/10/17 19:24	1
Toluene-d8 (Surr)	109		70 - 130					11/10/17 19:24	1

Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	70	CI	1.9	0.34	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluoropentanoic acid (PFPeA)	28		1.9	0.47	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorohexanoic acid (PFHxA)	29		1.9	0.56	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluoroheptanoic acid (PFHpA)	29		1.9	0.24	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorooctanoic acid (PFOA)	100		1.9	0.82	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorononanoic acid (PFNA)	12	В	1.9	0.26	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorodecanoic acid (PFDA)	26		1.9	0.30	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluoroundecanoic acid (PFUnA)	8.0		1.9	1.1	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorododecanoic acid (PFDoA)	5.5		1.9	0.53	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	1.3	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.28	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorobutanesulfonic acid (PFBS)	40		1.9	0.19	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorohexanesulfonic acid (PFHxS)	14	В	1.9	0.16	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluoroheptanesulfonic Acid (PFHpS)	4.6		1.9	0.18	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorooctanesulfonic acid (PFOS)	380		1.9	0.52	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorodecanesulfonic acid (PFDS)	3.9		1.9	0.31	ng/L		11/16/17 10:19	11/18/17 03:03	1
Perfluorooctane Sulfonamide (FOSA)	12		1.9	0.34	ng/L		11/16/17 10:19	11/18/17 03:03	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	97		25 - 150				11/16/17 10:19	11/18/17 03:03	1
13C4 PFBA	49		25 - 150				11/16/17 10:19	11/18/17 03:03	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

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

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TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-15R

Date Collected: 11/08/17 11:25 Date Received: 11/09/17 01:00 Lab Sample ID: 480-127283-6

11/16/17 10:19 11/18/17 03:03

11/16/17 10:19 11/18/17 03:03

11/16/17 10:19 11/18/17 03:03

Matrix: Water

Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	83	25 - 150	11/16/17 10:19	11/18/17 03:03	1
13C4 PFOA	87	25 - 150	11/16/17 10:19	11/18/17 03:03	1
13C5 PFNA	100	25 - 150	11/16/17 10:19	11/18/17 03:03	1
13C2 PFDA	104	25 - 150	11/16/17 10:19	11/18/17 03:03	1
13C2 PFUnA	109	25 - 150	11/16/17 10:19	11/18/17 03:03	1
13C2 PFDoA	98	25 - 150	11/16/17 10:19	11/18/17 03:03	1
18O2 PFHxS	98	25 - 150	11/16/17 10:19	11/18/17 03:03	1
13C4 PFOS	104	25 - 150	11/16/17 10:19	11/18/17 03:03	1
13C4-PFHpA	87	25 - 150	11/16/17 10:19	11/18/17 03:03	1

25 - 150

25 - 150

25 - 150

Client Sample ID: MW-25D Lab Sample ID: 480-127283-7

Date Collected: 11/07/17 15:40 Matrix: Water

Date Received: 11/09/17 01:00

13C5 PFPeA

13C3-PFBS

13C2-PFTeDA

Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/12/17 01:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/12/17 01:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1.0	0.15	ug/L			11/12/17 01:43	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/12/17 01:43	1
1,1-Dichloroethane	0.97	J	1.0	0.24	ug/L			11/12/17 01:43	1
1,1-Dichloroethene	0.46	J	1.0	0.25	ug/L			11/12/17 01:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/12/17 01:43	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/12/17 01:43	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/12/17 01:43	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/17 01:43	1
1,2-Dichloroethane	1.1		1.0	0.20	ug/L			11/12/17 01:43	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/12/17 01:43	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/12/17 01:43	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/12/17 01:43	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/12/17 01:43	1
2-Hexanone	ND		10	1.3	ug/L			11/12/17 01:43	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/12/17 01:43	1
Acetone	ND		25	2.7	ug/L			11/12/17 01:43	1
Benzene	0.98	J	1.0	0.20	ug/L			11/12/17 01:43	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/12/17 01:43	1
Bromoform	ND		1.0	0.29	ug/L			11/12/17 01:43	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/17 01:43	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/12/17 01:43	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/12/17 01:43	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/12/17 01:43	1
Chloroethane	ND		1.0	0.36	ug/L			11/12/17 01:43	1
Chloroform	ND		1.0	0.23	ug/L			11/12/17 01:43	1
Chloromethane	ND		1.0	0.36	ug/L			11/12/17 01:43	1
cis-1,2-Dichloroethene	150		1.0	0.21	ug/L			11/12/17 01:43	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/12/17 01:43	1
Cyclohexane	ND		5.0	0.13	ug/L			11/12/17 01:43	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Lab Sample ID: 480-127283-7

Matrix: Water

Client Sample ID: MW-25D Date Collected: 11/07/17 15:40

Date Received: 11/09/17 01:00

Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.25	ug/L			11/12/17 01:43	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/12/17 01:43	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/12/17 01:43	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/12/17 01:43	1
Methyl acetate	ND		10	0.58	ug/L			11/12/17 01:43	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/12/17 01:43	1
Methylcyclohexane	1.4	J	5.0	0.090	ug/L			11/12/17 01:43	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/12/17 01:43	1
Styrene	ND		1.0	0.28	ug/L			11/12/17 01:43	1
Tetrachloroethene	3.2		1.0	0.14	ug/L			11/12/17 01:43	1
Toluene	ND		1.0	0.17	ug/L			11/12/17 01:43	1
trans-1,2-Dichloroethene	2.3		1.0	0.23	ug/L			11/12/17 01:43	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/12/17 01:43	1
Trichloroethene	3.8		1.0	0.20	ug/L			11/12/17 01:43	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/12/17 01:43	1
Vinyl chloride	330		1.0	0.18	ug/L			11/12/17 01:43	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/12/17 01:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 130			-		11/12/17 01:43	1
4-Bromofluorobenzene (Surr)	97		70 - 130					11/12/17 01:43	1
Dibromofluoromethane (Surr)	106		70 - 130					11/12/17 01:43	1
Toluene-d8 (Surr)	96		70 - 130					11/12/17 01:43	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	33	CI	2.0	0.35	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluoropentanoic acid (PFPeA)	11		2.0	0.48	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorohexanoic acid (PFHxA)	15		2.0	0.57	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluoroheptanoic acid (PFHpA)	11		2.0	0.25	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorooctanoic acid (PFOA)	34		2.0	0.84	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorononanoic acid (PFNA)	3.4	В	2.0	0.27	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorodecanoic acid (PFDA)	2.4		2.0	0.31	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorobutanesulfonic acid (PFBS)	9.7		2.0	0.20	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorohexanesulfonic acid (PFHxS)	6.3	В	2.0	0.17	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.1	J	2.0	0.19	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorooctanesulfonic acid (PFOS)	100		2.0	0.53	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 10:19	11/18/17 03:11	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.35	ng/L		11/16/17 10:19	11/18/17 03:11	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	98		25 - 150				11/16/17 10:19	11/18/17 03:11	1
13C4 PFBA	57		25 - 150				11/16/17 10:19	11/18/17 03:11	1
13C2 PFHxA	80		25 - 150				11/16/17 10:19	11/18/17 03:11	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-25D

Lab Sample ID: 480-127283-7 Date Collected: 11/07/17 15:40

Matrix: Water

Date Received: 11/09/17 01:00

Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	85	25 - 150	11/16/17 10:19	11/18/17 03:11	1
13C5 PFNA	96	25 - 150	11/16/17 10:19	11/18/17 03:11	1
13C2 PFDA	99	25 - 150	11/16/17 10:19	11/18/17 03:11	1
13C2 PFUnA	96	25 - 150	11/16/17 10:19	11/18/17 03:11	1
13C2 PFDoA	88	25 - 150	11/16/17 10:19	11/18/17 03:11	1
1802 PFHxS	94	25 - 150	11/16/17 10:19	11/18/17 03:11	1
13C4 PFOS	97	25 - 150	11/16/17 10:19	11/18/17 03:11	1
13C4-PFHpA	89	25 - 150	11/16/17 10:19	11/18/17 03:11	1
13C5 PFPeA	84	25 - 150	11/16/17 10:19	11/18/17 03:11	1
13C3-PFBS	96	25 - 150	11/16/17 10:19	11/18/17 03:11	1
13C2-PFTeDA	83	25 - 150	11/16/17 10:19	11/18/17 03:11	1

Client Sample ID: TRIP BLANKS Lab Sample ID: 480-127283-8

Date Collected: 11/08/17 00:00 **Matrix: Water**

Method: 8260C - Volatile Orgar Analyte		unds by GC/N Qualifier	MS RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L		<u>-</u>	11/10/17 16:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/10/17 16:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1.0	0.15	ug/L			11/10/17 16:11	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 16:11	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/10/17 16:11	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/10/17 16:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/10/17 16:11	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/10/17 16:11	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/10/17 16:11	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/10/17 16:11	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/10/17 16:11	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/10/17 16:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/10/17 16:11	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/10/17 16:11	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/10/17 16:11	1
2-Hexanone	ND		10	1.3	ug/L			11/10/17 16:11	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/10/17 16:11	1
Acetone	ND		25	2.7	ug/L			11/10/17 16:11	1
Benzene	ND		1.0	0.20	ug/L			11/10/17 16:11	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/10/17 16:11	1
Bromoform	ND		1.0	0.29	ug/L			11/10/17 16:11	1
Bromomethane	ND		1.0	0.35	ug/L			11/10/17 16:11	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/10/17 16:11	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/10/17 16:11	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/10/17 16:11	1
Chloroethane	ND		1.0	0.36	ug/L			11/10/17 16:11	1
Chloroform	ND		1.0	0.23	ug/L			11/10/17 16:11	1
Chloromethane	ND		1.0	0.36	ug/L			11/10/17 16:11	1
cis-1,2-Dichloroethene	ND		1.0	0.21	ug/L			11/10/17 16:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/10/17 16:11	1
Cyclohexane	ND		5.0	0.13	ug/L			11/10/17 16:11	1
Dibromochloromethane	ND		1.0		ug/L			11/10/17 16:11	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: TRIP BLANKS

Date Collected: 11/08/17 00:00 Date Received: 11/09/17 01:00 Lab Sample ID: 480-127283-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND	*	1.0	0.17	ug/L			11/10/17 16:11	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/10/17 16:11	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/10/17 16:11	1
Methyl acetate	ND		10	0.58	ug/L			11/10/17 16:11	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/10/17 16:11	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/10/17 16:11	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/10/17 16:11	1
Styrene	ND		1.0	0.28	ug/L			11/10/17 16:11	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/10/17 16:11	1
Toluene	ND		1.0	0.17	ug/L			11/10/17 16:11	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/10/17 16:11	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/10/17 16:11	1
Trichloroethene	ND		1.0	0.20	ug/L			11/10/17 16:11	1
Trichlorofluoromethane	ND	*	1.0	0.21	ug/L			11/10/17 16:11	1
Vinyl chloride	ND		1.0	0.18	ug/L			11/10/17 16:11	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/10/17 16:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130			-		11/10/17 16:11	1
4-Bromofluorobenzene (Surr)	123		70 - 130					11/10/17 16:11	1
Dibromofluoromethane (Surr)	114		70 - 130					11/10/17 16:11	1
Toluene-d8 (Surr)	96		70 - 130					11/10/17 16:11	1

Lab Sample ID: 480-127283-9 **Client Sample ID: EB-04** Date Collected: 11/08/17 10:50 **Matrix: Water**

Date Received: 11/09/17 01:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.36	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.50	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.59	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.86	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.32	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorohexanesulfonic acid (PFHxS)	0.24	JB	2.0	0.17	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.55	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.33	ng/L		11/16/17 10:19	11/18/17 03:19	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.36	ng/L		11/16/17 10:19	11/18/17 03:19	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	96		25 - 150				11/16/17 10:19	11/18/17 03:19	

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Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-127283-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: EB-04 Lab Sample ID: 480-127283-9

Date Collected: 11/08/17 10:50 Matrix: Water Date Received: 11/09/17 01:00

Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	101	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C2 PFHxA	102	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C4 PFOA	88	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C5 PFNA	99	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C2 PFDA	99	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C2 PFUnA	97	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C2 PFDoA	88	25 - 150	11/16/17 10:19	11/18/17 03:19	1
1802 PFHxS	103	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C4 PFOS	103	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C4-PFHpA	103	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C5 PFPeA	102	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C3-PFBS	106	25 - 150	11/16/17 10:19	11/18/17 03:19	1
13C2-PFTeDA	87	25 - 150	11/16/17 10:19	11/18/17 03:19	1

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Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surre	ogate Red
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-127283-1	MW-6R	95	105	106	95
480-127283-1 - DL	MW-6R	101	94	114	98
480-127283-2	DW-03	104	113	104	109
480-127283-3	MW-29	106	112	106	109
480-127283-4	MW-2	105	111	102	109
480-127283-5	MW-14R	105	110	103	109
480-127283-6	MW-15R	104	124	102	109
480-127283-7	MW-25D	97	97	106	96
480-127283-8	TRIP BLANKS	98	123	114	96
LCS 490-474930/3	Lab Control Sample	106	110	103	110
LCS 490-474935/3	Lab Control Sample	97	94	110	95
LCS 490-475225/3	Lab Control Sample	88	94	107	99
LCS 490-475387/3	Lab Control Sample	98	88	108	97
LCSD 490-474930/4	Lab Control Sample Dup	106	110	104	110
LCSD 490-474935/4	Lab Control Sample Dup	100	89	109	99
LCSD 490-475225/4	Lab Control Sample Dup	89	93	108	96
LCSD 490-475387/4	Lab Control Sample Dup	98	91	110	96
MB 490-474930/6	Method Blank	107	110	106	109
MB 490-474935/6	Method Blank	94	101	108	99
MB 490-475225/6	Method Blank	92	98	105	100
	Method Blank	102	103	115	98

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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Isotope Dilution Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)									
		3C8 FOS/	3C4 PFB/	3C2 PFHx	3C4 PFO	3C5 PFN/	3C2 PFD/	3C2 PFUn	3C2 PFDo		
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)		
480-127283-1	MW-6R	98	48	85	91	104	115	110	97		
480-127283-2	DW-03	92	46	81	86	99	108	105	96		
480-127283-3	MW-29	103	39	81	86	105	114	111	100		
480-127283-4	MW-2	97	81	93	87	100	102	98	86		
480-127283-5	MW-14R	90	27	73	84	100	121	109	98		
480-127283-5 - DL	MW-14R										
480-127283-6	MW-15R	97	49	83	87	100	104	109	98		
480-127283-7	MW-25D	98	57	80	85	96	99	96	88		
480-127283-9	EB-04	96	101	102	88	99	99	97	88		
LCS 320-195067/2-A	Lab Control Sample	96	101	99	91	101	98	97	91		
LCSD 320-195067/3-A	Lab Control Sample Dup	98	102	102	89	101	97	99	94		
MB 320-195067/1-A	Method Blank	95	96	96	85	97	99	99	90		

Percent Isotope Dilution Recovery (Acceptance Limits)

		BO2 PFHx	3C4 PFOS	3C4-PFHp	3C5 PFPe.	3C3-PFBS	C2-PFTeE
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
480-127283-1	MW-6R	100	110	88	80	109	92
480-127283-2	DW-03	100	105	87	79	94	92
480-127283-3	MW-29	99	108	84	65	106	89
480-127283-4	MW-2	98	106	100	91	100	89
480-127283-5	MW-14R	111	112	81	58	113	93
480-127283-5 - DL	MW-14R		99				
480-127283-6	MW-15R	98	104	87	78	93	90
480-127283-7	MW-25D	94	97	89	84	96	83
480-127283-9	EB-04	103	103	103	102	106	87
LCS 320-195067/2-A	Lab Control Sample	101	102	98	100	98	93
LCSD 320-195067/3-A	Lab Control Sample Dup	106	105	103	104	105	90
MB 320-195067/1-A	Method Blank	100	97	94	98	101	91

Surrogate Legend

13C8 FOSA = 13C8 FOSA

13C4 PFBA = 13C4 PFBA

13C2 PFHxA = 13C2 PFHxA

13C4 PFOA = 13C4 PFOA

13C5 PFNA = 13C5 PFNA

13C2 PFDA = 13C2 PFDA

13C2 PFUnA = 13C2 PFUnA

13C2 PFDoA = 13C2 PFDoA

1802 PFHxS = 1802 PFHxS

13C4 PFOS = 13C4 PFOS 13C4-PFHpA = 13C4-PFHpA

13C5 PFPeA = 13C5 PFPeA

13C3-PFBS = 13C3-PFBS

13C2-PFTeDA = 13C2-PFTeDA

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: MB 490-474930/6

Matrix: Water

Vinyl chloride

Xylenes, Total

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

Analysis Batch: 474930	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 13:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/10/17 13:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/10/17 13:28	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/10/17 13:28	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/10/17 13:28	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/10/17 13:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/10/17 13:28	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/10/17 13:28	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/10/17 13:28	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/10/17 13:28	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/10/17 13:28	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/10/17 13:28	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/10/17 13:28	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/10/17 13:28	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/10/17 13:28	1
2-Hexanone	ND		10	1.3	ug/L			11/10/17 13:28	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/10/17 13:28	1
Acetone	ND		25	2.7	ug/L			11/10/17 13:28	1
Benzene	ND		1.0	0.20	ug/L			11/10/17 13:28	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/10/17 13:28	1
Bromoform	ND		1.0	0.29	ug/L			11/10/17 13:28	1
Bromomethane	ND		1.0	0.35	ug/L			11/10/17 13:28	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/10/17 13:28	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/10/17 13:28	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/10/17 13:28	1
Chloroethane	ND		1.0	0.36	ug/L			11/10/17 13:28	1
Chloroform	ND		1.0	0.23	ug/L			11/10/17 13:28	1
Chloromethane	ND		1.0	0.36	ug/L			11/10/17 13:28	1
cis-1,2-Dichloroethene	ND		1.0	0.21	ug/L			11/10/17 13:28	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/10/17 13:28	1
Cyclohexane	ND		5.0	0.13	ug/L			11/10/17 13:28	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/10/17 13:28	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/10/17 13:28	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/10/17 13:28	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/10/17 13:28	1
Methyl acetate	ND		10	0.58	ug/L			11/10/17 13:28	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/10/17 13:28	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/10/17 13:28	1
Methylene Chloride	1.07	J	5.0	1.0	ug/L			11/10/17 13:28	1
Styrene	ND		1.0	0.28	ug/L			11/10/17 13:28	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/10/17 13:28	1
Toluene	ND		1.0	0.17	ug/L			11/10/17 13:28	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/10/17 13:28	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/10/17 13:28	1
Trichloroethene	ND		1.0	0.20	ug/L			11/10/17 13:28	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/10/17 13:28	1
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TestAmerica Buffalo

11/10/17 13:28

11/10/17 13:28

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1.0

3.0

0.18 ug/L

0.58 ug/L

ND

ND

2

3

4

6

8

J

12

14

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

	MB MB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107	70 - 130		11/10/17 13:28	1
4-Bromofluorobenzene (Surr)	110	70 - 130		11/10/17 13:28	1
Dibromofluoromethane (Surr)	106	70 - 130		11/10/17 13:28	1
Toluene-d8 (Surr)	109	70 - 130		11/10/17 13:28	1

Lab Sample ID: LCS 490-474930/3

Matrix: Water

Analysis Batch: 474930

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 474930	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	22.1		ug/L		111	78 - 135	
1,1,2,2-Tetrachloroethane	20.0	22.1		ug/L		111	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.8		ug/L		114	77 - 129	
ne								
1,1,2-Trichloroethane	20.0	20.4		ug/L		102	80 - 124	
1,1-Dichloroethane	20.0	20.5		ug/L		103	78 - 125	
1,1-Dichloroethene	20.0	20.5		ug/L		103	79 - 124	
1,2,4-Trichlorobenzene	20.0	19.0		ug/L		95	63 - 133	
1,2-Dibromo-3-Chloropropane	20.0	18.8		ug/L		94	54 - 125	
1,2-Dibromoethane	20.0	20.2		ug/L		101	80 - 129	
1,2-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 121	
1,2-Dichloroethane	20.0	22.2		ug/L		111	77 - 121	
1,2-Dichloropropane	20.0	19.9		ug/L		100	75 - 120	
1,3-Dichlorobenzene	20.0	20.7		ug/L		104	80 - 122	
1,4-Dichlorobenzene	20.0	21.0		ug/L		105	80 - 120	
2-Butanone (MEK)	100	98.7		ug/L		99	62 - 133	
2-Hexanone	100	103		ug/L		103	60 - 142	
4-Methyl-2-pentanone (MIBK)	100	110		ug/L		110	60 - 137	
Acetone	100	115		ug/L		115	54 ₋ 145	
Benzene	20.0	20.0		ug/L		100	80 - 121	
Bromodichloromethane	20.0	20.6		ug/L		103	75 - 129	
Bromoform	20.0	18.5		ug/L		93	46 - 145	
Bromomethane	20.0	18.4		ug/L		92	41 - 150	
Carbon disulfide	20.0	18.8		ug/L		94	77 - 126	
Carbon tetrachloride	20.0	22.7		ug/L		113	64 - 147	
Chlorobenzene	20.0	20.5		ug/L		102	80 - 120	
Chloroethane	20.0	20.3		ug/L		102	72 - 120	
Chloroform	20.0	21.2		ug/L		106	73 - 129	
Chloromethane	20.0	21.8		ug/L		109	12 - 150	
cis-1,2-Dichloroethene	20.0	20.0		ug/L		100	76 - 125	
cis-1,3-Dichloropropene	20.0	21.3		ug/L		107	74 - 140	
Cyclohexane	20.0	20.5		ug/L		102	73 - 122	
Dibromochloromethane	20.0	21.6		ug/L		108	69 - 133	
Dichlorodifluoromethane	20.0	25.5		ug/L		127	37 - 127	
Ethylbenzene	20.0	20.6		ug/L		103	80 - 130	
Isopropylbenzene	20.0	19.4		ug/L		97	80 - 141	
Methyl acetate	40.0	42.8		ug/L		107	64 - 150	
Methyl tert-butyl ether	20.0	19.4		ug/L		97	72 - 133	
Methylcyclohexane	20.0	20.6		ug/L		103	71 - 129	
Methylene Chloride	20.0	20.1		ug/L		101	79 - 123	
Styrene	20.0	18.7		ug/L		93	80 - 127	
Tetrachloroethene	20.0	21.0		ug/L		105	80 - 126	
Toluene	20.0	22.0		ug/L		110	80 - 126	
trans-1,2-Dichloroethene	20.0	20.9		ug/L		105	79 - 126	
	20.0	20.0		3		.00	. 5 - 120	

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: LCS 490-474930/3

Lab Sample ID: LCSD 490-474930/4

Matrix: Water

Analysis Batch: 474930

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,3-Dichloropropene	20.0	19.9		ug/L		100	63 - 134	
Trichloroethene	20.0	20.1		ug/L		100	80 - 123	
Trichlorofluoromethane	20.0	22.2		ug/L		111	65 - 124	
Vinyl chloride	20.0	19.9		ug/L		99	68 - 120	
Xylenes, Total	40.0	39.4		ug/L		99	80 - 132	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	110		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	110		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 474930							PO. 100	
•	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D %Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	22.4		ug/L		78 - 135	1	15
1,1,2,2-Tetrachloroethane	20.0	22.1		ug/L	111	69 - 131	0	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	23.0		ug/L	115	77 - 129	1	16
ne								
1,1,2-Trichloroethane	20.0	20.7		ug/L	103	80 - 124	1	13
1,1-Dichloroethane	20.0	20.5		ug/L	102	78 - 125	0	17
1,1-Dichloroethene	20.0	21.1		ug/L	106	79 ₋ 124	3	20
1,2,4-Trichlorobenzene	20.0	19.3		ug/L	97	63 - 133	2	15
1,2-Dibromo-3-Chloropropane	20.0	18.9		ug/L	94	54 - 125	0	19
1,2-Dibromoethane	20.0	20.7		ug/L	103	80 - 129	2	13
1,2-Dichlorobenzene	20.0	21.1		ug/L	106	80 - 121	2	12
1,2-Dichloroethane	20.0	22.6		ug/L	113	77 - 121	2	13
1,2-Dichloropropane	20.0	19.8		ug/L	99	75 - 120	0	15
1,3-Dichlorobenzene	20.0	20.9		ug/L	104	80 - 122	1	13
1,4-Dichlorobenzene	20.0	20.6		ug/L	103	80 - 120	2	12
2-Butanone (MEK)	100	94.7		ug/L	95	62 - 133	4	19
2-Hexanone	100	102		ug/L	102	60 - 142	1	17
4-Methyl-2-pentanone (MIBK)	100	111		ug/L	111	60 - 137	1	21
Acetone	100	111		ug/L	111	54 ₋ 145	3	23
Benzene	20.0	20.1		ug/L	100	80 - 121	0	12
Bromodichloromethane	20.0	20.8		ug/L	104	75 - 129	1	14
Bromoform	20.0	18.8		ug/L	94	46 - 145	2	14
Bromomethane	20.0	18.7		ug/L	93	41 - 150	1	19
Carbon disulfide	20.0	19.0		ug/L	95	77 - 126	1	16
Carbon tetrachloride	20.0	22.7		ug/L	113	64 - 147	0	16
Chlorobenzene	20.0	20.3		ug/L	101	80 - 120	1	12
Chloroethane	20.0	20.7		ug/L	103	72 - 120	2	15
Chloroform	20.0	21.3		ug/L	106	73 - 129	0	14
Chloromethane	20.0	21.8		ug/L	109	12 - 150	0	20
cis-1,2-Dichloroethene	20.0	19.9		ug/L	100	76 - 125	1	15
cis-1,3-Dichloropropene	20.0	21.3		ug/L	107	74 - 140	0	15

TestAmerica Buffalo

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11/24/2017

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: LCSD 490-474930/4

Matrix: Water

Analysis Batch: 474930

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyclohexane	20.0	20.1		ug/L		100	73 - 122	2	16
Dibromochloromethane	20.0	21.5		ug/L		107	69 - 133	0	13
Dichlorodifluoromethane	20.0	25.6	*	ug/L		128	37 - 127	0	16
Ethylbenzene	20.0	20.6		ug/L		103	80 - 130	0	12
Isopropylbenzene	20.0	19.2		ug/L		96	80 - 141	1	13
Methyl acetate	40.0	44.0		ug/L		110	64 - 150	3	18
Methyl tert-butyl ether	20.0	19.6		ug/L		98	72 - 133	1	16
Methylcyclohexane	20.0	20.3		ug/L		102	71 - 129	2	17
Methylene Chloride	20.0	20.6		ug/L		103	79 - 123	2	15
Styrene	20.0	18.8		ug/L		94	80 - 127	1	12
Tetrachloroethene	20.0	20.8		ug/L		104	80 - 126	1	17
Toluene	20.0	21.7		ug/L		109	80 - 126	1	13
trans-1,2-Dichloroethene	20.0	21.3		ug/L		107	79 - 126	2	15
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	63 - 134	2	13
Trichloroethene	20.0	20.0		ug/L		100	80 - 123	0	14
Trichlorofluoromethane	20.0	22.1		ug/L		111	65 - 124	0	22
Vinyl chloride	20.0	20.0		ug/L		100	68 - 120	1	15
Xylenes, Total	40.0	39.4		ug/L		99	80 - 132	0	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	110		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	110		70 - 130

Lab Sample ID: MB 490-474935/6

Matrix: Water

Analysis Batch: 474935

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

	MB Qualifier	D.						
	Qualifier	ъ.						
NID.		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		1.0	0.19	ug/L			11/10/17 13:34	1
ND		1.0	0.19	ug/L			11/10/17 13:34	1
ND		1.0	0.15	ug/L			11/10/17 13:34	1
ND		1.0	0.19	ug/L			11/10/17 13:34	1
ND		1.0	0.24	ug/L			11/10/17 13:34	1
ND		1.0	0.25	ug/L			11/10/17 13:34	1
ND		1.0	0.20	ug/L			11/10/17 13:34	1
ND		10	0.94	ug/L			11/10/17 13:34	1
ND		1.0	0.21	ug/L			11/10/17 13:34	1
ND		1.0	0.19	ug/L			11/10/17 13:34	1
ND		1.0	0.20	ug/L			11/10/17 13:34	1
ND		1.0	0.25	ug/L			11/10/17 13:34	1
ND		1.0	0.18	ug/L			11/10/17 13:34	1
ND		1.0	0.17	ug/L			11/10/17 13:34	1
ND		50	2.6	ug/L			11/10/17 13:34	1
ND		10	1.3	ug/L			11/10/17 13:34	1
ND		10	0.81	ug/L			11/10/17 13:34	1
ND		25	2.7	ug/L			11/10/17 13:34	1
	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 10 ND 1.0 ND 50 ND 10 ND 10 ND 10 ND 10 ND 10	ND 1.0 0.19 ND 1.0 0.15 ND 1.0 0.24 ND 1.0 0.25 ND 1.0 0.20 ND 10 0.94 ND 1.0 0.21 ND 1.0 0.19 ND 1.0 0.20 ND 1.0 0.25 ND 1.0 0.18 ND 1.0 0.17 ND 50 2.6 ND 10 1.3 ND 10 0.81	ND 1.0 0.19 ug/L ND 1.0 0.15 ug/L ND 1.0 0.19 ug/L ND 1.0 0.24 ug/L ND 1.0 0.25 ug/L ND 1.0 0.20 ug/L ND 10 0.94 ug/L ND 1.0 0.21 ug/L ND 1.0 0.19 ug/L ND 1.0 0.25 ug/L ND 1.0 0.18 ug/L ND 1.0 0.17 ug/L ND 50 2.6 ug/L ND 10 1.3 ug/L ND 10 0.81 ug/L	ND 1.0 0.19 ug/L ND 1.0 0.15 ug/L ND 1.0 0.19 ug/L ND 1.0 0.24 ug/L ND 1.0 0.25 ug/L ND 1.0 0.20 ug/L ND 1.0 0.94 ug/L ND 1.0 0.21 ug/L ND 1.0 0.19 ug/L ND 1.0 0.20 ug/L ND 1.0 0.25 ug/L ND 1.0 0.18 ug/L ND 1.0 0.17 ug/L ND 50 2.6 ug/L ND 10 1.3 ug/L ND 10 0.81 ug/L	ND 1.0 0.19 ug/L ND 1.0 0.15 ug/L ND 1.0 0.19 ug/L ND 1.0 0.24 ug/L ND 1.0 0.25 ug/L ND 1.0 0.20 ug/L ND 1.0 0.94 ug/L ND 1.0 0.21 ug/L ND 1.0 0.19 ug/L ND 1.0 0.25 ug/L ND 1.0 0.18 ug/L ND 1.0 0.17 ug/L ND 50 2.6 ug/L ND 10 1.3 ug/L ND 10 0.81 ug/L	ND 1.0 0.19 ug/L 11/10/17 13:34 ND 1.0 0.15 ug/L 11/10/17 13:34 ND 1.0 0.19 ug/L 11/10/17 13:34 ND 1.0 0.24 ug/L 11/10/17 13:34 ND 1.0 0.25 ug/L 11/10/17 13:34 ND 1.0 0.20 ug/L 11/10/17 13:34 ND 1.0 0.20 ug/L 11/10/17 13:34 ND 10 0.94 ug/L 11/10/17 13:34 ND 10 0.91 ug/L 11/10/17 13:34 ND 1.0 0.21 ug/L 11/10/17 13:34 ND 1.0 0.21 ug/L 11/10/17 13:34 ND 1.0 0.19 ug/L 11/10/17 13:34 ND 1.0 0.20 ug/L 11/10/17 13:34 ND 1.0 0.25 ug/L 11/10/17 13:34 ND 1.0 0.25 ug/L 11/10/17 13:34 ND 1.0 0.18 ug/L 11/10/17 13:34 ND 1.0 0.18 ug/L 11/10/17 13:34 ND 1.0 0.17 ug/L 11/10/17 13:34 ND 1.0 0.17 ug/L 11/10/17 13:34 ND 1.0 0.17 ug/L 11/10/17 13:34 ND 1.0 0.17 ug/L 11/10/17 13:34 ND 1.0 0.17 ug/L 11/10/17 13:34 ND 1.0 0.17 ug/L 11/10/17 13:34 ND 1.0 0.81 ug/L 11/10/17 13:34

TestAmerica Buffalo

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11/24/2017

TestAmerica Job ID: 480-127283-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 490-474935/6

Matrix: Water

Analysis Batch: 474935

Client Sample ID: Method Blank **Prep Type: Total/NA**

MB MB **MDL** Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Benzene $\overline{\mathsf{ND}}$ 1.0 0.20 ug/L 11/10/17 13:34 Bromodichloromethane ND 1.0 0.17 ug/L 11/10/17 13:34 **Bromoform** ND 1.0 0.29 ug/L 11/10/17 13:34 Bromomethane ND 1.0 0.35 ug/L 11/10/17 13:34 Carbon disulfide ND 1.0 0.22 ug/L 11/10/17 13:34 Carbon tetrachloride ND 1.0 0.18 ug/L 11/10/17 13:34 Chlorobenzene ND 1.0 0.18 ug/L 11/10/17 13:34 Chloroethane ND 1.0 0.36 ug/L 11/10/17 13:34 Chloroform ND 1.0 0.23 ug/L 11/10/17 13:34 1 ND Chloromethane 1.0 0.36 ug/L 11/10/17 13:34 cis-1,2-Dichloroethene ND 1.0 0.21 ug/L 11/10/17 13:34 ND 0.17 ug/L cis-1,3-Dichloropropene 1.0 11/10/17 13:34 ND 5.0 Cyclohexane 0.13 ug/L 11/10/17 13:34 Dibromochloromethane ND 1.0 0.25 ug/L 11/10/17 13:34 1.0 Dichlorodifluoromethane ND 0.17 ug/L 11/10/17 13:34 Ethylbenzene ND 1.0 0.19 ug/L 11/10/17 13:34 Isopropylbenzene ND 1.0 0.33 ug/L 11/10/17 13:34 ND 10 Methyl acetate 0.58 ug/L 11/10/17 13:34 Methyl tert-butyl ether ND 1.0 0.17 ug/L 11/10/17 13:34 Methylcyclohexane ND 5.0 0.090 ug/L 11/10/17 13:34 Methylene Chloride ND 5.0 1.0 ug/L 11/10/17 13:34 Styrene ND 1.0 0.28 ug/L 11/10/17 13:34 Tetrachloroethene ND 1.0 0.14 ug/L 11/10/17 13:34 Toluene ND 1.0 0.17 ug/L 11/10/17 13:34 ND trans-1,2-Dichloroethene 1.0 0.23 ug/L 11/10/17 13:34 trans-1,3-Dichloropropene ND 1.0 0.17 ug/L 11/10/17 13:34 Trichloroethene ND 0.20 ug/L 1.0 11/10/17 13:34 Trichlorofluoromethane ND 1.0 0.21 ug/L 11/10/17 13:34 ND Vinyl chloride 1.0 0.18 ug/L 11/10/17 13:34 Xylenes, Total ND 3.0 0.58 ug/L 11/10/17 13:34

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	94		70 - 130	_		11/10/17 13:34	1	
4-Bromofluorobenzene (Surr)	101		70 - 130			11/10/17 13:34	1	
Dibromofluoromethane (Surr)	108		70 - 130			11/10/17 13:34	1	
Toluene-d8 (Surr)	99		70 - 130			11/10/17 13:34	1	

Lab Sample ID: LCS 490-474935/3

Matrix: Water

Analysis Batch: 474935

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	24.0		ug/L		120	78 - 135	
1,1,2,2-Tetrachloroethane	20.0	19.7		ug/L		98	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.8		ug/L		129	77 - 129	
ne								
1,1,2-Trichloroethane	20.0	20.9		ug/L		104	80 - 124	
1,1-Dichloroethane	20.0	21.0		ug/L		105	78 - 125	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Lab Sample ID: LCS 490-474935/3 **Matrix: Water**

Analysis Batch: 474935

Analyte	Spike Added		LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	23.2		ug/L		116	79 - 124
1,2,4-Trichlorobenzene	20.0	15.6		ug/L		78	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	17.4		ug/L		87	54 - 125
1,2-Dibromoethane	20.0	21.5		ug/L		107	80 - 129
1,2-Dichlorobenzene	20.0	21.3		ug/L		106	80 - 121
1,2-Dichloroethane	20.0	22.6		ug/L		113	77 - 121
1,2-Dichloropropane	20.0	19.7		ug/L		99	75 - 120
1,3-Dichlorobenzene	20.0	21.5		ug/L		108	80 - 122
1,4-Dichlorobenzene	20.0	21.8		ug/L		109	80 - 120
2-Butanone (MEK)	100	93.9		ug/L		94	62 - 133
2-Hexanone	100	85.7		ug/L		86	60 - 142
4-Methyl-2-pentanone (MIBK)	100	85.1		ug/L		85	60 - 137
Acetone	100	90.2		ug/L		90	54 ₋ 145
Benzene	20.0	21.1		ug/L		105	80 - 121
Bromodichloromethane	20.0	22.9		ug/L		115	75 ₋ 129
Bromoform	20.0	21.8		ug/L		109	46 - 145
Bromomethane	20.0	23.9		ug/L		119	41 - 150
Carbon disulfide	20.0	22.1		ug/L		110	77 ₋ 126
Carbon tetrachloride	20.0	25.6		ug/L		128	64 - 147
Chlorobenzene	20.0	21.6		ug/L		108	80 - 120
Chloroethane	20.0	21.3		ug/L		107	72 - 120
Chloroform	20.0	22.1		ug/L		111	73 - 129
Chloromethane	20.0	18.3		ug/L		91	12 - 150
cis-1,2-Dichloroethene	20.0	21.4		ug/L		107	76 ₋ 125
cis-1,3-Dichloropropene	20.0	20.3		ug/L		101	74 ₋ 140
Cyclohexane	20.0	20.5		ug/L		102	73 - 122
Dibromochloromethane	20.0	21.9		ug/L		109	69 - 133
Dichlorodifluoromethane	20.0	29.8	*	ug/L		149	37 - 127
Ethylbenzene	20.0	20.1		ug/L		100	80 - 130
Isopropylbenzene	20.0	20.7		ug/L		104	80 - 141
Methyl acetate	40.0	39.8		ug/L		100	64 - 150
Methyl tert-butyl ether	20.0	21.1		ug/L		106	72 - 133
Methylcyclohexane	20.0	23.3		ug/L		117	71 - 129
Methylene Chloride	20.0	22.7		ug/L		114	79 - 123
Styrene	20.0	20.2		ug/L		101	80 - 127
Tetrachloroethene	20.0	22.7		ug/L		113	80 - 126
Toluene	20.0	20.4		ug/L		102	80 - 126
trans-1,2-Dichloroethene	20.0	20.6		ug/L		103	79 - 126
trans-1,3-Dichloropropene	20.0	19.9		ug/L		100	63 - 134
Trichloroethene	20.0	23.4		ug/L		117	80 - 123
Trichlorofluoromethane	20.0	26.1	*	ug/L		130	65 - 124
Vinyl chloride	20.0	20.8		ug/L		104	68 - 120
Xylenes, Total	40.0	39.8		ug/L		100	80 - 132

Surrogate	%Recovery Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97	70 - 130
4-Bromofluorobenzene (Surr)	94	70 - 130
Dibromofluoromethane (Surr)	110	70 - 130

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: LCS 490-474935/3

Lab Sample ID: LCSD 490-474935/4

Matrix: Water

Analysis Batch: 474935

LCS LCS

Surrogate %Recovery Qualifier Limits Toluene-d8 (Surr) 70 - 130 95

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

Client Sample ID: Lab Control Sample Dup

Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 474935											
	Spike	LCSD				%Rec.		RPD			
Analyte	Added		Qualifier	Unit	D %Rec	Limits	RPD	Limit			
1,1,1-Trichloroethane	20.0	24.4		ug/L	122	78 - 135	1	15			
1,1,2,2-Tetrachloroethane	20.0	17.9		ug/L	90	69 - 131	9	15			
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	26.4	*	ug/L	132	77 - 129	2	16			
ne 1,1,2-Trichloroethane	20.0	21.2		ug/L	106	80 - 124	1	13			
1.1-Dichloroethane	20.0	21.6		ug/L ug/L	108	78 ₋ 125	3	17			
1,1-Dichloroethene	20.0	24.3		ug/L ug/L	122	70 - 123 79 - 124	5	20			
1,2,4-Trichlorobenzene	20.0	17.9		ug/L	89	63 - 133	14	15			
1,2-Dibromo-3-Chloropropane	20.0	18.4		ug/L ug/L	92	54 ₋ 125	5	19			
1,2-Dibromoethane	20.0	21.5		ug/L ug/L	108	80 - 129	0	13			
1,2-Dibromoethane 1,2-Dichlorobenzene	20.0	21.8		ug/L ug/L	109	80 - 129	2	12			
1,2-Dichloroethane	20.0	22.8		ug/L ug/L	114	77 ₋ 121	1	13			
1,2-Dichloropropane	20.0	20.8		ug/L ug/L	104	77 - 121 75 - 120	5	15			
1,3-Dichlorobenzene	20.0	22.0		ug/L	110	80 - 122	2	13			
1,4-Dichlorobenzene	20.0	22.6		ug/L	113	80 - 120	4	12			
2-Butanone (MEK)	100	91.1		ug/L ug/L	91	62 - 133	3	19			
2-Hexanone	100	80.8		ug/L ug/L	81	60 - 142	6	17			
4-Methyl-2-pentanone (MIBK)	100	82.8		_	83	60 - 142	3	21			
Acetone	100	83.5		ug/L ug/L	83	54 ₋ 145	8	23			
Benzene	20.0	21.2		ug/L ug/L	106	80 - 121	0	12			
Bromodichloromethane	20.0	22.9		ug/L ug/L	114	75 - 129	0	14			
Bromoform	20.0	21.8		ug/L ug/L	109	46 - 145	0	14			
Bromomethane	20.0	23.2		ug/L	116	41 - 150	3	19			
Carbon disulfide	20.0	22.0		ug/L ug/L	110	77 ₋ 126	0	16			
Carbon tetrachloride	20.0	26.0		ug/L ug/L	130	64 - 147	2	16			
Chlorobenzene	20.0	22.2		ug/L	111	80 - 120	2	12			
Chloroethane	20.0	23.3		ug/L ug/L	117	72 - 120	9	15			
Chloroform	20.0	23.0		ug/L ug/L	115	73 - 129	4	14			
Chloromethane	20.0	19.0		ug/L	95	12 - 150	4	20			
cis-1,2-Dichloroethene	20.0	21.9		ug/L	109	76 - 125	2	15			
cis-1,3-Dichloropropene	20.0	20.5		ug/L ug/L	103	70 - 123 74 - 140	1	15			
Cyclohexane	20.0	21.0		ug/L	105	73 - 122		16			
Dibromochloromethane	20.0	21.9		ug/L ug/L	110	69 - 133	0	13			
Dichlorodifluoromethane	20.0	30.6	*	ug/L ug/L	153	37 ₋ 127	3	16			
Ethylbenzene	20.0	20.4		ug/L	102	80 - 130	2	12			
Isopropylbenzene	20.0	21.3		ug/L ug/L	102	80 - 130 80 - 141	3	13			
Methyl acetate	40.0	40.9		ug/L ug/L	107	64 - 150	3	18			
Methyl tert-butyl ether	20.0	21.3		ug/L	107	72 - 133		16			
Methylcyclohexane	20.0	24.1		ug/L ug/L	121	71 - 129	3	17			
Methylene Chloride	20.0	23.0		ug/L ug/L	115	79 - 123	1	15			
Styrene	20.0	20.5		ug/L ug/L	102	80 - 127		12			

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: LCSD 490-474935/4

Matrix: Water

Analysis Batch: 474935

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		KPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Tetrachloroethene	20.0	23.2		ug/L		116	80 - 126	2	17
Toluene	20.0	21.0		ug/L		105	80 - 126	3	13
trans-1,2-Dichloroethene	20.0	20.9		ug/L		104	79 - 126	1	15
trans-1,3-Dichloropropene	20.0	20.4		ug/L		102	63 - 134	3	13
Trichloroethene	20.0	23.6		ug/L		118	80 - 123	1	14
Trichlorofluoromethane	20.0	28.2	*	ug/L		141	65 - 124	8	22
Vinyl chloride	20.0	21.3		ug/L		106	68 - 120	2	15
Xylenes, Total	40.0	41.1		ug/L		103	80 - 132	3	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	89		70 - 130
Dibromofluoromethane (Surr)	109		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: MB 490-475225/6 Client Sample ID: Method Blank

Matrix: Water Prep Type: Total/NA

Analysis Batch: 475225

Analysis Baton: 470220	МВ	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 17:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 17:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 17:26	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 17:26	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 17:26	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 17:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 17:26	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 17:26	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 17:26	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/17 17:26	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 17:26	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 17:26	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 17:26	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 17:26	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 17:26	1
2-Hexanone	ND		10	1.3	ug/L			11/11/17 17:26	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 17:26	1
Acetone	ND		25	2.7	ug/L			11/11/17 17:26	1
Benzene	ND		1.0	0.20	ug/L			11/11/17 17:26	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/11/17 17:26	1
Bromoform	ND		1.0	0.29	ug/L			11/11/17 17:26	1
Bromomethane	ND		1.0	0.35	ug/L			11/11/17 17:26	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/11/17 17:26	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/11/17 17:26	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/11/17 17:26	1
Chloroethane	ND		1.0	0.36	ug/L			11/11/17 17:26	1
Chloroform	ND		1.0	0.23	ug/L			11/11/17 17:26	1
Chloromethane	ND		1.0	0.36	ug/L			11/11/17 17:26	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

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

Lab Sample ID: MB 490-475225/6 **Matrix: Water**

Analysis Batch: 475225

	MB MB							
Analyte	Result Quali	fier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND	1.0	0.21	ug/L			11/11/17 17:26	1
cis-1,3-Dichloropropene	ND	1.0	0.17	ug/L			11/11/17 17:26	1
Cyclohexane	ND	5.0	0.13	ug/L			11/11/17 17:26	1
Dibromochloromethane	ND	1.0	0.25	ug/L			11/11/17 17:26	1
Dichlorodifluoromethane	ND	1.0	0.17	ug/L			11/11/17 17:26	1
Ethylbenzene	ND	1.0	0.19	ug/L			11/11/17 17:26	1
Isopropylbenzene	ND	1.0	0.33	ug/L			11/11/17 17:26	1
Methyl acetate	ND	10	0.58	ug/L			11/11/17 17:26	1
Methyl tert-butyl ether	ND	1.0	0.17	ug/L			11/11/17 17:26	1
Methylcyclohexane	ND	5.0	0.090	ug/L			11/11/17 17:26	1
Methylene Chloride	ND	5.0	1.0	ug/L			11/11/17 17:26	1
Styrene	ND	1.0	0.28	ug/L			11/11/17 17:26	1
Tetrachloroethene	ND	1.0	0.14	ug/L			11/11/17 17:26	1
Toluene	ND	1.0	0.17	ug/L			11/11/17 17:26	1
trans-1,2-Dichloroethene	ND	1.0	0.23	ug/L			11/11/17 17:26	1
trans-1,3-Dichloropropene	ND	1.0	0.17	ug/L			11/11/17 17:26	1
Trichloroethene	ND	1.0	0.20	ug/L			11/11/17 17:26	1
Trichlorofluoromethane	ND	1.0	0.21	ug/L			11/11/17 17:26	1
Vinyl chloride	ND	1.0	0.18	ug/L			11/11/17 17:26	1
Xylenes, Total	ND	3.0	0.58	ug/L			11/11/17 17:26	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130		11/11/17 17:26	1
4-Bromofluorobenzene (Surr)	98		70 - 130		11/11/17 17:26	1
Dibromofluoromethane (Surr)	105		70 - 130		11/11/17 17:26	1
Toluene-d8 (Surr)	100		70 - 130		11/11/17 17:26	1

Lab Sample ID: LCS 490-475225/3

Matrix: Water

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

Analysis Batch: 475225	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	20.0	23.7		ug/L		119	78 - 135
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		102	69 - 131
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.9	*	ug/L		130	77 - 129
ne							
1,1,2-Trichloroethane	20.0	22.0		ug/L		110	80 - 124
1,1-Dichloroethane	20.0	21.5		ug/L		108	78 - 125
1,1-Dichloroethene	20.0	22.3		ug/L		112	79 - 124
1,2,4-Trichlorobenzene	20.0	18.5		ug/L		92	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	19.2		ug/L		96	54 - 125
1,2-Dibromoethane	20.0	22.2		ug/L		111	80 - 129
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 - 121
1,2-Dichloroethane	20.0	22.7		ug/L		114	77 ₋ 121
1,2-Dichloropropane	20.0	20.9		ug/L		105	75 - 120
1,3-Dichlorobenzene	20.0	23.0		ug/L		115	80 - 122
1,4-Dichlorobenzene	20.0	23.3		ug/L		116	80 - 120
2-Butanone (MEK)	100	88.0		ug/L		88	62 - 133

TestAmerica Buffalo

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TestAmerica Job ID: 480-127283-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Analysis Batch: 475225

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

, ,	Spike	LCS	LCS		%Rec.	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
2-Hexanone	100	86.0	ug/L	86	60 - 142	
4-Methyl-2-pentanone (MIBK)	100	85.4	ug/L	85	60 - 137	
Acetone	100	87.4	ug/L	87	54 - 145	
Benzene	20.0	20.6	ug/L	103	80 - 121	
Bromodichloromethane	20.0	23.1	ug/L	115	75 - 129	
Bromoform	20.0	21.2	ug/L	106	46 - 145	
Bromomethane	20.0	21.4	ug/L	107	41 - 150	
Carbon disulfide	20.0	21.4	ug/L	107	77 - 126	
Carbon tetrachloride	20.0	25.5	ug/L	128	64 - 147	
Chlorobenzene	20.0	23.1	ug/L	115	80 - 120	
Chloroethane	20.0	20.7	ug/L	103	72 - 120	
Chloroform	20.0	23.4	ug/L	117	73 - 129	
Chloromethane	20.0	16.4	ug/L	82	12 - 150	
cis-1,2-Dichloroethene	20.0	21.8	ug/L	109	76 - 125	
cis-1,3-Dichloropropene	20.0	21.4	ug/L	107	74 - 140	
Cyclohexane	20.0	19.7	ug/L	99	73 - 122	
Dibromochloromethane	20.0	22.2	ug/L	111	69 - 133	
Dichlorodifluoromethane	20.0	23.0	ug/L	115	37 - 127	
Ethylbenzene	20.0	20.3	ug/L	101	80 - 130	
Isopropylbenzene	20.0	19.1	ug/L	95	80 - 141	
Methyl acetate	40.0	39.5	ug/L	99	64 - 150	
Methyl tert-butyl ether	20.0	20.8	ug/L	104	72 - 133	
Methylcyclohexane	20.0	21.5	ug/L	108	71 - 129	
Methylene Chloride	20.0	21.7	ug/L	108	79 - 123	
Styrene	20.0	20.2	ug/L	101	80 - 127	
Tetrachloroethene	20.0	22.8	ug/L	114	80 - 126	
Toluene	20.0	20.8	ug/L	104	80 - 126	
trans-1,2-Dichloroethene	20.0	21.3	ug/L	107	79 - 126	
trans-1,3-Dichloropropene	20.0	20.6	ug/L	103	63 - 134	
Trichloroethene	20.0	23.9	ug/L	120	80 - 123	
Trichlorofluoromethane	20.0	24.8	ug/L	124	65 - 124	
Vinyl chloride	20.0	20.2	ug/L	101	68 - 120	
Xylenes, Total	40.0	39.9	ug/L	100	80 - 132	

LCS LCS Limits Surrogate %Recovery Qualifier 1,2-Dichloroethane-d4 (Surr) 88 70 - 130 4-Bromofluorobenzene (Surr) 94 70 - 130 Dibromofluoromethane (Surr) 107 70 - 130 Toluene-d8 (Surr) 99 70 - 130

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Analysis Batch: 475225

•	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	24.2		ug/L		121	78 - 135	2	15
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	69 - 131	2	15

TestAmerica Buffalo

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Analysis Batch: 475225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 475225	Spike	LCSD	LCSD				%Rec.		RPE
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	26.3	*	ug/L		132	77 - 129	2	16
ne				<u>-</u>					
1,1,2-Trichloroethane	20.0	21.8		ug/L		109	80 - 124	1	13
1,1-Dichloroethane	20.0	21.9		ug/L		110	78 - 125	2	17
1,1-Dichloroethene	20.0	23.7		ug/L		118	79 - 124	6	20
1,2,4-Trichlorobenzene	20.0	18.7		ug/L		94	63 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	19.5		ug/L		98	54 - 125	2	19
1,2-Dibromoethane	20.0	21.5		ug/L		108	80 - 129	3	13
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 - 121	0	12
1,2-Dichloroethane	20.0	23.2		ug/L		116	77 - 121	2	13
1,2-Dichloropropane	20.0	21.4		ug/L		107	75 - 120	2	15
1,3-Dichlorobenzene	20.0	23.1		ug/L		116	80 - 122	1	13
1,4-Dichlorobenzene	20.0	23.2		ug/L		116	80 - 120	0	12
2-Butanone (MEK)	100	95.9		ug/L		96	62 - 133	9	19
2-Hexanone	100	86.1		ug/L		86	60 - 142	0	17
4-Methyl-2-pentanone (MIBK)	100	87.1		ug/L		87	60 - 137	2	2
Acetone	100	90.2		ug/L		90	54 - 145	3	23
Benzene	20.0	21.0		ug/L		105	80 - 121	2	12
Bromodichloromethane	20.0	23.4		ug/L		117	75 - 129	1	14
Bromoform	20.0	21.2		ug/L		106	46 - 145	0	14
Bromomethane	20.0	22.0		ug/L		110	41 - 150	3	19
Carbon disulfide	20.0	21.8		ug/L		109	77 - 126	2	16
Carbon tetrachloride	20.0	25.4		ug/L		127	64 - 147	0	16
Chlorobenzene	20.0	22.3		ug/L		111	80 - 120	3	12
Chloroethane	20.0	21.7		ug/L		108	72 - 120	5	15
Chloroform	20.0	23.8		ug/L		119	73 - 129	2	14
Chloromethane	20.0	16.4		ug/L		82	12 - 150	0	20
cis-1,2-Dichloroethene	20.0	22.1		ug/L		111	76 - 125	1	15
cis-1,3-Dichloropropene	20.0	20.9		ug/L		104	74 - 140	2	15
Cyclohexane	20.0	19.9		ug/L		99	73 - 122	1	16
Dibromochloromethane	20.0	22.8		ug/L		114	69 - 133	3	13
Dichlorodifluoromethane	20.0	22.4		ug/L		112	37 - 127	2	16
Ethylbenzene	20.0	20.2		ug/L		101	80 - 130	0	12
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 141	1	13
Methyl acetate	40.0	40.4		ug/L		101	64 - 150	2	18
Methyl tert-butyl ether	20.0	21.4		ug/L		107	72 - 133	3	16
Methylcyclohexane	20.0	21.5		ug/L		107	71 - 129	0	17
Methylene Chloride	20.0	23.3		ug/L		116	79 - 123	7	15
Styrene	20.0	20.2		ug/L		101	80 - 127		12
Tetrachloroethene	20.0	22.5		ug/L		112	80 - 126	1	17
Toluene	20.0	20.8		ug/L ug/L		104	80 - 126	0	13
trans-1,2-Dichloroethene	20.0	21.4		ug/L ug/L		107	79 - 126		15
trans-1,3-Dichloropropene	20.0	20.7		ug/L ug/L		107	63 - 134	0	13
Trichloroethene	20.0	20.7		_		118	80 ₋ 123	1	14
Trichloroethene		23.7 24.5		ug/L		122		1	22
	20.0			ug/L			65 ₋ 124		
Vinyl chloride	20.0	20.4		ug/L		102	68 - 120	1	15
Xylenes, Total	40.0	39.5		ug/L		99	80 - 132	1	1

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Analysis Batch: 475225

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

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Client Sample ID: Method Blank

Prep Type: Total/NA

Lab Sample ID: MB 490-475387/6 **Matrix: Water**

Analysis Batch: 475387 MB MB

Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/13/17 11:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/13/17 11:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/13/17 11:23	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/13/17 11:23	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/13/17 11:23	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/13/17 11:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/13/17 11:23	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/13/17 11:23	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/13/17 11:23	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/13/17 11:23	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/13/17 11:23	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/13/17 11:23	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/13/17 11:23	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/13/17 11:23	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/13/17 11:23	1
2-Hexanone	ND		10	1.3	ug/L			11/13/17 11:23	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/13/17 11:23	1
Acetone	ND		25	2.7	ug/L			11/13/17 11:23	1
Benzene	ND		1.0	0.20	ug/L			11/13/17 11:23	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/13/17 11:23	1
Bromoform	ND		1.0	0.29	ug/L			11/13/17 11:23	1
Bromomethane	ND		1.0	0.35	ug/L			11/13/17 11:23	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/13/17 11:23	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/13/17 11:23	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/13/17 11:23	1
Chloroethane	ND		1.0	0.36	ug/L			11/13/17 11:23	1
Chloroform	ND		1.0	0.23	ug/L			11/13/17 11:23	1
Chloromethane	ND		1.0	0.36	ug/L			11/13/17 11:23	1
cis-1,2-Dichloroethene	ND		1.0	0.21	ug/L			11/13/17 11:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/13/17 11:23	1
Cyclohexane	ND		5.0	0.13	ug/L			11/13/17 11:23	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/13/17 11:23	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/13/17 11:23	1
Ethylbenzene	ND		1.0		ug/L			11/13/17 11:23	1
Isopropylbenzene	ND		1.0	0.33				11/13/17 11:23	1
Methyl acetate	ND		10	0.58	-			11/13/17 11:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/13/17 11:23	1
Methylcyclohexane	ND		5.0	0.090	_			11/13/17 11:23	1

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

Client: ARCADIS U.S. Inc

Analysis Batch: 475387

Matrix: Water

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: MB 490-475387/6

TestAmerica Job ID: 480-127283-1

Client Sample ID: Method Blank

Prep Type: Total/NA

	IVID	NID							
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	1.0	ug/L			11/13/17 11:23	1
Styrene	ND		1.0	0.28	ug/L			11/13/17 11:23	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/13/17 11:23	1
Toluene	ND		1.0	0.17	ug/L			11/13/17 11:23	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/13/17 11:23	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/13/17 11:23	1
Trichloroethene	ND		1.0	0.20	ug/L			11/13/17 11:23	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/13/17 11:23	1
Vinyl chloride	ND		1.0	0.18	ug/L			11/13/17 11:23	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/13/17 11:23	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		11/13/17 11:23	1
4-Bromofluorobenzene (Surr)	103		70 - 130		11/13/17 11:23	1
Dibromofluoromethane (Surr)	115		70 - 130		11/13/17 11:23	1
Toluene-d8 (Surr)	98		70 - 130		11/13/17 11:23	1
	1,2-Dichloroethane-d4 (Surr) 4-Bromofluorobenzene (Surr) Dibromofluoromethane (Surr)	Surrogate%Recovery1,2-Dichloroethane-d4 (Surr)1024-Bromofluorobenzene (Surr)103Dibromofluoromethane (Surr)115	1,2-Dichloroethane-d4 (Surr) 102 4-Bromofluorobenzene (Surr) 103 Dibromofluoromethane (Surr) 115	Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 102 70 - 130 4-Bromofluorobenzene (Surr) 103 70 - 130 Dibromofluoromethane (Surr) 115 70 - 130	Surrogate %Recovery Qualifier Limits Prepared 1,2-Dichloroethane-d4 (Surr) 102 70 - 130 4-Bromofluorobenzene (Surr) 103 70 - 130 Dibromofluoromethane (Surr) 115 70 - 130	Surrogate %Recovery Qualifier Limits Prepared Analyzed 1,2-Dichloroethane-d4 (Surr) 102 70 - 130 11/13/17 11:23 4-Bromofluorobenzene (Surr) 103 70 - 130 11/13/17 11:23 Dibromofluoromethane (Surr) 115 70 - 130 11/13/17 11:23

Lab Sample ID: LCS 490-475387/3 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Analysis Batch: 475387**

Analysis Batch. 475567	Spike	LCS I	LCS		%Rec.
Analyte	Added	Result (Qualifier Unit	D %Rec	Limits
1,1,1-Trichloroethane	20.0	21.5	ug/L		78 - 135
1,1,2,2-Tetrachloroethane	20.0	18.4	ug/L	92	69 - 131
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.3	ug/L	112	77 - 129
ne					
1,1,2-Trichloroethane	20.0	19.4	ug/L	97	80 - 124
1,1-Dichloroethane	20.0	20.2	ug/L	101	78 - 125
1,1-Dichloroethene	20.0	21.6	ug/L	108	79 - 124
1,2,4-Trichlorobenzene	20.0	16.8	ug/L	84	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	18.1	ug/L	90	54 - 125
1,2-Dibromoethane	20.0	20.0	ug/L	100	80 - 129
1,2-Dichlorobenzene	20.0	20.3	ug/L	102	80 - 121
1,2-Dichloroethane	20.0	20.1	ug/L	101	77 - 121
1,2-Dichloropropane	20.0	19.4	ug/L	97	75 - 120
1,3-Dichlorobenzene	20.0	20.1	ug/L	101	80 - 122
1,4-Dichlorobenzene	20.0	20.5	ug/L	103	80 - 120
2-Butanone (MEK)	100	95.4	ug/L	95	62 - 133
2-Hexanone	100	81.1	ug/L	81	60 - 142
4-Methyl-2-pentanone (MIBK)	100	83.8	ug/L	84	60 - 137
Acetone	100	95.6	ug/L	96	54 - 145
Benzene	20.0	19.6	ug/L	98	80 - 121
Bromodichloromethane	20.0	21.6	ug/L	108	75 - 129
Bromoform	20.0	20.4	ug/L	102	46 - 145
Bromomethane	20.0	20.5	ug/L	102	41 - 150
Carbon disulfide	20.0	20.5	ug/L	102	77 - 126
Carbon tetrachloride	20.0	23.4	ug/L	117	64 - 147
Chlorobenzene	20.0	20.3	ug/L	101	80 - 120

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: LCS 490-475387/3

Matrix: Water

Analysis Batch: 475387

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

Client Sample ID: Lab Control Sample Dup

102

99

110

97

%Rec.

80 - 129

80 - 121

77 - 121

75 - 120

Allalysis Balcii. 475367	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloroethane	20.0	20.0		ug/L		100	72 - 120	
Chloroform	20.0	22.1		ug/L		111	73 - 129	
Chloromethane	20.0	15.3		ug/L		76	12 - 150	
cis-1,2-Dichloroethene	20.0	20.2		ug/L		101	76 - 125	
cis-1,3-Dichloropropene	20.0	19.1		ug/L		95	74 - 140	
Cyclohexane	20.0	18.8		ug/L		94	73 - 122	
Dibromochloromethane	20.0	20.9		ug/L		105	69 - 133	
Dichlorodifluoromethane	20.0	19.8		ug/L		99	37 - 127	
Ethylbenzene	20.0	19.0		ug/L		95	80 - 130	
Isopropylbenzene	20.0	18.6		ug/L		93	80 - 141	
Methyl acetate	40.0	39.8		ug/L		100	64 - 150	
Methyl tert-butyl ether	20.0	20.1		ug/L		100	72 - 133	
Methylcyclohexane	20.0	21.3		ug/L		107	71 - 129	
Methylene Chloride	20.0	20.5		ug/L		102	79 - 123	
Styrene	20.0	18.8		ug/L		94	80 - 127	
Tetrachloroethene	20.0	21.2		ug/L		106	80 - 126	
Toluene	20.0	19.2		ug/L		96	80 - 126	
trans-1,2-Dichloroethene	20.0	19.8		ug/L		99	79 - 126	
trans-1,3-Dichloropropene	20.0	19.2		ug/L		96	63 - 134	
Trichloroethene	20.0	22.7		ug/L		114	80 - 123	
Trichlorofluoromethane	20.0	25.1	*	ug/L		126	65 - 124	
Vinyl chloride	20.0	18.2		ug/L		91	68 - 120	
Xylenes, Total	40.0	37.4		ug/L		94	80 - 132	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	88		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: LCSD 490-475387/4

Matrix: Water

1,2-Dibromoethane

1,2-Dichloroethane

1,2-Dichloropropane

1,2-Dichlorobenzene

Analysis Batch: 475387

Analyte	Added	Result Qualifier	Unit	D %Rec	Limits	RPD	Limit	
1,1,1-Trichloroethane	20.0	21.6	ug/L		78 - 135	0	15	
1,1,2,2-Tetrachloroethane	20.0	17.7	ug/L	89	69 - 131	3	15	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.3	ug/L	112	77 - 129	0	16	
ne								
1,1,2-Trichloroethane	20.0	20.7	ug/L	104	80 - 124	6	13	
1,1-Dichloroethane	20.0	20.3	ug/L	101	78 - 125	0	17	
1,1-Dichloroethene	20.0	21.5	ug/L	108	79 - 124	0	20	
1,2,4-Trichlorobenzene	20.0	17.3	ug/L	87	63 - 133	3	15	
1.2-Dibromo-3-Chloropropane	20.0	18.1	ua/L	90	54 ₋ 125	0	19	

LCSD LCSD

20.5

19.8

21.9

19.4

ug/L ug/L

ug/L

ug/L

Spike

20.0

20.0

20.0

20.0

TestAmerica Buffalo

Prep Type: Total/NA

RPD

13

12

13

15

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: LCSD 490-475387/4

Matrix: Water

Analysis Batch: 475387

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 4/538/	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	RPD	Limit
1,3-Dichlorobenzene	20.0	20.5	ug/L		102	80 - 122	2	13
1,4-Dichlorobenzene	20.0	20.9	ug/L		104	80 - 120	2	12
2-Butanone (MEK)	100	92.4	ug/L		92	62 - 133	3	19
2-Hexanone	100	82.1	ug/L		82	60 - 142	1	17
4-Methyl-2-pentanone (MIBK)	100	82.2	ug/L		82	60 - 137	2	21
Acetone	100	87.7	ug/L		88	54 - 145	9	23
Benzene	20.0	19.5	ug/L		98	80 - 121	1	12
Bromodichloromethane	20.0	21.8	ug/L		109	75 - 129	1	14
Bromoform	20.0	20.2	ug/L		101	46 - 145	1	14
Bromomethane	20.0	22.5	ug/L		113	41 - 150	10	19
Carbon disulfide	20.0	20.5	ug/L		102	77 - 126	0	16
Carbon tetrachloride	20.0	23.0	ug/L		115	64 - 147	2	16
Chlorobenzene	20.0	20.5	ug/L		103	80 - 120	1	12
Chloroethane	20.0	20.7	ug/L		104	72 - 120	4	15
Chloroform	20.0	21.9	ug/L		110	73 - 129	1	14
Chloromethane	20.0	15.7	ug/L		78	12 - 150	2	20
cis-1,2-Dichloroethene	20.0	20.2	ug/L		101	76 - 125	0	15
cis-1,3-Dichloropropene	20.0	19.1	ug/L		95	74 - 140	0	15
Cyclohexane	20.0	19.2	ug/L		96	73 - 122	2	16
Dibromochloromethane	20.0	20.8	ug/L		104	69 - 133	0	13
Dichlorodifluoromethane	20.0	21.2	ug/L		106	37 - 127	7	16
Ethylbenzene	20.0	19.0	ug/L		95	80 - 130	0	12
Isopropylbenzene	20.0	18.9	ug/L		95	80 - 141	2	13
Methyl acetate	40.0	38.6	ug/L		97	64 - 150	3	18
Methyl tert-butyl ether	20.0	19.9	ug/L		100	72 - 133	1	16
Methylcyclohexane	20.0	21.4	ug/L		107	71 - 129	0	17
Methylene Chloride	20.0	22.0	ug/L		110	79 - 123	7	15
Styrene	20.0	18.6	ug/L		93	80 - 127	1	12
Tetrachloroethene	20.0	21.1	ug/L		105	80 - 126	0	17
Toluene	20.0	19.2	ug/L		96	80 - 126	0	13
trans-1,2-Dichloroethene	20.0	19.8	ug/L		99	79 - 126	0	15
trans-1,3-Dichloropropene	20.0	19.1	ug/L		96	63 - 134	0	13
Trichloroethene	20.0	22.1	ug/L		110	80 - 123	3	14
Trichlorofluoromethane	20.0	25.5	* ug/L		127	65 - 124	1	22
Vinyl chloride	20.0	18.4	ug/L		92	68 - 120	1	15
Xylenes, Total	40.0	37.4	ug/L		94	80 - 132	0	11

LCSD I	LCSD
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Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	91		70 - 130
Dibromofluoromethane (Surr)	110		70 - 130
Toluene-d8 (Surr)	96		70 - 130

TestAmerica Buffalo

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TestAmerica Job ID: 480-127283-1

Client Sample ID: Method Blank

Prep Type: Total/NA

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: MB 320-195067/1-A

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

ND

Analysis Batch: 195531 Prep Batch: 195067 MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 2.0 0.35 ng/L <u>11/16/17 10:16</u> <u>11/18/17 00:09</u> Perfluorobutanoic acid (PFBA) ND ND Perfluoropentanoic acid (PFPeA) 2.0 0.49 ng/L 11/16/17 10:16 11/18/17 00:09 Perfluorohexanoic acid (PFHxA) ND 11/16/17 10:16 11/18/17 00:09 2.0 0.58 ng/L Perfluoroheptanoic acid (PFHpA) ND 2.0 0.25 ng/L 11/16/17 10:16 11/18/17 00:09 Perfluorooctanoic acid (PFOA) ND 2.0 0.85 ng/L 11/16/17 10:16 11/18/17 00:09 Perfluorononanoic acid (PFNA) 0.910 J 2.0 0.27 ng/L 11/16/17 10:16 11/18/17 00:09 ND 2.0 Perfluorodecanoic acid (PFDA) 0.31 ng/L 11/16/17 10:16 11/18/17 00:09 Perfluoroundecanoic acid (PFUnA) 11/16/17 10:16 11/18/17 00:09 ND 2.0 1.1 ng/L ND Perfluorododecanoic acid (PFDoA) 20 0.55 ng/L 11/16/17 10:16 11/18/17 00:09

Perfluorotridecanoic Acid (PFTriA) 1.3 ng/L 11/16/17 10:16 11/18/17 00:09 11/16/17 10:16 11/18/17 00:09 Perfluorotetradecanoic acid (PFTeA) ND 0.29 ng/L 2.0 Perfluorobutanesulfonic acid (PFBS) ND 2.0 0.20 ng/L 11/16/17 10:16 11/18/17 00:09 Perfluorohexanesulfonic acid (PFHxS) 0.257 J 2.0 0.17 ng/L 11/16/17 10:16 11/18/17 00:09 Perfluoroheptanesulfonic Acid ND 2.0 0.19 ng/L 11/16/17 10:16 11/18/17 00:09 Perfluorooctanesulfonic acid (PFOS) ND 2.0 0.54 ng/L 11/16/17 10:16 11/18/17 00:09

2.0

Perfluorodecanesulfonic acid (PFDS) ND 2.0 0.32 ng/L 11/16/17 10:16 11/18/17 00:09 Perfluorooctane Sulfonamide (FOSA) ND 2.0 0.35 ng/L 11/16/17 10:16 11/18/17 00:09 MR MR

	INID					
Isotope Dilution	%Recovery	Qualifier Limit	s	Prepared	Analyzed	Dil Fac
13C8 FOSA	95	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C4 PFBA	96	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C2 PFHxA	96	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C4 PFOA	85	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C5 PFNA	97	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C2 PFDA	99	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C2 PFUnA	99	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C2 PFDoA	90	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
1802 PFHxS	100	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C4 PFOS	97	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C4-PFHpA	94	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C5 PFPeA	98	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C3-PFBS	101	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1
13C2-PFTeDA	91	25 - 1	50	11/16/17 10:16	11/18/17 00:09	1

Lab Sample ID: LCS 320-195067/2-A

Matrix: Water

Analysis Batch: 195531

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 195067

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Perfluorobutanoic acid (PFBA)	40.0	41.4		ng/L		103	78 - 138	
Perfluoropentanoic acid (PFPeA)	40.0	40.0		ng/L		100	66 - 136	
Perfluorohexanoic acid (PFHxA)	40.0	39.4		ng/L		98	76 - 136	
Perfluoroheptanoic acid (PFHpA)	40.0	41.7		ng/L		104	78 - 138	
Perfluorooctanoic acid (PFOA)	40.0	41.4		ng/L		104	70 - 130	
Perfluorononanoic acid (PFNA)	40.0	40.2		ng/L		101	77 - 137	
Perfluorodecanoic acid (PFDA)	40.0	43.2		ng/L		108	74 - 134	
Perfluoroundecanoic acid	40.0	39.3		ng/L		98	68 - 128	
(PFUnA)								

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Client: ARCADIS U.S. Inc

Analysis Batch: 195531

Matrix: Water

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: LCS 320-195067/2-A

TestAmerica Job ID: 480-127283-1

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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 195067

7 maryolo Batolii 100001	Spike	LCS L	cs		%Rec.
Analyte	Added	Result C	Qualifier Unit	D %Rec	Limits
Perfluorododecanoic acid (PFDoA)	40.0	42.9	ng/L	107	72 - 132
Perfluorotridecanoic Acid (PFTriA)	40.0	39.3	ng/L	98	56 - 163
Perfluorotetradecanoic acid (PFTeA)	40.0	39.6	ng/L	99	63 - 123
Perfluorobutanesulfonic acid (PFBS)	35.4	39.1	ng/L	111	79 - 139
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.3	ng/L	100	77 - 137
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	40.5	ng/L	106	83 - 143
Perfluorooctanesulfonic acid (PFOS)	37.1	38.4	ng/L	103	74 - 134
Perfluorodecanesulfonic acid (PFDS)	38.6	38.6	ng/L	100	75 - 135
Perfluorooctane Sulfonamide (FOSA)	40.0	41.6	ng/L	104	82 - 142
100					

LCS LCS

Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	96		25 - 150
13C4 PFBA	101		25 - 150
13C2 PFHxA	99		25 - 150
13C4 PFOA	91		25 - 150
13C5 PFNA	101		25 - 150
13C2 PFDA	98		25 - 150
13C2 PFUnA	97		25 - 150
13C2 PFDoA	91		25 - 150
1802 PFHxS	101		25 - 150
13C4 PFOS	102		25 - 150
13C4-PFHpA	98		25 - 150
13C5 PFPeA	100		25 - 150
13C3-PFBS	98		25 - 150
13C2-PFTeDA	93		25 - 150

Lab Sample ID: LCSD 320-195067/3-A

Matrix: Water

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA **Prep Batch: 195067**

Analysis Batch: 195531 Spike LCSD LCSD %Rec. **RPD** Analyte Added Result Qualifier Unit Limits **RPD** Limit D %Rec 40.0 Perfluorobutanoic acid (PFBA) 42.9 ng/L 107 78 - 138 3 30 ng/L Perfluoropentanoic acid (PFPeA) 40.0 40.7 102 66 - 136 2 30 40.0 40.5 Perfluorohexanoic acid (PFHxA) ng/L 101 76 - 136 30 40.0 41.9 Perfluoroheptanoic acid (PFHpA) ng/L 105 78 - 138 30 Perfluorooctanoic acid (PFOA) 40.0 42.6 ng/L 107 70 - 130 3 30 Perfluorononanoic acid (PFNA) 40.0 42.0 ng/L 105 77 - 137 30 Perfluorodecanoic acid (PFDA) 40.0 44.0 110 74 - 134 30 ng/L 40.0 39.0 97 68 - 128 30 ng/L Perfluoroundecanoic acid (PFUnA) Perfluorododecanoic acid 40.0 41.5 ng/L 104 72 - 132 3 30 (PFDoA)

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

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

Lab Sample ID: LCSD 320-195067/3-A Matrix: Water			(Client Sa	ample	ID: Lab	Control Prep Ty		
Analysis Batch: 195531							Prep Ba	itch: 19	35067
-	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorotridecanoic Acid (PFTriA)	40.0	38.7		ng/L		97	56 - 163	1	30
Perfluorotetradecanoic acid (PFTeA)	40.0	40.6		ng/L		101	63 - 123	2	30
Perfluorobutanesulfonic acid (PFBS)	35.4	39.1		ng/L		111	79 - 139	0	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.8		ng/L		98	77 - 137	2	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	40.7		ng/L		107	83 - 143	1	30
Perfluorooctanesulfonic acid	37.1	38.0		ng/L		102	74 - 134	1	30

38.6

40.0

39.6

42.0

ng/L

ng/L

(FOSA)

(PFDS)

Perfluorodecanesulfonic acid

Perfluorooctane Sulfonamide

LCSD LCSD

	LUSD	LUSD	
Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	98		25 - 150
13C4 PFBA	102		25 - 150
13C2 PFHxA	102		25 - 150
13C4 PFOA	89		25 - 150
13C5 PFNA	101		25 - 150
13C2 PFDA	97		25 - 150
13C2 PFUnA	99		25 - 150
13C2 PFDoA	94		25 - 150
1802 PFHxS	106		25 - 150
13C4 PFOS	105		25 - 150
13C4-PFHpA	103		25 - 150
13C5 PFPeA	104		25 - 150
13C3-PFBS	105		25 - 150
13C2-PFTeDA	90		25 - 150

103

105

75 - 135

82 - 142

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

GC/MS VOA

Analysis Batch: 474930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127283-2	DW-03	Total/NA	Water	8260C	
480-127283-3	MW-29	Total/NA	Water	8260C	
480-127283-4	MW-2	Total/NA	Water	8260C	
480-127283-5	MW-14R	Total/NA	Water	8260C	
480-127283-6	MW-15R	Total/NA	Water	8260C	
MB 490-474930/6	Method Blank	Total/NA	Water	8260C	
LCS 490-474930/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-474930/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 474935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127283-8	TRIP BLANKS	Total/NA	Water	8260C	<u> </u>
MB 490-474935/6	Method Blank	Total/NA	Water	8260C	
LCS 490-474935/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-474935/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 475225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127283-1	MW-6R	Total/NA	Water	8260C	
480-127283-7	MW-25D	Total/NA	Water	8260C	
MB 490-475225/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475225/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475225/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 475387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127283-1 - DL	MW-6R	Total/NA	Water	8260C	
MB 490-475387/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475387/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475387/4	Lab Control Sample Dup	Total/NA	Water	8260C	

LCMS

Prep Batch: 195067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127283-1	MW-6R	Total/NA	Water	3535	
480-127283-2	DW-03	Total/NA	Water	3535	
480-127283-3	MW-29	Total/NA	Water	3535	
480-127283-4	MW-2	Total/NA	Water	3535	
480-127283-5 - DL	MW-14R	Total/NA	Water	3535	
480-127283-5	MW-14R	Total/NA	Water	3535	
480-127283-6	MW-15R	Total/NA	Water	3535	
480-127283-7	MW-25D	Total/NA	Water	3535	
480-127283-9	EB-04	Total/NA	Water	3535	
MB 320-195067/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-195067/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-195067/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

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QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

LCMS (Continued)

Analysis Batch: 195531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127283-1	MW-6R	Total/NA	Water	537 (modified)	195067
480-127283-2	DW-03	Total/NA	Water	537 (modified)	195067
480-127283-3	MW-29	Total/NA	Water	537 (modified)	195067
480-127283-4	MW-2	Total/NA	Water	537 (modified)	195067
480-127283-5	MW-14R	Total/NA	Water	537 (modified)	195067
480-127283-6	MW-15R	Total/NA	Water	537 (modified)	195067
480-127283-7	MW-25D	Total/NA	Water	537 (modified)	195067
480-127283-9	EB-04	Total/NA	Water	537 (modified)	195067
MB 320-195067/1-A	Method Blank	Total/NA	Water	537 (modified)	195067
LCS 320-195067/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	195067
LCSD 320-195067/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	195067

Analysis Batch: 196181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127283-5 - DL	MW-14R	Total/NA	Water	537 (modified)	195067

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Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Client Sample ID: MW-6R Lab Sample ID: 480-127283-1

Date Collected: 11/07/17 16:10 **Matrix: Water**

Date Received: 11/09/17 01:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475225	11/12/17 02:09	S1S	TAL NSH
Total/NA	Analysis	8260C	DL	10	475387	11/13/17 13:07	S1S	TAL NSH
Total/NA	Prep	3535			195067	11/16/17 10:19	CCB	TAL SAC
Total/NA	Analysis	537 (modified)		1	195531	11/18/17 02:15	ABH	TAL SAC

Client Sample ID: DW-03 Lab Sample ID: 480-127283-2

Date Collected: 11/08/17 08:30 **Matrix: Water**

Date Received: 11/09/17 01:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	474930	11/10/17 20:40	P1B	TAL NSH
Total/NA	Prep	3535			195067	11/16/17 10:19	CCB	TAL SAC
Total/NA	Analysis	537 (modified)		1	195531	11/18/17 02:23	ABH	TAL SAC

Lab Sample ID: 480-127283-3 Client Sample ID: MW-29

Date Collected: 11/08/17 09:55

Date Received: 11/09/17 01:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type Total/NA	Type Analysis	Method 8260C	Run	Factor 10	474930	or Analyzed 11/10/17 21:05	Analyst P1B	TAL NSH
Total/NA	Prep	3535			195067	11/16/17 10:19	ССВ	TAL SAC
Total/NA	Analysis	537 (modified)		1	195531	11/18/17 02:31	ABH	TAL SAC

Client Sample ID: MW-2 Lab Sample ID: 480-127283-4

Date Collected: 11/08/17 08:05

Date Received: 11/09/17 01:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	474930	11/10/17 18:58	P1B	TAL NSH
Total/NA	Prep	3535			195067	11/16/17 10:19	CCB	TAL SAC
Total/NA	Analysis	537 (modified)		1	195531	11/18/17 02:39	ABH	TAL SAC

Lab Sample ID: 480-127283-5 **Client Sample ID: MW-14R**

Date Collected: 11/08/17 10:15 **Matrix: Water**

Date Received: 11/09/17 01:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	474930	11/10/17 19:49	P1B	TAL NSH
Total/NA	Prep	3535			195067	11/16/17 10:19	CCB	TAL SAC
Total/NA	Analysis	537 (modified)		1	195531	11/18/17 02:47	ABH	TAL SAC
Total/NA	Prep	3535	DL		195067	11/16/17 10:19	CCB	TAL SAC
Total/NA	Analysis	537 (modified)	DL	5	196181	11/21/17 16:37	ABH	TAL SAC

TestAmerica Buffalo

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Matrix: Water

Matrix: Water

Lab Chronicle

Client: ARCADIS U.S. Inc

Client Sample ID: MW-15R

Date Collected: 11/08/17 11:25

Date Received: 11/09/17 01:00

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Lab Sample ID: 480-127283-6

Matrix: Water

Batch Dilution Batch Batch **Prepared Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA Analysis 8260C 474930 11/10/17 19:24 P1B TAL NSH Total/NA Prep 3535 TAL SAC 195067 11/16/17 10:19 CCB Total/NA Analysis 537 (modified) 1 195531 11/18/17 03:03 ABH TAL SAC

Client Sample ID: MW-25D Lab Sample ID: 480-127283-7

Date Collected: 11/07/17 15:40 **Matrix: Water**

Date Received: 11/09/17 01:00

Dilution Batch Batch **Batch Prepared Prep Type** Туре Method Run Factor Number or Analyzed Analyst Lab 8260C Total/NA Analysis 475225 11/12/17 01:43 S1S TAL NSH Total/NA Prep 3535 195067 11/16/17 10:19 CCB TAL SAC Total/NA Analysis 537 (modified) 1 195531 11/18/17 03:11 ABH TAL SAC

Client Sample ID: TRIP BLANKS Lab Sample ID: 480-127283-8

Date Collected: 11/08/17 00:00 **Matrix: Water**

Date Received: 11/09/17 01:00

Dilution Batch **Batch Batch** Prepared **Prep Type** Type Method Run Factor Number or Analyzed **Analyst** Lab 11/10/17 16:11 C1A TAL NSH Total/NA Analysis 8260C 474935

Client Sample ID: EB-04 Lab Sample ID: 480-127283-9

Date Collected: 11/08/17 10:50 Matrix: Water

Date Received: 11/09/17 01:00

Batch Batch Dilution Batch Prepared Method Number **Prep Type** Type Run **Factor** or Analyzed Analyst Lab TAL SAC Total/NA Prep 3535 195067 11/16/17 10:19 CCB Total/NA 537 (modified) 195531 11/18/17 03:19 ABH TAL SAC Analysis 1

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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

TestAmerica Buffalo

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

Laboratory: TestAmerica Nashville

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 Dat
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	01-01-18
Arizona	State Program	9	AZ0473	05-05-18
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2L A)	12-31-17
Illinois	NELAP	5	200010	12-09-17
lowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	12-31-17
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-18
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	<u> </u>	8	R-146	06-30-18
Ohio VAP	State Program	5	CL0033	07-06-19
	State Program		9412	
Oklahoma	State Program	6		08-31-18
Oregon	NELAP	10	TN200001	04-27-18
Pennsylvania Blacks Island	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-18
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-18
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-18
Wyoming (UST)	A2LA	8	453.07	12-31-17

TestAmerica Buffalo

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Accreditation/Certification Summary

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-127283-1

Project/Site: Crown Dykman - Glen Cove, NY

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	UST-055	12-18-17
Arizona	State Program	9	AZ0708	08-11-18
Arkansas DEQ	State Program	6	88-0691	06-17-18
California	State Program	9	2897	01-31-18
Colorado	State Program	8	CA00044	08-31-18
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-18
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-18
Illinois	NELAP	5	200060	03-17-18
Kansas	NELAP	7	E-10375	10-31-17 *
L-A-B	DoD ELAP		L2468	01-20-18
Louisiana	NELAP	6	30612	06-30-18
Maine	State Program	1	CA0004	04-18-18
Michigan	State Program	5	9947	01-31-18
Nevada	State Program	9	CA00044	07-31-18
New Hampshire	NELAP	1	2997	04-18-18
New Jersey	NELAP	2	CA005	06-30-18
New York	NELAP	2	11666	04-01-18
Oregon	NELAP	10	4040	01-28-18
Pennsylvania	NELAP	3	68-01272	03-31-18
Texas	NELAP	6	T104704399	05-31-18
US Fish & Wildlife	Federal		LE148388-0	07-31-18
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-18
Virginia	NELAP	3	460278	03-14-18
Washington	State Program	10	C581	05-05-18
West Virginia (DW)	State Program	3	9930C	12-31-17
Wyoming	State Program	8	8TMS-L	01-28-19

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

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127283-1

Lab Sample ID	Client Sample ID	Matrix	Collected Received
480-127283-1	MW-6R	Water	11/07/17 16:10 11/09/17 01:00
480-127283-2	DW-03	Water	11/08/17 08:30 11/09/17 01:00
480-127283-3	MW-29	Water	11/08/17 09:55 11/09/17 01:00
480-127283-4	MW-2	Water	11/08/17 08:05 11/09/17 01:00
480-127283-5	MW-14R	Water	11/08/17 10:15 11/09/17 01:00
480-127283-6	MW-15R	Water	11/08/17 11:25 11/09/17 01:00
480-127283-7	MW-25D	Water	11/07/17 15:40 11/09/17 01:00
480-127283-8	TRIP BLANKS	Water	11/08/17 00:00 11/09/17 01:00
480-127283-9	EB-04	Water	11/08/17 10:50 11/09/17 01:00

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4 E.Sasa	Lab PM. Carner T. Deyo, Melissa L.	COC No. 480-104070-24647.10
りからしゅ	E-Mail: melissa.deyo@testamericainc.com	Page 10 of 10
	Analysis Requeste	Job#
Due Date Requested:		Code
100		A - HCL M - Texane B - NaOH N - None C - Zn Acetate O - Asna02
Starcom		D - Nitric Acid P - Na2O4S E - Na4SO4 Q - Na2SO3
PO# 00266417,0000	(0	G - America S - HSSD4 H - Ascorbic Acid T - TSP Dodecalydrate
WO#	(on	I - Ice J - DI Water
Project # 48008440	Jo 58	L-EDA
SSOW#:	SD (Y	Other:
Sample Type Sample (C=comp,	ield Filtered erform MS/N 260C - TCL Vo	TedmuM listo
Time G=grab)	E A B	Special Instructions/Note:
	XZZ	ما
0	2	ما
		\$
11-8-17 080S G Wat	X X Z Z Z	N
10 KS C	8 NN X X	N
1135 6	メメスマる	S
BNN 3 DIST 17-1-11	& NN X X	જ
mat	SV NVX	9
11-8-17 1050 G Wat	ev NN X	(8
		1707
		8-11-20
Poison B Unknown Radiological	Sample Disposal (A fee may be assessed Peturn To Client	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Months
	Special Instructions/QC Requirements:	
Date	Time:	Method of Shipment
-18 15 45	Sign	8-17 1.545
-18 1800 T	4	Date/Time: Company
	Cooler Temperature(s) "C and Other Remarks.	1111
		O1 & 7
	Sample Type Sample (C=Construction) Sample Type Type Type C=Construction Type Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type C=Construction Type	6417,0000 or ## Sample Date Time Sample (Weature, Eggraph) Type Sample (C=Comp, Oseration Code; Assert Nature) February Captable Nation Nation Nature Na

TestAmerica

TestAmerica Buffalo

10 Hazeiwood Drive Amherst, NY 14228-2298 Phone (716) 691-7991		cord	TestAmeric Supering properties
Client Information	Sample: Name 4 E.S. CUSON Lab PM. Beyo, Melissa L.		Carrier Tracking No(s) (COC No. 480-154677,10
Cifent Contact: Aaron Bobar	0-7296	E-Mail melissa deyo@testamericainc com	Page 10 of 10
Company ARCADIS U.S. Inc		Analysis Requested	
Address 855 Route 146 Suite 210	Due Date Requested:		Preservation Codes:
City. Clifton Park	TAT Requested (days):		
State, Zip NY, 12065	Stanco		Acid F - Na2O4S 04 Q - Na2S03
TSB) 250-1360	417,0000	190 22253	1 - 15P Dedecal
Email: aaron bobar@arcadis-us.com	1000	15)	.v
Project Name: Crown Dykman - Glen Cove, NY			G K EDIA W-pH 4.5 L-EDA Z-other (specify
Eraun Olytimas	dmsS	selltel	Octo
Sample Identification	Sample Cacomp, Sample	MISM mrothes V JOT - Doass ARG - AGI_DRG	mul leto
	Preservation Code:	A	
MW-6R	11-7-17 16 10 6 Water . N	×× Z	S
NO-03	S Water N	× × Z	6
PC-VM	11-8-1709SS 6 Water N	× × ×	\$
M2-9	11-8-17 C805 6. 1 Water N	X	2
MV - LHR	1015 C Water N	У Х Z	2
MN-158	Z	メメス	N
MN-350	Z	У Х Z	<i>\</i>
I'm Blanks	1	×>	و.
10-10-10-10-10-10-10-10-10-10-10-10-10-1	N WARD O D MOTEON N	× 2	বে
			The state of the s
Iden		Sample Disposal (A fee may be asse	nples are retained longer than 1 mo
0	Radioiogical	Special Instructions/QC Requirements:	Visposal by Lab Aronive For monins ants:
Empty Kit Relinquished by:	Date;	Time	Method of Shipment:
Reingalished by	-18 15 45		11-8-17 1545 Company
Reinquished by Toll	Date Time. 18-00 Company	Received by Mr.	Date 7 950 Company
Custody Sears Intact; Guerraly one No.:		Codie: Jempatan eta, Cario Littat mustana	6.0
מאו מ פפן מ			Ver. 08/04/201



THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM -

Cooler Received/Opened On11/10/170950	
Time Samples Removed From Cooler Time Samples Placed In Storage	(2 Hour Window)
1. Tracking #(last 4 digits, FedEx) Courier:FedEx	
IR Gun ID97310166 pH Strip Lot Chlorine Strip Lot	_
2. Temperature of rep. sample or temp blank when opened: 155 Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO. (NA)
4. Were custody seals on outside of cooler?	YESNONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	(ES)NONA
6. Were custody papers inside cooler?	YES(NO).NA
certify that I opened the cooler and answered questions 1-6 (intial)	es
7. Were custody seals on containers: YES NO and Intact	YESNO.(.NA)
Were these signed and dated correctly?	YESNO(NA)
Bubblewrap (Blastic bag) Peanuts Vermiculite Foam Insert Pape	r Other None
9. Cooling process: (ce Ice-pack Ice (direct contact) Dry Ice	Other None
10. Did all containers arrive in good condition (unbroken)?	(YES), NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	YE9NONA
12. Did all container labels and tags agree with custody papers?	YES. NONA
I3a. Were VOA vials received?	YES. NONA
b. Was there any observable headspace present in any VOA vial?	YESNONA
_	5
Larger than this.	
(Colored	
4. Was there a Trip Blank in this cooler? (ES) NONA If multiple coolers, sequence	e #
certify that I unloaded the cooler and answered questions 7-14 (intial)	ج م
5a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO(NA)
b. Did the bottle labels indicate that the correct preservatives were used	YES.).NONA
6. Was residual chlorine present?	YESNO(NA)
certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	<u>es</u>
7. Were custody papers properly filled out (ink, signed, etc)?	YES NONA
8. Did you sign the custody papers in the appropriate place?	YESNONA
9. Were correct containers used for the analysis requested?	(YES)NONA
0. Was sufficient amount of sample sent in each container?	YESNONA
certify that I entered this project into LIMS and answered questions 17-20 (intial)	es
certify that I attached a label with the unique LIMS number to each container (intial)	es
1. Were there Non-Conformance issues at login? YES. NO Was a NCM generated? YES. NO. #	<u> </u>

BIS = Broken in shipment Cooler Receipt Form.doc

LF-1 End of Form Revised 8/23/17

Unconfirmed				Return To Client Disposal By Lab	Lab Archive For	Months
Deliverable Requested:	Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	8	Special Instructions/QC Requirements:		
Empty Kit Relinquished by:	is Uu ike	Date:	Time:		Method of Shipment	
Relinquished by:	(Thur States	Date/Time 1700		Received by:	Date/Time: 10-17 9257	Company
Relinquished by:		Date/Tirke:	Company	Received by:	Date/Time:	Company
Relinquished by:		Date/Time:	Сотралу	Received by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No.:	Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:	50	
						Ver: 09/20/20

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Phone (716) 891-2600 Fax (716) 691-7991 Client Information (Sub Contract Lab) Client Contact Shipping/Receiving	Sampler:	nain of	Chain of Custody Record	dy Re	/ Record			4	480-127283	0-1	27	2	∞	# 177 177		STAMETICO	
Company: TestAmerica Laboratories, Inc				¥ Z	creditation ELAP - N	Accreditations Required (See note): NELAP - New York	(See note			T OF L			다 아	rage 1 of 1 Job #: 480-127283-1	5		T
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 11/21/2017						`	lysis F	Analysis Requested	ted			1 2	Preservation Codes	epo		T
Crb: Nashville State, Zip:	TAT Requested (days):	ä		(1.00 mg									A - HCL B - NaOH C - Zn Acetate D - Nitric Acid		M - Hexane N - None O - AsNaO2 P - Na2O4S	
Flow, 57.204 Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO#:			\$ P (1									ш н. О :	E - NaHSO4 F - MeOH G - Amchlor	3	Q - Na2SO3 R - Na2S2O3 S - H2SO4	
Email:	WO#:			oN-10										n - Ascorbic Acid I - Ice J - DI Water		i - i SP Dodecanydrate U - Acetone V - MCAA	a
Project Name: Crown Dykman - Glen Cove, NY	Project #: 48008440			Se (,) e	N 10 se									K-EDTA L-EDA	× - Z	W - pH 4-5 Z - other (specify)	
Site:	SSOW#:			lames	A) as				-					Other:			
	 			Matrix (wewater, seaolic, ocewaste/oil, ocewaste/oil)	M\&M myhe 5000\603\0				· 				yedmuN isto				
Sample Identification - Citetic ID (Lab ID)	Sample Date		G=grab) BT=TISSUR, A=Alt Preservation Code;	- ''	aX				The state of		41.00	7.1 04 2.5		Specia	al Instru	Special Instructions/Note:	2.0
MW-6R (480-127283-1)	11/7/17	16:10 Eastern		Water	×								<u>ب</u>		and the state of		Ī
DW-03 (480-127283-2)	11/8/17	08:30 Eastern		Water	×				-			-	ო				}
MW-29 (480-127283-3)	11/8/17	09:55 Eastern		Water	×				-				က				
MW-2 (480-127283-4)	11/8/17	08:05 Eastern		Water	×				_				'n				
MW-14R (480-127283-5)	11/8/17	10:15 Eastern		Water	×						-		- m				Г
MW-15R (480-127283-6)	11/8/17	11:25 Eastern		Water	×				_			-	ო				Γ
MW-25D (480-127283-7)	11/7/17	15:40 Eastern		Water	×						ļ.,		ъ.				
TRIP BLANKS (480-127283-8)	11/8/17	Eastern		Water	×								ო				
												4	2.5%				Т
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is fowarded under chain-of-custody. If the laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditation sare current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.	nies, Inc. places the ov Vmatrix being analyzed to date, retum the sign	nership of met , the samples r led Chain of Co	thod, analyte & must be shippe ustody attesting	accreditation of back to the T	compliance estAmerica icance to T	upon out s a laboraton estAmence	ubcontrac / or other i	laborato Istruction ies, Inc.	ries. This swill be p	sample sh rovided. A	ipment is kny chang	forwarde ges to acc	ed under or editation	chain-of-cust n status shou	tody. If the ald be brou	laboratory does nol ght to TestAmerica	
Possible Hazard Identification					Sample	e Díspos	al (A fe	e may I	e asse	sed if s	ample	s are re	tained	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	an 1 mo	nth)	Τ
Unconfirmed Deliverable Beautofed: 1 111 N/ Other (carefit)						Return To Client	Client	<u> </u>	Dispo	Disposal By Lab	ab] [Archive For	For		Months	Т
Deliverable Requested. 1, 11, 11, 1v, Ourer (specify)	Primary Deliverable Kank: 2	e Kank: z			Special	Special Instructions/QC Requirements:	ons/CC	Reduire	ments:								

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sam



Jo

Tracking # 7417 3416 5347

	Therm. ID: AK-2 / AK-3 / HACCP /Other	
otes:		
	Ice X Wet Dry Other	
	Cooler Custody Seal: 649930	
	Obbiei Custody Cour.	
	Sample Custody Seal:	
	Cooler ID: 1.f2	**
	Coolel ID.	
	Temp: Observed 0 . T	
	Corrected:	
	Corrected.	4
	From: Temp Blank D Sample	
	NCM Filed: Yes D No D	
	Yes No	
	Perchlorate has headspace? D	Po
	CoC is complete w/o discrepancies?	
	Samples received within holding time?	
	Sample preservatives verified?	.)d
	Cooler compromised/tampered with?	
	Samples compromised/tampered-with?	D
** ** ** ** ** ** ** ** ** ** ** ** **	COC and Samples w/o discrepancies?	
	Sample containers have legible labels?	ם
V	Containers are not broken or leaking?	Δ
*** day	Sample date/times are provided.	· D -
	Appropriate containers are used?	Δ.
	Sample bottles are completely filled?	D
	Zero headspace?*	10
	Multiphasic samples are not present?	Ď
		44
	Initials: Det Date:	7

W/6C

TestAmerica THE DEADER IN ENVIRONMENTAL TESTING

Sacramento Sample Receiving Notes

i	Therm. ID: AK-2 / AK-3 / HACCP /Other
ites:	Ice Wet Dry Other
	OUGALI
	Cooler Custody Seal: 949911
	Sample Custody Seal:
	Cooler ID: 2 of 2
	Cooler ID: COT
	Temp: Observed
	Corrected:
	Corrected.
	From: Temp Blank D Sample
	NCM Filed: Yes D No D
	Yes No NA
	Perchlorate has headspace?
100	CoC is complete w/o discrepancies?
	Samples received within holding time?
<u> </u>	Sample preservatives verified?
	Cooler compromised/tampered with?
	Samples compromised/tampered-with?
V	COC and Samples w/o discrepancies?
	Sample containers have legible labels?
X *	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?

Client: ARCADIS U.S. Inc Job Number: 480-127283-1

Login Number: 127283 List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Tractor Timano, Timotophor T		
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	

14

Client: ARCADIS U.S. Inc Job Number: 480-127283-1

List Source: TestAmerica Sacramento
List Number: 2
List Source: TestAmerica Sacramento
List Creation: 11/09/17 05:35 PM

Creator: Nelson, Kvm D

Creator: Nelson, Kym D		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	849911, 849930
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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
ls 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

N/A

TestAmerica Buffalo

Residual Chlorine Checked.



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-127327-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

7

Authorized for release by: 11/24/2017 2:31:58 PM Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I (716)504-9874 melissa.deyo@testamericainc.com

·····LINKS ······

Review your project results through

Total Access

Have a Question?



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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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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.
В	Compound was found in the blank and sample.

LCMS

Qualifier	Qualifier Description
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect
	there may be a high bias.
В	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

ND

PQL

QC

RER

RL RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

Reporting Limit or Requested Limit (Radiochemistry)

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Quality Control

TestAmerica Buffalo

11/24/2017

Page 3 of 78

Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Job ID: 480-127327-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-127327-1

Receipt

The samples were received on 11/9/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-475225 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: IW-01S (480-127327-8), MW-26 (480-127327-9) and MW-25S (480-127327-10).

Method(s) 8260C: The following sample was diluted due to the nature of the sample matrix: MW-26 (480-127327-9). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted due to the nature of the sample matrix: MW-13 (480-127327-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-474935 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane. Dichlorodifluoromethane and Trichlorofluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: MW-27 (480-127327-2), IW-02 (480-127327-3) and DUP-02 (480-127327-4).

Method(s) 8260C: The following samples was diluted due to the nature of the sample matrix: MW-27 (480-127327-2), IW-02 (480-127327-3) and DUP-02 (480-127327-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-475277 recovered outside control limits for the following analytes: Trichlorofluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: MW-28 (480-127327-1) and MW-21D (480-127327-7).

Method(s) 8260C: The following samples was diluted due to the nature of the sample matrix: MW-28 (480-127327-1) and MW-21D (480-127327-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-475387 recovered outside control limits for the following analytes: Trichlorofluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: TRIP BLANKS (480-127327-11).

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

LCMS

Method(s) 537 (modified): The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias for Perfluorobutanoic acid (PFBA) and Perfluorobutanesulfonic acid (PFBS) in the following samples: MW-28 (480-127327-1), DUP-02 (480-127327-4) and MW-26 (480-127327-9).

Method(s) 537 (modified): The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias for Perfluorobutanoic acid (PFBA) in the following samples: MW-27 (480-127327-2), IW-02 (480-127327-3), MW-13 (480-127327-5), IW-01S (480-127327-8) and MW-25S (480-127327-10).

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

Organic Prep

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-195170.

TestAmerica Job ID: 480-127327-1

Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Job ID: 480-127327-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method Code: 3535_PFC

Method(s) 3535: The following samples IW-01S (480-127327-8), MW-25S (480-127327-10) and IW-01D (480-127327-11) had a magenta

color. Sample 480-127327-A-10 was an intense pink and sample 480-127327-A-11 was a pale pink color.

Prep Batch: 320-195170 Method Code: 3535_PFC

Method(s) 3535: The following samples: MW-28 (480-127327-1), MW-27 (480-127327-2), IW-02 (480-127327-3), DUP-02 (480-127327-4), MW-13 (480-127327-5), MW-21D (480-127327-7), MW-26 (480-127327-9), MW-25S (480-127327-10) and IW-01D (480-127327-11) were

decanted prior to preparation due to excess sediment that had the potential to clog the solid-phase column.

Prep Batch: 320-195170

Method(s) 3535: Although the following sample MW-25S (480-127327-10) was a deep purple prior to extraction, the final extract that came

off of the solid-phase column was clear.

Prep Batch: 320-195170 Method Code: 3535_PFC

Method(s) 3535: Due to the matrix, the initial volume used for the following sample MW-25S (480-127327-10) deviated from the standard procedure: The following sample <CommaMerge> was extracted at a 2X dilution as a precaution of possibly containing high levels. The reporting limits (RLs) have been adjusted proportionately.

Prep Batch: 320-195170

Method Code: 3535_PFC, waters

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

VOA Prep

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

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16

TestAmerica Job ID: 480-127327-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-28

Lab Sample ID: 480-127327-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	28000		200	42	ug/L	200	8260C	Total/NA
Tetrachloroethene	1500		200	28	ug/L	200	8260C	Total/NA
trans-1,2-Dichloroethene	95	J	200	46	ug/L	200	8260C	Total/NA
Trichloroethene	4200		200	40	ug/L	200	8260C	Total/NA
Vinyl chloride	1100		200	36	ug/L	200	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	96	CI	2.0	0.35	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	16		2.0	0.48	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	24		2.0	0.57	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	20		2.0	0.25	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	77		2.0	0.84	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	5.4		2.0	0.27	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	4.7		2.0	0.31	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	59	CI	2.0	0.20	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	31	В	2.0	0.17	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	9.0		2.0	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	600		2.0	0.53	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.54	JB	2.0	0.35	ng/L	1	537 (modified)	Total/NA

Client Sample ID: MW-27

Lab Sample ID: 480-127327-2

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nalyte F	ult Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
s-1,2-Dichloroethene	00	1000	210	ug/L	1000	_	8260C	Total/NA
ethylene Chloride	00 J	5000	1000	ug/L	1000		8260C	Total/NA
etrachloroethene 14	00	1000	140	ug/L	1000		8260C	Total/NA
ichloroethene	00	1000	200	ug/L	1000		8260C	Total/NA
nyl chloride	00	1000	180	ug/L	1000		8260C	Total/NA
erfluorobutanoic acid (PFBA)	10 CI	2.0	0.35	ng/L	1		537 (modified)	Total/NA
erfluoropentanoic acid (PFPeA)	14	2.0	0.49	ng/L	1		537 (modified)	Total/NA
erfluorohexanoic acid (PFHxA)	17	2.0	0.57	ng/L	1		537 (modified)	Total/NA
erfluoroheptanoic acid (PFHpA)	20	2.0	0.25	ng/L	1		537 (modified)	Total/NA
erfluorooctanoic acid (PFOA)	86	2.0	0.84	ng/L	1		537 (modified)	Total/NA
erfluorononanoic acid (PFNA)	3.6	2.0	0.27	ng/L	1		537 (modified)	Total/NA
erfluorodecanoic acid (PFDA)	2.2	2.0	0.31	ng/L	1		537 (modified)	Total/NA
erfluorobutanesulfonic acid (PFBS)	27	2.0	0.20	ng/L	1		537 (modified)	Total/NA
erfluorohexanesulfonic acid (PFHxS)	21 B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
erfluoroheptanesulfonic Acid FHpS)	7.8	2.0	0.19	ng/L	1		537 (modified)	Total/NA
erfluorooctanesulfonic acid (PFOS)	50	2.0	0.54	ng/L	1		537 (modified)	Total/NA
erfluorooctane Sulfonamide (FOSA)	52 JB	2.0	0.35	ng/L	1		537 (modified)	Total/NA
` ,	52 JB			•		1	1	, ,

Client Sample ID: IW-02

Lab Sample ID: 480-127327-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	14000		100	21	ug/L	100	8260C	Total/NA
Methylene Chloride	120	J	500	100	ug/L	100	8260C	Total/NA
Tetrachloroethene	3800		100	14	ug/L	100	8260C	Total/NA
trans-1,2-Dichloroethene	50	J	100	23	ug/L	100	8260C	Total/NA
Trichloroethene	5600		100	20	ug/L	100	8260C	Total/NA
Vinyl chloride	710		100	18	ug/L	100	8260C	Total/NA
Perfluorobutanoic acid (PFBA)	75	CI	2.0	0.35	ng/L	1	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

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TestAmerica Job ID: 480-127327-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: IW-02 (Continued)

Lab Sample ID: 480-127327-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	25		2.0	0.49	ng/L		_	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	24		2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	18		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	56		2.0	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	8.5		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	10		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	28		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	7.2	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	2.1		2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	190		2.0	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.0	JB	2.0	0.35	ng/L	1		537 (modified)	Total/NA

Client Sample ID: DUP-02

Lab Sample ID: 480-127327-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	50000		1000	210	ug/L	1000	_	8260C	Total/NA
Methylene Chloride	1300	J	5000	1000	ug/L	1000		8260C	Total/NA
Tetrachloroethene	150000		1000	140	ug/L	1000		8260C	Total/NA
Trichloroethene	18000		1000	200	ug/L	1000		8260C	Total/NA
Vinyl chloride	2500		1000	180	ug/L	1000		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	430	CI	2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	15		2.0	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	18		2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	20		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	84		2.0	0.85	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.7		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.1		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	31	CI	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	23	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	6.9		2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	450		2.0	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	0.55	JB	2.0	0.35	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 480-127327-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	14000		100	21	ug/L	100	_	8260C	Total/NA
Methylene Chloride	160	JB	500	100	ug/L	100		8260C	Total/NA
Tetrachloroethene	430		100	14	ug/L	100		8260C	Total/NA
trans-1,2-Dichloroethene	140		100	23	ug/L	100		8260C	Total/NA
Trichloroethene	480		100	20	ug/L	100		8260C	Total/NA
Vinyl chloride	660		100	18	ug/L	100		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	71	CI	2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	57		2.0	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	61		2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	39		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	96		2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	17		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	28		2.0	0.31	ng/L	1		537 (modified)	Total/NA

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-13 (Continued)

TestAmerica Job ID: 480-127327-1

Lab Sample ID: 480-127327-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroundecanoic acid (PFUnA)	2.4		2.0	1.1	ng/L	1	_	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	1.8	J	2.0	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	62		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	9.4	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	2.3		2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	230		2.0	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	3.3	В	2.0	0.35	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-3 Lab Sample ID: 480-127327-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac I) Method	Prep Type
Acetone	6.0	J	25	2.7	ug/L		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	38		2.0	0.36	ng/L	1	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	42		2.0	0.50	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	43		2.0	0.59	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	51		2.0	0.25	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	310		2.0	0.87	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	8.1		2.0	0.28	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.1	J	2.0	0.32	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	64		2.0	0.20	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	36	В	2.0	0.17	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	11		2.0	0.19	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	310		2.0	0.55	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	59	В	2.0	0.36	ng/L	1	537 (modified)	Total/NA

Silent Sample ID: MW-21D					Lab Sample ID: 480-12/32						
- Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type			
1,1-Dichloroethene	2.7	J	10	2.5	ug/L		8260C	Total/NA			
cis-1,2-Dichloroethene	1800		10	2.1	ug/L	10	8260C	Total/NA			
trans-1,2-Dichloroethene	28		10	2.3	ug/L	10	8260C	Total/NA			
Vinyl chloride	50		10	1.8	ug/L	10	8260C	Total/NA			
Perfluorobutanoic acid (PFBA)	29		2.0	0.34	ng/L	1	537 (modified)	Total/NA			
Perfluoropentanoic acid (PFPeA)	17		2.0	0.48	ng/L	1	537 (modified)	Total/NA			
Perfluorohexanoic acid (PFHxA)	24		2.0	0.57	ng/L	1	537 (modified)	Total/NA			
Perfluoroheptanoic acid (PFHpA)	18		2.0	0.24	ng/L	1	537 (modified)	Total/NA			
Perfluorooctanoic acid (PFOA)	59		2.0	0.83	ng/L	1	537 (modified)	Total/NA			
Perfluorononanoic acid (PFNA)	4.9		2.0	0.26	ng/L	1	537 (modified)	Total/NA			
Perfluorodecanoic acid (PFDA)	1.9	J	2.0	0.30	ng/L	1	537 (modified)	Total/NA			
Perfluorobutanesulfonic acid (PFBS)	5.8		2.0	0.20	ng/L	1	537 (modified)	Total/NA			
Perfluorohexanesulfonic acid (PFHxS)	8.0	В	2.0	0.17	ng/L	1	537 (modified)	Total/NA			
Perfluoroheptanesulfonic Acid (PFHpS)	1.6	J	2.0	0.19	ng/L	1	537 (modified)	Total/NA			
Perfluorooctanesulfonic acid (PFOS)	110		2.0	0.53	ng/L	1	537 (modified)	Total/NA			
Perfluorooctane Sulfonamide (FOSA)	1.8	JB	2.0	0.34	ng/L	1	537 (modified)	Total/NA			

Client Sample ID: IW-01S

Lab Sample ID: 480-127327-8

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: IW-01S (Continued)

TestAmerica Job ID: 480-127327-1

Lab Sample ID: 480-127327-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.45	J	1.0	0.23	ug/L		_	8260C	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.21	ug/L	1		8260C	Total/NA
Tetrachloroethene	17		1.0	0.14	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	29	CI	2.0	0.35	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	8.0		2.0	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	9.0		2.0	0.59	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	8.7		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	43		2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.7		2.0	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.4		2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	7.0		2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	8.3	В	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.4	J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	110		2.0	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.4	JB	2.0	0.35	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-26 Lab Sample ID: 480-127327-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D M	lethod	Prep Type
Benzene	1.3	J	5.0	1.0	ug/L	5	8	260C	Total/NA
cis-1,2-Dichloroethene	960		5.0	1.1	ug/L	5	8	260C	Total/NA
Ethylbenzene	85		5.0	0.95	ug/L	5	8	260C	Total/NA
Isopropylbenzene	43		5.0	1.7	ug/L	5	8	260C	Total/NA
Methylcyclohexane	4.4	J	25	0.45	ug/L	5	8	260C	Total/NA
Tetrachloroethene	2.1	J	5.0	0.70	ug/L	5	8	260C	Total/NA
Toluene	2.5	J	5.0	0.85	ug/L	5	8	260C	Total/NA
trans-1,2-Dichloroethene	8.7		5.0	1.2	ug/L	5	8	260C	Total/NA
Trichloroethene	17		5.0	1.0	ug/L	5	8	260C	Total/NA
Vinyl chloride	88		5.0	0.90	ug/L	5	8	260C	Total/NA
Xylenes, Total	270		15	2.9	ug/L	5	8	260C	Total/NA
Perfluorobutanoic acid (PFBA)	150	CI	2.0	0.35	ng/L	1	5	37 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	7.7		2.0	0.49	ng/L	1	5	37 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	9.7		2.0	0.58	ng/L	1	5	37 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	8.8		2.0	0.25	ng/L	1	5	37 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	33		2.0	0.86	ng/L	1	5	37 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.8		2.0	0.27	ng/L	1	5	37 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.7		2.0	0.31	ng/L	1	5	37 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	28	CI	2.0	0.20	ng/L	1	5	37 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	8.4	В	2.0	0.17	ng/L	1	5	37 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	4.7		2.0	0.19	ng/L	1	5	37 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	380		2.0	0.54	ng/L	1	5	37 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.6	JB	2.0	0.35	ng/L	1	5	37 (modified)	Total/NA

Client Sample ID: MW-25S Lab Sample ID: 480-127327-10

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	52	25	2.7	ug/L	1	_	8260C	Total/NA
Bromoform	1.0	1.0	0.29	ug/L	1		8260C	Total/NA
Chloroform	1.6	1.0	0.23	ug/L	1		8260C	Total/NA

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TestAmerica Job ID: 480-127327-1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-25S (Continued)

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Lab	Sample	ID: 480-	-127327	-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	91	CI	8.0	1.4	ng/L		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	31		8.0	2.0	ng/L	1	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	38		8.0	2.3	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	29		8.0	1.0	ng/L	1	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	140		8.0	3.4	ng/L	1	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	14		8.0	1.1	ng/L	1	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	3.7	J	8.0	1.2	ng/L	1	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	14		8.0	0.80	ng/L	1	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	20	В	8.0	0.68	ng/L	1	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	4.5	J	8.0	0.76	ng/L	1	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	350		8.0	2.2	ng/L	1	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	3.5	JB	8.0	1.4	ng/L	1	537 (modified)	Total/NA

Client Sample ID: IW-01D

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	29	25	2.7	ug/L		_	8260C	Total/NA
Chloroform	1.0	1.0	0.23	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	39	1.0	0.21	ug/L	1		8260C	Total/NA
Tetrachloroethene	25	1.0	0.14	ug/L	1		8260C	Total/NA
Trichloroethene	3.3	1.0	0.20	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	37	2.0	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	18	2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	21	2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	15	2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	47	2.0	0.83	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	6.2	2.0	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	13	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.2 J	2.0	1.1	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	0.67 J	2.0	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	13	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.8 B	2.0	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.3 J	2.0	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	130	2.0	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.7 JB	2.0	0.34	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-127327-12

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Lab Sample ID: 480-127327-1 **Client Sample ID: MW-28**

Date Collected: 11/07/17 09:00 Date Received: 11/09/17 09:30

Matrix: Water

Analyte	Result (Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	200	38	ug/L			11/12/17 12:36	20
1,1,2,2-Tetrachloroethane	ND	200	38	ug/L			11/12/17 12:36	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	30	ug/L			11/12/17 12:36	20
1,1,2-Trichloroethane	ND	200	38	ug/L			11/12/17 12:36	20
1,1-Dichloroethane	ND	200	48	ug/L			11/12/17 12:36	20
1,1-Dichloroethene	ND	200	50	ug/L			11/12/17 12:36	20
1,2,4-Trichlorobenzene	ND	200	40	ug/L			11/12/17 12:36	20
1,2-Dibromo-3-Chloropropane	ND	2000	190	ug/L			11/12/17 12:36	20
1,2-Dibromoethane	ND	200	42	ug/L			11/12/17 12:36	20
1,2-Dichlorobenzene	ND	200		ug/L			11/12/17 12:36	20
1,2-Dichloroethane	ND	200		ug/L			11/12/17 12:36	20
1,2-Dichloropropane	ND	200		ug/L			11/12/17 12:36	20
1,3-Dichlorobenzene	ND	200		ug/L			11/12/17 12:36	20
1,4-Dichlorobenzene	ND	200		ug/L			11/12/17 12:36	20
2-Butanone (MEK)	ND	10000		ug/L			11/12/17 12:36	20
2-Hexanone	ND	2000		ug/L			11/12/17 12:36	20
4-Methyl-2-pentanone (MIBK)	ND	2000		ug/L			11/12/17 12:36	20
Acetone	ND	5000		ug/L			11/12/17 12:36	20
Benzene	ND	200		ug/L			11/12/17 12:36	20
Bromodichloromethane	ND	200		ug/L			11/12/17 12:36	20
Bromoform	ND	200		ug/L			11/12/17 12:36	20
Bromomethane	ND	200		ug/L			11/12/17 12:36	20
Carbon disulfide	ND	200		ug/L			11/12/17 12:36	20
Carbon tetrachloride	ND ND	200		ug/L			11/12/17 12:36	20
Chlorobenzene	ND	200		ug/L ug/L			11/12/17 12:36	20
Chloroethane	ND ND	200		ug/L ug/L			11/12/17 12:36	20
Chloroform	ND ND	200		-			11/12/17 12:36	20
				ug/L			11/12/17 12:36	
Chloromethane	ND	200		ug/L				20
cis-1,2-Dichloroethene	28000	200		ug/L			11/12/17 12:36	20
cis-1,3-Dichloropropene	ND	200		ug/L			11/12/17 12:36	20
Cyclohexane	ND	1000		ug/L			11/12/17 12:36	20
Dibromochloromethane	ND	200		ug/L			11/12/17 12:36	20
Dichlorodifluoromethane	ND	200		ug/L			11/12/17 12:36	20
Ethylbenzene 	ND	200		ug/L			11/12/17 12:36	20
Isopropylbenzene	ND	200		ug/L			11/12/17 12:36	20
Methyl acetate	ND	2000		ug/L			11/12/17 12:36	20
Methyl tert-butyl ether	ND	200		ug/L			11/12/17 12:36	20
Methylcyclohexane	ND	1000		ug/L			11/12/17 12:36	20
Methylene Chloride	ND	1000		ug/L			11/12/17 12:36	20
Styrene	ND	200		ug/L			11/12/17 12:36	20
Tetrachloroethene	1500	200	28	ug/L			11/12/17 12:36	20
Toluene	ND	200		ug/L			11/12/17 12:36	20
trans-1,2-Dichloroethene	95 .			ug/L			11/12/17 12:36	20
trans-1,3-Dichloropropene	ND	200	34	ug/L			11/12/17 12:36	20
Trichloroethene	4200	200	40	ug/L			11/12/17 12:36	20
Trichlorofluoromethane	ND *	200	42	ug/L			11/12/17 12:36	20
Vinyl chloride	1100	200	36	ug/L			11/12/17 12:36	20
Xylenes, Total	ND	600	120	ug/L			11/12/17 12:36	20

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-28

Date Collected: 11/07/17 09:00 Date Received: 11/09/17 09:30 Lab Sample ID: 480-127327-1

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared Ana	lyzed Dil Fa	3C
1,2-Dichloroethane-d4 (Surr)	98	70 - 130	11/12/1	17 12:36 20) 0
4-Bromofluorobenzene (Surr)	97	70 - 130	11/12/3	17 12:36 20	00
Dibromofluoromethane (Surr)	110	70 - 130	11/12/1	17 12:36 20	00
Toluene-d8 (Surr)	99	70 - 130	11/12/1	17 12:36 20	00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	96	CI	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluoropentanoic acid (PFPeA)	16		2.0	0.48	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorohexanoic acid (PFHxA)	24		2.0	0.57	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluoroheptanoic acid (PFHpA)	20		2.0	0.25	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorooctanoic acid (PFOA)	77		2.0	0.84	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorononanoic acid (PFNA)	5.4		2.0	0.27	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorodecanoic acid (PFDA)	4.7		2.0	0.31	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorobutanesulfonic acid (PFBS)	59	CI	2.0	0.20	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorohexanesulfonic acid (PFHxS)	31	В	2.0	0.17	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluoroheptanesulfonic Acid (PFHpS)	9.0		2.0	0.19	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorooctanesulfonic acid (PFOS)	600		2.0	0.53	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 14:10	11/18/17 06:52	1
Perfluorooctane Sulfonamide (FOSA)	0.54	JB	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 06:52	1
Isotono Dilution	% Pacayory	Qualifier	Limite				Propared	Analyzod	Dil Ess

(FUSA)					
Isotope Dilution	%Recovery Q	ualifier Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA		25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C4 PFBA	29	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C2 PFHxA	75	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C4 PFOA	93	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C5 PFNA	115	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C2 PFDA	134	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C2 PFUnA	122	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C2 PFDoA	113	25 - 150	11/16/17 14:10	11/18/17 06:52	1
1802 PFHxS	110	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C4 PFOS	130	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C4-PFHpA	84	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C5 PFPeA	62	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C3-PFBS	110	25 - 150	11/16/17 14:10	11/18/17 06:52	1
13C2-PFTeDA	102	25 - 150	11/16/17 14:10	11/18/17 06:52	1

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Client: ARCADIS U.S. Inc

Methyl tert-butyl ether

Methylene Chloride

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

trans-1,2-Dichloroethene

Trichlorofluoromethane

trans-1,3-Dichloropropene

Methylcyclohexane

Styrene

Toluene

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-127327-2

TestAmerica Job ID: 480-127327-1

Matrix: Water

Client Sample ID: MW-27 Date Collected: 11/07/17 10:30

Method: 8260C - Volatile Orgar Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1000	190	ug/L		<u> </u>	11/10/17 21:25	1000
1,1,2,2-Tetrachloroethane	ND		1000		ug/L			11/10/17 21:25	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1000	150	ug/L			11/10/17 21:25	1000
1,1,2-Trichloroethane	ND		1000	190	ug/L			11/10/17 21:25	1000
1,1-Dichloroethane	ND		1000	240	ug/L			11/10/17 21:25	1000
1,1-Dichloroethene	ND		1000	250	ug/L			11/10/17 21:25	1000
1,2,4-Trichlorobenzene	ND		1000	200	ug/L			11/10/17 21:25	1000
1,2-Dibromo-3-Chloropropane	ND		10000	940	ug/L			11/10/17 21:25	1000
1,2-Dibromoethane	ND		1000	210	ug/L			11/10/17 21:25	1000
1,2-Dichlorobenzene	ND		1000	190	ug/L			11/10/17 21:25	1000
1,2-Dichloroethane	ND		1000	200	ug/L			11/10/17 21:25	1000
1,2-Dichloropropane	ND		1000	250	ug/L			11/10/17 21:25	1000
1,3-Dichlorobenzene	ND		1000	180	ug/L			11/10/17 21:25	1000
1,4-Dichlorobenzene	ND		1000	170	ug/L			11/10/17 21:25	1000
2-Butanone (MEK)	ND		50000	2600	ug/L			11/10/17 21:25	1000
2-Hexanone	ND		10000	1300	ug/L			11/10/17 21:25	1000
4-Methyl-2-pentanone (MIBK)	ND		10000	810	ug/L			11/10/17 21:25	1000
Acetone	ND		25000	2700	ug/L			11/10/17 21:25	1000
Benzene	ND		1000	200	ug/L			11/10/17 21:25	1000
Bromodichloromethane	ND		1000	170	ug/L			11/10/17 21:25	1000
Bromoform	ND		1000	290	ug/L			11/10/17 21:25	1000
Bromomethane	ND		1000	350	ug/L			11/10/17 21:25	1000
Carbon disulfide	ND		1000	220	ug/L			11/10/17 21:25	1000
Carbon tetrachloride	ND		1000	180	ug/L			11/10/17 21:25	1000
Chlorobenzene	ND		1000	180	ug/L			11/10/17 21:25	1000
Chloroethane	ND		1000	360	ug/L			11/10/17 21:25	1000
Chloroform	ND		1000	230	ug/L			11/10/17 21:25	1000
Chloromethane	ND		1000	360	ug/L			11/10/17 21:25	1000
cis-1,2-Dichloroethene	50000		1000	210	ug/L			11/10/17 21:25	1000
cis-1,3-Dichloropropene	ND		1000	170	ug/L			11/10/17 21:25	1000
Cyclohexane	ND		5000	130	ug/L			11/10/17 21:25	1000
Dibromochloromethane	ND		1000	250	ug/L			11/10/17 21:25	1000
Dichlorodifluoromethane	ND	*	1000	170	ug/L			11/10/17 21:25	1000
Ethylbenzene	ND		1000	190	ug/L			11/10/17 21:25	1000
Isopropylbenzene	ND		1000	330	ug/L			11/10/17 21:25	1000
Methyl acetate	ND		10000	580	ug/L			11/10/17 21:25	1000

TestAmerica Buffalo

11/24/2017

11/10/17 21:25

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1000

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3000

170 ug/L

90 ug/L

1000 ug/L

280 ug/L

140 ug/L

170 ug/L

230 ug/L

170 ug/L

200 ug/L

210 ug/L

180 ug/L

580 ug/L

ND

ND

1100 J

ND

ND

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ND

ND

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2500

17000

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2

3

6

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12

4 4

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1000

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1000

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-27

Date Collected: 11/07/17 10:30 Date Received: 11/09/17 09:30 Lab Sample ID: 480-127327-2

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90	70 - 130		11/10/17 21:25	1000
4-Bromofluorobenzene (Surr)	104	70 - 130		11/10/17 21:25	1000
Dibromofluoromethane (Surr)	108	70 - 130		11/10/17 21:25	1000
Toluene-d8 (Surr)	99	70 - 130		11/10/17 21:25	1000

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	410	CI	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluoropentanoic acid (PFPeA)	14		2.0	0.49	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorohexanoic acid (PFHxA)	17		2.0	0.57	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluoroheptanoic acid (PFHpA)	20		2.0	0.25	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorooctanoic acid (PFOA)	86		2.0	0.84	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorononanoic acid (PFNA)	3.6		2.0	0.27	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorodecanoic acid (PFDA)	2.2		2.0	0.31	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorobutanesulfonic acid (PFBS)	27		2.0	0.20	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorohexanesulfonic acid (PFHxS)	21	В	2.0	0.17	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	7.8		2.0	0.19	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorooctanesulfonic acid (PFOS)	450		2.0	0.54	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 14:10	11/18/17 06:59	1
Perfluorooctane Sulfonamide (FOSA)	0.52	JB	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 06:59	1
Isotono Dilution	% Pacayory	O	Limite				Propared	Analyzod	Dil Esc

(I COA)					
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	82	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C4 PFBA	35	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C2 PFHxA	76	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C4 PFOA	84	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C5 PFNA	99	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C2 PFDA	112	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C2 PFUnA	108	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C2 PFDoA	93	25 - 150	11/16/17 14:10	11/18/17 06:59	1
18O2 PFHxS	94	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C4 PFOS	103	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C4-PFHpA	81	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C5 PFPeA	68	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C3-PFBS	98	25 - 150	11/16/17 14:10	11/18/17 06:59	1
13C2-PFTeDA	77	25 - 150	11/16/17 14:10	11/18/17 06:59	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: IW-02 Lab Sample ID: 480-127327-3

Date Collected: 11/07/17 12:00 Matrix: Water

Date Received: 11/09/17 09:30

Analyte	Result Qualifier	RL	MDL		D Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	100	19	O		11/10/17 21:51	100
1,1,2,2-Tetrachloroethane	ND	100		ug/L		11/10/17 21:51	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	100		ug/L		11/10/17 21:51	100
1,1,2-Trichloroethane	ND	100		ug/L		11/10/17 21:51	100
1,1-Dichloroethane	ND	100		ug/L		11/10/17 21:51	100
1,1-Dichloroethene	ND	100		ug/L		11/10/17 21:51	100
1,2,4-Trichlorobenzene	ND	100	20	ug/L		11/10/17 21:51	100
1,2-Dibromo-3-Chloropropane	ND	1000	94	ug/L		11/10/17 21:51	100
1,2-Dibromoethane	ND	100	21	ug/L		11/10/17 21:51	10
1,2-Dichlorobenzene	ND	100	19	ug/L		11/10/17 21:51	100
1,2-Dichloroethane	ND	100	20	ug/L		11/10/17 21:51	100
1,2-Dichloropropane	ND	100	25	ug/L		11/10/17 21:51	100
1,3-Dichlorobenzene	ND	100	18	ug/L		11/10/17 21:51	100
1,4-Dichlorobenzene	ND	100		ug/L		11/10/17 21:51	100
2-Butanone (MEK)	ND	5000		ug/L		11/10/17 21:51	100
2-Hexanone	ND	1000		ug/L		11/10/17 21:51	100
4-Methyl-2-pentanone (MIBK)	ND	1000	81	-		11/10/17 21:51	10
Acetone	ND	2500	270	ug/L		11/10/17 21:51	10
Benzene	ND	100		ug/L		11/10/17 21:51	10
Bromodichloromethane	ND	100		ug/L		11/10/17 21:51	10
Bromoform	ND	100		ug/L		11/10/17 21:51	10
3romomethane	ND	100		ug/L		11/10/17 21:51	10
Carbon disulfide	ND	100		ug/L		11/10/17 21:51	10
Carbon tetrachloride	ND	100		ug/L		11/10/17 21:51	10
Chlorobenzene	ND	100		ug/L		11/10/17 21:51	10
Chloroethane	ND	100		ug/L		11/10/17 21:51	10
Chloroform	ND	100		ug/L		11/10/17 21:51	10
Chloromethane	ND	100		ug/L		11/10/17 21:51	10
cis-1,2-Dichloroethene	14000	100		ug/L		11/10/17 21:51	10
cis-1,3-Dichloropropene	ND	100		ug/L		11/10/17 21:51	10
Cyclohexane	ND	500		ug/L		11/10/17 21:51	10
Dibromochloromethane	ND	100		ug/L		11/10/17 21:51	10
Dichlorodifluoromethane	ND *	100		ug/L ug/L		11/10/17 21:51	10
		100				11/10/17 21:51	10
Ethylbenzene	ND			ug/L			
Isopropylbenzene	ND	100		ug/L		11/10/17 21:51	10
Methyl acetate	ND	1000		ug/L		11/10/17 21:51	10
Methyl tert-butyl ether	ND	100		ug/L		11/10/17 21:51	10
Methylcyclohexane	ND	500		ug/L		11/10/17 21:51	10
Methylene Chloride	120 J	500		ug/L		11/10/17 21:51	10
Styrene	ND	100		ug/L		11/10/17 21:51	10
Tetrachloroethene	3800	100		ug/L		11/10/17 21:51	10
Toluene	ND	100		ug/L		11/10/17 21:51	10
trans-1,2-Dichloroethene	50 J	100		ug/L		11/10/17 21:51	10
trans-1,3-Dichloropropene	ND	100		ug/L		11/10/17 21:51	10
Trichloroethene	5600	100		ug/L		11/10/17 21:51	10
Trichlorofluoromethane	ND *	100		ug/L		11/10/17 21:51	10
Vinyl chloride	710	100		ug/L		11/10/17 21:51	100
Xylenes, Total	ND	300	58	ug/L		11/10/17 21:51	10

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

13C4-PFHpA

13C5 PFPeA

13C3-PFBS

13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: IW-02 Lab Sample ID: 480-127327-3

Matrix: Water

Date Collected: 11/07/17 12:00 Date Received: 11/09/17 09:30

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93	70 - 130		1/10/17 21:51	100
4-Bromofluorobenzene (Surr)	101	70 - 130	1	1/10/17 21:51	100
Dibromofluoromethane (Surr)	108	70 - 130	1	1/10/17 21:51	100
Toluene-d8 (Surr)	100	70 - 130	1	1/10/17 21:51	100

Method: 537 (modified) - Fluor Analyte		/I Substan Qualifier	ces RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	75	CI	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluoropentanoic acid (PFPeA)	25		2.0	0.49	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorohexanoic acid (PFHxA)	24		2.0	0.58	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluoroheptanoic acid (PFHpA)	18		2.0	0.25	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorooctanoic acid (PFOA)	56		2.0	0.84	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorononanoic acid (PFNA)	8.5		2.0	0.27	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorodecanoic acid (PFDA)	10		2.0	0.31	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorobutanesulfonic acid (PFBS)	28		2.0	0.20	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorohexanesulfonic acid (PFHxS)	7.2	В	2.0	0.17	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	2.1		2.0	0.19	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorooctanesulfonic acid (PFOS)	190		2.0	0.54	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 14:10	11/18/17 07:15	1
Perfluorooctane Sulfonamide (FOSA)	1.0	JB	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 07:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	99		25 - 150				11/16/17 14:10	11/18/17 07:15	1
13C4 PFBA	56		25 - 150				11/16/17 14:10	11/18/17 07:15	1
13C2 PFHxA	83		25 - 150				11/16/17 14:10	11/18/17 07:15	1
13C4 PFOA	89		25 - 150				11/16/17 14:10	11/18/17 07:15	1
13C5 PFNA	103		25 - 150				11/16/17 14:10	11/18/17 07:15	1
13C2 PFDA	111		25 - 150				11/16/17 14:10	11/18/17 07:15	1
13C2 PFUnA	106		25 - 150				11/16/17 14:10	11/18/17 07:15	1
13C2 PFDoA	93		25 - 150				11/16/17 14:10	11/18/17 07:15	1
1802 PFHxS	97		25 - 150				11/16/17 14:10	11/18/17 07:15	1
13C4 PFOS	104		25 - 150				11/16/17 14:10	11/18/17 07:15	1

11/16/17 14:10 11/18/17 07:15

11/16/17 14:10 11/18/17 07:15

11/16/17 14:10 11/18/17 07:15

11/16/17 14:10 11/18/17 07:15

25 - 150

25 - 150

25 - 150

25 - 150

87

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99

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: DUP-02

Lab Sample ID: 480-127327-4

Date Collected: 11/07/17 00:00 **Matrix: Water** Date Received: 11/09/17 09:30

Method: 8260C - Volatile Organ Analyte	Result C		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1000	190	ug/L			11/10/17 22:17	1000
1,1,2,2-Tetrachloroethane	ND		1000	190	ug/L			11/10/17 22:17	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *		1000	150	ug/L			11/10/17 22:17	1000
1,1,2-Trichloroethane	ND		1000	190	ug/L			11/10/17 22:17	1000
1,1-Dichloroethane	ND		1000	240	ug/L			11/10/17 22:17	1000
1,1-Dichloroethene	ND		1000	250	ug/L			11/10/17 22:17	1000
1,2,4-Trichlorobenzene	ND		1000	200	ug/L			11/10/17 22:17	1000
1,2-Dibromo-3-Chloropropane	ND		10000	940	ug/L			11/10/17 22:17	1000
1,2-Dibromoethane	ND		1000		ug/L			11/10/17 22:17	1000
1,2-Dichlorobenzene	ND		1000		ug/L			11/10/17 22:17	1000
1,2-Dichloroethane	ND		1000		ug/L			11/10/17 22:17	1000
1,2-Dichloropropane	ND		1000		ug/L			11/10/17 22:17	1000
1,3-Dichlorobenzene	ND		1000		ug/L			11/10/17 22:17	1000
1,4-Dichlorobenzene	ND		1000		ug/L			11/10/17 22:17	1000
2-Butanone (MEK)	ND		50000	2600	-			11/10/17 22:17	1000
2-Hexanone	ND		10000	1300	-			11/10/17 22:17	1000
4-Methyl-2-pentanone (MIBK)	ND		10000		ug/L			11/10/17 22:17	1000
Acetone	ND		25000	2700	-			11/10/17 22:17	100
Benzene	ND		1000		ug/L			11/10/17 22:17	100
Bromodichloromethane	ND		1000		ug/L			11/10/17 22:17	100
Bromoform	ND		1000		ug/L			11/10/17 22:17	100
Bromomethane	ND		1000		ug/L			11/10/17 22:17	100
Carbon disulfide	ND		1000		ug/L			11/10/17 22:17	100
Carbon tetrachloride	ND		1000		ug/L			11/10/17 22:17	100
Chlorobenzene	ND		1000		ug/L			11/10/17 22:17	100
Chloroethane	ND		1000		ug/L			11/10/17 22:17	100
Chloroform	ND ND		1000		ug/L			11/10/17 22:17	100
Chloromethane	ND		1000		ug/L			11/10/17 22:17	100
cis-1,2-Dichloroethene	50000		1000		ug/L			11/10/17 22:17	100
cis-1,2-Dictrioroetherie	ND		1000		ug/L ug/L			11/10/17 22:17	100
Cyclohexane	ND		5000		ug/L			11/10/17 22:17	100
Dibromochloromethane	ND ND		1000		ug/L ug/L			11/10/17 22:17	1000
Dichlorodifluoromethane	ND *	•	1000		_			11/10/17 22:17	
	ND		1000		ug/L ug/L			11/10/17 22:17	100
Ethylbenzene Isopropylbenzene	ND ND		1000		-			11/10/17 22:17	100
,					ug/L				100
Methyl acetate	ND		10000		ug/L			11/10/17 22:17	
Methyl tert-butyl ether	ND		1000		ug/L			11/10/17 22:17	100
Methylcyclohexane	ND	_	5000		ug/L			11/10/17 22:17	100
Methylene Chloride	1300 J	J 	5000	1000	-			11/10/17 22:17	100
Styrene	ND		1000		ug/L			11/10/17 22:17	100
Tetrachloroethene	150000		1000		ug/L			11/10/17 22:17	100
Toluene	ND		1000		ug/L			11/10/17 22:17	1000
trans-1,2-Dichloroethene	ND		1000		ug/L			11/10/17 22:17	100
trans-1,3-Dichloropropene	ND		1000		ug/L			11/10/17 22:17	100
Trichloroethene	18000		1000		ug/L			11/10/17 22:17	100
Trichlorofluoromethane	ND *	•	1000		ug/L			11/10/17 22:17	100
Vinyl chloride	2500		1000	180	ug/L			11/10/17 22:17 11/10/17 22:17	1000

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-127327-4

TestAmerica Job ID: 480-127327-1

Matrix: Water

Client Sample ID: DUP-02 Date Collected: 11/07/17 00:00 Date Received: 11/09/17 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	l Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		11/10/17 22:17	1000
4-Bromofluorobenzene (Surr)	102		70 - 130		11/10/17 22:17	1000
Dibromofluoromethane (Surr)	108		70 - 130		11/10/17 22:17	1000
Toluene-d8 (Surr)	101		70 - 130		11/10/17 22:17	1000

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	430	CI	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluoropentanoic acid (PFPeA)	15		2.0	0.49	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorohexanoic acid (PFHxA)	18		2.0	0.58	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluoroheptanoic acid (PFHpA)	20		2.0	0.25	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorooctanoic acid (PFOA)	84		2.0	0.85	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorononanoic acid (PFNA)	3.7		2.0	0.27	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorodecanoic acid (PFDA)	2.1		2.0	0.31	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorobutanesulfonic acid (PFBS)	31	CI	2.0	0.20	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorohexanesulfonic acid (PFHxS)	23	В	2.0	0.17	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluoroheptanesulfonic Acid (PFHpS)	6.9		2.0	0.19	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorooctanesulfonic acid (PFOS)	450		2.0	0.54	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 14:10	11/18/17 07:23	1
Perfluorooctane Sulfonamide (FOSA)	0.55	JB	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 07:23	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	86		25 - 150				11/16/17 14:10	11/18/17 07:23	

(FUSA)					
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	86	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C4 PFBA	35	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C2 PFHxA	77	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C4 PFOA	89	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C5 PFNA	108	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C2 PFDA	119	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C2 PFUnA	119	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C2 PFDoA	96	25 - 150	11/16/17 14:10	11/18/17 07:23	1
18O2 PFHxS	96	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C4 PFOS	108	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C4-PFHpA	84	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C5 PFPeA	70	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C3-PFBS	89	25 - 150	11/16/17 14:10	11/18/17 07:23	1
13C2-PFTeDA	84	25 - 150	11/16/17 14:10	11/18/17 07:23	1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Lab Sample ID: 480-127327-5 Matrix: Water

Client Sample ID: MW-13 Date Collected: 11/07/17 08:25

Date Received: 11/09/17 09:30

D D D D D D D D D D D D D D D D D D D	100 100 100 100 100 100 100 100 100 100	19 15 19 24 25 20 94 21 19 20 25 18 17 260 130 81 270 20 17 29	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L		Prepared	Analyzed 11/11/17 10:14	100 100 100 100 100 100 100 100 100 100
D D D D D D D D D D D D D D D D D D D	100 100 100 100 100 100 100 100 100 100	15 19 24 25 20 94 21 19 20 25 18 17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	100 100 100 100 100 100 100 100 100 100
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D D D D D D D D D D D D D D D D D D D	100 100 100 100 100 100 100 100 100 5000 1000 2500 100 100 100	19 24 25 20 94 21 19 20 25 18 17 260 130 81 270 20 17 29	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	100 100 100 100 100 100 100 100 100 100
D D D D D D D D D D D D D D D D D D D	100 100 100 100 100 100 100 100 100 5000 1000 1000 1000 1000 1000 1000 1000	24 25 20 94 21 19 20 25 18 17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	100 100 100 100 100 100 100 100 100 100
D D D D D D D D D D D D D D D D D D D	100 1000 100 100 100 100 100 100 5000 1000 1000 1000 1000 100 1	25 20 94 21 19 20 25 18 17 260 130 81 270 20 17 29	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14	100 100 100 100 100 100 100 100 100 100
D D D D D D D D D D D D D D D D D D D	1000 100 100 100 100 100 100 5000 1000 2500 100 100 100	20 94 21 19 20 25 18 17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	100 100 100 100 100 100 100 100 100 100
D D D D D D D D D D D D D D D D D D D	1000 100 100 100 100 100 100 5000 1000 2500 100 100 100	94 21 19 20 25 18 17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	100 100 100 100 100 100 100 100 100 100
D D D D D D D D D D D D D D D D D D D	100 100 100 100 100 100 5000 1000 2500 100 100 100	21 19 20 25 18 17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	100 100 100 100 100 100 100 100 100
D D D D D D D D D D D D D D D D D D D	100 100 100 100 5000 1000 2500 100 100 100	19 20 25 18 17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	10 10 10 10 10 10 10 10
D D D D D D D D D D D D D D D D D D D	100 100 100 5000 1000 2500 100 100 100	20 25 18 17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	100 100 100 100 100 100 100
D D D D D D D D D D D D D D D D	100 100 100 5000 1000 1000 2500 100 100	25 18 17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	100 100 100 100 100 100 100
D D D D D D D D	100 100 5000 1000 1000 2500 100 100 100	18 17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	10 10 10 10 10 10
D D D D D D D	100 5000 1000 1000 2500 100 100 100	17 260 130 81 270 20 17	ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	10 10 10 10 10
D D D D D D	5000 1000 1000 2500 100 100 100	260 130 81 270 20 17 29	ug/L ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	10 10 10 10
D D D D D	1000 1000 2500 100 100 100	130 81 270 20 17 29	ug/L ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14 11/11/17 10:14	10 10 10
D D D D D	1000 2500 100 100 100	81 270 20 17 29	ug/L ug/L ug/L ug/L			11/11/17 10:14 11/11/17 10:14	10 10
D D D D	2500 100 100 100 100	270 20 17 29	ug/L ug/L ug/L			11/11/17 10:14	10
D D D	100 100 100 100	20 17 29	ug/L ug/L				
D D	100 100 100	17 29	ug/L				10
D D	100 100	29				11/11/17 10:14	10
D	100					11/11/17 10:14	10
		00	ug/L			11/11/17 10:14	10
D			ug/L			11/11/17 10:14	10
D	100		ug/L			11/11/17 10:14	10
D	100		ug/L			11/11/17 10:14	10
D	100		ug/L ug/L			11/11/17 10:14	10
D	100		ug/L			11/11/17 10:14	10
D	100		ug/L			11/11/17 10:14	10
) <mark>0</mark>	100		ug/L ug/L			11/11/17 10:14	10
D	100		ug/L ug/L			11/11/17 10:14	10
D	500		ug/L			11/11/17 10:14	10
D	100		Ü			11/11/17 10:14	10
			ug/L				
D	100		ug/L			11/11/17 10:14	10
D	100		ug/L			11/11/17 10:14	10
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TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

13C4-PFHpA

13C5 PFPeA

13C3-PFBS

13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-13

Date Received: 11/09/17 09:30

Date Collected: 11/07/17 08:25

Lab Sample ID: 480-127327-5

Matrix: Water

Surrogate	%Recovery G	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130		11/11/17 10:14	100
4-Bromofluorobenzene (Surr)	112		70 - 130		11/11/17 10:14	100
Dibromofluoromethane (Surr)	105		70 - 130		11/11/17 10:14	100
Toluene-d8 (Surr)	109		70 - 130		11/11/17 10:14	100

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	71	CI	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluoropentanoic acid (PFPeA)	57		2.0	0.49	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorohexanoic acid (PFHxA)	61		2.0	0.58	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluoroheptanoic acid (PFHpA)	39		2.0	0.25	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorooctanoic acid (PFOA)	96		2.0	0.86	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorononanoic acid (PFNA)	17		2.0	0.27	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorodecanoic acid (PFDA)	28		2.0	0.31	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluoroundecanoic acid (PFUnA)	2.4		2.0	1.1	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorododecanoic acid (PFDoA)	1.8	J	2.0	0.55	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorobutanesulfonic acid (PFBS)	62		2.0	0.20	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorohexanesulfonic acid (PFHxS)	9.4	В	2.0	0.17	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	2.3		2.0	0.19	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorooctanesulfonic acid (PFOS)	230		2.0	0.54	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 14:10	11/18/17 07:31	1
Perfluorooctane Sulfonamide (FOSA)	3.3	В	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 07:31	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	104		25 - 150				11/16/17 14:10	11/18/17 07:31	1
13C4 PFBA	64		25 - 150				11/16/17 14:10	11/18/17 07:31	1
13C2 PFHxA	88		25 - 150				11/16/17 14:10	11/18/17 07:31	1
13C4 PFOA	87		25 - 150				11/16/17 14:10	11/18/17 07:31	1
13C5 PFNA	104		25 - 150				11/16/17 14:10	11/18/17 07:31	1
13C2 PFDA	113		25 - 150				11/16/17 14:10	11/18/17 07:31	1
13C2 PFUnA	111		25 - 150				11/16/17 14:10	11/18/17 07:31	1
13C2 PFDoA	98		25 - 150				11/16/17 14:10	11/18/17 07:31	1
1802 PFHxS	100		25 - 150				11/16/17 14:10	11/18/17 07:31	1
13C4 PFOS	100		25 - 150				11/16/17 14:10	11/18/17 07:31	1

11/16/17 14:10 11/18/17 07:31

11/16/17 14:10 11/18/17 07:31

11/16/17 14:10 11/18/17 07:31

11/16/17 14:10 11/18/17 07:31

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25 - 150

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-3

Lab Sample ID: 480-127327-6

Matrix: Water

Date Collected: 11/07/17 09:35 Date Received: 11/09/17 09:30

Method: 8260C - Volatile Organ Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 05:34	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 05:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 05:34	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 05:34	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 05:34	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 05:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 05:34	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	-			11/11/17 05:34	1
1,2-Dibromoethane	ND		1.0	0.21	-			11/11/17 05:34	1
1,2-Dichlorobenzene	ND		1.0	0.19	-			11/11/17 05:34	1
1,2-Dichloroethane	ND		1.0	0.20	-			11/11/17 05:34	1
1,2-Dichloropropane	ND		1.0	0.25	_			11/11/17 05:34	1
1,3-Dichlorobenzene	ND		1.0	0.18	•			11/11/17 05:34	1
1,4-Dichlorobenzene	ND		1.0	0.17	-			11/11/17 05:34	1
2-Butanone (MEK)	ND		50		ug/L			11/11/17 05:34	1
2-Hexanone	ND		10		ug/L			11/11/17 05:34	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	-			11/11/17 05:34	1
Acetone	6.0		25		ug/L			11/11/17 05:34	1
Benzene	ND		1.0	0.20				11/11/17 05:34	
Bromodichloromethane	ND		1.0	0.20	ū			11/11/17 05:34	1
Bromoform	ND ND		1.0		_			11/11/17 05:34	1
Bromomethane	ND			0.29 0.35	-			11/11/17 05:34	1
			1.0		_				
Carbon disulfide	ND		1.0	0.22	-			11/11/17 05:34	1
Carbon tetrachloride	ND		1.0	0.18	-			11/11/17 05:34	1
Chlorobenzene	ND		1.0	0.18	-			11/11/17 05:34	1
Chloroethane	ND		1.0	0.36	-			11/11/17 05:34	1
Chloroform	ND		1.0	0.23	-			11/11/17 05:34	1
Chloromethane	ND		1.0	0.36	-			11/11/17 05:34	1
cis-1,2-Dichloroethene	ND		1.0	0.21	-			11/11/17 05:34	1
cis-1,3-Dichloropropene	ND		1.0	0.17	-			11/11/17 05:34	1
Cyclohexane	ND		5.0	0.13	_			11/11/17 05:34	1
Dibromochloromethane	ND		1.0	0.25	•			11/11/17 05:34	1
Dichlorodifluoromethane	ND		1.0	0.17	-			11/11/17 05:34	1
Ethylbenzene	ND		1.0	0.19	-			11/11/17 05:34	1
Isopropylbenzene	ND		1.0	0.33	-			11/11/17 05:34	1
Methyl acetate	ND		10	0.58				11/11/17 05:34	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/11/17 05:34	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/11/17 05:34	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/11/17 05:34	1
Styrene	ND		1.0	0.28				11/11/17 05:34	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/11/17 05:34	1
Toluene	ND		1.0	0.17	-			11/11/17 05:34	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/11/17 05:34	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 05:34	1
Trichloroethene	ND		1.0	0.20	ug/L			11/11/17 05:34	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/17 05:34	1
Vinyl chloride	ND		1.0	0.18				11/11/17 05:34	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/11/17 05:34	1

TestAmerica Buffalo

11/24/2017

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-3

Lab Sample ID: 480-127327-6

Matrix: Water

Date Collected: 11/07/17 09:35 Date Received: 11/09/17 09:30

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105	70 - 130		11/11/17 05:34	1
4-Bromofluorobenzene (Surr)	111	70 - 130		11/11/17 05:34	1
Dibromofluoromethane (Surr)	106	70 - 130		11/11/17 05:34	1
Toluene-d8 (Surr)	109	70 - 130		11/11/17 05:34	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	38		2.0	0.36	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluoropentanoic acid (PFPeA)	42		2.0	0.50	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorohexanoic acid (PFHxA)	43		2.0	0.59	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluoroheptanoic acid (PFHpA)	51		2.0	0.25	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorooctanoic acid (PFOA)	310		2.0	0.87	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorononanoic acid (PFNA)	8.1		2.0	0.28	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorodecanoic acid (PFDA)	1.1	J	2.0	0.32	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.30	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorobutanesulfonic acid (PFBS)	64		2.0	0.20	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorohexanesulfonic acid (PFHxS)	36	В	2.0	0.17	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluoroheptanesulfonic Acid (PFHpS)	11		2.0	0.19	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorooctanesulfonic acid (PFOS)	310		2.0	0.55	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.33	ng/L		11/16/17 14:10	11/18/17 07:39	1
Perfluorooctane Sulfonamide (FOSA)	59	В	2.0	0.36	ng/L		11/16/17 14:10	11/18/17 07:39	1
In the Billion	0/ 5							A I I	

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Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	101	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C4 PFBA	33	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C2 PFHxA	77	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C4 PFOA	89	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C5 PFNA	108	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C2 PFDA	113	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C2 PFUnA	105	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C2 PFDoA	93	25 - 150	11/16/17 14:10	11/18/17 07:39	1
18O2 PFHxS	101	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C4 PFOS	112	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C4-PFHpA	88	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C5 PFPeA	69	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C3-PFBS	94	25 - 150	11/16/17 14:10	11/18/17 07:39	1
13C2-PFTeDA	93	25 - 150	11/16/17 14:10	11/18/17 07:39	1

11/24/2017

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Lab Sample ID: 480-127327-7 **Client Sample ID: MW-21D**

Date Collected: 11/07/17 10:55 **Matrix: Water** Date Received: 11/09/17 09:30

Method: 8260C - Volatile Organ Analyte	Result Qualifier	RL	MDL		D Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	10	1.9	ug/L		11/12/17 11:43	10
1,1,2,2-Tetrachloroethane	ND	10	1.9	ug/L		11/12/17 11:43	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	1.5	ug/L		11/12/17 11:43	10
1,1,2-Trichloroethane	ND	10	1.9	ug/L		11/12/17 11:43	10
1,1-Dichloroethane	ND	10	2.4	ug/L		11/12/17 11:43	10
1,1-Dichloroethene	2.7 J	10	2.5	ug/L		11/12/17 11:43	10
1,2,4-Trichlorobenzene	ND	10		ug/L		11/12/17 11:43	10
1,2-Dibromo-3-Chloropropane	ND	100		ug/L		11/12/17 11:43	10
1,2-Dibromoethane	ND	10	2.1	_		11/12/17 11:43	10
1,2-Dichlorobenzene	ND	10	1.9	ug/L		11/12/17 11:43	10
1,2-Dichloroethane	ND	10		ug/L		11/12/17 11:43	10
1,2-Dichloropropane	ND	10		ug/L		11/12/17 11:43	10
1,3-Dichlorobenzene	ND	10		ug/L		11/12/17 11:43	10
1,4-Dichlorobenzene	ND	10		ug/L		11/12/17 11:43	10
2-Butanone (MEK)	ND	500		ug/L		11/12/17 11:43	10
2-Hexanone	ND	100		ug/L		11/12/17 11:43	10
4-Methyl-2-pentanone (MIBK)	ND	100	8.1	ug/L		11/12/17 11:43	10
Acetone	ND	250		ug/L		11/12/17 11:43	10
Benzene	ND	10		ug/L		11/12/17 11:43	10
Bromodichloromethane	ND	10		ug/L ug/L		11/12/17 11:43	10
Bromoform	ND	10		ug/L ug/L		11/12/17 11:43	10
Bromomethane	ND	10		ug/L ug/L		11/12/17 11:43	10
				-			
Carbon disulfide	ND	10		ug/L		11/12/17 11:43	10
Carbon tetrachloride	ND	10		ug/L		11/12/17 11:43	10
Chlorobenzene	ND	10		ug/L		11/12/17 11:43	10
Chloroethane	ND	10		ug/L		11/12/17 11:43	10
Chloroform	ND	10		ug/L		11/12/17 11:43	10
Chloromethane	ND	10		ug/L		11/12/17 11:43	10
cis-1,2-Dichloroethene	1800	10	2.1	J		11/12/17 11:43	10
cis-1,3-Dichloropropene	ND	10		ug/L		11/12/17 11:43	10
Cyclohexane	ND	50		ug/L		11/12/17 11:43	10
Dibromochloromethane	ND	10		ug/L		11/12/17 11:43	10
Dichlorodifluoromethane	ND	10		ug/L		11/12/17 11:43	10
Ethylbenzene	ND	10		ug/L		11/12/17 11:43	10
Isopropylbenzene	ND	10		ug/L		11/12/17 11:43	10
Methyl acetate	ND	100		ug/L		11/12/17 11:43	10
Methyl tert-butyl ether	ND	10	1.7	ug/L		11/12/17 11:43	10
Methylcyclohexane	ND	50		ug/L		11/12/17 11:43	10
Methylene Chloride	ND	50	10	ug/L		11/12/17 11:43	10
Styrene	ND	10		ug/L		11/12/17 11:43	10
Tetrachloroethene	ND	10	1.4	ug/L		11/12/17 11:43	10
Toluene	ND	10		ug/L		11/12/17 11:43	10
trans-1,2-Dichloroethene	28	10	2.3	ug/L		11/12/17 11:43	10
trans-1,3-Dichloropropene	ND	10	1.7	ug/L		11/12/17 11:43	10
Trichloroethene	ND	10	2.0	ug/L		11/12/17 11:43	10
Trichlorofluoromethane	ND *	10	2.1	ug/L		11/12/17 11:43	10
Vinyl chloride	50	10		ug/L		11/12/17 11:43	10
Xylenes, Total	ND	30		ug/L		11/12/17 11:43	10

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-21D

Date Collected: 11/07/17 10:55 Date Received: 11/09/17 09:30 Lab Sample ID: 480-127327-7

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100	70 - 130	11/12/17 11:43	10
4-Bromofluorobenzene (Surr)	97	70 - 130	11/12/17 11:43	10
Dibromofluoromethane (Surr)	108	70 - 130	11/12/17 11:43	10
Toluene-d8 (Surr)	98	70 - 130	11/12/17 11:43	10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	29		2.0	0.34	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluoropentanoic acid (PFPeA)	17		2.0	0.48	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorohexanoic acid (PFHxA)	24		2.0	0.57	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluoroheptanoic acid (PFHpA)	18		2.0	0.24	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorooctanoic acid (PFOA)	59		2.0	0.83	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorononanoic acid (PFNA)	4.9		2.0	0.26	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorodecanoic acid (PFDA)	1.9	J	2.0	0.30	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.28	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorobutanesulfonic acid (PFBS)	5.8		2.0	0.20	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorohexanesulfonic acid (PFHxS)	8.0	В	2.0	0.17	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.6	J	2.0	0.19	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorooctanesulfonic acid (PFOS)	110		2.0	0.53	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		11/16/17 14:10	11/18/17 07:47	1
Perfluorooctane Sulfonamide (FOSA)	1.8	JB	2.0	0.34	ng/L		11/16/17 14:10	11/18/17 07:47	1
lastana Dilutian	0/ Daggyamy	O !!#!	l imita				Dranavad	Amalumad	Dil Fac

(FOSA)					
Isotope Dilution	%Recovery Qualifi	er Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	100	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C4 PFBA	54	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C2 PFHxA	85	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C4 PFOA	89	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C5 PFNA	104	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C2 PFDA	106	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C2 PFUnA	102	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C2 PFDoA	91	25 - 150	11/16/17 14:10	11/18/17 07:47	1
18O2 PFHxS	100	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C4 PFOS	102	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C4-PFHpA	94	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C5 PFPeA	82	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C3-PFBS	101	25 - 150	11/16/17 14:10	11/18/17 07:47	1
13C2-PFTeDA	84	25 - 150	11/16/17 14:10	11/18/17 07:47	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: IW-01S

Date Collected: 11/07/17 12:35 Date Received: 11/09/17 09:30 Lab Sample ID: 480-127327-8

Matrix: Water

Method: 8260C - Volatile Orgar Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 21:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 21:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	1.0	0.15	ug/L			11/11/17 21:48	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 21:48	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 21:48	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 21:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	-			11/11/17 21:48	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	-			11/11/17 21:48	1
1,2-Dibromoethane	ND		1.0	0.21	-			11/11/17 21:48	1
1,2-Dichlorobenzene	ND		1.0	0.19	-			11/11/17 21:48	1
1,2-Dichloroethane	ND		1.0	0.20	-			11/11/17 21:48	1
1,2-Dichloropropane	ND		1.0	0.25	-			11/11/17 21:48	1
1,3-Dichlorobenzene	ND		1.0	0.18	-			11/11/17 21:48	1
1,4-Dichlorobenzene	ND		1.0	0.17	-			11/11/17 21:48	
2-Butanone (MEK)	ND		50		ug/L			11/11/17 21:48	
2-Hexanone	ND		10		ug/L			11/11/17 21:48	
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/17 21:48	1
Acetone	ND		25		ug/L			11/11/17 21:48	1
Benzene	ND		1.0	0.20	-			11/11/17 21:48	
Bromodichloromethane	ND		1.0	0.17	-			11/11/17 21:48	1
Bromoform	ND		1.0	0.29	-			11/11/17 21:48	,
Bromomethane	ND		1.0	0.35	-			11/11/17 21:48	
Carbon disulfide	ND		1.0	0.22	-			11/11/17 21:48	,
Carbon tetrachloride	ND		1.0	0.18	-			11/11/17 21:48	,
Chlorobenzene	ND		1.0	0.18	-			11/11/17 21:48	
Chloroethane	ND ND		1.0	0.16	-			11/11/17 21:48	,
	0.45		1.0	0.30	-			11/11/17 21:48	,
Chloroform		J		0.23	-				
Chloromethane	ND		1.0 1.0		-			11/11/17 21:48 11/11/17 21:48	1
cis-1,2-Dichloroethene	1.6 ND		1.0	0.21 0.17	-			11/11/17 21:48	
cis-1,3-Dichloropropene					-				
Cyclohexane	ND ND		5.0	0.13	-			11/11/17 21:48 11/11/17 21:48	1
Dibromochloromethane			1.0	0.25	-				1
Dichlorodifluoromethane	ND		1.0	0.17	-			11/11/17 21:48	
Ethylbenzene	ND		1.0	0.19	-			11/11/17 21:48	1
Isopropylbenzene	ND		1.0	0.33	-			11/11/17 21:48	1
Methyl acetate	ND		10		ug/L			11/11/17 21:48	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/17 21:48	1
Methylcyclohexane	ND		5.0	0.090	-			11/11/17 21:48	1
Methylene Chloride	ND		5.0		ug/L			11/11/17 21:48	1
Styrene	ND		1.0	0.28				11/11/17 21:48	1
Tetrachloroethene	17		1.0		ug/L			11/11/17 21:48	1
Toluene	ND		1.0		ug/L			11/11/17 21:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/17 21:48	1
trans-1,3-Dichloropropene	ND		1.0	0.17	-			11/11/17 21:48	1
Trichloroethene	ND		1.0	0.20				11/11/17 21:48	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/17 21:48	1
Vinyl chloride	ND		1.0	0.18	ug/L			11/11/17 21:48	1
Xylenes, Total	ND		3.0		ug/L			11/11/17 21:48	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: IW-01S

Lab Sample ID: 480-127327-8

Matrix: Water

Date Collected: 11/07/17 12:35 Date Received: 11/09/17 09:30

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95	70 - 130		11/11/17 21:48	1
4-Bromofluorobenzene (Surr)	97	70 - 130		11/11/17 21:48	1
Dibromofluoromethane (Surr)	106	70 - 130		11/11/17 21:48	1
Toluene-d8 (Surr)	100	70 - 130		11/11/17 21:48	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	29	CI	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluoropentanoic acid (PFPeA)	8.0		2.0	0.50	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorohexanoic acid (PFHxA)	9.0		2.0	0.59	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluoroheptanoic acid (PFHpA)	8.7		2.0	0.25	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorooctanoic acid (PFOA)	43		2.0	0.86	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorononanoic acid (PFNA)	3.7		2.0	0.27	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorodecanoic acid (PFDA)	2.4		2.0	0.31	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.56	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorobutanesulfonic acid (PFBS)	7.0		2.0	0.20	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorohexanesulfonic acid (PFHxS)	8.3	В	2.0	0.17	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.4	J	2.0	0.19	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorooctanesulfonic acid (PFOS)	110		2.0	0.55	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 14:10	11/18/17 08:26	1
Perfluorooctane Sulfonamide (FOSA)	1.4	JB	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 08:26	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	100	-	25 - 150				11/16/17 14:10	11/18/17 08:26	1
13C4 PFBA	58		25 - 150				11/16/17 14:10	11/18/17 08:26	1
13C2 PFHxA	88		25 - 150				11/16/17 14:10	11/18/17 08:26	1
13C4 PFOA	88		25 - 150				11/16/17 14:10	11/18/17 08:26	1
13C5 PFNA	102		25 - 150				11/16/17 14:10	11/18/17 08:26	1

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Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	100	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C4 PFBA	58	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C2 PFHxA	88	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C4 PFOA	88	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C5 PFNA	102	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C2 PFDA	109	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C2 PFUnA	102	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C2 PFDoA	93	25 - 150	11/16/17 14:10	11/18/17 08:26	1
1802 PFHxS	102	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C4 PFOS	104	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C4-PFHpA	91	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C5 PFPeA	87	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C3-PFBS	102	25 - 150	11/16/17 14:10	11/18/17 08:26	1
13C2-PFTeDA	89	25 - 150	11/16/17 14:10	11/18/17 08:26	1

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-26

Lab Sample ID: 480-127327-9

Matrix: Water

Date Collected: 11/07/17 14:00 Date Received: 11/09/17 09:30

Analyte	Result Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	5.0	0.95	ug/L			11/12/17 00:24	
1,1,2,2-Tetrachloroethane	ND	5.0	0.95	ug/L			11/12/17 00:24	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	5.0	0.75	ug/L			11/12/17 00:24	
1,1,2-Trichloroethane	ND	5.0	0.95	ug/L			11/12/17 00:24	
1,1-Dichloroethane	ND	5.0	1.2	ug/L			11/12/17 00:24	
1,1-Dichloroethene	ND	5.0	1.3	ug/L			11/12/17 00:24	
1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/L			11/12/17 00:24	
1,2-Dibromo-3-Chloropropane	ND	50	4.7	ug/L			11/12/17 00:24	
1,2-Dibromoethane	ND	5.0	1.1	ug/L			11/12/17 00:24	
1,2-Dichlorobenzene	ND	5.0	0.95	ug/L			11/12/17 00:24	
1,2-Dichloroethane	ND	5.0	1.0	ug/L			11/12/17 00:24	
1,2-Dichloropropane	ND	5.0		ug/L			11/12/17 00:24	
1,3-Dichlorobenzene	ND	5.0		ug/L			11/12/17 00:24	
1,4-Dichlorobenzene	ND	5.0	0.85	-			11/12/17 00:24	
2-Butanone (MEK)	ND	250		ug/L			11/12/17 00:24	
2-Hexanone	ND	50		ug/L			11/12/17 00:24	
4-Methyl-2-pentanone (MIBK)	ND	50	4.1	ug/L			11/12/17 00:24	
Acetone	ND	130		ug/L			11/12/17 00:24	
Benzene	1.3 J	5.0		ug/L			11/12/17 00:24	
Bromodichloromethane	ND	5.0		ug/L			11/12/17 00:24	
Bromoform	ND	5.0		ug/L			11/12/17 00:24	
Bromomethane	ND	5.0		ug/L			11/12/17 00:24	
Carbon disulfide	ND	5.0		ug/L			11/12/17 00:24	
Carbon tetrachloride	ND	5.0		ug/L			11/12/17 00:24	
Chlorobenzene	ND	5.0		ug/L			11/12/17 00:24	
Chloroethane	ND	5.0		ug/L			11/12/17 00:24	
Chloroform	ND	5.0		ug/L			11/12/17 00:24	
Chloromethane	ND	5.0		ug/L			11/12/17 00:24	
cis-1,2-Dichloroethene	960	5.0		ug/L			11/12/17 00:24	
cis-1,3-Dichloropropene	ND	5.0	0.85	-			11/12/17 00:24	
Cyclohexane	ND	25		ug/L			11/12/17 00:24	
Dibromochloromethane	ND	5.0		ug/L			11/12/17 00:24	
Dichlorodifluoromethane	ND	5.0	0.85	-			11/12/17 00:24	
Ethylbenzene	85	5.0		ug/L			11/12/17 00:24	
Isopropylbenzene	43	5.0		ug/L			11/12/17 00:24	
Methyl acetate	ND	50		ug/L			11/12/17 00:24	
Methyl tert-butyl ether	ND	5.0		ug/L			11/12/17 00:24	
Methylcyclohexane	4.4 J	25		ug/L			11/12/17 00:24	
Methylene Chloride	ND	25		ug/L			11/12/17 00:24	
Styrene	ND	5.0		ug/L			11/12/17 00:24	
Tetrachloroethene	2.1 J	5.0		ug/L			11/12/17 00:24	
Toluene	2.5 J	5.0		ug/L			11/12/17 00:24	
trans-1,2-Dichloroethene	8.7	5.0		ug/L			11/12/17 00:24	
trans-1,3-Dichloropropene	ND	5.0		ug/L			11/12/17 00:24	
Trichloroethene	17	5.0		ug/L			11/12/17 00:24	
Trichlorofluoromethane	ND	5.0		ug/L			11/12/17 00:24	
Vinyl chloride	88	5.0		ug/L			11/12/17 00:24	
Xylenes, Total	270	15		ug/L			11/12/17 00:24	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-26

Date Received: 11/09/17 09:30

Lab Sample ID: 480-127327-9 Date Collected: 11/07/17 14:00

Matrix: Water

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1,2-Dichloroethane-d4 (Surr)	96		70 - 130		11/12/17 00:24	5
١	4-Bromofluorobenzene (Surr)	96		70 - 130		11/12/17 00:24	5
	Dibromofluoromethane (Surr)	109		70 - 130		11/12/17 00:24	5
	Toluene-d8 (Surr)	100		70 - 130		11/12/17 00:24	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	150	CI	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluoropentanoic acid (PFPeA)	7.7		2.0	0.49	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorohexanoic acid (PFHxA)	9.7		2.0	0.58	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluoroheptanoic acid (PFHpA)	8.8		2.0	0.25	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorooctanoic acid (PFOA)	33		2.0	0.86	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorononanoic acid (PFNA)	3.8		2.0	0.27	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorodecanoic acid (PFDA)	2.7		2.0	0.31	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorobutanesulfonic acid (PFBS)	28	CI	2.0	0.20	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorohexanesulfonic acid (PFHxS)	8.4	В	2.0	0.17	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluoroheptanesulfonic Acid (PFHpS)	4.7		2.0	0.19	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorooctanesulfonic acid (PFOS)	380		2.0	0.54	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/16/17 14:10	11/18/17 07:54	1
Perfluorooctane Sulfonamide (FOSA)	1.6	JB	2.0	0.35	ng/L		11/16/17 14:10	11/18/17 07:54	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

(IOSA)					
Isotope Dilution	%Recovery Qualifie	er Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	102	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C4 PFBA	43	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C2 PFHxA	82	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C4 PFOA	91	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C5 PFNA	110	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C2 PFDA	122	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C2 PFUnA	118	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C2 PFDoA	96	25 - 150	11/16/17 14:10	11/18/17 07:54	1
18O2 PFHxS	105	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C4 PFOS	116	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C4-PFHpA	90	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C5 PFPeA	78	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C3-PFBS	100	25 - 150	11/16/17 14:10	11/18/17 07:54	1
13C2-PFTeDA	86	25 - 150	11/16/17 14:10	11/18/17 07:54	1

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-127327-10

TestAmerica Job ID: 480-127327-1

Matrix: Water

Client Sample ID: MW-25S

Date Collected: 11/07/17 13:55 Date Received: 11/09/17 09:30

Method: 8260C - Volatile Orga				Ha''	_	Day	A 1 1	D.: -
Analyte	Result Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND ND	1.0		ug/L			11/11/17 22:14	,
1,1,2,2-Tetrachloroethane	ND *	1.0		ug/L			11/11/17 22:14	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND *	1.0		ug/L			11/11/17 22:14	
1,1,2-Trichloroethane	ND ND	1.0		ug/L			11/11/17 22:14	1
1,1-Dichloroethane	ND	1.0		ug/L			11/11/17 22:14	1
1,1-Dichloroethene	ND	1.0		ug/L			11/11/17 22:14	1
1,2,4-Trichlorobenzene	ND	1.0		ug/L			11/11/17 22:14	1
1,2-Dibromo-3-Chloropropane	ND	10		ug/L			11/11/17 22:14	•
1,2-Dibromoethane	ND	1.0		ug/L			11/11/17 22:14	
1,2-Dichlorobenzene	ND	1.0		ug/L			11/11/17 22:14	•
1,2-Dichloroethane	ND	1.0		ug/L			11/11/17 22:14	•
1,2-Dichloropropane	ND	1.0		ug/L			11/11/17 22:14	
1,3-Dichlorobenzene	ND	1.0		ug/L			11/11/17 22:14	•
1,4-Dichlorobenzene	ND	1.0		ug/L			11/11/17 22:14	•
2-Butanone (MEK)	ND	50		ug/L			11/11/17 22:14	
2-Hexanone	ND	10	1.3	ug/L			11/11/17 22:14	•
4-Methyl-2-pentanone (MIBK)	ND	10		ug/L			11/11/17 22:14	•
Acetone	52	25	2.7	ug/L			11/11/17 22:14	•
Benzene	ND	1.0	0.20	ug/L			11/11/17 22:14	,
Bromodichloromethane	ND	1.0	0.17	ug/L			11/11/17 22:14	•
Bromoform	1.0	1.0	0.29	ug/L			11/11/17 22:14	1
Bromomethane	ND	1.0	0.35	ug/L			11/11/17 22:14	1
Carbon disulfide	ND	1.0	0.22	ug/L			11/11/17 22:14	1
Carbon tetrachloride	ND	1.0	0.18	ug/L			11/11/17 22:14	•
Chlorobenzene	ND	1.0	0.18	ug/L			11/11/17 22:14	
Chloroethane	ND	1.0	0.36	ug/L			11/11/17 22:14	•
Chloroform	1.6	1.0	0.23	ug/L			11/11/17 22:14	1
Chloromethane	ND	1.0	0.36	ug/L			11/11/17 22:14	1
cis-1,2-Dichloroethene	ND	1.0	0.21	ug/L			11/11/17 22:14	1
cis-1,3-Dichloropropene	ND	1.0	0.17	ug/L			11/11/17 22:14	1
Cyclohexane	ND	5.0	0.13	ug/L			11/11/17 22:14	• • • • • • • •
Dibromochloromethane	ND	1.0	0.25	ug/L			11/11/17 22:14	1
Dichlorodifluoromethane	ND	1.0	0.17	_			11/11/17 22:14	
Ethylbenzene	ND	1.0	0.19	-			11/11/17 22:14	· · · · · · .
Isopropylbenzene	ND	1.0	0.33	_			11/11/17 22:14	
Methyl acetate	ND	10		ug/L			11/11/17 22:14	1
Methyl tert-butyl ether	ND	1.0		ug/L			11/11/17 22:14	1
Methylcyclohexane	ND	5.0	0.090				11/11/17 22:14	1
Methylene Chloride	ND	5.0		ug/L			11/11/17 22:14	1
Styrene	ND	1.0		ug/L			11/11/17 22:14	1
Tetrachloroethene	ND	1.0		ug/L			11/11/17 22:14	1
Toluene	ND	1.0		ug/L			11/11/17 22:14	1
trans-1,2-Dichloroethene	ND	1.0		ug/L			11/11/17 22:14	
trans-1,3-Dichloropropene	ND	1.0		ug/L			11/11/17 22:14	1
Trichloroethene	ND	1.0		ug/L			11/11/17 22:14	
Trichlorofluoromethane	ND	1.0		ug/L			11/11/17 22:14	
Vinyl chloride	ND	1.0		ug/L			11/11/17 22:14	-
Xylenes, Total	ND	3.0		ug/L			11/11/17 22:14	-

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-25S

Date Collected: 11/07/17 13:55
Date Received: 11/09/17 09:30

Lab Sample ID: 480-127327-10

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92	70 - 130		11/11/17 22:14	1
4-Bromofluorobenzene (Surr)	98	70 - 130		11/11/17 22:14	1
Dibromofluoromethane (Surr)	108	70 - 130		11/11/17 22:14	1
Toluene-d8 (Surr)	96	70 - 130		11/11/17 22:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	91	CI	8.0	1.4	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluoropentanoic acid (PFPeA)	31		8.0	2.0	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorohexanoic acid (PFHxA)	38		8.0	2.3	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluoroheptanoic acid (PFHpA)	29		8.0	1.0	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorooctanoic acid (PFOA)	140		8.0	3.4	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorononanoic acid (PFNA)	14		8.0	1.1	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorodecanoic acid (PFDA)	3.7	J	8.0	1.2	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluoroundecanoic acid (PFUnA)	ND		8.0	4.4	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorododecanoic acid (PFDoA)	ND		8.0	2.2	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorotridecanoic Acid (PFTriA)	ND		8.0	5.2	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorotetradecanoic acid (PFTeA)	ND		8.0	1.2	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorobutanesulfonic acid (PFBS)	14		8.0	0.80	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorohexanesulfonic acid (PFHxS)	20	В	8.0	0.68	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluoroheptanesulfonic Acid (PFHpS)	4.5	J	8.0	0.76	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorooctanesulfonic acid (PFOS)	350		8.0	2.2	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorodecanesulfonic acid (PFDS)	ND		8.0	1.3	ng/L		11/16/17 14:10	11/18/17 08:42	1
Perfluorooctane Sulfonamide (FOSA)	3.5	JB	8.0	1.4	ng/L		11/16/17 14:10	11/18/17 08:42	1
Isotono Dilution	% Pacayory	Ovelifier	Limite				Propared	Analyzod	Dil Ess

(FOSA)					
Isotope Dilution	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	91	25 - 150	11/16/17 14:10	11/18/17 08:42	1
13C4 PFBA	79	25 - 150	11/16/17 14:10	11/18/17 08:42	1
13C2 PFHxA	92	25 - 150	11/16/17 14:10	11/18/17 08:42	1
13C4 PFOA	84	25 ₋ 150	11/16/17 14:10	11/18/17 08:42	1
13C5 PFNA	95	25 ₋ 150	11/16/17 14:10	11/18/17 08:42	1
13C2 PFDA	96	25 - 150	11/16/17 14:10	11/18/17 08:42	1
13C2 PFUnA	97	25 ₋ 150	11/16/17 14:10	11/18/17 08:42	1
13C2 PFDoA	92	25 - 150	11/16/17 14:10	11/18/17 08:42	1
18O2 PFHxS	100	25 - 150	11/16/17 14:10	11/18/17 08:42	1
13C4 PFOS	99	25 ₋ 150	11/16/17 14:10	11/18/17 08:42	1
13C4-PFHpA	94	25 - 150	11/16/17 14:10	11/18/17 08:42	1
13C5 PFPeA	94	25 ₋ 150	11/16/17 14:10	11/18/17 08:42	1
13C3-PFBS	98	25 - 150	11/16/17 14:10	11/18/17 08:42	1
13C2-PFTeDA	85	25 ₋ 150	11/16/17 14:10	11/18/17 08:42	1

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: 480-127327-11

TestAmerica Job ID: 480-127327-1

Matrix: Water

Client Sample ID: IW-01D Date Collected: 11/06/17 16:35

Date Received: 11/09/17 09:30

Analyte	nic Compound Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	1.0	0.19	ug/L			11/13/17 11:49	
1,1,2,2-Tetrachloroethane	ND	1.0	0.19	ug/L			11/13/17 11:49	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.15	ug/L			11/13/17 11:49	•
1,1,2-Trichloroethane	ND	1.0	0.19	ug/L			11/13/17 11:49	•
1,1-Dichloroethane	ND	1.0	0.24	ug/L			11/13/17 11:49	•
1,1-Dichloroethene	ND	1.0	0.25	ug/L			11/13/17 11:49	
1,2,4-Trichlorobenzene	ND	1.0	0.20	ug/L			11/13/17 11:49	
1,2-Dibromo-3-Chloropropane	ND	10	0.94	ug/L			11/13/17 11:49	
1,2-Dibromoethane	ND	1.0	0.21	ug/L			11/13/17 11:49	
1,2-Dichlorobenzene	ND	1.0	0.19	ug/L			11/13/17 11:49	•
1,2-Dichloroethane	ND	1.0	0.20	ug/L			11/13/17 11:49	
1,2-Dichloropropane	ND	1.0	0.25	-			11/13/17 11:49	
1,3-Dichlorobenzene	ND	1.0		ug/L			11/13/17 11:49	
1,4-Dichlorobenzene	ND	1.0	0.17	_			11/13/17 11:49	1
2-Butanone (MEK)	ND	50		ug/L			11/13/17 11:49	1
2-Hexanone	ND	10		ug/L			11/13/17 11:49	· · · · · · .
4-Methyl-2-pentanone (MIBK)	ND	10	0.81	-			11/13/17 11:49	
Acetone	29	25		ug/L			11/13/17 11:49	
Benzene	ND	1.0	0.20	-			11/13/17 11:49	· · · · · · .
Bromodichloromethane	ND	1.0	0.17	-			11/13/17 11:49	
Bromoform	ND	1.0	0.29	-			11/13/17 11:49	
Bromomethane	ND	1.0	0.35	-			11/13/17 11:49	
Carbon disulfide	ND	1.0	0.22	-			11/13/17 11:49	
Carbon tetrachloride	ND	1.0	0.22	-			11/13/17 11:49	
Chlorobenzene	ND	1.0	0.18	-			11/13/17 11:49	,
Chloroethane	ND	1.0	0.16	-			11/13/17 11:49	
Chloroform	1.0	1.0	0.30	_			11/13/17 11:49	
Chloromethane	ND	1.0	0.23				11/13/17 11:49	· · · · · · .
	39	1.0		ug/L ug/L			11/13/17 11:49	
cis-1,2-Dichloroethene cis-1,3-Dichloropropene	ND	1.0	0.21				11/13/17 11:49	
Cyclohexane	ND	5.0	0.17	-			11/13/17 11:49	,
Dibromochloromethane	ND ND	1.0	0.13	-			11/13/17 11:49	
				-			11/13/17 11:49	,
Dichlorodifluoromethane	ND	1.0	0.17	-				
Ethylbenzene	ND	1.0	0.19	-			11/13/17 11:49	
Isopropylbenzene	ND	1.0	0.33	-			11/13/17 11:49	•
Methyl acetate	ND	10		ug/L			11/13/17 11:49	
Methyl tert-butyl ether	ND	1.0		ug/L			11/13/17 11:49	•
Methylcyclohexane	ND	5.0	0.090	-			11/13/17 11:49	•
Methylene Chloride	ND	5.0		ug/L			11/13/17 11:49	
Styrene	ND	1.0		ug/L			11/13/17 11:49	•
Tetrachloroethene	25	1.0		ug/L			11/13/17 11:49	•
Toluene	ND	1.0		ug/L			11/13/17 11:49	
trans-1,2-Dichloroethene	ND	1.0		ug/L			11/13/17 11:49	•
trans-1,3-Dichloropropene	ND	1.0		ug/L			11/13/17 11:49	•
Trichloroethene	3.3	1.0		ug/L			11/13/17 11:49	
Trichlorofluoromethane	ND *	1.0		ug/L			11/13/17 11:49	•
Vinyl chloride	ND	1.0		ug/L			11/13/17 11:49	•
Xylenes, Total	ND	3.0	0.58	ug/L			11/13/17 11:49	•

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

13C4-PFHpA

13C5 PFPeA

13C3-PFBS

13C2-PFTeDA

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: IW-01D

Date Collected: 11/06/17 16:35 Date Received: 11/09/17 09:30 Lab Sample ID: 480-127327-11

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101	70 - 130		11/13/17 11:49	1
4-Bromofluorobenzene (Surr)	100	70 - 130		11/13/17 11:49	1
Dibromofluoromethane (Surr)	110	70 - 130		11/13/17 11:49	1
Toluene-d8 (Surr)	98	70 - 130		11/13/17 11:49	1

Method: 537 (modified) - Fluo Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	37		2.0	0.34	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluoropentanoic acid (PFPeA)	18		2.0	0.48	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorohexanoic acid (PFHxA)	21		2.0	0.57	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluoroheptanoic acid (PFHpA)	15		2.0	0.24	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorooctanoic acid (PFOA)	47		2.0	0.83	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorononanoic acid (PFNA)	6.2		2.0	0.26	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorodecanoic acid (PFDA)	13		2.0	0.30	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluoroundecanoic acid (PFUnA)	1.2	J	2.0	1.1	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorododecanoic acid (PFDoA)	0.67	J	2.0	0.54	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	1.3	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.28	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorobutanesulfonic acid (PFBS)	13		2.0	0.20	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorohexanesulfonic acid (PFHxS)	6.8	В	2.0		ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.3	J	2.0	0.19	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorooctanesulfonic acid (PFOS)	130		2.0	0.53	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		11/16/17 14:10	11/18/17 08:58	1
Perfluorooctane Sulfonamide (FOSA)	1.7	JB	2.0	0.34	ng/L		11/16/17 14:10	11/18/17 08:58	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	98		25 - 150				11/16/17 14:10	11/18/17 08:58	1
13C4 PFBA	63		25 - 150				11/16/17 14:10	11/18/17 08:58	1
13C2 PFHxA	85		25 - 150				11/16/17 14:10	11/18/17 08:58	1
13C4 PFOA	87		25 - 150				11/16/17 14:10	11/18/17 08:58	1
13C5 PFNA	103		25 - 150				11/16/17 14:10	11/18/17 08:58	1
13C2 PFDA	104		25 - 150				11/16/17 14:10	11/18/17 08:58	1
13C2 PFUnA	97		25 - 150				11/16/17 14:10	11/18/17 08:58	1
13C2 PFDoA	89		25 - 150				11/16/17 14:10	11/18/17 08:58	1
1802 PFHxS	97		25 - 150				11/16/17 14:10	11/18/17 08:58	1
13C4 PFOS	101		25 - 150				11/16/17 14:10	11/18/17 08:58	1

11/16/17 14:10 11/18/17 08:58

11/16/17 14:10 11/18/17 08:58

11/16/17 14:10 11/18/17 08:58

11/16/17 14:10 11/18/17 08:58

25 - 150

25 - 150

25 - 150

25 - 150

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: TRIP BLANKS Lab Sample ID: 480-127327-12

Date Collected: 11/07/17 00:00 **Matrix: Water**

Date Received: 11/09/17 09:30

Method: 8260C - Volatile Orgar ^{Analyte}		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0		ug/L	— <u> </u>		11/11/17 03:01	
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/17 03:01	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/17 03:01	
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/17 03:01	· · · · · · .
1,1-Dichloroethane	ND		1.0		ug/L			11/11/17 03:01	
1.1-Dichloroethene	ND		1.0		ug/L			11/11/17 03:01	
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/17 03:01	
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			11/11/17 03:01	
1,2-Dibromoethane	ND		1.0		ug/L			11/11/17 03:01	
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/17 03:01	
1,2-Dichloroethane	ND		1.0		ug/L			11/11/17 03:01	
1,2-Dichloropropane	ND		1.0		ug/L			11/11/17 03:01	
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/17 03:01	
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/17 03:01	
2-Butanone (MEK)	ND		50		ug/L			11/11/17 03:01	
2-Hexanone	ND		10		ug/L			11/11/17 03:01	
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/17 03:01	
Acetone	ND		25		ug/L			11/11/17 03:01	
Benzene	ND		1.0		ug/L			11/11/17 03:01	
Bromodichloromethane	ND		1.0		ug/L			11/11/17 03:01	
Bromoform	ND		1.0		ug/L			11/11/17 03:01	
Bromomethane	ND		1.0		ug/L			11/11/17 03:01	
Carbon disulfide	ND		1.0		ug/L			11/11/17 03:01	
Carbon tetrachloride	ND		1.0		ug/L			11/11/17 03:01	
Chlorobenzene	ND		1.0		ug/L			11/11/17 03:01	
Chloroethane	ND		1.0		ug/L			11/11/17 03:01	
Chloroform	ND		1.0		ug/L			11/11/17 03:01	
Chloromethane	ND		1.0		ug/L			11/11/17 03:01	
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/17 03:01	
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 03:01	
Cyclohexane	ND		5.0		ug/L			11/11/17 03:01	
Dibromochloromethane	ND		1.0		ug/L			11/11/17 03:01	
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/17 03:01	
Ethylbenzene	ND		1.0		ug/L			11/11/17 03:01	
Isopropylbenzene	ND		1.0	0.33				11/11/17 03:01	
Methyl acetate	ND		10		ug/L			11/11/17 03:01	
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/17 03:01	
Methylcyclohexane	ND		5.0	0.090				11/11/17 03:01	
Methylene Chloride	ND		5.0		ug/L			11/11/17 03:01	
Styrene	ND		1.0		ug/L			11/11/17 03:01	
Tetrachloroethene	ND		1.0		ug/L			11/11/17 03:01	
Toluene	ND		1.0		ug/L			11/11/17 03:01	
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/17 03:01	
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/17 03:01	
Trichloroethene	ND		1.0		ug/L			11/11/17 03:01	
Trichlorofluoromethane	ND		1.0		ug/L			11/11/17 03:01	
Vinyl chloride	ND		1.0		ug/L			11/11/17 03:01	
Xylenes, Total	ND		3.0		ug/L			11/11/17 03:01	

TestAmerica Buffalo

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-127327-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: TRIP BLANKS Lab Sample ID: 480-127327-12

Date Collected: 11/07/17 00:00 Matrix: Water Date Received: 11/09/17 09:30

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	-		11/11/17 03:01	1
4-Bromofluorobenzene (Surr)	111		70 - 130			11/11/17 03:01	1
Dibromofluoromethane (Surr)	105		70 - 130			11/11/17 03:01	1
Toluene-d8 (Surr)	109		70 - 130			11/11/17 03:01	1

5

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14

16

Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surre	•
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-127327-1	MW-28	98	97	110	99
480-127327-2	MW-27	90	104	108	99
480-127327-3	IW-02	93	101	108	100
480-127327-4	DUP-02	93	102	108	101
480-127327-5	MW-13	105	112	105	109
480-127327-6	MW-3	105	111	106	109
480-127327-7	MW-21D	100	97	108	98
480-127327-8	IW-01S	95	97	106	100
480-127327-9	MW-26	96	96	109	100
480-127327-10	MW-25S	92	98	108	96
480-127327-11	IW-01D	101	100	110	98
480-127327-12	TRIP BLANKS	105	111	105	109
480-127327-C-1 MS	Matrix Spike	91	90	107	97
480-127327-C-1 MSD	Matrix Spike Duplicate	93	88	113	97
LCS 490-474935/3	Lab Control Sample	97	94	110	95
LCS 490-475086/3	Lab Control Sample	105	110	104	110
LCS 490-475225/3	Lab Control Sample	88	94	107	99
LCS 490-475277/3	Lab Control Sample	92	91	108	96
LCS 490-475387/3	Lab Control Sample	98	88	108	97
LCSD 490-474935/4	Lab Control Sample Dup	100	89	109	99
LCSD 490-475086/4	Lab Control Sample Dup	106	111	103	109
LCSD 490-475225/4	Lab Control Sample Dup	89	93	108	96
LCSD 490-475277/4	Lab Control Sample Dup	97	91	109	100
LCSD 490-475387/4	Lab Control Sample Dup	98	91	110	96
MB 490-474935/6	Method Blank	94	101	108	99
MB 490-475086/6	Method Blank	107	112	106	109
MB 490-475225/6	Method Blank	92	98	105	100
MB 490-475277/6	Method Blank	99	96	110	96
MB 490-475387/6	Method Blank	102	103	115	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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Isotope Dilution Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water Prep Type: Total/NA

_		Percent Isotope Dilution Recovery (Acceptance Limits)										
		3C8 FOS/	3C4 PFB/	3C2 PFHx	3C4 PFO	3C5 PFN/	3C2 PFD/	3C2 PFUn	3C2 PFDo			
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)			
480-127327-1	MW-28	111	29	75	93	115	134	122	113			
480-127327-2	MW-27	82	35	76	84	99	112	108	93			
480-127327-3	IW-02	99	56	83	89	103	111	106	93			
480-127327-4	DUP-02	86	35	77	89	108	119	119	96			
480-127327-5	MW-13	104	64	88	87	104	113	111	98			
480-127327-6	MW-3	101	33	77	89	108	113	105	93			
480-127327-7	MW-21D	100	54	85	89	104	106	102	91			
480-127327-8	IW-01S	100	58	88	88	102	109	102	93			
480-127327-9	MW-26	102	43	82	91	110	122	118	96			
480-127327-10	MW-25S	91	79	92	84	95	96	97	92			
480-127327-11	IW-01D	98	63	85	87	103	104	97	89			
LCS 320-195170/2-A	Lab Control Sample	94	99	98	87	103	102	99	88			
LCSD 320-195170/3-A	Lab Control Sample Dup	91	99	96	86	103	102	96	88			
MB 320-195170/1-A	Method Blank	90	99	99	86	103	107	100	91			

Percent Isotope Dilution Recovery (Acceptance Limits)

		BO2 PFHx	3C4 PFOS	3C4-PFHp	3C5 PFPe	3C3-PFBS	C2-PFTeE	
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	
480-127327-1	MW-28	110	130	84	62	110	102	
480-127327-2	MW-27	94	103	81	68	98	77	
480-127327-3	IW-02	97	104	87	83	99	83	
480-127327-4	DUP-02	96	108	84	70	89	84	
480-127327-5	MW-13	100	100	96	87	95	90	
480-127327-6	MW-3	101	112	88	69	94	93	
480-127327-7	MW-21D	100	102	94	82	101	84	
480-127327-8	IW-01S	102	104	91	87	102	89	
480-127327-9	MW-26	105	116	90	78	100	86	
480-127327-10	MW-25S	100	99	94	94	98	85	
480-127327-11	IW-01D	97	101	90	83	102	87	
LCS 320-195170/2-A	Lab Control Sample	102	103	97	101	101	90	
LCSD 320-195170/3-A	Lab Control Sample Dup	98	100	94	99	97	91	
MB 320-195170/1-A	Method Blank	100	103	101	104	102	88	

Surrogate Legend

13C8 FOSA = 13C8 FOSA

13C4 PFBA = 13C4 PFBA

13C2 PFHxA = 13C2 PFHxA

13C4 PFOA = 13C4 PFOA

13C5 PFNA = 13C5 PFNA

13C2 PFDA = 13C2 PFDA

13C2 PFUnA = 13C2 PFUnA

13C2 PFDoA = 13C2 PFDoA 1802 PFHxS = 1802 PFHxS

13C4 PFOS = 13C4 PFOS

13C4-PFHpA = 13C4-PFHpA

13C5 PFPeA = 13C5 PFPeA

13C3-PFBS = 13C3-PFBS

13C2-PFTeDA = 13C2-PFTeDA

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: MB 490-474935/6

Matrix: Water

Client Sample ID: Method Blank **Prep Type: Total/NA**

Analysis Batch: 474935	МВ	МВ							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L		•	11/10/17 13:34	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/10/17 13:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/10/17 13:34	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/10/17 13:34	1
1,1-Dichloroethane	ND		1.0		ug/L			11/10/17 13:34	1
1,1-Dichloroethene	ND		1.0		ug/L			11/10/17 13:34	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/10/17 13:34	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			11/10/17 13:34	1
1,2-Dibromoethane	ND		1.0		ug/L			11/10/17 13:34	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/10/17 13:34	1
1,2-Dichloroethane	ND		1.0		ug/L			11/10/17 13:34	1
1,2-Dichloropropane	ND		1.0		ug/L			11/10/17 13:34	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/10/17 13:34	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/10/17 13:34	1
2-Butanone (MEK)	ND		50		ug/L			11/10/17 13:34	1
2-Hexanone	ND		10		ug/L			11/10/17 13:34	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L ug/L			11/10/17 13:34	1
, , , ,	ND		25		ug/L ug/L			11/10/17 13:34	1
Acetone Benzene	ND		1.0		ug/L ug/L			11/10/17 13:34	
					-				
Bromodichloromethane	ND		1.0		ug/L			11/10/17 13:34	1
Bromoform	ND		1.0		ug/L			11/10/17 13:34	1
Bromomethane	ND		1.0		ug/L			11/10/17 13:34	1
Carbon disulfide	ND		1.0		ug/L			11/10/17 13:34	1
Carbon tetrachloride	ND		1.0		ug/L			11/10/17 13:34	1
Chlorobenzene	ND		1.0		ug/L			11/10/17 13:34	1
Chloroethane	ND		1.0		ug/L			11/10/17 13:34	1
Chloroform	ND		1.0		ug/L			11/10/17 13:34	1
Chloromethane	ND		1.0		ug/L			11/10/17 13:34	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/10/17 13:34	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/10/17 13:34	1
Cyclohexane	ND		5.0		ug/L			11/10/17 13:34	1
Dibromochloromethane	ND		1.0		ug/L			11/10/17 13:34	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/10/17 13:34	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/10/17 13:34	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/10/17 13:34	1
Methyl acetate	ND		10	0.58	ug/L			11/10/17 13:34	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/10/17 13:34	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/10/17 13:34	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/10/17 13:34	1
Styrene	ND		1.0	0.28	ug/L			11/10/17 13:34	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/10/17 13:34	1
Toluene	ND		1.0	0.17	ug/L			11/10/17 13:34	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/10/17 13:34	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/10/17 13:34	1
Trichloroethene	ND		1.0		ug/L			11/10/17 13:34	1
Trichlorofluoromethane	ND		1.0		ug/L			11/10/17 13:34	1
Vinyl chloride	ND		1.0		ug/L			11/10/17 13:34	1
Xylenes, Total	ND		3.0		ug/L			11/10/17 13:34	1

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94	-	70 - 130		11/10/17 13:34	1
4-Bromofluorobenzene (Surr)	101		70 - 130		11/10/17 13:34	1
Dibromofluoromethane (Surr)	108		70 - 130		11/10/17 13:34	1
Toluene-d8 (Surr)	99		70 - 130		11/10/17 13:34	1

LCS LCS

19.7

Result Qualifier Unit

ug/L

Lab Sample ID: LCS 490-474935/3

Matrix: Water

1,2-Dichloropropane

Tetrachloroethene

trans-1,2-Dichloroethene

Toluene

Analyte

Analysis Batch: 474935

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

Limits

75 - 120

D %Rec

99

%Rec.

1,1,1-Trichloroethane	20.0	24.0	ug/L	120	78 - 135	
1,1,2,2-Tetrachloroethane	20.0	19.7	ug/L	98	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.8	ug/L	129	77 - 129	
ne						
1,1,2-Trichloroethane	20.0	20.9	ug/L	104	80 - 124	
1,1-Dichloroethane	20.0	21.0	ug/L	105	78 ₋ 125	
1,1-Dichloroethene	20.0	23.2	ug/L	116	79 - 124	
1,2,4-Trichlorobenzene	20.0	15.6	ug/L	78	63 - 133	
1,2-Dibromo-3-Chloropropane	20.0	17.4	ug/L	87	54 - 125	
1,2-Dibromoethane	20.0	21.5	ug/L	107	80 - 129	
1,2-Dichlorobenzene	20.0	21.3	ug/L	106	80 - 121	
1.2-Dichloroethane	20.0	22.6	ua/L	113	77 - 121	

20.0

Spike

Added

1,2 2.66.60	_0.0		~g/=	• •		
1,3-Dichlorobenzene	20.0	21.5	ug/L	108	80 - 122	
1,4-Dichlorobenzene	20.0	21.8	ug/L	109	80 - 120	
2-Butanone (MEK)	100	93.9	ug/L	94	62 - 133	
2-Hexanone	100	85.7	ug/L	86	60 - 142	
4-Methyl-2-pentanone (MIBK)	100	85.1	ug/L	85	60 - 137	
Acetone	100	90.2	ug/L	90	54 - 145	
Benzene	20.0	21.1	ug/L	105	80 - 121	
Bromodichloromethane	20.0	22.9	ug/L	115	75 - 129	
Bromoform	20.0	21.8	ug/L	109	46 - 145	
Bromomethane	20.0	23.9	ug/L	119	41 - 150	
Carbon disulfide	20.0	22.1	ug/L	110	77 - 126	
Carbon tetrachloride	20.0	25.6	ug/L	128	64 - 147	
Chlorobenzene	20.0	21.6	ug/L	108	80 - 120	
Chloroethane	20.0	21.3	ug/L	107	72 - 120	
Chloroform	20.0	22.1	ug/L	111	73 - 129	
Chloromethane	20.0	18.3	ug/L	91	12 - 150	
cis-1,2-Dichloroethene	20.0	21.4	ug/L	107	76 - 125	
cis-1,3-Dichloropropene	20.0	20.3	ug/L	101	74 - 140	
Cyclohexane	20.0	20.5	ug/L	102	73 - 122	
Dibromochloromethane	20.0	21.9	ug/L	109	69 - 133	
Dichlorodifluoromethane	20.0	29.8 *	ug/L	149	37 - 127	
Ethylbenzene	20.0	20.1	ug/L	100	80 - 130	
Isopropylbenzene	20.0	20.7	ug/L	104	80 - 141	
Methyl acetate	40.0	39.8	ug/L	100	64 - 150	
Methyl tert-butyl ether	20.0	21.1	ug/L	106	72 - 133	
Methylcyclohexane	20.0	23.3	ug/L	117	71 - 129	
Methylene Chloride	20.0	22.7	ug/L	114	79 - 123	
Styrene	20.0	20.2	ug/L	101	80 - 127	

TestAmerica Buffalo

22.7

20.4

20.6

ug/L

ug/L

ug/L

113

102

103

80 - 126

80 - 126

79 - 126

20.0

20.0

20.0

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCS 490-474935/3

Matrix: Water

Analysis Batch: 474935

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
trans-1,3-Dichloropropene	20.0	19.9		ug/L		100	63 - 134	
Trichloroethene	20.0	23.4		ug/L		117	80 - 123	
Trichlorofluoromethane	20.0	26.1	*	ug/L		130	65 - 124	
Vinyl chloride	20.0	20.8		ug/L		104	68 - 120	
Xylenes, Total	40.0	39.8		ug/L		100	80 - 132	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130
Dibromofluoromethane (Surr)	110		70 - 130
Toluene-d8 (Surr)	95		70 - 130

Lab Sample ID: LCSD 490-474935/4

Matrix: Water

Analysis Batch: 474935

Client Sample I	D: Lab	Contro	Sample Dup
		Prep Ty	pe: Total/NA

%Rec.

RPD

Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane		20.0	24.4		ug/L		122	78 - 135	1	15
1,1,2,2-Tetrachloroethane		20.0	17.9		ug/L		90	69 - 131	9	15
1,1,2-Trichloro-1,2,2-trifluoro	etha	20.0	26.4	*	ug/L		132	77 - 129	2	16
ne										
1,1,2-Trichloroethane		20.0	21.2		ug/L		106	80 - 124	1	13
1,1-Dichloroethane		20.0	21.6		ug/L		108	78 - 125	3	17
1,1-Dichloroethene		20.0	24.3		ug/L		122	79 - 124	5	20

Spike

LCSD LCSD

Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	24.4		ug/L		122	78 - 135	1	15
1,1,2,2-Tetrachloroethane	20.0	17.9		ug/L		90	69 - 131	9	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	26.4	*	ug/L		132	77 - 129	2	16
ne									
1,1,2-Trichloroethane	20.0	21.2		ug/L		106	80 - 124	1	13
1,1-Dichloroethane	20.0	21.6		ug/L		108	78 - 125	3	17
1,1-Dichloroethene	20.0	24.3		ug/L		122	79 - 124	5	20
1,2,4-Trichlorobenzene	20.0	17.9		ug/L		89	63 - 133	14	15
1,2-Dibromo-3-Chloropropane	20.0	18.4		ug/L		92	54 - 125	5	19
1,2-Dibromoethane	20.0	21.5		ug/L		108	80 - 129	0	13
1,2-Dichlorobenzene	20.0	21.8		ug/L		109	80 - 121	2	12
1,2-Dichloroethane	20.0	22.8		ug/L		114	77 - 121	1	13
1,2-Dichloropropane	20.0	20.8		ug/L		104	75 - 120	5	15
1,3-Dichlorobenzene	20.0	22.0		ug/L		110	80 - 122	2	13
1,4-Dichlorobenzene	20.0	22.6		ug/L		113	80 - 120	4	12
2-Butanone (MEK)	100	91.1		ug/L		91	62 - 133	3	19
2-Hexanone	100	80.8		ug/L		81	60 - 142	6	17
4-Methyl-2-pentanone (MIBK)	100	82.8		ug/L		83	60 - 137	3	21
Acetone	100	83.5		ug/L		83	54 - 145	8	23
Benzene	20.0	21.2		ug/L		106	80 - 121	0	12
Bromodichloromethane	20.0	22.9		ug/L		114	75 - 129	0	14
Bromoform	20.0	21.8		ug/L		109	46 - 145	0	14
Bromomethane	20.0	23.2		ug/L		116	41 - 150	3	19
Carbon disulfide	20.0	22.0		ug/L		110	77 - 126	0	16
Carbon tetrachloride	20.0	26.0		ug/L		130	64 - 147	2	16
Chlorobenzene	20.0	22.2		ug/L		111	80 - 120	2	12
Chloroethane	20.0	23.3		ug/L		117	72 - 120	9	15
Chloroform	20.0	23.0		ug/L		115	73 - 129	4	14
Chloromethane	20.0	19.0		ug/L		95	12 - 150	4	20
cis-1,2-Dichloroethene	20.0	21.9		ug/L		109	76 - 125	2	15
cis-1,3-Dichloropropene	20.0	20.5		ug/L		102	74 - 140	1	15

TestAmerica Buffalo

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCSD 490-474935/4

Matrix: Water

Analysis Batch: 474935

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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyclohexane	20.0	21.0		ug/L		105	73 - 122	3	16
Dibromochloromethane	20.0	21.9		ug/L		110	69 - 133	0	13
Dichlorodifluoromethane	20.0	30.6	*	ug/L		153	37 - 127	3	16
Ethylbenzene	20.0	20.4		ug/L		102	80 - 130	2	12
Isopropylbenzene	20.0	21.3		ug/L		107	80 - 141	3	13
Methyl acetate	40.0	40.9		ug/L		102	64 - 150	3	18
Methyl tert-butyl ether	20.0	21.3		ug/L		107	72 - 133	1	16
Methylcyclohexane	20.0	24.1		ug/L		121	71 - 129	3	17
Methylene Chloride	20.0	23.0		ug/L		115	79 - 123	1	15
Styrene	20.0	20.5		ug/L		102	80 - 127	1	12
Tetrachloroethene	20.0	23.2		ug/L		116	80 - 126	2	17
Toluene	20.0	21.0		ug/L		105	80 - 126	3	13
trans-1,2-Dichloroethene	20.0	20.9		ug/L		104	79 - 126	1	15
trans-1,3-Dichloropropene	20.0	20.4		ug/L		102	63 - 134	3	13
Trichloroethene	20.0	23.6		ug/L		118	80 - 123	1	14
Trichlorofluoromethane	20.0	28.2	*	ug/L		141	65 - 124	8	22
Vinyl chloride	20.0	21.3		ug/L		106	68 - 120	2	15
Xylenes, Total	40.0	41.1		ug/L		103	80 - 132	3	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	89		70 - 130
Dibromofluoromethane (Surr)	109		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: MB 490-475086/6

Matrix: Water

Analysis Batch: 475086

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

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	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 02:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 02:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 02:10	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 02:10	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 02:10	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 02:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 02:10	1
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 02:10	1
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 02:10	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/17 02:10	1
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 02:10	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 02:10	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 02:10	1
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 02:10	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 02:10	1
2-Hexanone	ND		10	1.3	ug/L			11/11/17 02:10	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 02:10	1
Acetone	ND		25	2.7	ug/L			11/11/17 02:10	1
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TestAmerica Buffalo

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TestAmerica Job ID: 480-127327-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: MB 490-475086/6 **Client Sample ID: Method Blank Matrix: Water**

Analysis Batch: 475086

Prep Type: Total/NA MB MB

	MR	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			11/11/17 02:10	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/11/17 02:10	1
Bromoform	ND		1.0	0.29	ug/L			11/11/17 02:10	1
Bromomethane	ND		1.0	0.35	ug/L			11/11/17 02:10	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/11/17 02:10	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/11/17 02:10	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/11/17 02:10	1
Chloroethane	ND		1.0	0.36	ug/L			11/11/17 02:10	1
Chloroform	ND		1.0	0.23	ug/L			11/11/17 02:10	1
Chloromethane	ND		1.0	0.36	ug/L			11/11/17 02:10	1
cis-1,2-Dichloroethene	ND		1.0	0.21	ug/L			11/11/17 02:10	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 02:10	1
Cyclohexane	ND		5.0	0.13	ug/L			11/11/17 02:10	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/11/17 02:10	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/11/17 02:10	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/11/17 02:10	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/11/17 02:10	1
Methyl acetate	ND		10	0.58	ug/L			11/11/17 02:10	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/11/17 02:10	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/11/17 02:10	1
Methylene Chloride	1.57	J	5.0	1.0	ug/L			11/11/17 02:10	1
Styrene	ND		1.0	0.28	ug/L			11/11/17 02:10	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/11/17 02:10	1
Toluene	ND		1.0	0.17	ug/L			11/11/17 02:10	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/11/17 02:10	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 02:10	1
Trichloroethene	ND		1.0	0.20	ug/L			11/11/17 02:10	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/17 02:10	1
Vinyl chloride	ND		1.0	0.18	ug/L			11/11/17 02:10	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/11/17 02:10	1

MB	MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107	70 - 130		/11/17 02:10	1
4-Bromofluorobenzene (Surr)	112	70 - 130	11.	/11/17 02:10	1
Dibromofluoromethane (Surr)	106	70 - 130	11.	/11/17 02:10	1
Toluene-d8 (Surr)	109	70 - 130	11.	/11/17 02:10	1

Lab Sample ID: LCS 490-475086/3

Matrix: Water

Analysis Batch: 475086

7 maryolo Batom 47 0000	Spike	LCS I	LCS		%Rec.	
Analyte	Added	Result (Qualifier Unit	D %Rec	Limits	
1,1,1-Trichloroethane	20.0	21.5	ug/L		78 - 135	
1,1,2,2-Tetrachloroethane	20.0	20.8	ug/L	104	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	21.7	ug/L	108	77 - 129	
ne						
1,1,2-Trichloroethane	20.0	20.3	ug/L	101	80 - 124	
1,1-Dichloroethane	20.0	19.7	ug/L	99	78 ₋ 125	

TestAmerica Buffalo

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCS 490-475086/3

Matrix: Water

Analysis Batch: 475086

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

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1-Dichloroethene	20.0	19.8		ug/L		99	79 - 124
1,2,4-Trichlorobenzene	20.0	17.9		ug/L		90	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	19.2		ug/L		96	54 - 125
1,2-Dibromoethane	20.0	20.0		ug/L		100	80 - 129
1,2-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 121
1,2-Dichloroethane	20.0	21.5		ug/L		108	77 - 121
1,2-Dichloropropane	20.0	19.1		ug/L		96	75 - 120
1,3-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 122
1,4-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120
2-Butanone (MEK)	100	93.1		ug/L		93	62 - 133
2-Hexanone	100	99.7		ug/L		100	60 - 142
4-Methyl-2-pentanone (MIBK)	100	110		ug/L		110	60 - 137
Acetone	100	111		ug/L		111	54 - 145
Benzene	20.0	19.2		ug/L		96	80 - 121
Bromodichloromethane	20.0	20.2		ug/L		101	75 - 129
Bromoform	20.0	18.0		ug/L		90	46 - 145
Bromomethane	20.0	16.9		ug/L		85	41 - 150
Carbon disulfide	20.0	18.2		ug/L		91	77 - 126
Carbon tetrachloride	20.0	21.6		ug/L		108	64 - 147
Chlorobenzene	20.0	19.8		ug/L		99	80 - 120
Chloroethane	20.0	19.4		ug/L		97	72 - 120
Chloroform	20.0	20.6		ug/L		103	73 - 129
Chloromethane	20.0	20.4		ug/L		102	12 - 150
cis-1,2-Dichloroethene	20.0	19.3		ug/L		96	76 - 125
cis-1,3-Dichloropropene	20.0	20.1		ug/L		101	74 - 140
Cyclohexane	20.0	19.0		ug/L		95	73 - 122
Dibromochloromethane	20.0	21.0		ug/L		105	69 - 133
Dichlorodifluoromethane	20.0	24.4		ug/L		122	37 - 127
Ethylbenzene	20.0	19.9		ug/L		99	80 - 130
Isopropylbenzene	20.0	18.5		ug/L		93	80 - 141
Methyl acetate	40.0	40.9		ug/L		102	64 - 150
Methyl tert-butyl ether	20.0	18.2		ug/L		91	72 - 133
Methylcyclohexane	20.0	19.0		ug/L		95	71 - 129
Methylene Chloride	20.0	19.8		ug/L		99	79 - 123
Styrene	20.0	18.1		ug/L		91	80 - 127
Tetrachloroethene	20.0	20.1		ug/L		100	80 - 126
Toluene	20.0	21.2		ug/L		106	80 - 126
trans-1,2-Dichloroethene	20.0	20.0		ug/L		100	79 - 126
trans-1,3-Dichloropropene	20.0	19.0		ug/L		95	63 - 134
Trichloroethene	20.0	19.7		ug/L		98	80 - 123
Trichlorofluoromethane	20.0	21.4		ug/L		107	65 - 124
Vinyl chloride	20.0	19.1		ug/L		96	68 - 120
Xylenes, Total	40.0	37.5		ug/L		94	80 - 132

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
4-Bromofluorobenzene (Surr)	110		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCS 490-475086/3

Lab Sample ID: LCSD 490-475086/4

Matrix: Water

Matrix: Water

Bromodichloromethane

Styrene

Analysis Batch: 475086

Analysis Batch: 475086

LCS LCS

Surrogate %Recovery Qualifier Limits Toluene-d8 (Surr) 110 70 - 130 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	22.3		ug/L		112	78 - 135	4	15
1,1,2,2-Tetrachloroethane	20.0	21.6		ug/L		108	69 - 131	4	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.7		ug/L		114	77 - 129	5	16
ne									
1,1,2-Trichloroethane	20.0	20.7		ug/L		103	80 - 124	2	13
1,1-Dichloroethane	20.0	20.4		ug/L		102	78 - 125	4	17
1,1-Dichloroethene	20.0	20.6		ug/L		103	79 ₋ 124	4	20

1,1-Dichloroethene 20.0 20.6 103 79 - 124 ug/L 97 63 - 133 1,2,4-Trichlorobenzene 20.0 19.4 ug/L 8 1,2-Dibromo-3-Chloropropane 20.0 18 9 ug/L 95 54 - 125 2 20.0 20.4 ug/L 102 80 - 129 2 1,2-Dibromoethane 80 - 121 1,2-Dichlorobenzene 20.0 21.3 ug/L 106 5 1,2-Dichloroethane 20.0 22.1 ug/L 110 77 - 121

20.0 19.4 97 ug/L 75 - 1202 1,2-Dichloropropane 1,3-Dichlorobenzene 20.0 20.8 ug/L 104 80 - 1225 20.0 20.9 105 1,4-Dichlorobenzene ug/L 80 - 1203 2-Butanone (MEK) 100 97.6 ug/L 98 62 - 133 5 2-Hexanone 100 105 ug/L 105 60 - 142 5 4-Methyl-2-pentanone (MIBK) 100 113 ug/L 113 60 - 1373 Acetone 100 119 ug/L 119 54 - 145 6 20.0 19.8 99 80 - 121 Benzene ug/L

20.8

ug/L

ug/L

104

93

80 - 127

75 - 129

20.0

20.0 18.9 94 **Bromoform** ug/L 46 - 145 5 14 Bromomethane 20.0 17.8 ug/L 89 41 - 150 19 Carbon disulfide 20.0 18.8 94 77 - 126 16 ug/L 3 Carbon tetrachloride 20.0 22.4 ug/L 112 64 - 147 Chlorobenzene 20.0 20.5 ug/L 102 80 - 120 3 12 Chloroethane 20.0 20.5 ug/L 102 72 - 120 5 15 Chloroform 20.0 21.0 105 73 - 129 2 14 ug/L Chloromethane 20.0 21.6 ug/L 108 12 - 1506 20 ug/L cis-1.2-Dichloroethene 20.0 20.3 101 76 - 125 5 15 cis-1,3-Dichloropropene 20.0 20.8 ug/L 104 74 - 140 3 15

20.0 20.0 100 73 - 122 16 Cyclohexane ug/L Dibromochloromethane 20.0 21.6 108 69 - 133 13 ug/L 3 20.0 127 37 - 127 Dichlorodifluoromethane 25.4 ug/L ug/L Ethylbenzene 20.0 20.6 103 80 - 13012 Isopropylbenzene 20.0 ug/L 97 80 - 141 13 19.4 40.0 100 Methyl acetate 40 2 ug/L 64 - 15018 Methyl tert-butyl ether 20.0 18.9 ug/L 95 72 - 133 16 ug/L Methylcyclohexane 20.0 20.4 102 7 17 $71_{-}129$ Methylene Chloride 20.0 20.4 ug/L 102 79 - 123 3 15

20.0

TestAmerica Buffalo

18.6

15

19

13

12

13

15

13

12

19

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23

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16

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCSD 490-475086/4

Matrix: Water

Analysis Batch: 475086

Spike	LCSD	LCSD				%Rec.		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
20.0	21.0		ug/L		105	80 - 126	5	17
20.0	21.8		ug/L		109	80 - 126	3	13
20.0	20.9		ug/L		105	79 - 126	5	15
20.0	20.0		ug/L		100	63 - 134	5	13
20.0	20.5		ug/L		103	80 - 123	4	14
20.0	22.1		ug/L		110	65 - 124	3	22
20.0	19.9		ug/L		99	68 - 120	4	15
40.0	39.2		ug/L		98	80 - 132	4	11
	Added 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.	Added Result 20.0 21.0 20.0 21.8 20.0 20.9 20.0 20.0 20.0 20.5 20.0 22.1 20.0 19.9	Added Result Qualifier 20.0 21.0 20.0 21.8 20.0 20.9 20.0 20.0 20.0 20.5 20.0 22.1 20.0 19.9	Added Result 20.0 Qualifier 21.0 Unit ug/L ug/L ug/L ug/L 20.0 21.8 ug/L ug/L 20.0 20.9 ug/L ug/L 20.0 20.0 ug/L ug/L 20.0 20.5 ug/L ug/L 20.0 22.1 ug/L ug/L 20.0 19.9 ug/L	Added Result Qualifier Unit D 20.0 21.0 ug/L ug/L 20.0 21.8 ug/L ug/L 20.0 20.9 ug/L ug/L 20.0 20.0 ug/L ug/L 20.0 22.1 ug/L 20.0 19.9 ug/L	Added Result 20.0 Qualifier 20.0 Unit ug/L D 105 %Rec 105 20.0 21.0 ug/L 105 20.0 21.8 ug/L 109 20.0 20.9 ug/L 105 20.0 20.0 ug/L 100 20.0 20.5 ug/L 103 20.0 22.1 ug/L 110 20.0 19.9 ug/L 99	Added Result Qualifier Unit D %Rec Limits 20.0 21.0 ug/L 105 80 - 126 20.0 21.8 ug/L 109 80 - 126 20.0 20.9 ug/L 105 79 - 126 20.0 20.0 ug/L 100 63 - 134 20.0 20.5 ug/L 103 80 - 123 20.0 22.1 ug/L 110 65 - 124 20.0 19.9 ug/L 99 68 - 120	Added Result 20.0 Qualifier 21.0 Unit ug/L D %Rec 20.0 Limits 80-126 RPD 25.0 20.0 21.8 ug/L 105 80-126 3 20.0 20.9 ug/L 105 79-126 5 20.0 20.0 ug/L 100 63-134 5 20.0 20.5 ug/L 103 80-123 4 20.0 22.1 ug/L 110 65-124 3 20.0 19.9 ug/L 99 68-120 4

LCSD LCSD

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

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	111		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	109		70 - 130

Lab Sample ID: MB 490-475225/6

Matrix: Water

Chloromethane

Analysis Batch: 475225

Client S	Sample	ID: Me	thod Blank	
	_	_		

Prep Type: Total/NA

1

17

Analysis Batch: 475225	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 17:26	
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			11/11/17 17:26	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15	ug/L			11/11/17 17:26	
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			11/11/17 17:26	
1,1-Dichloroethane	ND		1.0	0.24	ug/L			11/11/17 17:26	
1,1-Dichloroethene	ND		1.0	0.25	ug/L			11/11/17 17:26	
1,2,4-Trichlorobenzene	ND		1.0	0.20	ug/L			11/11/17 17:26	
1,2-Dibromo-3-Chloropropane	ND		10	0.94	ug/L			11/11/17 17:26	
1,2-Dibromoethane	ND		1.0	0.21	ug/L			11/11/17 17:26	
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/17 17:26	
1,2-Dichloroethane	ND		1.0	0.20	ug/L			11/11/17 17:26	
1,2-Dichloropropane	ND		1.0	0.25	ug/L			11/11/17 17:26	
1,3-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/17 17:26	
1,4-Dichlorobenzene	ND		1.0	0.17	ug/L			11/11/17 17:26	
2-Butanone (MEK)	ND		50	2.6	ug/L			11/11/17 17:26	
2-Hexanone	ND		10	1.3	ug/L			11/11/17 17:26	
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/11/17 17:26	
Acetone	ND		25	2.7	ug/L			11/11/17 17:26	
Benzene	ND		1.0	0.20	ug/L			11/11/17 17:26	
Bromodichloromethane	ND		1.0	0.17	ug/L			11/11/17 17:26	
Bromoform	ND		1.0	0.29	ug/L			11/11/17 17:26	
Bromomethane	ND		1.0	0.35	ug/L			11/11/17 17:26	
Carbon disulfide	ND		1.0	0.22	ug/L			11/11/17 17:26	
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/11/17 17:26	
Chlorobenzene	ND		1.0	0.18	ug/L			11/11/17 17:26	
Chloroethane	ND		1.0	0.36	ug/L			11/11/17 17:26	
Chloroform	ND		1.0	0.23	ug/L			11/11/17 17:26	

TestAmerica Buffalo

11/11/17 17:26

1.0

0.36 ug/L

ND

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: MB 490-475225/6

Matrix: Water

Analysis Batch: 475225

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.21	ug/L			11/11/17 17:26	1
cis-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 17:26	1
Cyclohexane	ND		5.0	0.13	ug/L			11/11/17 17:26	1
Dibromochloromethane	ND		1.0	0.25	ug/L			11/11/17 17:26	1
Dichlorodifluoromethane	ND		1.0	0.17	ug/L			11/11/17 17:26	1
Ethylbenzene	ND		1.0	0.19	ug/L			11/11/17 17:26	1
Isopropylbenzene	ND		1.0	0.33	ug/L			11/11/17 17:26	1
Methyl acetate	ND		10	0.58	ug/L			11/11/17 17:26	1
Methyl tert-butyl ether	ND		1.0	0.17	ug/L			11/11/17 17:26	1
Methylcyclohexane	ND		5.0	0.090	ug/L			11/11/17 17:26	1
Methylene Chloride	ND		5.0	1.0	ug/L			11/11/17 17:26	1
Styrene	ND		1.0	0.28	ug/L			11/11/17 17:26	1
Tetrachloroethene	ND		1.0	0.14	ug/L			11/11/17 17:26	1
Toluene	ND		1.0	0.17	ug/L			11/11/17 17:26	1
trans-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/11/17 17:26	1
trans-1,3-Dichloropropene	ND		1.0	0.17	ug/L			11/11/17 17:26	1
Trichloroethene	ND		1.0	0.20	ug/L			11/11/17 17:26	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/17 17:26	1
Vinyl chloride	ND		1.0	0.18	ug/L			11/11/17 17:26	1
Xylenes, Total	ND		3.0	0.58	ug/L			11/11/17 17:26	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 92 70 - 130 11/11/17 17:26 4-Bromofluorobenzene (Surr) 98 70 - 130 11/11/17 17:26 Dibromofluoromethane (Surr) 70 - 130 105 11/11/17 17:26 Toluene-d8 (Surr) 100 70 - 130 11/11/17 17:26

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Analysis Batch: 475225

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

Analysis Batch: 4/5225							
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	20.0	23.7		ug/L		119	78 - 135
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		102	69 - 131
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	25.9	*	ug/L		130	77 - 129
ne							
1,1,2-Trichloroethane	20.0	22.0		ug/L		110	80 - 124
1,1-Dichloroethane	20.0	21.5		ug/L		108	78 - 125
1,1-Dichloroethene	20.0	22.3		ug/L		112	79 - 124
1,2,4-Trichlorobenzene	20.0	18.5		ug/L		92	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	19.2		ug/L		96	54 - 125
1,2-Dibromoethane	20.0	22.2		ug/L		111	80 - 129
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 - 121
1,2-Dichloroethane	20.0	22.7		ug/L		114	77 - 121
1,2-Dichloropropane	20.0	20.9		ug/L		105	75 - 120
1,3-Dichlorobenzene	20.0	23.0		ug/L		115	80 - 122
1,4-Dichlorobenzene	20.0	23.3		ug/L		116	80 - 120
2-Butanone (MEK)	100	88.0		ug/L		88	62 - 133

TestAmerica Buffalo

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TestAmerica Job ID: 480-127327-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCS 490-475225/3

Matrix: Water

Analysis Batch: 475225

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

	Spike	LCS	LCS		%Rec.	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
2-Hexanone	100	86.0	ug/L	86	60 - 142	
4-Methyl-2-pentanone (MIBK)	100	85.4	ug/L	85	60 - 137	
Acetone	100	87.4	ug/L	87	54 ₋ 145	
Benzene	20.0	20.6	ug/L	103	80 - 121	
Bromodichloromethane	20.0	23.1	ug/L	115	75 ₋ 129	
Bromoform	20.0	21.2	ug/L	106	46 - 145	
Bromomethane	20.0	21.4	ug/L	107	41 - 150	
Carbon disulfide	20.0	21.4	ug/L	107	77 - 126	
Carbon tetrachloride	20.0	25.5	ug/L	128	64 - 147	
Chlorobenzene	20.0	23.1	ug/L	115	80 - 120	
Chloroethane	20.0	20.7	ug/L	103	72 - 120	
Chloroform	20.0	23.4	ug/L	117	73 - 129	
Chloromethane	20.0	16.4	ug/L	82	12 - 150	
cis-1,2-Dichloroethene	20.0	21.8	ug/L	109	76 ₋ 125	
cis-1,3-Dichloropropene	20.0	21.4	ug/L	107	74 - 140	
Cyclohexane	20.0	19.7	ug/L	99	73 - 122	
Dibromochloromethane	20.0	22.2	ug/L	111	69 - 133	
Dichlorodifluoromethane	20.0	23.0	ug/L	115	37 - 127	
Ethylbenzene	20.0	20.3	ug/L	101	80 - 130	
Isopropylbenzene	20.0	19.1	ug/L	95	80 - 141	
Methyl acetate	40.0	39.5	ug/L	99	64 - 150	
Methyl tert-butyl ether	20.0	20.8	ug/L	104	72 - 133	
Methylcyclohexane	20.0	21.5	ug/L	108	71 - 129	
Methylene Chloride	20.0	21.7	ug/L	108	79 - 123	
Styrene	20.0	20.2	ug/L	101	80 - 127	
Tetrachloroethene	20.0	22.8	ug/L	114	80 - 126	
Toluene	20.0	20.8	ug/L	104	80 - 126	
trans-1,2-Dichloroethene	20.0	21.3	ug/L	107	79 - 126	
trans-1,3-Dichloropropene	20.0	20.6	ug/L	103	63 - 134	
Trichloroethene	20.0	23.9	ug/L	120	80 - 123	
Trichlorofluoromethane	20.0	24.8	ug/L	124	65 - 124	
Vinyl chloride	20.0	20.2	ug/L	101	68 - 120	
Xylenes, Total	40.0	39.9	ug/L	100	80 - 132	

LCS LCS Limits Surrogate %Recovery Qualifier 1,2-Dichloroethane-d4 (Surr) 88 70 - 130 4-Bromofluorobenzene (Surr) 94 70 - 130 Dibromofluoromethane (Surr) 107 70 - 130 Toluene-d8 (Surr) 99 70 - 130

Lab Sample ID: LCSD 490-475225/4

Matrix: Wate

Analysis Bat

ID: LCSD 490-475225/4	Client Sample ID: Lab Control Sample Dup
er	Prep Type: Total/NA
tch: 475225	

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	24.2		ug/L		121	78 - 135	2	15
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	69 - 131	2	15

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

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

Analysis Batch: 475225	Spike	LCSD	LCSD				%Rec.		RP
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	26.3	*	ug/L		132	77 - 129	2	16
ne						400			
1,1,2-Trichloroethane	20.0	21.8		ug/L		109	80 - 124	1	1:
1,1-Dichloroethane	20.0	21.9		ug/L		110	78 ₋ 125	2	17
1,1-Dichloroethene	20.0	23.7		ug/L		118	79 - 124	6	20
1,2,4-Trichlorobenzene	20.0	18.7		ug/L		94	63 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	19.5		ug/L		98	54 - 125	2	19
1,2-Dibromoethane	20.0	21.5		ug/L		108	80 - 129	3	13
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	80 - 121	0	12
1,2-Dichloroethane	20.0	23.2		ug/L		116	77 - 121	2	13
1,2-Dichloropropane	20.0	21.4		ug/L		107	75 - 120	2	15
1,3-Dichlorobenzene	20.0	23.1		ug/L		116	80 - 122	1	13
1,4-Dichlorobenzene	20.0	23.2		ug/L		116	80 - 120	0	12
2-Butanone (MEK)	100	95.9		ug/L		96	62 - 133	9	19
2-Hexanone	100	86.1		ug/L		86	60 - 142	0	17
4-Methyl-2-pentanone (MIBK)	100	87.1		ug/L		87	60 - 137	2	2
Acetone	100	90.2		ug/L		90	54 - 145	3	23
Benzene	20.0	21.0		ug/L		105	80 - 121	2	12
Bromodichloromethane	20.0	23.4		ug/L		117	75 - 129	1	14
Bromoform	20.0	21.2		ug/L		106	46 - 145	0	14
Bromomethane	20.0	22.0		ug/L		110	41 - 150	3	19
Carbon disulfide	20.0	21.8		ug/L		109	77 - 126	2	16
Carbon tetrachloride	20.0	25.4		ug/L		127	64 - 147	0	16
Chlorobenzene	20.0	22.3		ug/L		111	80 - 120	3	12
Chloroethane	20.0	21.7		ug/L		108	72 - 120	5	1
Chloroform	20.0	23.8		ug/L		119	73 - 129	2	14
Chloromethane	20.0	16.4		ug/L		82	12 - 150	0	20
cis-1,2-Dichloroethene	20.0	22.1		ug/L		111	76 - 125	1	1
cis-1,3-Dichloropropene	20.0	20.9		ug/L		104	74 - 140	2	1
Cyclohexane	20.0	19.9		ug/L		99	73 - 122	1	16
Dibromochloromethane	20.0	22.8		ug/L		114	69 - 133	3	13
Dichlorodifluoromethane	20.0	22.4		ug/L		112	37 - 127	2	16
Ethylbenzene	20.0	20.2		ug/L		101	80 - 130	0	12
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 141	1	13
Methyl acetate	40.0	40.4		ug/L		101	64 - 150	2	18
Methyl tert-butyl ether	20.0	21.4		ug/L		107	72 - 133	3	16
Methylcyclohexane	20.0	21.5		ug/L		107	71 - 129	0	17
Methylene Chloride	20.0	23.3		ug/L		116	79 - 123	7	1
Styrene	20.0	20.2		ug/L		101	80 - 127	0	12
Tetrachloroethene	20.0	22.5		ug/L		112	80 - 126	1	17
Toluene	20.0	20.8		ug/L		104	80 - 126	0	13
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	79 - 126	0	1
trans-1,3-Dichloropropene	20.0	20.7		ug/L		103	63 - 134	0	13
Trichloroethene	20.0	23.7		ug/L		118	80 - 123	1	14
Trichlorofluoromethane	20.0	24.5		ug/L		122	65 - 124	1	22
Vinyl chloride	20.0	20.4		ug/L		102	68 - 120	1	1
Xylenes, Total	40.0	39.5		ug/L		99	80 - 132	1	1.

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCSD 490-475225/4

Matrix: Water

Analysis Batch: 475225

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

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 475277

Lab Sample ID: MB 490-475277/6

Analyta		MB	RL	MDL	Unit	D	Dronorod	Anglyzod	Dil Fac
Analyte 1,1,1-Trichloroethane	ND	Qualifier		0.19	ug/L		Prepared	Analyzed 11/12/17 06:30	DII Fac
1,1,2,2-Tetrachloroethane	ND ND		1.0		ug/L ug/L			11/12/17 06:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND ND		1.0		_			11/12/17 06:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/12/17 06:30	י 1
* *					ug/L				
1,1-Dichloroethane	ND		1.0		ug/L			11/12/17 06:30	1
1,1-Dichloroethene	ND		1.0		ug/L			11/12/17 06:30	
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/12/17 06:30	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			11/12/17 06:30	1
1,2-Dibromoethane	ND		1.0		ug/L			11/12/17 06:30	
1,2-Dichlorobenzene	ND		1.0		ug/L			11/12/17 06:30	1
1,2-Dichloroethane	ND		1.0		ug/L			11/12/17 06:30	1
1,2-Dichloropropane	ND		1.0		ug/L			11/12/17 06:30	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/12/17 06:30	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/12/17 06:30	1
2-Butanone (MEK)	ND		50	2.6	ug/L			11/12/17 06:30	1
2-Hexanone	ND		10	1.3	ug/L			11/12/17 06:30	1
4-Methyl-2-pentanone (MIBK)	ND		10	0.81	ug/L			11/12/17 06:30	1
Acetone	ND		25	2.7	ug/L			11/12/17 06:30	1
Benzene	ND		1.0	0.20	ug/L			11/12/17 06:30	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/12/17 06:30	1
Bromoform	ND		1.0	0.29	ug/L			11/12/17 06:30	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/17 06:30	1
Carbon disulfide	ND		1.0	0.22	ug/L			11/12/17 06:30	1
Carbon tetrachloride	ND		1.0	0.18	ug/L			11/12/17 06:30	1
Chlorobenzene	ND		1.0	0.18	ug/L			11/12/17 06:30	1
Chloroethane	ND		1.0	0.36	ug/L			11/12/17 06:30	1
Chloroform	ND		1.0	0.23	ug/L			11/12/17 06:30	1
Chloromethane	ND		1.0	0.36	ug/L			11/12/17 06:30	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/12/17 06:30	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/12/17 06:30	1
Cyclohexane	ND		5.0		ug/L			11/12/17 06:30	1
Dibromochloromethane	ND		1.0		ug/L			11/12/17 06:30	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/12/17 06:30	1
Ethylbenzene	ND		1.0		ug/L			11/12/17 06:30	1
Isopropylbenzene	ND		1.0		ug/L			11/12/17 06:30	1
Methyl acetate	ND		10		ug/L			11/12/17 06:30	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/12/17 06:30	
Methylcyclohexane	ND		5.0	0.090				11/12/17 06:30	1

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3

4

6

8

4.6

13

15

10

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

Client: ARCADIS U.S. Inc

Analysis Batch: 475277

Matrix: Water

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: MB 490-475277/6

TestAmerica Job ID: 480-127327-1

Client Sample ID: Method Blank

Prep Type: Total/NA

MR MR							
Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND ND	5.0	1.0	ug/L			11/12/17 06:30	1
ND	1.0	0.28	ug/L			11/12/17 06:30	1
ND	1.0	0.14	ug/L			11/12/17 06:30	1
ND	1.0	0.17	ug/L			11/12/17 06:30	1
ND	1.0	0.23	ug/L			11/12/17 06:30	1
ND	1.0	0.17	ug/L			11/12/17 06:30	1
ND	1.0	0.20	ug/L			11/12/17 06:30	1
ND	1.0	0.21	ug/L			11/12/17 06:30	1
ND	1.0	0.18	ug/L			11/12/17 06:30	1
ND	3.0	0.58	ug/L			11/12/17 06:30	1
	Result Qualifier ND ND ND ND ND ND ND ND ND N	Result Qualifier RL ND 5.0 ND 1.0 ND 1.0	Result Qualifier RL MDL ND 5.0 1.0 ND 1.0 0.28 ND 1.0 0.14 ND 1.0 0.17 ND 1.0 0.23 ND 1.0 0.20 ND 1.0 0.20 ND 1.0 0.21 ND 1.0 0.18	Result Qualifier RL MDL Unit ND 5.0 1.0 ug/L ND 1.0 0.28 ug/L ND 1.0 0.14 ug/L ND 1.0 0.17 ug/L ND 1.0 0.23 ug/L ND 1.0 0.20 ug/L ND 1.0 0.21 ug/L ND 1.0 0.18 ug/L	Result Qualifier RL MDL Unit Ug/L	Result Qualifier RL MDL Unit D Prepared ND 5.0 1.0 ug/L ND 1.0 0.28 ug/L ND 1.0 0.14 ug/L ND 1.0 0.23 ug/L ND 1.0 0.21 ug/L ND 1.0 0.20 ug/L ND 1.0 0.21 ug/L ND 1.0 0.18 ug/L	Result Qualifier RL MDL Unit D Prepared Analyzed ND 5.0 1.0 ug/L 11/12/17 06:30 ND 1.0 0.28 ug/L 11/12/17 06:30 ND 1.0 0.17 ug/L 11/12/17 06:30 ND 1.0 0.23 ug/L 11/12/17 06:30 ND 1.0 0.17 ug/L 11/12/17 06:30 ND 1.0 0.20 ug/L 11/12/17 06:30 ND 1.0 0.21 ug/L 11/12/17 06:30 ND 1.0 0.21 ug/L 11/12/17 06:30 ND 1.0 0.21 ug/L 11/12/17 06:30 ND 1.0 0.21 ug/L 11/12/17 06:30

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		11/12/17 06:30	1
4-Bromofluorobenzene (Surr)	96		70 - 130		11/12/17 06:30	1
Dibromofluoromethane (Surr)	110		70 - 130		11/12/17 06:30	1
Toluene-d8 (Surr)	96		70 - 130		11/12/17 06:30	1
	1,2-Dichloroethane-d4 (Surr) 4-Bromofluorobenzene (Surr) Dibromofluoromethane (Surr)	Surrogate%Recovery1,2-Dichloroethane-d4 (Surr)994-Bromofluorobenzene (Surr)96Dibromofluoromethane (Surr)110	1,2-Dichloroethane-d4 (Surr) 99 4-Bromofluorobenzene (Surr) 96 Dibromofluoromethane (Surr) 110	Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 99 70 - 130 4-Bromofluorobenzene (Surr) 96 70 - 130 Dibromofluoromethane (Surr) 110 70 - 130	Surrogate %Recovery Qualifier Limits Prepared 1,2-Dichloroethane-d4 (Surr) 99 70 - 130 4-Bromofluorobenzene (Surr) 96 70 - 130 Dibromofluoromethane (Surr) 110 70 - 130	Surrogate %Recovery Qualifier Limits Prepared Analyzed 1,2-Dichloroethane-d4 (Surr) 99 70 - 130 11/12/17 06:30 4-Bromofluorobenzene (Surr) 96 70 - 130 11/12/17 06:30 Dibromofluoromethane (Surr) 110 70 - 130 11/12/17 06:30

Lab Sample ID: LCS 490-475277/3 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 475277	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	20.0	22.2		ug/L		111	78 - 135
1,1,2,2-Tetrachloroethane	20.0	18.3		ug/L		92	69 - 131
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	23.1		ug/L		115	77 - 129
ne							
1,1,2-Trichloroethane	20.0	19.9		ug/L		100	80 - 124
1,1-Dichloroethane	20.0	20.3		ug/L		101	78 - 125
1,1-Dichloroethene	20.0	21.4		ug/L		107	79 - 124
1,2,4-Trichlorobenzene	20.0	17.0		ug/L		85	63 - 133
1,2-Dibromo-3-Chloropropane	20.0	17.6		ug/L		88	54 - 125
1,2-Dibromoethane	20.0	20.4		ug/L		102	80 - 129
1,2-Dichlorobenzene	20.0	20.5		ug/L		102	80 - 121
1,2-Dichloroethane	20.0	22.0		ug/L		110	77 - 121
1,2-Dichloropropane	20.0	19.8		ug/L		99	75 - 120
1,3-Dichlorobenzene	20.0	20.9		ug/L		105	80 - 122
1,4-Dichlorobenzene	20.0	21.1		ug/L		106	80 - 120
2-Butanone (MEK)	100	96.1		ug/L		96	62 - 133
2-Hexanone	100	82.1		ug/L		82	60 - 142
4-Methyl-2-pentanone (MIBK)	100	83.3		ug/L		83	60 - 137
Acetone	100	89.1		ug/L		89	54 ₋ 145
Benzene	20.0	20.0		ug/L		100	80 - 121
Bromodichloromethane	20.0	22.1		ug/L		111	75 ₋ 129
Bromoform	20.0	20.2		ug/L		101	46 - 145
Bromomethane	20.0	21.8		ug/L		109	41 - 150
Carbon disulfide	20.0	19.8		ug/L		99	77 - 126
Carbon tetrachloride	20.0	23.2		ug/L		116	64 - 147
Chlorobenzene	20.0	21.3		ug/L		106	80 - 120

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCS 490-475277/3

Matrix: Water

Analysis Batch: 475277

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

Alialysis Batch. 4/32//	Spike	LCS LCS			%Rec.	
Analyte	Added	Result Qual	ifier Unit	D %Rec	Limits	
Chloroethane	20.0	21.0	ug/L	105	72 - 120	_
Chloroform	20.0	22.1	ug/L	111	73 - 129	
Chloromethane	20.0	16.7	ug/L	83	12 - 150	
cis-1,2-Dichloroethene	20.0	21.1	ug/L	106	76 - 125	
cis-1,3-Dichloropropene	20.0	19.0	ug/L	95	74 - 140	
Cyclohexane	20.0	18.3	ug/L	91	73 - 122	
Dibromochloromethane	20.0	20.6	ug/L	103	69 - 133	
Dichlorodifluoromethane	20.0	22.9	ug/L	114	37 - 127	
Ethylbenzene	20.0	19.5	ug/L	97	80 - 130	
Isopropylbenzene	20.0	19.0	ug/L	95	80 - 141	
Methyl acetate	40.0	38.7	ug/L	97	64 - 150	
Methyl tert-butyl ether	20.0	19.7	ug/L	98	72 - 133	
Methylcyclohexane	20.0	21.0	ug/L	105	71 - 129	
Methylene Chloride	20.0	22.1	ug/L	110	79 - 123	
Styrene	20.0	19.0	ug/L	95	80 - 127	
Tetrachloroethene	20.0	21.4	ug/L	107	80 - 126	
Toluene	20.0	19.6	ug/L	98	80 - 126	
trans-1,2-Dichloroethene	20.0	19.6	ug/L	98	79 - 126	
trans-1,3-Dichloropropene	20.0	18.9	ug/L	95	63 - 134	
Trichloroethene	20.0	22.8	ug/L	114	80 - 123	
Trichlorofluoromethane	20.0	26.1 *	ug/L	131	65 - 124	
Vinyl chloride	20.0	19.4	ug/L	97	68 - 120	
Xylenes, Total	40.0	37.8	ug/L	95	80 - 132	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 130
4-Bromofluorobenzene (Surr)	91		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Lab Sample ID: LCSD 490-475277/4

Matrix: Water

Analysis Batch: 475277

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

•	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	22.4		ug/L		112	78 - 135	1	15
1,1,2,2-Tetrachloroethane	20.0	16.8		ug/L		84	69 - 131	8	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.8		ug/L		114	77 - 129	1	16
ne									
1,1,2-Trichloroethane	20.0	19.9		ug/L		99	80 - 124	0	13
1,1-Dichloroethane	20.0	20.0		ug/L		100	78 - 125	1	17
1,1-Dichloroethene	20.0	21.1		ug/L		106	79 - 124	1	20
1,2,4-Trichlorobenzene	20.0	16.8		ug/L		84	63 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	17.8		ug/L		89	54 - 125	1	19
1,2-Dibromoethane	20.0	20.4		ug/L		102	80 - 129	0	13
1,2-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 121	1	12
1,2-Dichloroethane	20.0	21.5		ug/L		107	77 - 121	3	13
1,2-Dichloropropane	20.0	19.9		ug/L		100	75 - 120	1	15

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCSD 490-475277/4

Matrix: Water

Analysis Batch: 475277

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 4/52//	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	RPD	Limit
1,3-Dichlorobenzene	20.0	20.4	ug/L		102	80 - 122	3	13
1,4-Dichlorobenzene	20.0	20.7	ug/L		104	80 - 120	2	12
2-Butanone (MEK)	100	92.2	ug/L		92	62 - 133	4	19
2-Hexanone	100	83.1	ug/L		83	60 - 142	1	17
4-Methyl-2-pentanone (MIBK)	100	82.3	ug/L		82	60 - 137	1	21
Acetone	100	90.4	ug/L		90	54 - 145	1	23
Benzene	20.0	19.6	ug/L		98	80 - 121	2	12
Bromodichloromethane	20.0	22.1	ug/L		111	75 - 129	0	14
Bromoform	20.0	20.7	ug/L		103	46 - 145	2	14
Bromomethane	20.0	22.2	ug/L		111	41 - 150	2	19
Carbon disulfide	20.0	19.5	ug/L		98	77 - 126	1	16
Carbon tetrachloride	20.0	23.2	ug/L		116	64 - 147	0	16
Chlorobenzene	20.0	20.8	ug/L		104	80 - 120	2	12
Chloroethane	20.0	21.0	ug/L		105	72 - 120	0	15
Chloroform	20.0	21.9	ug/L		109	73 - 129	1	14
Chloromethane	20.0	16.1	ug/L		80	12 - 150	4	20
cis-1,2-Dichloroethene	20.0	20.3	ug/L		101	76 - 125	4	15
cis-1,3-Dichloropropene	20.0	18.5	ug/L		93	74 - 140	3	15
Cyclohexane	20.0	18.5	ug/L		92	73 - 122	1	16
Dibromochloromethane	20.0	20.5	ug/L		103	69 - 133	0	13
Dichlorodifluoromethane	20.0	22.4	ug/L		112	37 - 127	2	16
Ethylbenzene	20.0	19.1	ug/L		95	80 - 130	2	12
Isopropylbenzene	20.0	19.0	ug/L		95	80 - 141	0	13
Methyl acetate	40.0	37.8	ug/L		94	64 - 150	2	18
Methyl tert-butyl ether	20.0	19.9	ug/L		99	72 - 133	1	16
Methylcyclohexane	20.0	20.9	ug/L		104	71 - 129	1	17
Methylene Chloride	20.0	21.7	ug/L		108	79 - 123	2	15
Styrene	20.0	18.8	ug/L		94	80 - 127	1	12
Tetrachloroethene	20.0	21.1	ug/L		105	80 - 126	1	17
Toluene	20.0	19.5	ug/L		98	80 - 126	0	13
trans-1,2-Dichloroethene	20.0	19.2	ug/L		96	79 - 126	2	15
trans-1,3-Dichloropropene	20.0	18.7	ug/L		94	63 - 134	1	13
Trichloroethene	20.0	23.4	ug/L		117	80 - 123	3	14
Trichlorofluoromethane	20.0	26.0	_		130	65 - 124	0	22
Vinyl chloride	20.0	19.1	ug/L		96	68 - 120	1	15
Xylenes, Total	40.0	37.0	ug/L		93	80 - 132	2	11

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	91		70 - 130
Dibromofluoromethane (Surr)	109		70 - 130
Toluene-d8 (Surr)	100		70 - 130

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

ND

ND

Lab Sample ID: MB 490-475387/6

Matrix: Water

Acetone

Xylenes, Total

Analysis Batch: 475387

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

11/13/17 11:23

ype. Total/NA

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL (Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.19 ι	ug/L			11/13/17 11:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19 ι	ug/L			11/13/17 11:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.15 ι	ug/L			11/13/17 11:23	1
1,1,2-Trichloroethane	ND		1.0	0.19 ι	ug/L			11/13/17 11:23	1

 1,1,2-Trichloro-1,2,2-trifluoroethane
 ND
 1.0
 0.15 ug/L
 11/13/17 11:23

 1,1,2-Trichloroethane
 ND
 1.0
 0.19 ug/L
 11/13/17 11:23

 1,1-Dichloroethane
 ND
 1.0
 0.24 ug/L
 11/13/17 11:23

 1,1-Dichloroethene
 ND
 1.0
 0.25 ug/L
 11/13/17 11:23

 1,2,4-Trichlorobenzene
 ND
 1.0
 0.20 ug/L
 11/13/17 11:23

 1,2-Dibromo-3-Chloropropage
 ND
 10
 0.94 ug/L
 11/13/17 11:23

1,2-Dibromo-3-Chloropropane 0.94 ug/L 11/13/17 11:23 ND 10 1,2-Dibromoethane ND 1.0 0.21 ug/L 11/13/17 11:23 1.2-Dichlorobenzene ND 1.0 0.19 ug/L 11/13/17 11:23 ND 1.2-Dichloroethane 1.0 0.20 ug/L 11/13/17 11:23

1,2-Dichloropropane ND 1.0 0.25 ug/L 11/13/17 11:23 1,3-Dichlorobenzene ND 1.0 0.18 ug/L 11/13/17 11:23 1,4-Dichlorobenzene ND 1.0 0.17 ug/L 11/13/17 11:23 2-Butanone (MEK) ND 50 11/13/17 11:23 2.6 ug/L ND 10 2-Hexanone 1.3 ug/L 11/13/17 11:23 4-Methyl-2-pentanone (MIBK) ND 10 0.81 ug/L 11/13/17 11:23

25

2.7 ug/L

Benzene ND 1.0 0.20 ug/L 11/13/17 11:23 Bromodichloromethane ND 1.0 0.17 ug/L 11/13/17 11:23 Bromoform 1.0 0.29 ug/L ND 11/13/17 11:23 Bromomethane ND 1.0 0.35 ug/L 11/13/17 11:23 Carbon disulfide ND 1.0 0.22 ug/L 11/13/17 11:23 Carbon tetrachloride ND 1.0 0.18 ug/L 11/13/17 11:23 Chlorobenzene ND 1.0 0.18 ug/L 11/13/17 11:23

Chloroethane ND 1.0 0.36 ug/L 11/13/17 11:23 Chloroform ND 1.0 0.23 ug/L 11/13/17 11:23 Chloromethane ND 1.0 0.36 ug/L 11/13/17 11:23 cis-1,2-Dichloroethene ND 0.21 ug/L 1.0 11/13/17 11:23 cis-1,3-Dichloropropene ND 1.0 0.17 ug/L 11/13/17 11:23 ND Cyclohexane 5.0 0.13 ug/L 11/13/17 11:23 Dibromochloromethane ND 1.0 0.25 ug/L 11/13/17 11:23

Dichlorodifluoromethane ND 1.0 0.17 ug/L 11/13/17 11:23 Ethylbenzene ND 1.0 0.19 ug/L 11/13/17 11:23 ND Isopropylbenzene 1.0 0.33 ug/L 11/13/17 11:23 Methyl acetate ND 10 0.58 ug/L 11/13/17 11:23 ND Methyl tert-butyl ether 1.0 0.17 ug/L 11/13/17 11:23 Methylcyclohexane ND 5.0 0.090 ug/L 11/13/17 11:23

Methylene Chloride ND 5.0 1.0 ug/L 11/13/17 11:23 Styrene ND 1.0 0.28 ug/L 11/13/17 11:23 Tetrachloroethene ND 1.0 0.14 ug/L 11/13/17 11:23 Toluene ND 1.0 0.17 ug/L 11/13/17 11:23

trans-1,2-Dichloroethene ND 1.0 0.23 ug/L 11/13/17 11:23 trans-1,3-Dichloropropene ND 1.0 0.17 ug/L 11/13/17 11:23 Trichloroethene ND 1.0 0.20 ug/L 11/13/17 11:23 ND Trichlorofluoromethane 1.0 0.21 ug/L 11/13/17 11:23 Vinyl chloride ND 1.0 0.18 ug/L 11/13/17 11:23

TestAmerica Buffalo

11/13/17 11:23

3.0

0.58 ug/L

13

14

16

1/

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

	MB MB			
Surrogate	%Recovery Qualifi	er Limits	Prepared Analy.	zed Dil Fac
1,2-Dichloroethane-d4 (Surr)	102	70 - 130	11/13/17	11:23
4-Bromofluorobenzene (Surr)	103	70 - 130	11/13/17	11:23 1
Dibromofluoromethane (Surr)	115	70 - 130	11/13/17	11:23 1
Toluene-d8 (Surr)	98	70 - 130	11/13/17	11:23 1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Water Analysis Batch: 475387

trans-1,2-Dichloroethene

Lab Sample ID: LCS 490-475387/3

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	21.5		ug/L		107	78 - 135	
1,1,2,2-Tetrachloroethane	20.0	18.4		ug/L		92	69 - 131	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.3		ug/L		112	77 - 129	
1,1,2-Trichloroethane	20.0	19.4		ug/L		97	80 - 124	
1,1-Dichloroethane	20.0	20.2		ug/L		101	78 ₋ 125	
1,1-Dichloroethene	20.0	21.6		ug/L		108	79 - 124	
1,2,4-Trichlorobenzene	20.0	16.8		ug/L		84	63 - 133	
1,2-Dibromo-3-Chloropropane	20.0	18.1		ug/L		90	54 - 125	
1,2-Dibromoethane	20.0	20.0		ug/L		100	80 - 129	
1,2-Dichlorobenzene	20.0	20.3		ug/L		102	80 - 121	
1,2-Dichloroethane	20.0	20.1		ug/L		101	77 - 121	
1,2-Dichloropropane	20.0	19.4		ug/L		97	75 - 120	
1,3-Dichlorobenzene	20.0	20.1		ug/L		101	80 - 122	
1,4-Dichlorobenzene	20.0	20.5		ug/L		103	80 - 120	
2-Butanone (MEK)	100	95.4		ug/L		95	62 - 133	
2-Hexanone	100	81.1		ug/L		81	60 - 142	
4-Methyl-2-pentanone (MIBK)	100	83.8		ug/L		84	60 - 137	
Acetone	100	95.6		ug/L		96	54 ₋ 145	
Benzene	20.0	19.6		ug/L		98	80 - 121	
Bromodichloromethane	20.0	21.6		ug/L		108	75 - 129	
Bromoform	20.0	20.4		ug/L		102	46 - 145	
Bromomethane	20.0	20.5		ug/L		102	41 - 150	
Carbon disulfide	20.0	20.5		ug/L		102	77 - 126	
Carbon tetrachloride	20.0	23.4		ug/L		117	64 - 147	
Chlorobenzene	20.0	20.3		ug/L		101	80 - 120	
Chloroethane	20.0	20.0		ug/L		100	72 - 120	
Chloroform	20.0	22.1		ug/L		111	73 - 129	
Chloromethane	20.0	15.3		ug/L		76	12 - 150	
cis-1,2-Dichloroethene	20.0	20.2		ug/L		101	76 - 125	
cis-1,3-Dichloropropene	20.0	19.1		ug/L		95	74 - 140	
Cyclohexane	20.0	18.8		ug/L		94	73 - 122	
Dibromochloromethane	20.0	20.9		ug/L		105	69 - 133	
Dichlorodifluoromethane	20.0	19.8		ug/L		99	37 - 127	
Ethylbenzene	20.0	19.0		ug/L		95	80 - 130	
Isopropylbenzene	20.0	18.6		ug/L		93	80 - 141	
Methyl acetate	40.0	39.8		ug/L		100	64 - 150	
Methyl tert-butyl ether	20.0	20.1		ug/L		100	72 - 133	
Methylcyclohexane	20.0	21.3		ug/L		107	71 - 129	
Methylene Chloride	20.0	20.5		ug/L		102	79 - 123	
Styrene	20.0	18.8		ug/L		94	80 - 127	
Tetrachloroethene	20.0	21.2		ug/L		106	80 - 126	
Toluene	20.0	19.2		ug/L		96	80 - 126	
trans 1.2 Diablaraathana	20.0	10.0				00	70 100	

TestAmerica Buffalo

79 - 126

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19.8

ug/L

20.0

2

3

4

6

8

ع 10

12

1 /

40

11/

Spike

Added

20.0

20.0

20.0

20.0

40.0

LCS LCS

19.2

22.7

18.2

37.4

25.1 *

ug/L

ug/L

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

Lab Sample ID: LCS 490-475387/3

Matrix: Water

Trichloroethene

Vinyl chloride

Xylenes, Total

Analyte

Analysis Batch: 475387

trans-1,3-Dichloropropene

Trichlorofluoromethane

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

68 - 120

80 - 132

%Rec. Result Qualifier Unit D %Rec Limits ug/L 96 63 - 134 ug/L 114 80 - 123 ug/L 126 65 - 124

91

94

LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 98 70 - 130 4-Bromofluorobenzene (Surr) 88 70 - 130 Dibromofluoromethane (Surr) 108 70 - 130 70 - 130 Toluene-d8 (Surr) 97

Lab Sample ID: LCSD 490-475387/4

Matrix: Water

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

Analysis Batch: 475387

Analysis Batch. 475507	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	20.0	21.6		ug/L		108	78 - 135		15
1,1,2,2-Tetrachloroethane	20.0	17.7		ug/L		89	69 - 131	3	15
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	22.3		ug/L		112	77 - 129	0	16
ne									
1,1,2-Trichloroethane	20.0	20.7		ug/L		104	80 - 124	6	13
1,1-Dichloroethane	20.0	20.3		ug/L		101	78 - 125	0	17
1,1-Dichloroethene	20.0	21.5		ug/L		108	79 - 124	0	20
1,2,4-Trichlorobenzene	20.0	17.3		ug/L		87	63 - 133	3	15
1,2-Dibromo-3-Chloropropane	20.0	18.1		ug/L		90	54 - 125	0	19
1,2-Dibromoethane	20.0	20.5		ug/L		102	80 - 129	2	13
1,2-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 121	3	12
1,2-Dichloroethane	20.0	21.9		ug/L		110	77 - 121	9	13
1,2-Dichloropropane	20.0	19.4		ug/L		97	75 - 120	0	15
1,3-Dichlorobenzene	20.0	20.5		ug/L		102	80 - 122	2	13
1,4-Dichlorobenzene	20.0	20.9		ug/L		104	80 - 120	2	12
2-Butanone (MEK)	100	92.4		ug/L		92	62 - 133	3	19
2-Hexanone	100	82.1		ug/L		82	60 - 142	1	17
4-Methyl-2-pentanone (MIBK)	100	82.2		ug/L		82	60 - 137	2	21
Acetone	100	87.7		ug/L		88	54 - 145	9	23
Benzene	20.0	19.5		ug/L		98	80 - 121	1	12
Bromodichloromethane	20.0	21.8		ug/L		109	75 - 129	1	14
Bromoform	20.0	20.2		ug/L		101	46 - 145	1	14
Bromomethane	20.0	22.5		ug/L		113	41 - 150	10	19
Carbon disulfide	20.0	20.5		ug/L		102	77 - 126	0	16
Carbon tetrachloride	20.0	23.0		ug/L		115	64 - 147	2	16
Chlorobenzene	20.0	20.5		ug/L		103	80 - 120	1	12
Chloroethane	20.0	20.7		ug/L		104	72 - 120	4	15
Chloroform	20.0	21.9		ug/L		110	73 - 129	1	14
Chloromethane	20.0	15.7		ug/L		78	12 - 150	2	20
cis-1,2-Dichloroethene	20.0	20.2		ug/L		101	76 - 125	0	15
cis-1,3-Dichloropropene	20.0	19.1		ug/L		95	74 - 140	0	15

TestAmerica Buffalo

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Spike

Added

20.0

20.0

20.0

20.0

20.0

40.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

40.0

19.2

20.8

21 2

19.0

18.9

38.6

19.9

21.4

22.0

18.6

21.1

192

19.8

19.1

22.1

25.5

18.4

37.4

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

TestAmerica Job ID: 480-127327-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

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

Lab Sample ID: LCSD 490-475387/4

Matrix: Water

Analyte

Cyclohexane

Ethylbenzene

Methyl acetate

Styrene

Toluene

Isopropylbenzene

Methyl tert-butyl ether Methylcyclohexane

Methylene Chloride

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

trans-1,2-Dichloroethene

trans-1,3-Dichloropropene

Trichlorofluoromethane

Dibromochloromethane

Dichlorodifluoromethane

Analysis Batch: 475387

Client Sample ID: Lab	Control \$	Sample	Dup
	Prep Tvr	e: Tota	I/NA

RPD LCSD LCSD %Rec. RPD Result Qualifier Unit %Rec Limits Limit 73 - 122 96 ug/L 2 16 ug/L 104 69 - 133 0 13 106 37 - 127 16 ug/L ug/L 95 80 - 130 12 ug/L 95 80 - 1412 13 ug/L 97 64 - 150 3 18 ug/L 100 72 - 133 16 ug/L 107 71 - 1290 17 ug/L 110 79 - 1237 15 80 - 127 ug/L 93 12 ug/L 105 80 - 126 17 96 80 - 126 13 ug/L n

99

96

110

127

92

94

79 - 126

63 - 134

80 - 123

65 124

68 - 120

80 - 132

LCSD LCSD %Recovery Qualifier Surrogate Limits 1,2-Dichloroethane-d4 (Surr) 98 70 - 130 4-Bromofluorobenzene (Surr) 91 70 - 130Dibromofluoromethane (Surr) 110 70 - 130 Toluene-d8 (Surr) 96 70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances

MB MB

 $\overline{\mathsf{ND}}$

ND

ND

ND

NΠ

ND

ND

ND

ND

ND

ND

ND

ND

ND

0.284

Result Qualifier

Lab Sample ID: MB 320-195170/1-A

Matrix: Water

Analyte

Analysis Batch: 195549

Perfluorobutanoic acid (PFBA)

Perfluoropentanoic acid (PFPeA)

Perfluorohexanoic acid (PFHxA)

Perfluoroheptanoic acid (PFHpA)

Perfluorooctanoic acid (PFOA)

Perfluorononanoic acid (PFNA)

Perfluorodecanoic acid (PFDA)

Perfluoroundecanoic acid (PFUnA)

Perfluorododecanoic acid (PFDoA)

Perfluorotridecanoic Acid (PFTriA)

Perfluorotetradecanoic acid (PFTeA)

Perfluorobutanesulfonic acid (PFBS)

Perfluoroheptanesulfonic Acid

Perfluorohexanesulfonic acid (PFHxS)

Perfluorooctanesulfonic acid (PFOS)

Client Sample ID: Method Blank Prep Type: Total/NA **Prep Batch: 195170**

Analyzed

ng/L 11/16/17 14:10 11/18/17 05:48 ng/L 11/16/17 14:10 11/18/17 05:48 11/16/17 14:10 11/18/17 05:48 ng/L 11/16/17 14:10 11/18/17 05:48 ng/L ng/L 11/16/17 14:10 11/18/17 05:48 11/16/17 14:10 11/18/17 05:48 ng/L 11/16/17 14:10 11/18/17 05:48 ng/L 11/16/17 14:10 11/18/17 05:48 ng/L ng/L 11/16/17 14:10 11/18/17 05:48

11/16/17 14:10 11/18/17 05:48

11/16/17 14:10 11/18/17 05:48

Prepared

0.20 ng/L 11/16/17 14:10 11/18/17 05:48 0.17 ng/L 11/16/17 14:10 11/18/17 05:48 11/16/17 14:10 11/18/17 05:48 0.19 ng/L 0.54 ng/L 11/16/17 14:10 11/18/17 05:48

TestAmerica Buffalo

RL

2.0

2.0

2.0

2.0

20

2.0

2.0

2.0

2.0

2.0

2.0

2.0

2.0

2.0

20

MDL

0.35

0.49

0.58

0.25

0.85

0.27

0.31

1.1

1.3 ng/L

ng/L

0.29

0.55

Unit

15

13

14 22

15

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Dil Fac

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: MB 320-195170/1-A

TestAmerica Job ID: 480-127327-1

Client Sample ID: Method Blank

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

Matrix: Water Prep Type: Total/NA Analysis Batch: 195549 **Prep Batch: 195170** MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared Perfluorodecanesulfonic acid (PFDS) 2.0 0.32 na/L <u>11/16/17 14:10</u> <u>11/18/17 05:48</u> $\overline{\mathsf{ND}}$

r dinadioaccanocanomic acia (i i Be)	.,,			0.02 119/2	11/10/11 11:10	1 17 107 17 00.10	•
Perfluorooctane Sulfonamide (FOSA)	0.357	J	2.0	0.35 ng/L	11/16/17 14:10	11/18/17 05:48	1
	MB	MB					
Isotope Dilution	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
13C8 FOSA	90		25 - 150		11/16/17 14:10	11/18/17 05:48	
13C4 PFBA	99		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C2 PFHxA	99		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C4 PFOA	86		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C5 PFNA	103		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C2 PFDA	107		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C2 PFUnA	100		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C2 PFDoA	91		25 - 150		11/16/17 14:10	11/18/17 05:48	1
1802 PFHxS	100		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C4 PFOS	103		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C4-PFHpA	101		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C5 PFPeA	104		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C3-PFBS	102		25 - 150		11/16/17 14:10	11/18/17 05:48	1
13C2-PFTeDA	88		25 - 150		11/16/17 14:10	11/18/17 05:48	1

Lab Sample ID: LCS 320-195170/2-A

Matrix: Water

Analysis Batch: 195549

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

Prep Batch: 195170

Analyte Added Result Perfluorobutanoic acid (PFBA) 40.0 41.0 ng/L 102 78 - 138 Perfluoropentanoic acid (PFPA) 40.0 39.1 ng/L 98 66 - 136 Perfluorohexanoic acid (PFHxA) 40.0 39.7 ng/L 99 76 - 136 Perfluoroheptanoic acid (PFHpA) 40.0 42.5 ng/L 106 78 - 138 Perfluorocotanoic acid (PFOA) 40.0 43.2 ng/L 108 70 - 130 Perfluorononanoic acid (PFNA) 40.0 39.1 ng/L 98 77 - 137 Perfluorodecanoic acid (PFDA) 40.0 39.1 ng/L 98 68 - 128 (PFUnA) 40.0 39.4 ng/L 98 68 - 128 (PFUnA) 40.0 39.4 ng/L 98 68 - 128 (PFDOA) 40.0 36.8 ng/L 92 56 - 163 (PFTiA) 9crfluorotridecanoic Acid 40.0 37.9 ng/L 95 63 - 123 (PFTEA) 9crfluorobutanesulfonic	
Perfluoropentanoic acid (PFPeA) 40.0 39.1 ng/L 98 66 - 136 Perfluorohexanoic acid (PFHxA) 40.0 39.7 ng/L 99 76 - 136 Perfluorohexanoic acid (PFHpA) 40.0 42.5 ng/L 106 78 - 138 Perfluorooctanoic acid (PFOA) 40.0 43.2 ng/L 108 70 - 130 Perfluorononanoic acid (PFNA) 40.0 39.1 ng/L 98 77 - 137 Perfluorodecanoic acid (PFDA) 40.0 41.4 ng/L 103 74 - 134 Perfluoroundecanoic acid (PFUnA) 40.0 39.4 ng/L 98 68 - 128 (PFUnA) 98 68 - 128 68 - 128 68 - 128 68 - 128 (PFDoA) 40.0 36.8 ng/L 92 56 - 163 (PFTriA) 92 56 - 163 63 - 123 63 - 123 (PFTeA) 40.0 37.9 ng/L 95 63 - 123	
Perfluorohexanoic acid (PFHxA) 40.0 39.7 ng/L 99 76 - 136 Perfluorohexanoic acid (PFHpA) 40.0 42.5 ng/L 106 78 - 138 Perfluorooctanoic acid (PFOA) 40.0 43.2 ng/L 108 70 - 130 Perfluorononanoic acid (PFNA) 40.0 39.1 ng/L 98 77 - 137 Perfluorodecanoic acid (PFDA) 40.0 41.4 ng/L 103 74 - 134 Perfluoroundecanoic acid (PFUnA) 40.0 39.4 ng/L 98 68 - 128 (PFUnA) 98 68 - 128 110 72 - 132 72 - 132 (PFDoA) 40.0 36.8 ng/L 92 56 - 163 (PFTriA) 92 56 - 163 123 123 (PFTeA) 40.0 37.9 ng/L 95 63 - 123	
Perfluoroheptanoic acid (PFHpA) 40.0 42.5 ng/L 106 78 - 138 Perfluorooctanoic acid (PFOA) 40.0 43.2 ng/L 108 70 - 130 Perfluorononanoic acid (PFNA) 40.0 39.1 ng/L 98 77 - 137 Perfluorodecanoic acid (PFDA) 40.0 41.4 ng/L 103 74 - 134 Perfluoroundecanoic acid (PFUnA) 40.0 39.4 ng/L 98 68 - 128 (PFUnA) 98 68 - 128 68 - 128 68 - 128 68 - 128 (PFDoA) 40.0 36.8 ng/L 92 56 - 163 (PFTriA) 92 56 - 163 63 - 123 (PFTeA) 40.0 37.9 ng/L 95 63 - 123	
Perfluorooctanoic acid (PFOA) 40.0 43.2 ng/L 108 70 - 130 Perfluorononanoic acid (PFNA) 40.0 39.1 ng/L 98 77 - 137 Perfluorodecanoic acid (PFDA) 40.0 41.4 ng/L 103 74 - 134 Perfluoroundecanoic acid (PFUnA) 40.0 39.4 ng/L 98 68 - 128 (PFUnA) 9erfluorododecanoic acid (PFDA) 40.0 44.0 ng/L 110 72 - 132 (PFDOA) 9erfluorotridecanoic Acid (PFTriA) 40.0 36.8 ng/L 92 56 - 163 (PFTeA) 40.0 37.9 ng/L 95 63 - 123	
Perfluorononanoic acid (PFNA) 40.0 39.1 ng/L 98 77 - 137 Perfluorodecanoic acid (PFDA) 40.0 41.4 ng/L 103 74 - 134 Perfluoroundecanoic acid (PFUnA) 40.0 39.4 ng/L 98 68 - 128 (PFUnA) 9erfluorododecanoic acid (PFDoA) 40.0 44.0 ng/L 110 72 - 132 (PFDoA) 9erfluorotridecanoic Acid (PFTriA) 40.0 36.8 ng/L 92 56 - 163 (PFTeA) 40.0 37.9 ng/L 95 63 - 123	
Perfluorodecanoic acid (PFDA) 40.0 41.4 ng/L 103 74 - 134 Perfluoroundecanoic acid (PFUnA) 40.0 39.4 ng/L 98 68 - 128 (PFUnA) 98 68 - 128 110 72 - 132 (PFDoA) 110 72 - 132 72 - 132 (PFToA) 92 56 - 163 (PFTriA) 92 56 - 163 (PFTeA) 40.0 37.9 ng/L 95 63 - 123	
Perfluoroundecanoic acid 40.0 39.4 ng/L 98 68 - 128 (PFUnA) Perfluorododecanoic acid 40.0 44.0 ng/L 110 72 - 132 (PFDoA) Perfluorotridecanoic Acid 40.0 36.8 ng/L 92 56 - 163 (PFTriA) Perfluorotetradecanoic acid 40.0 37.9 ng/L 95 63 - 123 (PFTeA)	
(PFUnA) Perfluorododecanoic acid 40.0 44.0 ng/L 110 72 - 132 (PFDoA) Perfluorotridecanoic Acid 40.0 36.8 ng/L 92 56 - 163 (PFTriA) Perfluorotetradecanoic acid 40.0 37.9 ng/L 95 63 - 123 (PFTeA)	
Perfluorododecanoic acid 40.0 44.0 ng/L 110 72 - 132 (PFDoA) Perfluorotridecanoic Acid 40.0 36.8 ng/L 92 56 - 163 (PFTriA) Perfluorotetradecanoic acid 40.0 37.9 ng/L 95 63 - 123 (PFTeA)	
(PFDoA) 40.0 36.8 ng/L 92 56 - 163 (PFTriA) 92 56 - 163 95 63 - 123 (PFTeA) 40.0 37.9 ng/L 95 63 - 123	
Perfluorotridecanoic Acid 40.0 36.8 ng/L 92 56 - 163 (PFTriA) Perfluorotetradecanoic acid 40.0 37.9 ng/L 95 63 - 123 (PFTeA) Perfluorotetradecanoic acid	
(PFTriA) Perfluorotetradecanoic acid 40.0 37.9 ng/L 95 63 - 123 (PFTeA)	
Perfluorotetradecanoic acid 40.0 37.9 ng/L 95 63 - 123 (PFTeA)	
(PFTeA)	
(PFBS)	
Perfluorohexanesulfonic acid 36.4 34.8 ng/L 96 77 - 137	
(PFHxS)	
Perfluoroheptanesulfonic Acid 38.1 39.1 ng/L 103 83 - 143	
(PFHpS) Perfluorooctanesulfonic acid 37.1 36.8 ng/L 99 74 - 134	
Perfluorooctanesulfonic acid 37.1 36.8 ng/L 99 74 - 134 (PFOS)	
Perfluorodecanesulfonic acid 38.6 40.0 ng/L 104 75 - 135	
(PFDS)	
Perfluorooctane Sulfonamide 40.0 40.1 ng/L 100 82 - 142	
(FOSA)	

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: LCSD 320-195170/3-A

Matrix: Water

Perfluorodecanesulfonic acid

Perfluorooctane Sulfonamide

(PFDS)

(FOSA)

LCS LCS

Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	94		25 - 150
13C4 PFBA	99		25 - 150
13C2 PFHxA	98		25 - 150
13C4 PFOA	87		25 - 150
13C5 PFNA	103		25 - 150
13C2 PFDA	102		25 - 150
13C2 PFUnA	99		25 - 150
13C2 PFDoA	88		25 - 150
18O2 PFHxS	102		25 - 150
13C4 PFOS	103		25 - 150
13C4-PFHpA	97		25 - 150
13C5 PFPeA	101		25 - 150
13C3-PFBS	101		25 - 150
13C2-PFTeDA	90		25 - 150

Client Sample ID: Lab Control Sample Dup

100

105

75 - 135

82 - 142

TestAmerica Job ID: 480-127327-1

Prep Type: Total/NA

Prep Batch: 195170

								4	
Analysis Batch: 195549	Spike	I CSD	LCSD				Prep Ba	atch: 19	95170 RPD
Analyte	Added	_	Qualifier	Unit	D	%Rec	/intec.	RPD	Limit
Perfluorobutanoic acid (PFBA)	40.0	41.0		ng/L		103	78 - 138		30
Perfluoropentanoic acid (PFPeA)	40.0	39.0		ng/L		98	66 - 136	0	30
Perfluorohexanoic acid (PFHxA)	40.0	39.8		ng/L		100	76 ₋ 136	0	30
Perfluoroheptanoic acid (PFHpA)	40.0	43.1		ng/L		108	78 - 138	1	30
Perfluorooctanoic acid (PFOA)	40.0	41.7		ng/L		104	70 - 130	3	30
Perfluorononanoic acid (PFNA)	40.0	41.2		ng/L		103	77 - 137	5	30
Perfluorodecanoic acid (PFDA)	40.0	39.8		ng/L		99	74 - 134	4	30
Perfluoroundecanoic acid (PFUnA)	40.0	40.3		ng/L		101	68 - 128	2	30
Perfluorododecanoic acid (PFDoA)	40.0	41.8		ng/L		105	72 - 132	5	30
Perfluorotridecanoic Acid (PFTriA)	40.0	37.3		ng/L		93	56 - 163	1	30
Perfluorotetradecanoic acid (PFTeA)	40.0	38.7		ng/L		97	63 - 123	2	30
Perfluorobutanesulfonic acid (PFBS)	35.4	39.5		ng/L		112	79 - 139	5	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.4		ng/L		100	77 - 137	5	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.9		ng/L		102	83 - 143	1	30
Perfluorooctanesulfonic acid (PFOS)	37.1	37.9		ng/L		102	74 - 134	3	30
<u> </u>						400	75 405		

38.6

40.0

38.5

41.9

ng/L

LCSD LCSD

Isotope Dilution	%Recovery	Qualifier	Limits
13C8 FOSA	91		25 - 150
13C4 PFBA	99		25 - 150
13C2 PFHxA	96		25 - 150
13C4 PFOA	86		25 - 150
13C5 PFNA	103		25 - 150
13C2 PFDA	102		25 - 150
13C2 PFUnA	96		25 - 150
13C2 PFDoA	88		25 - 150

TestAmerica Buffalo

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

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

t Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 195170

Alialysis Dalcii. 133	J 4 3			
•	LCSD	LCSD		
Isotope Dilution	%Recovery	Qualifier	Limits	
1802 PFHxS	98		25 - 150	
13C4 PFOS	100		25 - 150	
13C4-PFHpA	94		25 - 150	
13C5 PFPeA	99		25 - 150	
13C3-PFBS	97		25 - 150	
13C2-PFTeDA	91		25 - 150	

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TestAmerica Job ID: 480-127327-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

GC/MS VOA

Analysis Batch: 474935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127327-2	MW-27	Total/NA	Water	8260C	
480-127327-3	IW-02	Total/NA	Water	8260C	
480-127327-4	DUP-02	Total/NA	Water	8260C	
MB 490-474935/6	Method Blank	Total/NA	Water	8260C	
LCS 490-474935/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-474935/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 475086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127327-5	MW-13	Total/NA	Water	8260C	
480-127327-6	MW-3	Total/NA	Water	8260C	
480-127327-12	TRIP BLANKS	Total/NA	Water	8260C	
MB 490-475086/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475086/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475086/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 475225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127327-8	IW-01S	Total/NA	Water	8260C	
480-127327-9	MW-26	Total/NA	Water	8260C	
480-127327-10	MW-25S	Total/NA	Water	8260C	
MB 490-475225/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475225/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475225/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 475277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127327-1	MW-28	Total/NA	Water	8260C	
480-127327-7	MW-21D	Total/NA	Water	8260C	
MB 490-475277/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475277/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475277/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 475387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127327-11	IW-01D	Total/NA	Water	8260C	
MB 490-475387/6	Method Blank	Total/NA	Water	8260C	
LCS 490-475387/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-475387/4	Lab Control Sample Dup	Total/NA	Water	8260C	

LCMS

Prep Batch: 195170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127327-1	MW-28	Total/NA	Water	3535	<u> </u>
480-127327-2	MW-27	Total/NA	Water	3535	
480-127327-3	IW-02	Total/NA	Water	3535	
480-127327-4	DUP-02	Total/NA	Water	3535	
480-127327-5	MW-13	Total/NA	Water	3535	
480-127327-6	MW-3	Total/NA	Water	3535	

TestAmerica Buffalo

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QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

LCMS (Continued)

Prep Batch: 195170 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127327-7	MW-21D	Total/NA	Water	3535	
480-127327-8	IW-01S	Total/NA	Water	3535	
480-127327-9	MW-26	Total/NA	Water	3535	
480-127327-10	MW-25S	Total/NA	Water	3535	
480-127327-11	IW-01D	Total/NA	Water	3535	
MB 320-195170/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-195170/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-195170/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 195549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127327-1	MW-28	Total/NA	Water	537 (modified)	195170
480-127327-2	MW-27	Total/NA	Water	537 (modified)	195170
480-127327-3	IW-02	Total/NA	Water	537 (modified)	195170
480-127327-4	DUP-02	Total/NA	Water	537 (modified)	195170
480-127327-5	MW-13	Total/NA	Water	537 (modified)	195170
480-127327-6	MW-3	Total/NA	Water	537 (modified)	195170
480-127327-7	MW-21D	Total/NA	Water	537 (modified)	195170
480-127327-8	IW-01S	Total/NA	Water	537 (modified)	195170
480-127327-9	MW-26	Total/NA	Water	537 (modified)	195170
480-127327-10	MW-25S	Total/NA	Water	537 (modified)	195170
480-127327-11	IW-01D	Total/NA	Water	537 (modified)	195170
MB 320-195170/1-A	Method Blank	Total/NA	Water	537 (modified)	195170
LCS 320-195170/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	195170
LCSD 320-195170/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	195170

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11/24/2017

Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Client Sample ID: MW-28 Lab Sample ID: 480-127327-1

Date Collected: 11/07/17 09:00 **Matrix: Water** Date Received: 11/09/17 09:30

Batch Batch Dilution Batch Prepared Method **Prep Type** Run **Factor** Number or Analyzed Analyst Type Lab Total/NA Analysis 8260C 200 475277 11/12/17 12:36 AK1 TAL NSH Total/NA 3535 TAL SAC Prep 195170 11/16/17 14:10 KMK Total/NA Analysis 537 (modified) 195549 11/18/17 06:52 ABH TAL SAC

Client Sample ID: MW-27 Lab Sample ID: 480-127327-2

Date Collected: 11/07/17 10:30 **Matrix: Water**

Date Received: 11/09/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1000	474935	11/10/17 21:25	C1A	TAL NSH
Total/NA	Prep	3535			195170	11/16/17 14:10	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195549	11/18/17 06:59	ABH	TAL SAC

Client Sample ID: IW-02 Lab Sample ID: 480-127327-3

Date Collected: 11/07/17 12:00 **Matrix: Water**

Date Received: 11/09/17 09:30

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	474935	11/10/17 21:51	C1A	TAL NSH
Total/NA	Prep	3535			195170	11/16/17 14:10	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195549	11/18/17 07:15	ABH	TAL SAC

Lab Sample ID: 480-127327-4 Client Sample ID: DUP-02

Date Collected: 11/07/17 00:00 **Matrix: Water**

Date Received: 11/09/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1000	474935	11/10/17 22:17	C1A	TAL NSH
Total/NA	Prep	3535			195170	11/16/17 14:10	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195549	11/18/17 07:23	ABH	TAL SAC

Client Sample ID: MW-13 Lab Sample ID: 480-127327-5

Date Collected: 11/07/17 08:25 **Matrix: Water**

Date Received: 11/09/17 09:30

		Batch	Batch		Dilution	Batch	Prepared		
F	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Ī	Total/NA	Analysis	8260C		100	475086	11/11/17 10:14	AK1	TAL NSH
1	Total/NA	Prep	3535			195170	11/16/17 14:10	KMK	TAL SAC
1	「otal/NA	Analysis	537 (modified)		1	195549	11/18/17 07:31	ABH	TAL SAC

TestAmerica Buffalo

11/24/2017

TestAmerica Job ID: 480-127327-1

Lab Sample ID: 480-127327-6 Client Sample ID: MW-3

Date Collected: 11/07/17 09:35 **Matrix: Water** Date Received: 11/09/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475086	11/11/17 05:34	AK1	TAL NSH
Total/NA	Prep	3535			195170	11/16/17 14:10	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195549	11/18/17 07:39	ABH	TAL SAC

Client Sample ID: MW-21D Lab Sample ID: 480-127327-7

Date Collected: 11/07/17 10:55 **Matrix: Water** Date Received: 11/09/17 09:30

Batch Batch **Dilution** Batch Prepared Method **Prep Type** Туре Run Factor Number or Analyzed Analyst Lab Total/NA 8260C Analysis 10 475277 11/12/17 11:43 AK1 TAL NSH Total/NA 3535 TAL SAC Prep 195170 11/16/17 14:10 KMK Total/NA 195549 11/18/17 07:47 ABH TAL SAC Analysis 537 (modified) 1

Client Sample ID: IW-01S Lab Sample ID: 480-127327-8

Date Collected: 11/07/17 12:35 **Matrix: Water**

Date Received: 11/09/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475225	11/11/17 21:48	S1S	TAL NSH
Total/NA	Prep	3535			195170	11/16/17 14:10	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195549	11/18/17 08:26	ABH	TAL SAC

Lab Sample ID: 480-127327-9 Client Sample ID: MW-26

Date Collected: 11/07/17 14:00 **Matrix: Water** Date Received: 11/09/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475225	11/12/17 00:24	S1S	TAL NSH
Total/NA	Prep	3535			195170	11/16/17 14:10	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195549	11/18/17 07:54	ABH	TAL SAC

Client Sample ID: MW-25S Lab Sample ID: 480-127327-10

Date Collected: 11/07/17 13:55 **Matrix: Water**

Date Received: 11/09/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	475225	11/11/17 22:14	S1S	TAL NSH
Total/NA	Prep	3535			195170	11/16/17 14:10	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195549	11/18/17 08:42	ABH	TAL SAC

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Lab Sample ID: 480-127327-11

Client Sample ID: IW-01D Date Collected: 11/06/17 16:35 **Matrix: Water**

Date Received: 11/09/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	475387	11/13/17 11:49	S1S	TAL NSH
Total/NA	Prep	3535			195170	11/16/17 14:10	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	195549	11/18/17 08:58	ABH	TAL SAC

Client Sample ID: TRIP BLANKS Lab Sample ID: 480-127327-12

Date Collected: 11/07/17 00:00 **Matrix: Water**

Date Received: 11/09/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			475086	11/11/17 03:01	AK1	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

Laboratory: TestAmerica Nashville

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 Dat
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	01-01-18
Arizona	State Program	9	AZ0473	05-05-18
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2L A)	12-31-17
Illinois	NELAP	5	200010	12-09-17
lowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	12-31-17
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-18
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)		4	387	12-31-17
` ,	State Program			
North Dakota	State Program	8	R-146	06-30-18
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412 TN000004	08-31-18
Oregon	NELAP	10	TN200001	04-27-18
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-18
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-18
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-18
Wyoming (UST)	A2LA	8	453.07	12-31-17

TestAmerica Buffalo

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Accreditation/Certification Summary

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-127327-1

Project/Site: Crown Dykman - Glen Cove, NY

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	UST-055	12-18-17
Arizona	State Program	9	AZ0708	08-11-18
Arkansas DEQ	State Program	6	88-0691	06-17-18
California	State Program	9	2897	01-31-18
Colorado	State Program	8	CA00044	08-31-18
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-18
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-18
Illinois	NELAP	5	200060	03-17-18
Kansas	NELAP	7	E-10375	10-31-17 *
L-A-B	DoD ELAP		L2468	01-20-18
Louisiana	NELAP	6	30612	06-30-18
Maine	State Program	1	CA0004	04-18-18
Michigan	State Program	5	9947	01-31-18
Nevada	State Program	9	CA00044	07-31-18
New Hampshire	NELAP	1	2997	04-18-18
New Jersey	NELAP	2	CA005	06-30-18
New York	NELAP	2	11666	04-01-18
Oregon	NELAP	10	4040	01-28-18
Pennsylvania	NELAP	3	68-01272	03-31-18
Texas	NELAP	6	T104704399	05-31-18
US Fish & Wildlife	Federal		LE148388-0	07-31-18
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-18
Virginia	NELAP	3	460278	03-14-18
Washington	State Program	10	C581	05-05-18
West Virginia (DW)	State Program	3	9930C	12-31-17
Wyoming	State Program	8	8TMS-L	01-28-19

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

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-127327-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-127327-1	MW-28	Water	11/07/17 09:00	11/09/17 09:30
480-127327-2	MW-27	Water	11/07/17 10:30	11/09/17 09:30
480-127327-3	IW-02	Water	11/07/17 12:00	11/09/17 09:30
480-127327-4	DUP-02	Water	11/07/17 00:00	11/09/17 09:30
480-127327-5	MW-13	Water	11/07/17 08:25	11/09/17 09:30
480-127327-6	MW-3	Water	11/07/17 09:35	11/09/17 09:30
480-127327-7	MW-21D	Water	11/07/17 10:55	11/09/17 09:30
480-127327-8	IW-01S	Water	11/07/17 12:35	11/09/17 09:30
480-127327-9	MW-26	Water	11/07/17 14:00	11/09/17 09:30
480-127327-10	MW-25S	Water	11/07/17 13:55	11/09/17 09:30
480-127327-11	IW-01D	Water	11/06/17 16:35	11/09/17 09:30
480-127327-12	TRIP BLANKS	Water	11/07/17 00:00	11/09/17 09:30

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TestAmerica Buffalo

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Client Information	The same of the sa		
	1 E. Sauser	Lab PM Deyo, Melissa L	Tracking No(s)
Client Contact Aaron Bobar	(SS) 396-7296	E-Mail melissa deyo@testamericainc.com	Page 1 0 F 2
Company ARCADIS U.S. Inc		Analysis Requested	pe)
Address 855 Route 146 Suite 210	Due Date Requested:		Cod
City. Clifton Park	TAT Requested (days):		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - Ashao2
State, Ztp. NY, 12065	Standard		
Phone (518) 250 -7360	PO# 00266417.0000	(d	G - Amc
Email· aaron.bobar@arcadis-us.com	WO#	(oN	I-Ice J-DIW
Project Name Crown Dykman - Glen Cove, NY	Project #: 48008440	10 50	L-EDA
strawn Dyfman	SSOW#	Y) GSN	6 Other: 480-127327 COC
		F F F F F F F F F F F F F F F F F F F	1edmuN lsto
sample identification	1	8 V	Special instructions/Notes
MW-28	11-7-17 0900 G water	> X Z Z > X Z Z	5
MN- 27	363	iter NNX X	S
10 - WH	11-7-17 1360 G water	iter MNX X	2
DUP-07	11-7-17 - G water	iter NNXX	2
MW-13	11-7-11 082S G water	iter NNXX	2
MW-3	11-7-17 0935 G water	ater NNXX	2
MN-AID	55	iter NN XX	V
TW-015	11-7-17 1335 G Water	ster N N X X	S
MN - 96	11-7-11 1460 G water	ster NNXX	\$
MW-265	11-7-17 13SS G Water	ater NNXX	b
IM-010	11-10-17 16 35 6 water	2	8
Possible Hazard Identification You-Hazard Plammable Skin Irritant Politographs Revised 11 III IV Other Femorety	. \square Poison B \square Unknown \square Radiological	Sample Disposal (A fee may bo asses Return To Client Dispos Special Instructions/OC Requirements	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Months Special Instructions/OC Requirements:
Empty Kit Relinguished by	Date	Time	Method of Shipment
Relinquished by	Date/Time		Date/Tighe Company
Relinquished by.	300	MY Received by Received by Received by	Dates Incompany Company Company
Custody Seals Intact: Custody Seal No.		Cooler Temperature(s) °C and Other Remarks	() E

suite 210 Suite 210 250 -73 0 0 Cadis-us com Glen Cove, NY Duy Kyngw	396-72 396-72 maleral	A C meliss	Lab PM: Deyo, Melissa L E-Mail:	Camer Tracking No(s):	COC No: 480-104070-24647.8
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Suite 210 250 -7300 readis-us.com - Glen Cove, NY Dukmou	seted (days): HUNDEN 2		melissa.deyo@testamericainc.com		Page Setto ROFZ
146 Suite 210 250-7300 Rearradis-us com nan - Glen Cove, NY N DUKMEN	seted (days): AUNDOLD		Analysis Requested	luested	# dol
250 –7300 readis-us com Glen Cove, NY Du Kyndev	sted (days): tunderal				
cadis-us com Gen Cove, NY Du V M Du Cation					A - HCL
Cadis-us.com Glen Cove, NY Cation	7.0000		(0)		
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Du Kundur	0		10 Se		L-EDA
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	Sample Type Sample (G=comp,	Matrix (wewater, Sesolid, Oewasterioli, BTETISSUE, ARAR)	Field Filtered MSM morbe B260C - TCL Vo A34 - AQL_334		No mper Potential Instructions/Note:
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Possible Hazard Identification		Water	Sample Disposal (A fee may be a	sesses if samples are	retained longer than 1 month)
ole Skin Irritant Poison B C	☐ Unknown ☐ Radiological	ical	Special Instructions/QC Requirements	Disposal By Lab ents.	Archive For Months
Empty Kit Relinguished by:	Date		Time	Method of Shipment	
Relinquished by	1-	Company	Received by	Date(Time:	1- 1/5 S Company A
Relinquished by Date/Time	8/17 12	Company	Keceived by	Datefline	11093A Company
Custody Seals Intact: Custody Seal No			Cooler Temperature(s) "C and Other Remarks:	emarks	142

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TestAmerica Buffalo

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18 18 18 18 18 18 18 18	Client Information	-	Melissa L	arrier Tracking No(s):	COC No. 480-104070-24647.7
Sample Cove NV Sample Date	Client Contact Aaron Bobar	21	E-Mart: melissa.deyo@testamericainc.com	ě.	Page 2 of 16 (-
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1250 - 1340	City Office Park	TAT Requested (days):			Jach N- None
Color Cove NY Color Cove N	State, Zip. NY, 12065	Standard			
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	MW-3	0935	2		2
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Special Instructions/OC Requirements: Date: Time: Time: Wethod of Shipment Method of Shi	ant	Unknown	Sample Disposal (A fee may be ass Return To Client	sessed if samples are rei	tained longer than 1 month) Archive For Months
Date: Time Time Time Time Time Method of Shipment Time Method of Shipment Time Date/Time Time Date/Time Time Time Date/Time Time		Special Instructions/QC Requirements			
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1 - S	(0)		Cooler Temperature(s) *C and Other Remarks:	13 25	92 TEN 27.7.

ופאושונים

Client Information	Sampler 1 ES	Lab PM. Deyo, Melissa L	Carrier Tracking No(s).	COC No. 480-104070-24647.8
Client Contact Aaron Bobar	Phone (516) 396 -72 ac	E-Mail: melissa.deyo@testamericainc.com		Page Ann 2012
Company ARCADIS U.S. Inc		Analysis Requested		Job#:
Address. 855 Route 146 Suite 210	Due Date Requested:			8
ित्र, Oitton Park	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2
State, Zip. NY, 12065	Standard			
Phone 5 (8) 250-7300	PO# 00266417.0000	(on		chilor corbic Acid
aaron bobar@arcadis-us com	WO fe	·(oN		J-DI Water V-MCAA
Project Name: Crown Dykman - Glen Cove, NY	Project # 48008440	10 SB)		L-EDA Z-other (specify)
Sin outiner	\$SOW#	NSD ()		Other:
	Sample Type Sample (C=come.	Matrix (wwwar, (wwwar, operation) (www.) (ww	Tedmuk Is	
Sample Identification	G=grab)	F161	101	Special Instructions/Note:
	Preservation Code	X	X	
Trip Blanks	1	Water NNX	6	
		Water		
		Water		
		Water		
	-	Water	\$195	
	THE THE	Water *		
		Water		
Possible Hazard Identification Non-Hazard	Poison B Unknown Radiological	Sample Disposal (A fee may be Return To Client	Sample Disposal (A fee maybe assessed if samples are retained longer than 1 month) Return To Client Mon	Archive For Months
Ò		Special Instructions/QC Requirements	nents:	
Empty Kit Relinquished by:	Date:	Time;	Method of Shipment	
Reinquished by	Date/Tune 1500 Co	Company Received by A	Date/Time /	15 S Company of
Relinquished by Relinquished by	36 J.	Company Received by Received by Received by	Date I'me	930 Company
(0)	5	Cooler Temperature(s) °C and Other Remarks.	3	5.50 cre A16-7. our
Δ Yes Δ No			1	Ver. 08/04/20

TestAmerica

Chain of Custody Record

10 Hazelwood Drive Amherst, NY 14228-2298



THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN



COOLER RECEIPT F

Cooler Received/Opened On11/10/170950	
Time Samples Removed From Cooler Time Samples Placed In Storage	(2 Hour Window)
1. Tracking #(last 4 digits, FedEx) Courier:FedEx	
IR Gun ID97310166pH Strip Lot Chlorine Strip Lot	-
2. Temperature of rep, sample or temp blank when opened:	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO. (NA)
4. Were custody seals on outside of cooler?	YESNONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	(ES)NONA
6. Were custody papers inside cooler?	YES(NO).NA
I certify that I opened the cooler and answered questions 1-6 (intial)	es
7. Were custody seals on containers: YES NO and Intact	YESNO.(.NA)
Were these signed and dated correctly?	YESNO(NA)
8. Packing mat'l used? Bubblewrap Blastic bag Peanuts Vermiculite Foam Insert Paper	r Other None
9. Cooling process: (ce Ice-pack Ice (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	YES. NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	YE9NONA
12. Did all container labels and tags agree with custody papers?	YES. NONA
13a. Were VOA vials received?	YES. NONA
b. Was there any observable headspace present in any VOA vial?	YES(NO)NA
	inne!
Larger than this.	
14. Was there a Trip Blank in this cooler? (YES.) NONA If multiple coolers, sequence	
I certify that I unloaded the cooler and answered questions 7-14 (intial)	
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO(NA)
b. Did the bottle labels indicate that the correct preservatives were used	ESNONA
16. Was residual chlorine present?	YESNQNA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	<u></u>
17. Were custody papers properly filled out (lnk, signed, etc)?	(YESNONA
18. Did you sign the custody papers in the appropriate place?	(YES),NONA
19. Were correct containers used for the analysis requested?	YESNONA
20. Was sufficient amount of sample sent in each container?	YE9NONA
I certify that I entered this project into LIMS and answered questions 17-20 (intial)	er
I certify that I attached a label with the unique LIMS number to each container (intial)	e\$
21. Were there Non-Conformance issues at login? YES(N) Was a NCM generated? YES(10)#	es
	/

BIS = Broken in shipment Cooler Receipt Form.doc

LF-1 End of Form Revised 8/23/17

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TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Phone (716) 691-2600 Fax (716) 691-7991	Chain o	Chain of Custody Record	Record	48()-127	732	estAl	480-127327 JestAmerica
Client Information (Sub Contract Lab)	Sampler.	Lab PM Deyo,	Lab PM: Deyo, Melissa L				30-38760.1	
Client Contact: Shipping/Receiving	Phone:	E-Mail: melis	E-Maii: melissa.deyo@testamericainc.com	ericainc.com	New York	1	age: Page 1 of 2	
Company: TestAmerica Laboratories, Inc			Accreditations Required (See note): NELAP - New York	ed (See note): rk			Job #: 480-127327-1	
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 11/21/2017			Analysis F	Analysis Requested		Preservation Codes	des:
City: Nashville	TAT Requested (days):		mingo segui				B - NaOH	N - None O - AsnaO2
State, Zip: TN, 37204							D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	#Od#:		(o				G - Amchlor H - Assorbic Acid	R - Na2S2O3 S - H2SO4 T - TSP Dodecabydrate
Email:	WO #:						-	U - Acetone V - MCAA
Project Name: Crown Dykman - Glen Cove, NY	Project #: 48008440		10 S9				X -1	W - pH 4-5 Z - other (specify)
Site:	SSOW#:		Y) dsi				Offer:	
	- "	2 0 1 8 18	eld Filtered erlogn MS/W seocksosc To				rėdoniji listo	
Sample Identification - Client ID (Lab ID)	Sample Date	Preservation Code:	ا ا	· 基			1000	Special Instructions/Note:
MW-28 (480-127327-1)	11/7/17 09:00 Fastern	Water	×				3	
MW-27 (480-127327-2)	11/7/17 10:30 Eastern	Water	×				, E.	
IW-02 (480-127327-3)	11/7/17 12:00 Eastern	Water	×				ന	
DUP-02 (480-127327-4)	11/7/17 Eastem	Water	×				8	
MW-13 (480-127327-5)	11/7/17 08:25 Eastern	Water	×				Ö	
MW-3 (480-127327-6)	11/7/17 09:35 Eastern	Water	×				Ŕ	
MW-21D (480-127327-7)	11/7/17 Eastern	Water	×				en.	
IW-01S (480-127327-8)	11/7/17 12:35 Eastern	Water	×				က	
MW-26 (480-127327-9)	11/7/17 T4:00 Eastern	Water	×				ွတ္	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc.	ratories, Inc. places the ownership of rests/matrix being analyzed, the sample rent to date, return the signed Chain of	nethod, analyte & accredital s must be shipped back to t Custody attesting to said or	lion compliance upon ou the TestAmerica laboration Implicance to TestAmer	ut subcontract laborato ory or other instruction rica Laboratories, Inc.	ries. This sample ships will be provided. An	pment is forwarder by changes to accr	d under chain-of-custody. editation status should be	If the laboratory does not a brought to TestAmerica
Possible Hazard Identification Unconfirmed			Sample Dispo	osal (A fee may I	be assessed if san	amples are re	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By I sh	1 month)
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2		Special Instruc	Special Instructions/QC Requirements:	ements:	ļ		
Empty Kit Relinquished by:	, Date:		Time:		Method of Shipment:	Shipment:		
Relinquished by:	Date/Timber H	ALL OF	Received by:		1	2	7 9,50	Company
Relinquished by:	Date/Tifne: /	Cómpāny	Received by:	2		Date/Time:		Company
Relinquished by:	Date/Time:	Company	Received by:			Date/Time:	<u> </u>	Company
Custody Seals Intact: Custody Seal No.:			Cooler Temp	Cooler Temperature(s) °C and Other Remarks:	ar Remarks:	165		

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Phone (716) 691-2600 Fax (716) 691-7991	Chain	Chain of Custody Record	/ Reco	5				TestA	TestAmerica
Client Information (Sub Contract Lab)	Sampler,		Lab PM: Devo Melissa I			Carrier Tracking No(s)	g No(s):	COC No:	
Client Contact Chinainal Beceiving	Phone:		E-Mail:			State of Origin:		Page:	
Company:			Accredit	Accreditations Required (See note):	See note):	New TOLK		Job#:	
nerica Laboratories, Inc			NELAF	- New York				480-127327-1	
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 11/21/2017				Analysis	Analysis Requested		Preservation Codes	sepo:
City: Nashville	TAT Requested (days):							B - NaOH	N - None
State, Zip: TN: 37204	- -		学 惠					D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone: (615-726-0177(Tel) 615-726-3404(Fax)	PO#:		(o	_		480		F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4
	WO#.				12	127327		In - Ascorbic Acid	
Project Name: Crown Dykman - Glen Cove, NY	Project #: 48008440			səlil					W - pH 4-5 Z - other (specify)
Site:	SSOW#:			BloV J	- <u></u>	:		oo to Offier:	
	Sample	Type Sesold (Wi-water, Sesold (C=Comp, O-wasteloit,	ةِ ۴ جَ عَ الرفاقة الرفاقة الرفاقة الرفاقة	OC/5030C TC				yệđượn Tếi	
Sample Identification - Client ID (Lab ID)	Sample Date Time	쁴눑	ii X)Z8			基本	100	Special Instructions/Note:
MW-25S (480-127327-10)	11/7/17 T3:55	Water	o d	×	,			3.	
IW-01D (480-127327-11)	11/6/17 Testern	Water	ā	×					
TRIP BLANKS (480-127327-12)	11/7/17 Eastern	Water	ja ja	×				12	
								Ţ.	
								27 V 77 T	
								899) 3AU	
Note: Since laboratory accreditations are subject to change. TestAmerica Laboratories, Inc. placas the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory of consulting maintain accreditation in the State of Origin listed above for analysis/hests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.	atories, Inc. places the ownership of sts/matrix being analyzed, the samp ent to date, return the signed Chain	f method, analyte & accriles must be shipped bar of Custody attesting to s	editation compl k to the TestAr aid complicano	ance upon out su nerica laboratory s to TestAmerica	ibcontract laborate or other instruction Laboratories, Inc.	ries. This sample sh ns will be provided. 7	nipment is forwarder Any changes to acc	d under chain-of-custod reditation status should	 If the laboratory does not be brought to TestAmerica
Possible Hazard Identification			Sai	nple Disposa	I (A fee may	e assessed if s	amples are ret	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	1 month)
Unconfirmed Deliverable Remissted: 11 III N. Other (snevity)	Primary Deliverable Pank			Return To Client	Return To Client Disp	Disposal By Lab		Archive For	Months
Deliverative (Addressed, 1, 11, 11, 17, Outer (Specify)	Deliverable Malin.	7	ndo .	scial illisir acuo	Is/ec Deduile				
Empty Kit Relinquished by:	Date:		Time:			Method o	Method of Shipment:		
Relinquished by:	Date/Time://9/13	Company Sept	Z Z	Received by:		R.	Date/Time:	47 9.50	Company
Relinquished by:	Date/Time:	Company)_	Received by:			Date/Time:		Company
Relinquished by:	Date/Time:	Company		Received by:			Date/Time:		Company
Custody Seals Intact: Custody Seal No.:				Cooler Tempera	Cooler Temperature(s) °C and Other Remarks:	er Remarks:	-		
3)		Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sacramento

Sa



480-127327 Field Sheet

otes:		Therm. ID: AK-2 /AK-8 / HACCP /Other	
0.00.		lce Wet Dry Other	`
	1.		
		Cooler Custody Seal:	
	-1-1	Sample Custody Seal:	
	• •	Cooler ID:	17
	· · · · · · · · · · · · · · · · · · ·	Cooler ID:	Te
		Temp: Observed 4.7	, ,
		Corrected:	
		Corrected.	-
	,	From: Temp Blank Sample D	
		NCM Filed: Yes D No D	
		Nomination 199	1
		Yes No	5 -
		Perchlorate has headspace? D	7
		CoC is complete w/o discrepancies?	
	34.	Samples received within holding time?	
	7	Sample preservatives verified?	- DE
	.,	Cooler compromised/tampered with?	
	·	Samples compromised/tampered-with?	
		COC and Samples w/o discrepancies?	
		Sample containers have legible labels?	
8.		Containers are not broken or leaking?	
Man .		Sample date/times are provided.	- D -
		Appropriate containers are used?	_
		Sample bottles are completely filled?	
		Zero headspace?*	- 5
* *		Multiphasic samples are not present?	D

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IGIN ID:TSSA (212) 643-2

11 W. 29TH STREET, UTE 904 W YORK, NY 10001 UTED STATES US SHIPIDATE: 08NO /17 ACTIVICT: 40 00 LB CAD 1001905570/INET3920 DIMS 26×18×16 IN

SAMPLE RECEIVING SAC TESTAMERICA 880 RIVERSIDE PKWY

WEST SACRAMENTO CA 95605





7707,0550 9409

THU - 09 NOV 3:00P STANDARD OVERNIGHT



95605 ca-us SMF





Job Number: 480-127327-1

Client: ARCADIS U.S. Inc

Login Number: 127327 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Creator. Janish, Carr W		
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.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica Buffalo

Client: ARCADIS U.S. Inc Job Number: 480-127327-1

Login Number: 127327 List Source: TestAmerica Sacramento
List Number: 2 List Creation: 11/09/17 02:15 PM

Creator: Nelson, Kym D

Creator: Nelson, Kym D		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	N/A	
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	4.2
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

N/A

TestAmerica Buffalo

Residual Chlorine Checked.

1,4-Dioxane Screening; April 2018 *PRELIMINARY*

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-133788-1

Client Project/Site: Crown Dykman - Glen Cove, NY

For:

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

Attn: Aaron Bobar

Authorized for release by: 4/11/2018 4:09:22 PM Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I (716)504-9874 melissa.deyo@testamericainc.com

.....LINKS

results through Total Access

Review your project

Have a Question?



Visit us at: 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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Isotope Dilution Summary	9
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QC Association Summary	11
Lab Chronicle	12
Certification Summary	14
Method Summary	15
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Definitions/Glossary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Reporting Limit or Requested Limit (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)
Toxicity Equivalent Quotient (Dioxin)

Relative Percent Difference, a measure of the relative difference between two points

TestAmerica Job ID: 480-133788-1

Qualifiers

GC/MS Semi VOA

Quali	ifier	Qualifier Description
J		Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Ε		Result exceeded calibration range.

Glossary

RL

RPD

TEF

TEQ

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

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-133788-1

Job ID: 480-133788-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-133788-1

Receipt

The samples were received on 4/7/2018 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.0° C, 3.2° C and 3.4° C.

GC/MS Semi VOA

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

Organic Prep

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

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TestAmerica Job ID: 480-133788-1

Client Sample ID: EB-01 Lab Sample ID: 480-133788-1 No Detections. Client Sample ID: EB-02 Lab Sample ID: 480-133788-2 No Detections. Client Sample ID: MW-14R-040518 Lab Sample ID: 480-133788-3 No Detections. Lab Sample ID: 480-133788-4 Client Sample ID: DUP-01-040518 No Detections. Client Sample ID: MW-3-040518 Lab Sample ID: 480-133788-5 No Detections. Client Sample ID: MW-4R-040518 Lab Sample ID: 480-133788-6 Analyte Result Qualifier RL MDL Unit Dil Fac D Method Prep Type 0.20 1,4-Dioxane 0.38 0.10 ug/L 8270D SIM ID Total/NA Client Sample ID: MW-18-040518 Lab Sample ID: 480-133788-7 Dil Fac D Method Analyte Result Qualifier RLMDL Unit Prep Type 8270D SIM ID 1,4-Dioxane 0.51 0.20 0.10 ug/L Total/NA Client Sample ID: MW-11-040518 Lab Sample ID: 480-133788-8 Analyte Result Qualifier RL MDL Unit Dil Fac D Method **Prep Type** 1,4-Dioxane 0.29 0.20 0.10 ug/L 8270D SIM ID Total/NA ID: 480-133788-9

Client Sample ID: MW-1D-040518						Lat	S	amp	e I
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Metho	d

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.69		0.20	0.10	ug/L		_	8270D SIM ID	Total/NA

Client Sample ID: MW-2-04051	8					Lab	Sample ID: 48	80-133788-10
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
1,4-Dioxane	0.13	J	0.20	0.10	ug/L	1	8270D SIM ID	Total/NA

Client Sample ID: MW-7-04051	8					Lab	Sample ID: 48	0-133788-11
Analyte 1,4-Dioxane		ualifier	RL 0.20	MDL 0.10	Unit ug/L	Dil Fac	D Method 8270D SIM ID	Prep Type Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

r Toject/Site. Grown Dykman - Glen Gove, Ni

Lab Sample ID: 480-133788-1

Matrix: Water

Date Collected: 04/05/18 08:32 Date Received: 04/07/18 09:00

Client Sample ID: EB-01

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 19:10	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1.4-Dioxane-d8	40	-	15 - 110				04/09/18 14:12	04/10/18 19:10	

Client Sample ID: EB-02 Lab Sample ID: 480-133788-2

Date Collected: 04/05/18 08:30 Matrix: Water

Date Received: 04/07/18 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 19:33	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1.4-Dioxane-d8	42	-	15 - 110				04/09/18 14:12	04/10/18 19:33	

Client Sample ID: MW-14R-040518 Lab Sample ID: 480-133788-3

Date Collected: 04/05/18 10:22 Matrix: Water

Date Received: 04/07/18 09:00

Method: 8270D SIM ID - Semivolati	ile Organic C	ompounds (GC/MS SIM	/ Isotope D	ilution)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 19:57	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	33		15 - 110				04/09/18 14:12	04/10/18 19:57	1

Client Sample ID: DUP-01-040518 Lab Sample ID: 480-133788-4

Date Collected: 04/05/18 00:00 Date Received: 04/07/18 09:00

Method: 8270D SIM ID - Se	emivolatile Organic Co	ompounds	(GC/MS SIM / I	sotope D	ilution)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 20:21	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	28		15 - 110				04/09/18 14:12	04/10/18 20:21	1

Client Sample ID: MW-3-040518 Lab Sample ID: 480-133788-5

Date Collected: 04/05/18 11:05 Date Received: 04/07/18 09:00

Method: 8270D SIM ID - Semivolati	le Organic C	ompounds	(GC/MS SIM	/ Isotope D	ilution	1)			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 20:45	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	39		15 - 110				04/09/18 14:12	04/10/18 20:45	1

Matrix: Water

Matrix: Water

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-133788-1

Client Sample ID: MW-4R-040518

Date Collected: 04/05/18 09:50 Date Received: 04/07/18 09:00 Lab Sample ID: 480-133788-6

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Method: 8270D SIM ID - Semivolati	le Organic C	ompounds	(GC/MS SIM / Is	sotope D	ilution)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.38		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 15:35	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	43		15 - 110				04/09/18 14:12	04/10/18 15:35	1

Client Sample ID: MW-18-040518 Lab Sample ID: 480-133788-7

Date Collected: 04/05/18 11:50

Date Received: 04/07/18 09:00

Method: 8270D SIM ID - Se	emivolatile Organic C	ompounds	(GC/MS SIM / Is	sotope D	ilution)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.51		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 21:08	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	32		15 - 110				04/09/18 14:12	04/10/18 21:08	1

Client Sample ID: MW-11-040518 Lab Sample ID: 480-133788-8

Date Collected: 04/05/18 12:20

Date Received: 04/07/18 09:00

Method: 8270D SIM ID - Se	emivolatile Organic C	ompounds	(GC/MS SIM / I	sotope D	ilution)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.29		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 21:32	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	30	-	15 - 110				04/09/18 14:12	04/10/18 21:32	1

Lab Sample ID: 480-133788-9 Client Sample ID: MW-1D-040518

Date Collected: 04/05/18 13:20

Date Received: 04/07/18 09:00

Method: 8270D SIM ID - Semivolati	ile Organic C	ompounds	(GC/MS SIM / I	sotope D	ilution)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.69		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 21:57	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	30		15 - 110				04/09/18 14:12	04/10/18 21:57	1

Client Sample ID: MW-2-040518 Lab Sample ID: 480-133788-10 Date Collected: 04/05/18 13:35

Date Received: 04/07/18 09:00

Method: 8270D SIM ID - Semivolat	ile Organic C	ompounds	(GC/MS SIM /	Isotope D	ilution)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.13	J	0.20	0.10	ug/L		04/09/18 14:12	04/10/18 22:21	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	46		15 - 110				04/09/18 14:12	04/10/18 22:21	1

Client Sample Results

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-133788-1

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: MW-7-040518 Lab Sample ID: 480-133788-11 Date Collected: 04/05/18 14:12

Matrix: Water

Date Received: 04/07/18 09:00

Method: 8270D SIM ID - Semivolati	le Organic C	ompounds	(GC/MS SIM /	Isotope D	ilution)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.33		0.20	0.10	ug/L		04/09/18 14:12	04/10/18 22:46	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	46		15 - 110				04/09/18 14:12	04/10/18 22:46	1

Isotope Dilution Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-133788-1

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

Matrix: Water Prep Type: Total/NA

			Percent Isotope Dilution Recovery (Acceptance Limits)
		DXE	
Lab Sample ID	Client Sample ID	(15-110)	
480-133788-1	EB-01	40	
480-133788-2	EB-02	42	
480-133788-3	MW-14R-040518	33	
480-133788-4	DUP-01-040518	28	
480-133788-5	MW-3-040518	39	
480-133788-6	MW-4R-040518	43	
480-133788-6 MS	MW-4R-040518	37	
480-133788-6 MSD	MW-4R-040518	31	
480-133788-7	MW-18-040518	32	
480-133788-8	MW-11-040518	30	
480-133788-9	MW-1D-040518	30	
480-133788-10	MW-2-040518	46	
480-133788-11	MW-7-040518	46	
LCS 480-407858/2-A	Lab Control Sample	43	
LOO 400-40103012-A		52	

TestAmerica Buffalo

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TestAmerica Job ID: 480-133788-1

Client: ARCADIS U.S. Inc Project/Site: Crown Dykman - Glen Cove, NY

Lab Sample ID: MB 480-407858/1-A

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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 407858

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND —	0.20	0.10 ug/L		04/09/18 14:12	04/10/18 13:58	1

MB MB

MR MR

Isotope Dilution %Recovery Qualifier Limits Prepared Analyzed Dil Fac 15 - 110 04/09/18 14:12 04/10/18 13:58 1,4-Dioxane-d8 52

Lab Sample ID: LCS 480-407858/2-A Client Sample ID: Lab Control Sample

Matrix: Water

Matrix: Water

Analysis Batch: 408032

Prep Type: Total/NA Analysis Batch: 408032 **Prep Batch: 407858** LCS LCS Spike %Rec.

Analyte Added Result Qualifier Unit %Rec Limits 1,4-Dioxane 1.00 1.05 ug/L 105 40 - 140

LCS LCS

Isotope Dilution %Recovery Qualifier Limits 1,4-Dioxane-d8 43 15 - 110

Client Sample ID: MW-4R-040518 Lab Sample ID: 480-133788-6 MS Prep Type: Total/NA

Matrix: Water

Prep Batch: 407858 Analysis Batch: 408032 Sample Sample Spike MS MS %Rec. Result Qualifier Added Limits Unit

Analyte Result Qualifier %Rec 1,4-Dioxane 0.38 1.00 1.44 E ug/L 105 40 - 140

MS MS

Isotope Dilution %Recovery Qualifier Limits 1,4-Dioxane-d8 37 15 - 110

Lab Sample ID: 480-133788-6 MSD Client Sample ID: MW-4R-040518

Matrix: Water

Analysis Batch: 408032 Prep Batch: 407858 Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 1,4-Dioxane 1.00 109 0.38 1.48 F 40 - 140 20 ug/L MSD

Qualifier Isotope Dilution %Recovery Limits 15 - 110 1,4-Dioxane-d8 31

Prep Type: Total/NA

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-133788-1

GC/MS Semi VOA

Prep Batch: 407858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-133788-1	EB-01	Total/NA	Water	3510C	_
480-133788-2	EB-02	Total/NA	Water	3510C	
480-133788-3	MW-14R-040518	Total/NA	Water	3510C	
480-133788-4	DUP-01-040518	Total/NA	Water	3510C	
480-133788-5	MW-3-040518	Total/NA	Water	3510C	
480-133788-6	MW-4R-040518	Total/NA	Water	3510C	
480-133788-7	MW-18-040518	Total/NA	Water	3510C	
480-133788-8	MW-11-040518	Total/NA	Water	3510C	
480-133788-9	MW-1D-040518	Total/NA	Water	3510C	
480-133788-10	MW-2-040518	Total/NA	Water	3510C	
480-133788-11	MW-7-040518	Total/NA	Water	3510C	
MB 480-407858/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-407858/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-133788-6 MS	MW-4R-040518	Total/NA	Water	3510C	
480-133788-6 MSD	MW-4R-040518	Total/NA	Water	3510C	

Analysis Batch: 408032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-133788-1	EB-01	Total/NA	Water	8270D SIM ID	407858
480-133788-2	EB-02	Total/NA	Water	8270D SIM ID	407858
480-133788-3	MW-14R-040518	Total/NA	Water	8270D SIM ID	407858
480-133788-4	DUP-01-040518	Total/NA	Water	8270D SIM ID	407858
480-133788-5	MW-3-040518	Total/NA	Water	8270D SIM ID	407858
480-133788-6	MW-4R-040518	Total/NA	Water	8270D SIM ID	407858
480-133788-7	MW-18-040518	Total/NA	Water	8270D SIM ID	407858
480-133788-8	MW-11-040518	Total/NA	Water	8270D SIM ID	407858
480-133788-9	MW-1D-040518	Total/NA	Water	8270D SIM ID	407858
480-133788-10	MW-2-040518	Total/NA	Water	8270D SIM ID	407858
480-133788-11	MW-7-040518	Total/NA	Water	8270D SIM ID	407858
MB 480-407858/1-A	Method Blank	Total/NA	Water	8270D SIM ID	407858
LCS 480-407858/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	407858
480-133788-6 MS	MW-4R-040518	Total/NA	Water	8270D SIM ID	407858
480-133788-6 MSD	MW-4R-040518	Total/NA	Water	8270D SIM ID	407858

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Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

Client Sample ID: EB-01 Lab Sample ID: 480-133788-1

Matrix: Water

Lab Sample ID: 480-133788-4

Date Collected: 04/05/18 08:32 Date Received: 04/07/18 09:00

ı		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
ı	Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 19:10	DMR	TAL BUF

Client Sample ID: EB-02 Lab Sample ID: 480-133788-2

Date Collected: 04/05/18 08:30 Matrix: Water

Date Received: 04/07/18 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 19:33	DMR	TAL BUF

Client Sample ID: MW-14R-040518 Lab Sample ID: 480-133788-3

Date Collected: 04/05/18 10:22 **Matrix: Water**

Date Received: 04/07/18 09:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 19:57	DMR	TAL BUF

Client Sample ID: DUP-01-040518

Date Collected: 04/05/18 00:00 **Matrix: Water**

Date Received: 04/07/18 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 20:21	DMR	TAL BUF

Client Sample ID: MW-3-040518 Lab Sample ID: 480-133788-5

Date Collected: 04/05/18 11:05 **Matrix: Water**

Date Received: 04/07/18 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 20:45	DMR	TAL BUF

Client Sample ID: MW-4R-040518 Lab Sample ID: 480-133788-6

Date Collected: 04/05/18 09:50 Matrix: Water

Date Received: 04/07/18 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 15:35	DMR	TAL BUF

TestAmerica Buffalo

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-133788-1

Lab Sample ID: 480-133788-7 Client Sample ID: MW-18-040518

Date Collected: 04/05/18 11:50 Matrix: Water

Date Received: 04/07/18 09:00

Client: ARCADIS U.S. Inc

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 21:08	DMR	TAL BUF

Client Sample ID: MW-11-040518 Lab Sample ID: 480-133788-8

Date Collected: 04/05/18 12:20 Matrix: Water

Date Received: 04/07/18 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 21:32	DMR	TAL BUF

Client Sample ID: MW-1D-040518 Lab Sample ID: 480-133788-9

Date Collected: 04/05/18 13:20 Matrix: Water

Date Received: 04/07/18 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 21:57	DMR	TAL BUF

Client Sample ID: MW-2-040518 Lab Sample ID: 480-133788-10

Date Collected: 04/05/18 13:35

Date Received: 04/07/18 09:00

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 22:21	DMR	TAL BUF

Client Sample ID: MW-7-040518 Lab Sample ID: 480-133788-11

Date Collected: 04/05/18 14:12

Date Received: 04/07/18 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			407858	04/09/18 14:12	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	408032	04/10/18 22:46	DMR	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Matrix: Water

Matrix: Water

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc TestAmerica Job ID: 480-133788-1

Project/Site: Crown Dykman - Glen Cove, NY

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18 *

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

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-133788-1

Method	Method Description	Protocol	Laboratory	
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL BUF	

Protocol References:

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

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Crown Dykman - Glen Cove, NY

TestAmerica Job ID: 480-133788-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-133788-1	EB-01	Water	04/05/18 08:32	04/07/18 09:00
480-133788-2	EB-02	Water	04/05/18 08:30	04/07/18 09:00
480-133788-3	MW-14R-040518	Water	04/05/18 10:22	04/07/18 09:00
480-133788-4	DUP-01-040518	Water	04/05/18 00:00	04/07/18 09:00
480-133788-5	MW-3-040518	Water	04/05/18 11:05	04/07/18 09:00
480-133788-6	MW-4R-040518	Water	04/05/18 09:50	04/07/18 09:00
480-133788-7	MW-18-040518	Water	04/05/18 11:50	04/07/18 09:00
480-133788-8	MW-11-040518	Water	04/05/18 12:20	04/07/18 09:00
480-133788-9	MW-1D-040518	Water	04/05/18 13:20	04/07/18 09:00
480-133788-10	MW-2-040518	Water	04/05/18 13:35	04/07/18 09:00
480-133788-11	MW-7-040518	Water	04/05/18 14:12	04/07/18 09:00

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1 estAmerica Buffalo 10 Hazelwood Drive Ambrist, NY 14228-2288	Chain	Chain of Custody Record	tody Re	cord	460501	TestA	KAKE
Client Information	Sampler	FKMSa	Lab PM Devo.	Melissa L	Carrier Tracking No(s):	COC No 480-111376-258	
Client Contact Aaron Bobar	35	-1360	E-Mail melis	E-Mail melissa.deyo@testamericainc.com		Page Ware	A80-133788 COC
Company. ARCADIS U.S. Inc				Analysis	Analysis Requested	Job#	
Address: 855 Route 146 Suite 210	Due Date Requested:					Preservation Codes	S: Mayone
City. Clifton Park	TAT Requested (days):						N None
State Zip NY, 12065	Shop C	5					P - Na2045 0 - Na2503
Pholesis 7250-7360	PO# 00266417.0000			lon		G - Amenior H - Ascorbic Acid	K - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate
Email: aaron bobar@arcadis-us.com	#OM			(oN		1 - Ice J - DI Water	U - Acetone V - MCAA
Project Name: Crown Dykman - Glen Cove, NY	Project # 48008440			10 80)		K - EDTA	W - pH 4.5 Z - other (specify)
SIEGUMN CULTURAIDE	#MOSS			() ası		of co	
	Sample Date Time	Sample Type e (C=comp,	Matrix (Wewater, Sesolid, Owwasteroll, PTETMELE ASAIL)	Perfect Files of MISIM moons and MISIM me		nedmuN latoT	Special Instructions/Note:
and the control of th	1	1		X			
EB-01	4-5-18 0433	0	Water	XXX		0	
E3-03	4-5-18 0830	0	Water	X 2 2		0	
MW-14R-040518	4-5-18 1033	0	Water	XZZ		3	
DUP-61-040518	4-5-18	9	Water	× Z Z		8	
MW-3-040518	SOII 81-5-H	0	Water	XZX		8	
MIN-4R-040518	4-5-18 BBS	9	Water	XXX		6 MSIMST	0
8/SOHO-31-MM		0	Water	XXZ		3	
MW-11-640518	14-5-18 133(0	Water	×× × ×		8	
MW- 1-0-6-10515	4-5-14 1330	2	Water	× Z Z		প্ৰ	
NIN-A-OLOSIS	4-S-18 133	5	Water	2		8	
MV -1-040518	4-3-18 141	9	Water	X		R	
Possible Hazard Identification	Decison B	Radiological		Sample Disposal (A fee m	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	retained longer than 1	month)
sted: I, II, III, IV, O				Special Instructions/QC Requirements	urements:		
Empty Kit Relinquished by:	Date:	,		Time:	Method of Shipment	, ,	
Relinquished by McCharles	Date/Time: 18 //	4:1)	Company	1	Surposed	119 15:10	L Adedwoo
Relinquished by	Date // ?	14.40	Company /		Date (1/2)	1.81	Company A. Ch.
- 11	Date 1/8/18	gan	Company &	H: Received by allule	Datefrine	118 0960	Statuos
Custody Seals Intact: Custody Seal No.:				Cobier Temperature(s) °C and Other Remarks.	Other Remarks. # 3/0	2, 3, 4, 3,	0
		þ,			1 12	-	Ver. 08/04/2016

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc Job Number: 480-133788-1

Login Number: 133788 List Source: TestAmerica Buffalo

List Number: 1

Creator: Wallace, Cameron

Creator. Wallace, Cameron		
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.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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APPENDIX F Gamma Logs – Radiological Site Screening

Downhole Gamma Scanning

Crown Dykman (Site # 130054) RAD-1

 Project No.:
 00266417.0000
 Site Location:
 Glen Cove, NY

 Probe:
 Ludlum 44-62 #165709
 Data Logger
 Ludlum 2350 #105641

 Field Crew:
 Anna Duewiger, Les Skoski
 Date 10/31/2017

	DEPTH	GAMMA COUNTS	DEPTH	GAMMA COUNTS
	Feet	(ctns in 30 sec)	Feet	(ctns in 30 sec)
30 SECOND	Surface	246		
COUNTS		434		
	1	668	13	739
		762		710
	2	831	14	705
		901		807
NEED AT	3	812 / 770	15	846
LEAST ONE		826		801
DUPLICATE	4	749	16	715
READING		587		683
	5	457	17	676
		494		752
	6	528	18	774
		600		793
	7	608	19	794
		681		862
	8	814	20	892
		843		
	9	825	21	
		800		
	10	736	22	
		597		
	11	640	23	
		662		
	12	650 / 612	24	
		706		

Comments:	Well RAD-1, DTB and DTW are from the ground surface	
	Stickup is ~3 feet	
	Depth to Bottom 20.39	Depth to Water 20.38

Downhole Gamma Scanning

Crown Dykman (Site # 130054) RAD-2

 Project No.:
 00266417.0000
 Site Location:
 Glen Cove, NY

 Probe:
 Ludlum 44-62 #165709
 Data Logger
 Ludlum 2350 #105641

 Field Crew:
 Anna Duewiger, Les Skoski
 Date 10/31/2017

	DEPTH	GAMMA COUNTS	DEPTH	GAMMA COUNTS
	Feet	(ctns in 30 sec)	Feet	(ctns in 30 sec)
30 SECOND	Surface	284		
COUNTS		704		
	1	812	13	173
		847		163
	2	875	14	187
		800		203
NEED AT	3	799 / 701	15	122
LEAST ONE		772		161
DUPLICATE	4	694	16	155
READING		623		175
	5	521	17	141
		553		127
	6	425	18	182
		354		160
	7	271 / 247	19	179
		203		156
	8	203	20	128
		191		
	9	191	21	
		191		
	10	217	22	
		193		
	11	209	23	
		206		
	12	229	24	
		200		

Comments:	Well RAD-2, DTB and DTW are from the ground surface						
	Stickup is ~3 feet						
	Depth to Bottom 2	20.09	Depth to Water	19.32			



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