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December 31, 2019

Mr. Matthew Hubicki
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York, 12233-7017

Re: Baseline Groundwater Sampling & Emerging Contaminant Sampling Letter Report
Polychrome Research and Development (R&D) Lab Site (Polychrome West Site)
137-145 Alexander Street, Yonkers, NY 10701
NYSDEC BCP Site: C360099

Dear Mr. Hubicki:

AKRF, Inc. (AKRF), on behalf of Avalon Yonkers Sun Sites, LLC, has prepared this Baseline Groundwater Sampling & Emerging Contaminant Sampling Letter Report (Letter Report) for the Polychrome West Site (the Site) located at 137-145 Alexander Street, Yonkers, New York. This Letter Report summarizes the results of the baseline groundwater sampling completed in October 2019 in compliance with the December 2019 Site Management Plan (SMP). This Letter Report also summarizes two rounds of emerging contaminant[1] sampling completed in June 2019 and October 2019.

SAMPLING METHODOLOGY

As detailed in Section 4.4 of the SMP, a network of groundwater monitoring wells has been installed at the Site to assess the effectiveness of the remedy in mitigating impacts to on-Site groundwater and to assess the long-term performance of natural attenuation following remediation.

The SMP groundwater monitoring well network consists of six 4-inch diameter monitoring wells (MW-A through MW-F), installed with 10-foot monitoring well screens set at elevations ranging from approximately -6 to +4 feet mean sea level (msl) to target the shallow groundwater table. Figure 1 depicts the location of groundwater monitoring wells. Monitoring well construction details are included in the SMP. The groundwater monitoring network was designed as detailed below.

- MW-A and MW-B were designed to monitor groundwater quality immediately up-gradient of the Hudson River along the western/northwestern portion of the Site;
- MW-C and MW-D were designed to monitor groundwater quality up-gradient of the Slurry Wall along the western/southwestern portion of the Site;

[1] For the purposes of this Letter Report, "emerging contaminants" refers to 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS), a select currently unregulated list of organic compounds that were added to the United States Environmental Protection Agency (USEPA)'s third drinking water contaminant candidate list (*USEPA CCL3*, dated October 8, 2009).

- MW-E was designed to monitor groundwater quality along the City of Yonkers Combined Sewer Overflow (CSO) (located along the southern portion of the Site immediately up-gradient of the CSO anti-seep collar); and
- MW-F was designed to monitor groundwater quality near a petroleum hot spot observed within Excavation Area E (located along the northern portion of the Site cross-gradient to the Excelsior Packaging facility).

Between October 9, 2019 and October 11, 2019, baseline groundwater samples were collected from groundwater monitoring wells MW-A through MW-F and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) by EPA Method 8260, TCL semi-volatile organic compounds (SVOCs) by EPA Method 8270D, and Target Analyte List (TAL) metals (total and dissolved). The data collected as part of this baseline sampling event is used to evaluate the appropriate analyte list for subsequent annual sampling events detailed in the SMP.

In addition, as part of NYSDEC's statewide initiative to evaluate environmental remediation sites for emerging contaminants, two rounds of emerging contaminant sampling was completed at the Site in 2019. In response to a NYSDEC request dated May 4, 2019, groundwater samples were collected from MW-A and MW-F on June 10, 2019, and analyzed for emerging contaminants. In response to a supplemental NYSDEC request dated October 17, 2019, an additional groundwater sample was collected from MW-E on October 24, 2019, and analyzed for emerging contaminants. The emerging contaminant samples collected were analyzed for 1,4-dioxane by EPA Method 8270 Selective Ion Monitoring (SIM) and PFAS by EPA Method Modified 537.

Sampling was conducted using low-flow sampling techniques, in general accordance with United States EPA's "Low-Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells" [(EQASOP-GW 001) dated January 2010] and the NYSDEC "PFAS Groundwater Samples from Monitoring Wells Sample Protocol Revision 1.2" dated August 9, 2018, augmented with the emerging contaminant sampling requirements set forth in USEPA Method 537, Rev 1.1, and with industry-consensus sampling methodology for emerging contaminants. Augmented methods included, but were not limited to, considerations for personal protective equipment (PPE) types and proprietary materials, work zone and exclusion zone considerations for equipment, and food/drink, sample collection sequencing, equipment, and bottleware and preservation, equipment decontamination, and auxiliary equipment such as field books, and writing utensils.

At each sampling location, tubing was connected to a peristaltic pump, which was then lowered to the appropriate sampling depth, based on the observed total depth and documented screened interval of the well. The pump was then activated at the lowest flow rate, and the depth to water was measured periodically. Groundwater was pumped, field-screened with a photoionization detector (PID), and monitored using a water quality meter for the gradual stabilization of five parameters: pH, specific conductivity, oxidation-reduction potential (ORP), turbidity, and dissolved oxygen. Groundwater samples were collected when water quality indicators had stabilized and turbidity levels were less than 50 nephelometric turbidity units (NTU). All purge water was containerized in a 55-gallon drum for future characterization and off-site disposal.

Quality assurance/quality control (QA/QC) samples were collected during both the June 2019 emerging contaminant sampling event and the October 2019 baseline groundwater/emerging contaminant sampling event.

In June 2019, the QA/QC samples consisted of a blind duplicate sample (labeled DUPE-06102019) collected at groundwater monitoring well MW-F, a matrix spike/matrix spike duplicate, and, a field equipment blank. Matrix spike/matrix spike duplicate and field equipment blank QA/QC samples were collected during the June 2019 emerging contaminant sampling event conducted concurrently at the adjacent Polychrome East site (BCP Site No. C360098) and were used as representative QA/QC samples for the Site. The results of the June 2019 field equipment blank and matrix spike/matrix spike duplicate are provided in the Baseline Groundwater Sampling & Emerging Contaminant Sampling Letter Report prepared for Polychrome East (BCP Site No. C360098), submitted to NYSDEC on December 31, 2019.

During the October 2019 baseline groundwater monitoring sampling event, the QA/QC samples consisted of a blind duplicate sample (labeled PCW-MW-X-20191011) collected at groundwater monitoring well MW-F, a matrix spike/matrix spike duplicate, and a field equipment blank. Matrix spike/matrix spike duplicate and field equipment blank QA/QC samples were collected during the baseline groundwater/emerging contaminant sampling event conducted concurrently at the adjacent Polychrome East site (BCP Site No. C360098) and were used as representative QA/QC samples for the Site. The results of the field equipment blank and matrix spike/matrix spike duplicate are provided in the Baseline Groundwater Sampling & Emerging Contaminant Sampling Letter Report prepared for Polychrome East (BCP Site No. C360098), submitted to NYSDEC on December 31, 2019.

Groundwater samples were collected in laboratory-supplied glassware, labeled, and placed in a chilled cooler in a safe location prior to pick-up by the laboratory under chain-of-custody protocol. The laboratory analysis was conducted by Alpha Analytical of Westborough, Massachusetts, a New York State Environmental Laboratory Approval Program (ELAP)-certified laboratory. Category B deliverables provided by the laboratory and associated Data Usability Summary Reports (DUSRs) were submitted to NYSDEC as part of the Final Engineering Report (FER). Validated Electronic Data Deliverables (EDDs) were accepted by NYSDEC on December 30, 2019.

BASELINE ANALYTICAL RESULTS

Sample results were compared to the NYSDEC Technical Operational Guidance Series (TOGS) Ambient Water Quality Standards and Guidance Values (AWQSGVs). A summary of the sampling results is as follows:

- No VOCs were detected above the AWQSGVs.
- Nine SVOCs were detected above the AWQSGVs in one or more groundwater samples as further detailed below. All other detected SVOCs were below the AWQSGVs.
    - Acenaphthene was detected in one of the six groundwater samples (MW-D) above its AWQSGV of 20 micrograms per liter (µg/L) at a concentration of 21 µg/L.
    - Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and chrysene were detected in five of the six groundwater samples, as well as the blind duplicate, above their AWQSGVs (0.002 µg/L, non-detect, 0.002 µg/L and 0.002 µg/L, respectively) with a maximum concentration of 0.23 µg/L of benzo(a)anthracene detected in MW-D.
    - Benzo(k)fluoranthene, was detected in five of the six groundwater samples above its AWQSGV of 0.002 µg/L with a concentration of 0.01 µg/L detected in each sample.
    - Indeno(1,2,3-c,d)pyrene was detected in three of the six groundwater samples above its AWQSGV of 0.002 µg/L with a maximum concentration of 0.03 µg/L detected in MW-B and MW-E.
    - Naphthalene was detected in one of the six groundwater samples (MW-D) above its AWQSGV of 10.0 µg/L with a concentration of 40 µg/L. Although there is no AWQSGV for comparison when analyzed as a VOC, naphthalene was also detected when analyzed as a VOC in two of the six samples, as well as the blind duplicate, with a maximum concentration of 90 µg/L detected in MW-D.
    - Phenol was detected in two of the six groundwater samples, as well as the blind duplicate, above its AWQSGV of 1.0 µg/L with a maximum concentration of 53 µg/L detected in MW-D.
- Five metals were detected above the AWQSGVs in one or more groundwater samples as further detailed below. All other detected metals were below the AWQSGVs.
    - Iron was detected in one of the six dissolved (filtered) groundwater samples, as well as the blind duplicate, above its AWQSGV of 300 µg/L with a maximum concentration of 486 µg/L in the MW-F blind duplicate.

- Magnesium was detected in four of the six dissolved (filtered) groundwater samples above its AWQSGV of 35,000 µg/L with a maximum concentration of 404,000 µg/L in MW-C.
- Manganese was detected in two of the six dissolved (filtered) groundwater samples above its AWQSGV of 300 µg/L with a maximum concentration of 380.9 µg/L in MW-F.
- Mercury was detected in one of the six dissolved (filtered) groundwater samples, as well as the blind duplicate, above its AWQSGV of 0.7 µg/L with a maximum concentration of 3.3 µg/L in the MW-F blind duplicate.
- Sodium was detected in all six dissolved (filtered) groundwater samples, as well as the blind duplicate, above its AWQSGV of 20,000 µg/L with a maximum concentration of 3,700,000 µg/L in MW-C.
- Similar but slightly higher concentrations were reported for the same analytes in the total (unfiltered) samples analyzed. Thallium and antimony were also detected above their respective AWQSGVs in four of the six total (unfiltered) groundwater samples.

The groundwater analytical results for VOCs, SVOCs, and metals (total and dissolved) are presented in the attached Tables 1A and 1D. SVOCs and metals (dissolved only) exceeding AWQSGVs are displayed on Figure 1. The full laboratory analytical reports for groundwater sampling are provided as Attachment A.

EMERGING CONTAMINANTS ANALYTICAL RESULTS

A summary of the sampling results is as follows:

- 1,4-Dioxane was detected in one of the two groundwater samples collected in June 2019 (MW-F), as well as the associated blind duplicate. 1,4-Dioxane was also detected in the one groundwater sample collected in October 2019 (MW-E) at concentration of 20 µg/L.
- PFAS were detected in all three groundwater samples collected between the June 2019 and October 2019 sampling events, as well as the blind duplicate, with a maximum total PFAS concentration (total of all compounds listed on Table 1E) of 190.17 nanograms/liter (ng/l) in MW-F.
- No emerging contaminants were identified in the associated field equipment blank sample.

The groundwater analytical results for 1,4-dioxane and PFAS are presented in the attached Tables 1E and 1F. The full laboratory analytical reports for groundwater sampling are provided as Attachment A.

CONCLUSIONS

VOCs

Although typically analyzed and reported as a SVOC, naphthalene was detected in two wells (reported at 90 µg/L at MW-D and reported at 12 µg/L at MW-F [also reported at 14 µg/L at the duplicate sample collected from MW-F]) above its AWQSGV (10 µg/L) when analyzed as a VOC. Naphthalene is a common indicator of coal tar contamination and its relevance at the Site is discussed below in the SVOC section.

SVOCs

With the exception of naphthalene and phenol, the detected SVOCs are PAHs, a class of compounds most commonly found in combustion byproducts that are frequently found in urban fill. Remedial activities targeted contaminant source areas of elevated PAHs; however, areas of urban fill remain beneath the Site-wide cover as documented in endpoint sampling completed as part of the remediation at the Site (refer to the FER for additional detail). As a result, low level PAHs detected above AWQSGVs in most groundwater monitoring wells sampled are likely attributable to the characteristics of remaining on-Site urban fill.

Naphthalene and phenol are byproducts commonly associated with coal tar. Naphthalene (when analyzed as a SVOC) and phenol were detected above the AWQSGV only in MW-D; however, when analyzed as a VOC, naphthalene was also detected above the AWQSGV at MW-D and MW-F. As noted in the FER, remnant coal tar dense non-aqueous phase liquid (DNAPL) contamination is present at the Site (including at the nearby NW-5). While naphthalene and phenol do not appear to be a Site-wide groundwater issue,

there may be small portions of the Site where groundwater quality is impacted by the residual coal tar DNAPL. Periodic removal of DNAPL from Site recovery wells will be conducted in accordance with the SMP. As outlined previously, the slurry wall is down-gradient of MW-D and acts as a containment measure for the contaminated groundwater in the southwestern portion of the Site.

Metals

Iron, magnesium, manganese, and sodium are natural metals that are expected to be present within the aquifer, and are not likely attributable to Site-related residual contamination. It should be noted that AWQSGVs were developed assuming use of groundwater as a drinking source, a scenario that is prohibited as part of the institutional controls implemented at the Site.

Mercury has been previously detected at elevated concentrations within the urban fill Site-wide. Remedial activities targeted contaminant source areas of elevated metals, including mercury; however, areas of residual mercury contamination within the urban fill likely remain beneath the Site-wide cover. As a result, mercury detected above the AWQSGV in MW-F is likely attributable to the characteristics of remaining on-Site urban fill. Note that mercury was detected at a slightly higher concentration in the MW-F total (unfiltered) groundwater sample. Similarly, mercury was detected above the AWQSGV in two other total (unfiltered) samples, which indicates that the additional total (unfiltered) mercury exceedances in groundwater are likely attributable to on-Site urban fill.

Note that thallium and antimony were also detected above their respective AWQSGVs in four of the six total (unfiltered) groundwater samples; however, these metals were likely detected due to turbidity (entrained sediment) from urban fill in the unfiltered sample as no exceedances of the AWQSGVs were reported in the corresponding dissolved samples.

Future Sampling Recommendations

Site groundwater concentrations are generally within an order of magnitude of the AWQSGV or are associated with regional groundwater quality (e.g., iron, magnesium, manganese, and sodium). Based on the baseline sampling results, AKRF recommends to continue groundwater monitoring on an annual basis in accordance with the SMP for TCL VOCs via EPA 8260 and TCL SVOCs by EPA 8270D. Future sampling for metals is not recommended based upon only minor exceedances and/or background sources for such exceedances.

Please feel free to contact me at 914-922-2387 with any questions or concerns during your review.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

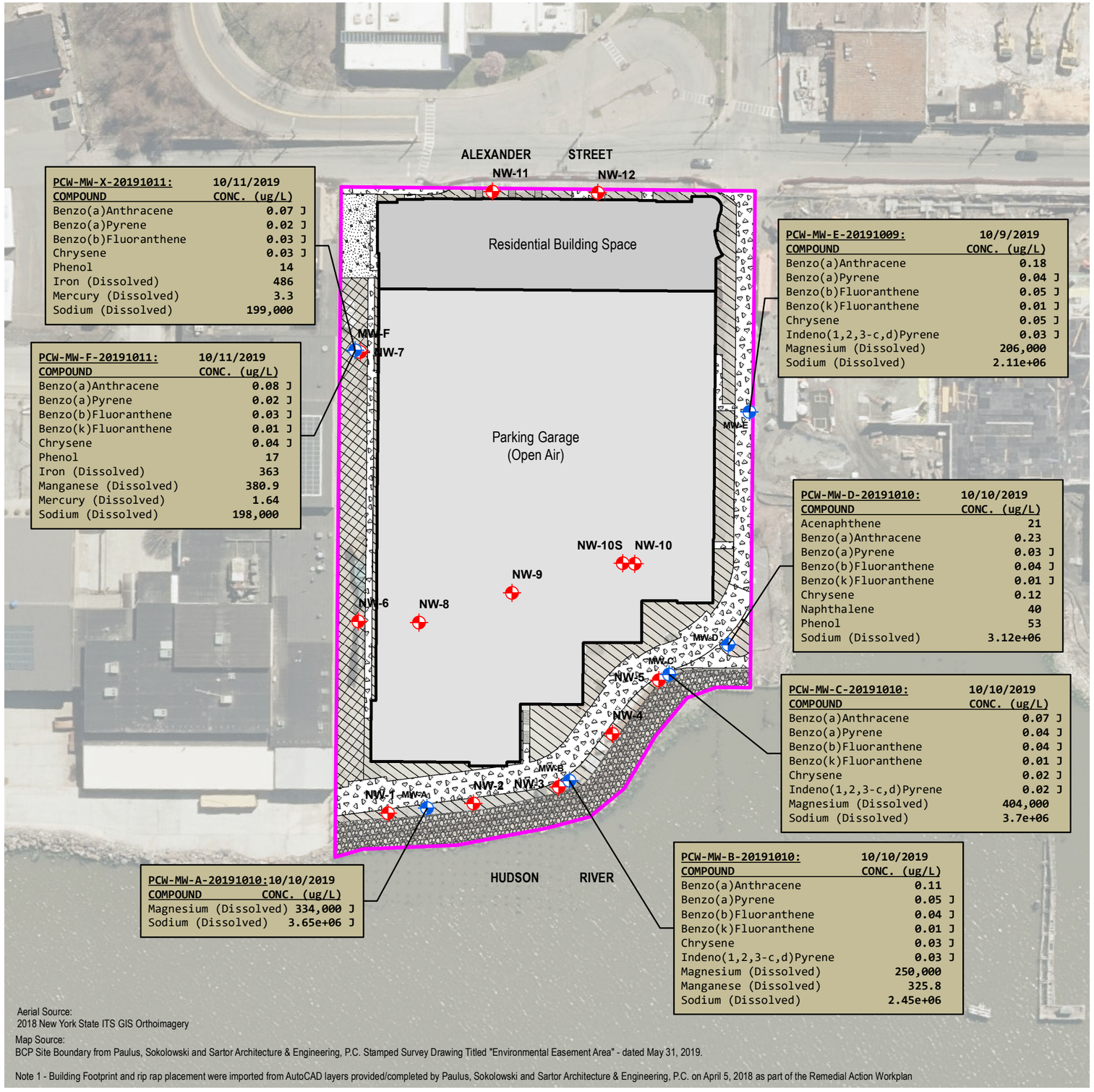
Attachments:

Figure 1	Baseline Groundwater Sampling Results Exceeding AWQSGVs
Tables 1A-1E	Baseline and Emerging Contaminant Sample Analytical Results
Attachment A	Laboratory Analytical Reports

cc (electronic copy only):

S. Deyette, K. Carpenter – NYSDEC
S. Wagh, M. Shuck – NYSDOH
M. Godick, R. Kinal, S. Grens, S. Caporizzo - AKRF
B. White, C. Reynolds, J. Vogel – Avalon Yonkers Sun Sites, LLC

FIGURES



PCW-MW-X-20191011: 10/11/2019

COMPOUND	CONC. (ug/L)
Benzo(a)Anthracene	0.07 J
Benzo(a)Pyrene	0.02 J
Benzo(b)Fluoranthene	0.03 J
Chrysene	0.03 J
Phenol	14
Iron (Dissolved)	486
Mercury (Dissolved)	3.3
Sodium (Dissolved)	199,000

PCW-MW-F-20191011: 10/11/2019

COMPOUND	CONC. (ug/L)
Benzo(a)Anthracene	0.08 J
Benzo(a)Pyrene	0.02 J
Benzo(b)Fluoranthene	0.03 J
Benzo(k)Fluoranthene	0.01 J
Chrysene	0.04 J
Phenol	17
Iron (Dissolved)	363
Manganese (Dissolved)	380.9
Mercury (Dissolved)	1.64
Sodium (Dissolved)	198,000

PCW-MW-E-20191009: 10/9/2019

COMPOUND	CONC. (ug/L)
Benzo(a)Anthracene	0.18
Benzo(a)Pyrene	0.04 J
Benzo(b)Fluoranthene	0.05 J
Benzo(k)Fluoranthene	0.01 J
Chrysene	0.05 J
Indeno(1,2,3-c,d)Pyrene	0.03 J
Magnesium (Dissolved)	206,000
Sodium (Dissolved)	2.11e+06

PCW-MW-D-20191010: 10/10/2019

COMPOUND	CONC. (ug/L)
Acenaphthene	21
Benzo(a)Anthracene	0.23
Benzo(a)Pyrene	0.03 J
Benzo(b)Fluoranthene	0.04 J
Benzo(k)Fluoranthene	0.01 J
Chrysene	0.12
Naphthalene	40
Phenol	53
Sodium (Dissolved)	3.12e+06

PCW-MW-C-20191010: 10/10/2019

COMPOUND	CONC. (ug/L)
Benzo(a)Anthracene	0.07 J
Benzo(a)Pyrene	0.04 J
Benzo(b)Fluoranthene	0.04 J
Benzo(k)Fluoranthene	0.01 J
Chrysene	0.02 J
Indeno(1,2,3-c,d)Pyrene	0.02 J
Magnesium (Dissolved)	404,000
Sodium (Dissolved)	3.7e+06

PCW-MW-A-20191010: 10/10/2019

COMPOUND	CONC. (ug/L)
Magnesium (Dissolved)	334,000 J
Sodium (Dissolved)	3.65e+06 J

PCW-MW-B-20191010: 10/10/2019

COMPOUND	CONC. (ug/L)
Benzo(a)Anthracene	0.11
Benzo(a)Pyrene	0.05 J
Benzo(b)Fluoranthene	0.04 J
Benzo(k)Fluoranthene	0.01 J
Chrysene	0.03 J
Indeno(1,2,3-c,d)Pyrene	0.03 J
Magnesium (Dissolved)	250,000
Manganese (Dissolved)	325.8
Sodium (Dissolved)	2.45e+06

Aerial Source:
2018 New York State ITS GIS Orthoimagery

Map Source:
BCP Site Boundary from Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. Stamped Survey Drawing Titled "Environmental Easement Area" - dated May 31, 2019.

Note 1 - Building Footprint and rip rap placement were imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. on April 5, 2018 as part of the Remedial Action Workplan

LEGEND

- BCP SITE BOUNDARY
- PARKING GARAGE (OPEN AIR)
- RESIDENTIAL BUILDING SPACE
- ESPLANADE
- GRASS PAVER
- ASPHALT
- RIP RAP
- LANDSCAPED
- NAPL RECOVERY WELL LOCATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW NAPL RECOVERY)

Row Labels	NYSDEC AWQSGVs ug/l
Metals	
Iron	300
Magnesium	35,000
Manganese	300
Mercury	0.7
Sodium	20,000
Semivolatile Organic Compounds	
Acenaphthene	20
Benzo(a)Anthracene	0.002
Benzo(a)Pyrene	0
Benzo(b)Fluoranthene	0.002
Benzo(k)Fluoranthene	0.002
Chrysene	0.002
Indeno(1,2,3-c,d)Pyrene	0.002
Naphthalene	10
Phenol	1

Qualifier	Description
J	The reported value is estimated

0 40 80 160
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Polychrome West
NYSDEC Site (BCP #C360099)
Yonkers, New York

BASELINE GROUNDWATER MONITORING EXCEEDANCES

DATE
12/17/2019

PROJECT NO.
180017

FIGURE
1

©2019 AKRF Q:\Projects\180017 - AVALONBAY YONKERS - BLD 2 - PCW\Technical\GIS and Graphics\Hazmat\Other\180017 Fig 1 GW Well Concentrations.mxd 12/17/2019 10:17:14 AM mweilleux

TABLES

Table 1A
Baseline Groundwater Sampling Emerging Contaminant Sampling Letter Report
Polychrome West (BCP No. C360099)
VOCs

	AKRF Sample ID	PCW-MW-A-20191010	PCW-MW-B-20191010	PCW-MW-C-20191010	PCW-MW-D-20191010	PCW-MW-E-20191009	PCW-MW-F-20191011	PCW-MW-X-20191011
	Laboratory Sample ID	L1947799-01	L1947799-02	L1947799-03	L1947799-04	L1947799-05	L1947799-06	L1947799-07
	Date Sampled	10/10/2019 10:35:00 AM	10/10/2019 9:35:00 AM	10/10/2019 12:30:00 PM	10/10/2019 1:15:00 PM	10/9/2019 2:10:00 PM	10/11/2019 9:20:00 AM	10/11/2019 10:00:00 AM
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CPNC Q
1,1,1,2-Tetrachloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,1-Trichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4,5-Tetramethylbenzene	5	2 U	2 U	2 U	1.3 J	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trimethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	0.13 J	0.15 J	0.5 U	0.18 J	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichloropropane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Diethyl Benzene	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2,2-Dichloropropane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Chlorotoluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Ethyltoluene	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Acetone	50	5 UJ	5 U	5 U	23	16 JK	14	9.4
Acrylonitrile	5	5 R	5 R	5 R	5 R	5 R	5 R	5 R
Benzene	1	0.5 U	0.5 U	0.5 U	0.94	0.5 U	0.5 U	0.5 U
Bromobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromochloromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 UJ	2.5 UJ
Carbon Disulfide	60	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cymene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Dibromochloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	NS	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Diethyl Ether (Ethyl Ether)	NS	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U
Ethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	2.5 U	2.5 U	2.5 U	1.7 J	2.5 U	2.5 U	2.5 U
M,P-Xylenes	5	2.5 U	2.5 U	2.5 U	0.74 J	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	5 U	5 U	5 U	5 U	3.8 JK	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Naphthalene	NS	2.5 UJ	2.5 U	2.5 U	90	2.5 UJ	12	14
N-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,4-Dichloro-2-Butene	5	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 UJ	2.5 UJ
Trichloroethylene (TCE)	5	0.45 J	0.36 J	0.5 U	0.5	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	0.78 J	1.1 J	2.5 U	4.6	2.5 U	2.5 U	2.5 U
Vinyl Acetate	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	NS	2.5 U	2.5 U	2.5 U	0.74 J	2.5 U	2.5 U	2.5 U

Table 1B
Baseline Groundwater Sampling Emerging Contaminant Sampling Letter Report
Polychrome West (BCP No. C360099)
SVOCs

	AKRF Sample ID	PCW-MW-A-20191010	PCW-MW-B-20191010	PCW-MW-C-20191010	PCW-MW-D-20191010	PCW-MW-E-20191009	PCW-MW-F-20191011	PCW-MW-X-20191011
	Laboratory Sample ID	L1947799-01	L1947799-02	L1947799-03	L1947799-04	L1947799-05	L1947799-06	L1947799-07
	Date Sampled	10/10/2019 10:35:00 AM	10/10/2019 9:35:00 AM	10/10/2019 12:30:00 PM	10/10/2019 1:15:00 PM	10/9/2019 2:10:00 PM	10/11/2019 9:20:00 AM	10/11/2019 10:00:00 AM
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	10	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Chloronaphthalene	10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chlorophenol	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene	NS	0.1 U	0.21	0.1 U	14	0.1 U	1.3	0.84
2-Methylphenol (O-Cresol)	NS	5 U	5 U	5 U	1.5 J	5 U	0.81 J	0.63 J
2-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitrophenol	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3-Methylphenol/4-Methylphenol	NS	5 U	5 U	5 U	4.2 J	5 U	2.5 J	2 J
3-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4,6-Dinitro-2-Methylphenol	NS	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U
4-Bromophenyl Phenyl Ether	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Chloro-3-Methylphenol	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Chloroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl Phenyl Ether	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Nitrophenol	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	**20**	0.1 U	2.1	0.47	**21**	0.13	2.4	1.6
Acenaphthylene	NS	0.1 U	0.08 J	0.04 J	0.92	0.1 U	0.11	0.09 J
Acetophenone	NS	5 U	5 U	5 U	2.6 J	5 U	5 U	5 U
Anthracene	50	0.03 J	0.1	0.03 J	4.2	0.03 J	0.63	0.52
Benzo(a)Anthracene	**0.002**	0.1 U	**0.11**	**0.07 J**	**0.23**	**0.18**	**0.08 J**	**0.07 J**
Benzo(a)Pyrene	**ND**	0.1 U	**0.05 J**	**0.04 J**	**0.03 J**	**0.04 J**	**0.02 J**	**0.02 J**
Benzo(b)Fluoranthene	**0.002**	0.1 U	**0.04 J**	**0.04 J**	**0.04 J**	**0.05 J**	**0.03 J**	**0.03 J**
Benzo(g,h,i)Perylene	NS	0.1 U	0.03 J	0.02 J	0.1 U	0.04 J	0.1 U	0.1 U
Benzo(k)Fluoranthene	**0.002**	0.1 U	**0.01 J**	**0.01 J**	**0.01 J**	**0.01 J**	**0.01 J**	0.1 U
Benzoic Acid	NS	50 R	50 R	50 R	46 JL	50 U	26 JL	20 JL
Benzyl Alcohol	NS	2 U	2 U	2 U	28	2 U	2 U	2 U
Benzyl Butyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Biphenyl (Diphenyl)	5	2 U	2 U	2 U	3.9	2 U	2 U	2 U
Bis(2-Chloroethoxy) Methane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bis(2-Chloroisopropyl) Ether	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bis(2-Ethylhexyl) Phthalate	5	3.1	3 U	3 U	3 U	2 J	3 U	3 U
Carbazole	NS	2 U	2 U	2 U	18	2 U	1.5 J	1.2 J
Chrysene	**0.002**	0.1 U	**0.03 J**	**0.02 J**	**0.12**	**0.05 J**	**0.04 J**	**0.03 J**
Dibenz(a,h)Anthracene	NS	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	NS	2 U	2 U	2 U	12	2 U	2 U	2 U
Diethyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dimethyl Phthalate	50	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U
Di-N-Butyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Di-N-Octylphthalate	50	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U
Fluoranthene	50	0.1 U	0.2	0.06 J	3.5	0.09 J	0.43	0.32
Fluorene	50	0.1 U	0.16	0.1 U	8.1	0.02 J	0.46	0.32
Hexachlorobenzene	0.04	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Hexachlorobutadiene	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	5	20 U	20 U	20 U	20 U	20 UJ	20 UJ	20 UJ
Hexachloroethane	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Indeno(1,2,3-c,d)Pyrene	**0.002**	0.1 U	**0.03 J**	**0.02 J**	0.1 U	**0.03 J**	0.1 U	0.1 U
Isophorone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	**10**	0.1 U	0.27	0.1 U	**40**	0.1 U	4.8	3.1
Nitrobenzene	0.4	2 U	2 U	2 U	2 U	2 U	2 U	2 U
N-Nitrosodi-N-Propylamine	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-Nitrosodiphenylamine	50	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Pentachlorophenol	NS	0.24 J	0.8 U	0.8 U	0.8 U	0.8 UJ	0.8 UJ	0.8 UJ
Phenanthrene	50	0.04 J	0.27	0.04 J	21	0.04 J	0.07 J	0.05 J
Phenol	**1**	5 U	5 U	5 U	**53**	5 U	**17**	**14**
Pyrene	50	0.1 U	0.15	0.08 J	2.2	0.11	0.34	0.25

Table 1C
Baseline Groundwater Sampling Emerging Contaminant Sampling Letter Report
Polychrome West (BCP No. C360099)
Metals (Dissolved)

	AKRF Sample ID	PCW-MW-A-20191010	PCW-MW-A-20191010	PCW-MW-B-20191010	PCW-MW-C-20191010	PCW-MW-C-20191010	PCW-MW-D-20191010
	Laboratory Sample ID	L1947799-01	L1947799-01	L1947799-02	L1947799-03	L1947799-03	L1947799-04
	Date Sampled	10/10/2019 10:35:00 AM	10/10/2019 10:35:00 AM	10/10/2019 9:35:00 AM	10/10/2019 12:30:00 PM	10/10/2019 12:30:00 PM	10/10/2019 1:15:00 PM
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	10	1	1	10	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NR	100 U	7.69 J	NR	100 U	NR
Antimony	3	NR	40 U	4 U	NR	40 U	NR
Arsenic	25	NR	3.23 J	1.81	NR	5 U	NR
Barium	1,000	NR	244.5	469.7	NR	169.9	NR
Beryllium	3	NR	5 U	0.5 U	NR	5 U	NR
Cadmium	5	NR	2 U	0.2 U	NR	2 U	NR
Calcium	NS	NR	322,000 J	174,000	NR	194,000	NR
Chromium, Total	50	NR	17.64	1.04	NR	3.31 J	NR
Cobalt	NS	NR	5 U	0.24 J	NR	5 U	NR
Copper	200	NR	11.02	0.89 J	NR	5.22 J	NR
Iron	**300**	NR	500 U	95.8	NR	500 U	NR
Lead	25	NR	10 U	1 U	NR	10 U	NR
Magnesium	**35,000**	NR	**334,000 J**	**250,000**	NR	**404,000**	NR
Manganese	**300**	NR	10 U	**325.8**	NR	81.59	NR
Mercury	**0.7**	0.2 U	NT	0.2 U	0.2 U	NT	0.15 J
Nickel	100	NR	20 U	1.7 J	NR	20 U	NR
Potassium	NS	NR	119,000	73,500	NR	120,000	NR
Selenium	10	NR	50 U	5 U	NR	50 U	NR
Silver	50	NR	4 U	0.4 U	NR	4 U	NR
Sodium	**20,000**	NR	**3,650,000 J**	**2,450,000**	NR	**3,700,000**	NR
Thallium	0.5	NR	5 U	0.5 U	NR	5 U	NR
Vanadium	NS	NR	50 U	5 U	NR	50 U	NR
Zinc	2,000	NR	100 U	10 U	NR	100 U	NR

Table 1C
Baseline Groundwater Sampling Emerging Contaminant Sampling Letter Report
Polychrome West (BCP No. C360099)
Metals (Dissolved)

	AKRF Sample ID	PCW-MW-D-20191010	PCW-MW-E-20191009	PCW-MW-E-20191009	PCW-MW-F-20191011	PCW-MW-X-20191011
	Laboratory Sample ID	L1947799-04	L1947799-05	L1947799-05	L1947799-06	L1947799-07
	Date Sampled	10/10/2019 1:15:00 PM	10/9/2019 2:10:00 PM	10/9/2019 2:10:00 PM	10/11/2019 9:20:00 AM	10/11/2019 10:00:00 AM
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	10	1	10	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	247	NR	52.8 J	65.4 J	212 J
Antimony	3	40 U	NR	40 U	2.21 J	2.87 J
Arsenic	25	3.53 J	NR	2.4 J	12.16	16.45
Barium	1,000	568.7	NR	69.5	96.15	89.43
Beryllium	3	5 U	NR	5 U	0.5 U	0.5 U
Cadmium	5	2 U	NR	2 U	0.2 U	0.2 U
Calcium	NS	653,000	NR	103,000	74,700	66,900
Chromium, Total	50	2.5 J	NR	6.6 J	0.39 J	0.58 J
Cobalt	NS	1.76 J	NR	5 U	2.21	2.2
Copper	200	10 U	NR	48.14	1 U	1 U
Iron	**300**	500 U	NR	500 U	**363**	**486**
Lead	25	10 U	NR	10 U	1 U	0.36 J
Magnesium	**35,000**	700 U	NR	**206,000**	8,370	6,850
Manganese	**300**	10 U	NR	12.79	**380.9**	298.1
Mercury	**0.7**	NT	0.2 U	NT	**1.64**	**3.3**
Nickel	100	24.53	NR	20 U	2.58	3.51
Potassium	NS	157,000	NR	77,800	28,000	30,400
Selenium	10	50 U	NR	50 U	5 U	5 U
Silver	50	4 U	NR	4 U	0.4 U	0.4 U
Sodium	**20,000**	**3,120,000**	NR	**2,110,000**	**198,000**	**199,000**
Thallium	0.5	5 U	NR	5 U	0.5 U	0.5 U
Vanadium	NS	50 U	NR	50 U	2.29 J	3.96 J
Zinc	2,000	100 U	NR	100 U	10 U	10 U

Table 1D
Baseline Groundwater Sampling Emerging Contaminant Sampling Letter Report
Polychrome West (BCP No. C360099)
Metals (Total)

AKRF Sample ID		PCW-MW-A-20191010	PCW-MW-A-20191010	PCW-MW-B-20191010	PCW-MW-B-20191010	PCW-MW-C-20191010	PCW-MW-C-20191010
Laboratory Sample ID		L1947799-01	L1947799-01	L1947799-02	L1947799-02	L1947799-03	L1947799-03
Date Sampled		10/10/2019 10:35:00 AM	10/10/2019 10:35:00 AM	10/10/2019 9:35:00 AM	10/10/2019 9:35:00 AM	10/10/2019 12:30:00 PM	10/10/2019 12:30:00 PM
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Dilution Factor		1	10	1	10	1	10
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NR	81.4 J	NR	79.8 J	NR	62.4 J
Antimony	**3**	NR	**11.17 JK**	NR	**5.35 J**	NR	40 U
Arsenic	25	NR	4.45 J	NR	2.12 J	NR	5 U
Barium	1,000	NR	207	NR	421.8	NR	148.6
Beryllium	3	NR	5 U	NR	5 U	NR	5 U
Cadmium	5	NR	2 U	NR	2 U	NR	2 U
Calcium	NS	NR	321,000	NR	239,000	NR	186,000
Chromium, Total	50	NR	14.26	NR	10 U	NR	10 U
Cobalt	NS	NR	5 U	NR	5 U	NR	5 U
Copper	200	NR	11.16	NR	10 U	NR	5.58 J
Iron	**300**	NR	284 JK	NR	**500**	NR	**422 J**
Lead	25	NR	10 U	NR	10 U	NR	10 U
Magnesium	**35,000**	NR	**358,000**	NR	**278,000**	NR	**424,000**
Manganese	**300**	NR	8.2 J	NR	**368.6**	NR	90.31
Mercury	**0.7**	0.2 U	NT	0.2 U	NT	0.2 U	NT
Nickel	100	NR	20 U	NR	20 U	NR	20 U
Potassium	NS	NR	123,000	NR	89,800	NR	115,000
Selenium	10	NR	50 U	NR	50 U	NR	50 U
Silver	50	NR	4 U	NR	4 U	NR	4 U
Sodium	**20,000**	NR	**3,740,000 J**	NR	**2,670,000**	NR	**3,770,000**
Thallium	**0.5**	NR	**3 J**	NR	**1.99 J**	NR	**1.52 J**
Vanadium	NS	NR	50 U	NR	50 U	NR	50 U
Zinc	2,000	NR	100 U	NR	100 U	NR	100 U

Table 1D
Baseline Groundwater Sampling Emerging Contaminant Sampling Letter Report
Polychrome West (BCP No. C360099)
Metals (Total)

AKRF Sample ID		PCW-MW-D-20191010	PCW-MW-D-20191010	PCW-MW-E-20191009	PCW-MW-E-20191009	PCW-MW-F-20191011	PCW-MW-X-20191011
Laboratory Sample ID		L1947799-04	L1947799-04	L1947799-05	L1947799-05	L1947799-06	L1947799-07
Date Sampled		10/10/2019 1:15:00 PM	10/10/2019 1:15:00 PM	10/9/2019 2:10:00 PM	10/9/2019 2:10:00 PM	10/11/2019 9:20:00 AM	10/11/2019 10:00:00 AM
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Dilution Factor		1	10	1	10	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NR	293	NR	414	331	414
Antimony	**3**	NR	40 U	NR	**27.16 J**	**3.9 J**	**4.26**
Arsenic	25	NR	4.28 J	NR	2.7 J	18.49	20.27
Barium	1,000	NR	540.2	NR	66.66	95.72	89.1
Beryllium	3	NR	5 U	NR	5 U	0.5 U	0.5 U
Cadmium	5	NR	2 U	NR	2 U	0.2 U	0.2 U
Calcium	NS	NR	644,000	NR	107,000	67,800	65,800
Chromium, Total	50	NR	10 U	NR	4.41 J	1.15	1.15
Cobalt	NS	NR	5 U	NR	5 U	1.85	2.09
Copper	200	NR	4.14 J	NR	59.7	1.96	1.91
Iron	**300**	NR	212 J	NR	**1,270**	**3,710**	**3,580**
Lead	25	NR	10 U	NR	10 U	3.72	4.26
Magnesium	**35,000**	NR	700 U	NR	**223,000**	8,040	7,560
Manganese	**300**	NR	10 U	NR	23.5	**378.2**	**359.9**
Mercury	**0.7**	0.16 J	NT	0.2 U	NT	**8.48**	**9.44**
Nickel	100	NR	23.18	NR	20 U	3.44	3.86
Potassium	NS	NR	158,000	NR	80,700	27,400	28,000
Selenium	10	NR	50 U	NR	50 U	5 U	5 U
Silver	50	NR	4 U	NR	4 U	0.4 U	0.4 U
Sodium	**20,000**	NR	**3,230,000**	NR	**2,210,000**	**196,000**	**200,000**
Thallium	**0.5**	NR	10 U	NR	**7.09 J**	1 U	1 U
Vanadium	NS	NR	50 U	NR	50 U	4.9 J	5.55
Zinc	2,000	NR	100 U	NR	100 U	4.61 J	4.83 J

Table 1E
Baseline Groundwater Sampling Emerging Contaminant Sampling Letter Report
Polychrome West (BCP No. C360099)
Emerging Contaminants - PFAS

	AKRF Sample ID	PCW-MW-A-06102019	PCW-MW-F-06102019	DUPE-06102019	PCW-MW-E-20191024
	Laboratory Sample ID	L1924652-01	L1924652-02	L1924652-03	L1924652-01
	Date Sampled	6/10/2019 12:30:00 AM	6/10/2019 13:35:00 AM	6/10/2019	10/24/2019 10:05:00 AM
	Unit	ng/L	ng/L	ng/L	ng/L
	Dilution Factor	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	1.33 U	1.96 J	2.34	1.88 U
8:2 Fluorotelomer sulfonate	NS	1.21 U	1.24 U	1.22 U	1.88 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	0.81 U	2.78	3.05	1.88 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	0.65 U	0.66 U	0.65 U	1.88 U
Perfluorobutanesulfonic acid	NS	0.65 J	3.11	2.9	1.45 J
Perfluorobutanoic acid	NS	0.16 J	9.24	10	2.69
Perfluorodecanesulfonic acid	NS	0.98 U	1 U	0.98 U	1.88 U
Perfluorodecanoic acid	NS	0.48 J	1.74 J	1.96 J	1.88 U
Perfluorododecanoic acid	NS	0.37 U	0.38 U	0.37 U	1.88 U
Perfluoroheptanesulfonic acid	NS	0.69 U	1.1 J	0.69 U	1.88 U
Perfluoroheptanoic acid	NS	0.82 J	8.37	8.64	2.08
Perfluorohexanesulfonic acid	NS	0.96 J	22.9	24.5	3.06
Perfluorohexanoic acid	NS	1.52 J	12.8	12.7	4
Perfluorononanoic acid	NS	5.12 J	4.97	5.41	0.774 J
Perfluorooctanesulfonic acid	NS	6.19	78.3	73.4	6.71
Perfluorooctanoic acid	NS	2.18	31.5	31.3	5.33
Perfluoropentanoic acid	NS	2.21	10.9	11.3	4.68
Perfluorotetradecanoic acid	NS	2.48 U	0.25 U	0.25 U	1.88 U
Perfluorotridecanoic acid	NS	0.33 U	0.33 U	0.33 U	1.88 U
Perfluoroundecanoic acid	NS	0.26 U	0.4 J	0.31 J	1.88 U
Perfluroroctanesulfonamide	NS	0.58 U	0.1 J	1.4 J	1.88 U

Table 1F
Baseline Groundwater Sampling Emerging Contaminant Sampling Letter Report
Polychrome West (BCP No. C360099)
Emerging Contaminants - 1,4-Dioxane

	AKRF Sample ID	PCW-MW-A-06102019	PCW-MW-F-06102019	DUPE-06102019	PCW-MW-E-20191024
	Laboratory Sample ID	L1924652-01	L1924652-02	L1924652-03	L1950465-01
	Date Sampled	6/10/2019 12:30:00 AM	6/10/2019 13:35:00 AM	6/10/2019	10/24/2019 10:05:00 AM
	Unit	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q
1,4-Dioxane (P-Dioxane)	NS	0.0339 U	1.88	1.92	20

Table 1A-1F
Baseline Groundwater Sampling Emerging Contaminant Sampling Letter Report
Polychrome West (BCP No. C360099)
Notes

DEFINITIONS

J : The reported value is estimated

K : Reported concentration value is proportional to dilution factor and may be exagerated.

L : Sample result is estimated and biased low.

ND : The standard is a non-detectable concentration by the approved analytical method.

NR : Not reported.

NS : No standard.

NT : Not tested.

R : Indicates the reported result is unusable. (note: the analyte may or may not be present.)

U : Indicates that the compound was analyzed for, but not detected.

µg/L : micrograms per Liter

ng/L : nanograms per Liter

STANDARDS

NYSDEC Class GA AWQSGVs : New York State Department of Environmental Conservation Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs).

Exceedances of NYSDEC Class GA AWQSGVs are highlighted in bold font.

ATTACHMENT A
LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

Lab Number:	L1924652
Client:	AKRF, Inc. 34 South Broadway Suite 401 White Plains, NY 10601
ATTN:	Patrick McHugh
Phone:	(914) 922-2387
Project Name:	AVALON YONKERS PCW
Project Number:	180017
Report Date:	06/24/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: AVALON YONKERS PCW
Project Number: 180017

Lab Number: L1924652
Report Date: 06/24/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1924652-01	PCW-MW-A-06102019	WATER	YONKERS, NY	06/10/19 12:30	06/10/19
L1924652-02	PCW-MW-F-06102019	WATER	YONKERS, NY	06/10/19 13:35	06/10/19
L1924652-03	DUPE-06102019	WATER	YONKERS, NY	06/10/19 00:00	06/10/19

Project Name:	AVALON YONKERS PCW	**Lab Number:**	L1924652
Project Number:	180017	**Report Date:**	06/24/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	AVALON YONKERS PCW	**Lab Number:**	L1924652
Project Number:	180017	**Report Date:**	06/24/19

Case Narrative (continued)

Report Submission

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

Perfluorinated Alkyl Acids by Isotope Dilution

WG1250772-1: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

The WG1250772-4/-5 MS/MSD RPD, performed on L1924652-01, is outside the acceptance criteria for 1h,1h,2h,2h-perfluorodecanesulfonic acid (8:2fts) (34%).

WG1251337-1: The continuing calibration standard had the response for M8FOSA, M2-6:2FTS and M2-8:2FTS outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

WG1251337-1: The continuing calibration standard had the response for 8:2FTS outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.

WG1251337-2: The continuing calibration standard had the response for M2-6:2FTS, M2-8:2FTS and M8FOSA outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

WG1251337-2: The continuing calibration standard had the response for Perfluoroctanesulfonic Acid-Branched (br-PFOS) outside of acceptance criteria. The response for Perfluorooctanesulfonic Acid (PFOS) was within acceptance criteria; therefore, no further action was taken.

WG1251337-4: The continuing calibration standard had the response for M2-6:2FTS, M2-8:2FTS and M8FOSA outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

WG1251337-5: The continuing calibration standard had the response for M2-8:2FTS and M8FOSA outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

Project Name:	AVALON YONKERS PCW	**Lab Number:**	L1924652
Project Number:	180017	**Report Date:**	06/24/19

Case Narrative (continued)

WG1251337-5:The continuing calibration standard had the response for 6:2FTS outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Susan E O'Neil Susan O' Neil

Title: Technical Director/Representative Date: 06/24/19

ORGANICS

SEMIVOLATILES

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

SAMPLE RESULTS

Lab ID: L1924652-01
Client ID: PCW-MW-A-06102019
Sample Location: YONKERS, NY

Date Collected: 06/10/19 12:30
Date Received: 06/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 06/16/19 05:33
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 06/15/19 08:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	150	33.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		15-110

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

SAMPLE RESULTS

Lab ID: L1924652-01
Client ID: PCW-MW-A-06102019
Sample Location: YONKERS, NY

Date Collected: 06/10/19 12:30
Date Received: 06/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 06/21/19 19:17
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 06/20/19 08:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.56	J	ng/l	2.00	0.408	1
Perfluoropentanoic Acid (PFPeA)	2.21		ng/l	2.00	0.396	1
Perfluorobutanesulfonic Acid (PFBS)	0.652	J	ng/l	2.00	0.238	1
Perfluorohexanoic Acid (PFHxA)	1.52	J	ng/l	2.00	0.328	1
Perfluoroheptanoic Acid (PFHpA)	0.824	J	ng/l	2.00	0.225	1
Perfluorohexanesulfonic Acid (PFHxS)	0.960	J	ng/l	2.00	0.376	1
Perfluorooctanoic Acid (PFOA)	2.18		ng/l	2.00	0.236	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688	1
Perfluorononanoic Acid (PFNA)	0.512	J	ng/l	2.00	0.312	1
Perfluorooctanesulfonic Acid (PFOS)	6.19		ng/l	2.00	0.504	1
Perfluorodecanoic Acid (PFDA)	0.476	J	ng/l	2.00	0.304	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248	1
PFOA/PFOS, Total	8.37		ng/l	2.00	0.236	1

Project Name: AVALON YONKERS PCW **Lab Number:** L1924652

Project Number: 180017 **Report Date:** 06/24/19

SAMPLE RESULTS

Lab ID: L1924652-01 Date Collected: 06/10/19 12:30

Client ID: PCW-MW-A-06102019 Date Received: 06/10/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	112		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	114		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	141		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	136		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	122		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	136		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	107		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	65		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	111		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	51		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	47		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	84		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	30		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	47		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	71		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	60		33-143

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

SAMPLE RESULTS

Lab ID: L1924652-02
Client ID: PCW-MW-F-06102019
Sample Location: YONKERS, NY

Date Collected: 06/10/19 13:35
Date Received: 06/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 06/16/19 06:43
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 06/15/19 08:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1880		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	37		15-110

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

SAMPLE RESULTS

Lab ID: L1924652-02
Client ID: PCW-MW-F-06102019
Sample Location: YONKERS, NY

Date Collected: 06/10/19 13:35
Date Received: 06/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 06/21/19 20:07
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 06/20/19 08:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	9.24		ng/l	2.04	0.416	1
Perfluoropentanoic Acid (PFPeA)	10.9		ng/l	2.04	0.404	1
Perfluorobutanesulfonic Acid (PFBS)	3.11		ng/l	2.04	0.243	1
Perfluorohexanoic Acid (PFHxA)	12.8		ng/l	2.04	0.335	1
Perfluoroheptanoic Acid (PFHpA)	8.37		ng/l	2.04	0.230	1
Perfluorohexanesulfonic Acid (PFHxS)	22.9		ng/l	2.04	0.384	1
Perfluorooctanoic Acid (PFOA)	31.5		ng/l	2.04	0.241	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.96	J	ng/l	2.04	1.36	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.10	J	ng/l	2.04	0.702	1
Perfluorononanoic Acid (PFNA)	4.97		ng/l	2.04	0.318	1
Perfluorooctanesulfonic Acid (PFOS)	78.3		ng/l	2.04	0.514	1
Perfluorodecanoic Acid (PFDA)	1.74	J	ng/l	2.04	0.310	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.04	1.24	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.04	0.661	1
Perfluoroundecanoic Acid (PFUnA)	0.404	J	ng/l	2.04	0.265	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.04	1.00	1
Perfluorooctanesulfonamide (FOSA)	1.03	J	ng/l	2.04	0.592	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2.78		ng/l	2.04	0.820	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.04	0.380	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.04	0.334	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.04	0.253	1
PFOA/PFOS, Total	110		ng/l	2.04	0.241	1

Project Name: AVALON YONKERS PCW **Lab Number:** L1924652

Project Number: 180017 **Report Date:** 06/24/19

SAMPLE RESULTS

Lab ID: L1924652-02 Date Collected: 06/10/19 13:35

Client ID: PCW-MW-F-06102019 Date Received: 06/10/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	112		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	92		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	130		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	100		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	134		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	115		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	112		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	96		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	68		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	39		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	55		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	72		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	60		33-143

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

SAMPLE RESULTS

Lab ID: L1924652-03
Client ID: DUPE-06102019
Sample Location: YONKERS, NY

Date Collected: 06/10/19 00:00
Date Received: 06/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 06/16/19 07:07
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 06/15/19 08:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1920		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	35		15-110

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

SAMPLE RESULTS

Lab ID: L1924652-03
Client ID: DUPE-06102019
Sample Location: YONKERS, NY

Date Collected: 06/10/19 00:00
Date Received: 06/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 06/21/19 19:00
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 06/19/19 10:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	10.0		ng/l	2.01	0.410	1
Perfluoropentanoic Acid (PFPeA)	11.3		ng/l	2.01	0.398	1
Perfluorobutanesulfonic Acid (PFBS)	2.90		ng/l	2.01	0.239	1
Perfluorohexanoic Acid (PFHxA)	12.7		ng/l	2.01	0.329	1
Perfluoroheptanoic Acid (PFHpA)	8.64		ng/l	2.01	0.226	1
Perfluorohexanesulfonic Acid (PFHxS)	24.5		ng/l	2.01	0.378	1
Perfluorooctanoic Acid (PFOA)	31.3		ng/l	2.01	0.237	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.34		ng/l	2.01	1.34	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.01	0.691	1
Perfluorononanoic Acid (PFNA)	5.41		ng/l	2.01	0.313	1
Perfluorooctanesulfonic Acid (PFOS)	73.4		ng/l	2.01	0.506	1
Perfluorodecanoic Acid (PFDA)	1.96	J	ng/l	2.01	0.305	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.01	1.22	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.01	0.651	1
Perfluoroundecanoic Acid (PFUnA)	0.309	J	ng/l	2.01	0.261	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.01	0.984	1
Perfluorooctanesulfonamide (FOSA)	1.44	J	ng/l	2.01	0.582	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	3.05		ng/l	2.01	0.807	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.01	0.373	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.01	0.328	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.01	0.249	1
PFOA/PFOS, Total	105		ng/l	2.01	0.237	1

Project Name: AVALON YONKERS PCW **Lab Number:** L1924652

Project Number: 180017 **Report Date:** 06/24/19

SAMPLE RESULTS

Lab ID: L1924652-03 Date Collected: 06/10/19 00:00

Client ID: DUPE-06102019 Date Received: 06/10/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	80		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	112		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	111		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	97		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	84		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	107		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	92		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	59		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	83		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	44		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	51		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	65		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	51		33-143

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 06/16/19 03:13
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 06/15/19 08:15

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-03 Batch: WG1248924-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	40		15-110

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/21/19 09:05
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 06/19/19 10:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 03 Batch: WG1250266-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/21/19 09:05
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 06/19/19 10:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 03 Batch: WG1250266-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	101		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	93		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	128		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	128		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	110		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	112		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	46		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	78		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	38		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	65		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	43		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	58		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	62		33-143

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/21/19 10:11
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 06/20/19 08:01

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-02 Batch: WG1250772-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/21/19 10:11
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 06/20/19 08:01

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-02 Batch: WG1250772-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	121		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	115		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	145		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	**146**	Q	21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	123		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	144		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	109		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	54		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	126		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	109		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	45		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	78		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	113		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	58		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	70		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	96		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	87		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON YONKERS PCW

Project Number: 180017

Lab Number: L1924652

Report Date: 06/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-03		Batch: WG1248924-2 WG1248924-3					
1,4-Dioxane	110		107		40-140	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	37		31		15-110

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON YONKERS PCW
Project Number: 180017
Lab Number: L1924652
Report Date: 06/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 03 Batch: WG1250266-2 WG1250266-3								
Perfluorobutanoic Acid (PFBA)	100		108		67-148	8		30
Perfluoropentanoic Acid (PFPeA)	101		108		63-161	7		30
Perfluorobutanesulfonic Acid (PFBS)	105		110		65-157	5		30
Perfluorohexanoic Acid (PFHxA)	116		123		69-168	6		30
Perfluoroheptanoic Acid (PFHpA)	106		114		58-159	7		30
Perfluorohexanesulfonic Acid (PFHxS)	110		122		69-177	10		30
Perfluorooctanoic Acid (PFOA)	108		116		63-159	7		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	82		105		49-187	25		30
Perfluoroheptanesulfonic Acid (PFHpS)	106		111		61-179	5		30
Perfluorononanoic Acid (PFNA)	110		113		68-171	3		30
Perfluorooctanesulfonic Acid (PFOS)	90		90		52-151	0		30
Perfluorodecanoic Acid (PFDA)	109		124		63-171	13		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	74		78		56-173	5		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	86		103		60-166	18		30
Perfluoroundecanoic Acid (PFUnA)	92		108		60-153	16		30
Perfluorodecanesulfonic Acid (PFDS)	113		124		38-156	9		30
Perfluorooctanesulfonamide (FOSA)	103		111		46-170	7		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	99		124		45-170	22		30
Perfluorododecanoic Acid (PFDoA)	112		123		67-153	9		30
Perfluorotridecanoic Acid (PFTrDA)	114		121		48-158	6		30
Perfluorotetradecanoic Acid (PFTA)	121		130		59-182	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON YONKERS PCW

Project Number: 180017

Lab Number: L1924652

Report Date: 06/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 03 Batch: WG1250266-2 WG1250266-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		99		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	91		94		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	120		113		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	121		124		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	103		105		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	109		101		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		88		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	44		37		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	77		81		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94		93		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		84		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	38		36		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	68		65		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	84		84		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	53		41		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	57		53		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	76		78		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	70		71		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON YONKERS PCW

Project Number: 180017

Lab Number: L1924652

Report Date: 06/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02 Batch: WG1250772-2 WG1250772-3								
Perfluorobutanoic Acid (PFBA)	105		99		67-148	6		30
Perfluoropentanoic Acid (PFPeA)	106		100		63-161	6		30
Perfluorobutanesulfonic Acid (PFBS)	106		102		65-157	4		30
Perfluorohexanoic Acid (PFHxA)	125		117		69-168	7		30
Perfluoroheptanoic Acid (PFHpA)	113		107		58-159	5		30
Perfluorohexanesulfonic Acid (PFHxS)	110		109		69-177	1		30
Perfluorooctanoic Acid (PFOA)	113		107		63-159	5		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	84		94		49-187	11		30
Perfluoroheptanesulfonic Acid (PFHpS)	118		105		61-179	12		30
Perfluorononanoic Acid (PFNA)	119		111		68-171	7		30
Perfluorooctanesulfonic Acid (PFOS)	95		89		52-151	7		30
Perfluorodecanoic Acid (PFDA)	119		112		63-171	6		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	111		98		56-173	12		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	116		104		60-166	11		30
Perfluoroundecanoic Acid (PFUnA)	99		94		60-153	5		30
Perfluorodecanesulfonic Acid (PFDS)	134		115		38-156	15		30
Perfluorooctanesulfonamide (FOSA)	111		105		46-170	6		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	108		140		45-170	26		30
Perfluorododecanoic Acid (PFDoA)	124		109		67-153	13		30
Perfluorotridecanoic Acid (PFTrDA)	114		113		48-158	1		30
Perfluorotetradecanoic Acid (PFTA)	131		122		59-182	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON YONKERS PCW

Project Number: 180017

Lab Number: L1924652

Report Date: 06/24/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02 Batch: WG1250772-2 WG1250772-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	111		111		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		105		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	126		124		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	134		133		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	115		109		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		115		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	103		96		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	54		47		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		85		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99		98		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	97		90		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	43		40		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	68		65		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	101		94		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	56		51		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	60		52		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	86		84		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		79		33-143

Matrix Spike Analysis

Batch Quality Control

Project Name: AVALON YONKERS PCW

Project Number: 180017

Lab Number: L1924652

Report Date: 06/24/19

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1248924-4 WG1248924-5 QC Sample: L1924652-01 Client ID: PCW-MW-A-06102019												
1,4-Dioxane	ND	5680	6540	115		5660	118		40-140	14		30

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
1,4-Dioxane-d8	45		38		15-110

Matrix Spike Analysis

Batch Quality Control

Project Name: AVALON YONKERS PCW

Project Number: 180017

Lab Number: L1924652

Report Date: 06/24/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1250772-4 WG1250772-5 QC Sample: L1924652-01 Client ID: PCW-MW-A-06102019												
Perfluorobutanoic Acid (PFBA)	1.56J	39.5	35.8	91		37.7	92		67-148	5		30
Perfluoropentanoic Acid (PFPeA)	2.21	39.5	36.4	86		39.7	92		63-161	9		30
Perfluorobutanesulfonic Acid (PFBS)	0.652J	39.5	35.9	91		38.6	95		65-157	7		30
Perfluorohexanoic Acid (PFHxA)	1.52J	39.5	40.0	101		44.2	108		69-168	10		30
Perfluoroheptanoic Acid (PFHpA)	0.824J	39.5	36.8	93		39.8	98		58-159	8		30
Perfluorohexanesulfonic Acid (PFHxS)	0.960J	39.5	38.2	97		40.3	99		69-177	5		30
Perfluorooctanoic Acid (PFOA)	2.18	39.5	39.4	94		41.9	97		63-159	6		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	39.5	30.7	78		33.8	83		49-187	10		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	39.5	40.0	101		39.1	96		61-179	2		30
Perfluorononanoic Acid (PFNA)	0.512J	39.5	38.5	97		41.0	100		68-171	6		30
Perfluorooctanesulfonic Acid (PFOS)	6.19	39.5	35.2	73		36.8	75		52-151	4		30
Perfluorodecanoic Acid (PFDA)	0.476J	39.5	37.8	96		38.0	93		63-171	1		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	39.5	39.6	100		28.1	69		56-173	**34**	Q	30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	39.5	34.0	86		30.2	74		60-166	12		30
Perfluoroundecanoic Acid (PFUnA)	ND	39.5	30.9	78		33.9	83		60-153	9		30
Perfluorodecanesulfonic Acid (PFDS)	ND	39.5	33.1	84		30.5	75		38-156	8		30
Perfluorooctanesulfonamide (FOSA)	ND	39.5	33.0	84		35.0	86		46-170	6		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	39.5	32.9	83		37.4	92		45-170	13		30
Perfluorododecanoic Acid (PFDoA)	ND	39.5	37.1	94		39.3	96		67-153	6		30
Perfluorotridecanoic Acid (PFTrDA)	ND	39.5	34.6	88		35.5	87		48-158	3		30
Perfluorotetradecanoic Acid (PFTA)	ND	39.5	36.6	93		40.8	100		59-182	11		30

Matrix Spike Analysis

Batch Quality Control

Project Name: AVALON YONKERS PCW

Project Number: 180017

Lab Number: L1924652

Report Date: 06/24/19

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1250772-4 WG1250772-5 QC Sample: L1924652-01 Client ID: PCW-MW-A-06102019												

Surrogate (Extracted Internal Standard)	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	43		53		7-170
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	69		66		1-244
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	40		42		23-146
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	45		59		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	84		93		40-144
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	97		101		38-144
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	127		128		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	113		113		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	134		127		47-153
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	66		78		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	59		65		33-143
Perfluoro[13C4]Butanoic Acid (MPFBA)	109		109		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	108		107		16-173
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	28		49		1-87
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	108		114		42-146
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		101		36-149
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90		93		34-146
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	133		128		31-159

Project Name: AVALON YONKERS PCW
Project Number: 180017

Lab Number: L1924652
Report Date: 06/24/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1924652-01A	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-01B	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-01C	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-01D	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-01E	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-01F	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-01G	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1924652-01H	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1924652-01I	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1924652-01J	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1924652-01K	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1924652-01L	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1924652-02A	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-02B	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-02C	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1924652-02D	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1924652-03A	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-03B	Amber 250ml unpreserved	A	7	7	3.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1924652-03C	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1924652-03D	2 Plastic/1 Plastic/1 H20 Plastic	B	NA		2.1	Y	Absent		A2-NY-537-ISOTOPE(14)

*Values in parentheses indicate holding time in days

Project Name:	AVALON YONKERS PCW	**Lab Number:**	L1924652
Project Number:	180017	**Report Date:**	06/24/19

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVALON YONKERS PCW	**Lab Number:**	L1924652
Project Number:	180017	**Report Date:**	06/24/19

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

Terms

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

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVALON YONKERS PCW	**Lab Number:**	L1924652
Project Number:	180017	**Report Date:**	06/24/19

REFERENCES

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

122 Determination of Selected Perfluorintated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

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

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

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

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

Serial_No:06241915:35

NEW YORK CHAIN OF CUSTODY

ALPHA

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page ___ of ___

Date Rec'd in Lab: 6/11/19

ALPHA Job #: L1924652

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Client Information
Client: AKRF Inc
Address: 440 Park Ave S
NY NY
Phone:
Fax:
Email: [illegible]

Project Information
Project Name: Avalon Yonkers PCW
Project Location: Yonkers NY
Project #: 190027
(Use Project name as Project #) ☐
Project Manager: Pat McMahon
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS: PFAS; 1,4-Dioxane

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PFAS	1,4-Dioxane	Sample Specific Comments	Total Bottles
24652-01	PCW-MW-A-061019	6/10/19	1230	Water	JS	X	X		
-01	PCW-MW-A-MS-061019	↓	1230	↓	JS	X	X		
-01	PCW-MW-A-MSD-061019	↓	1230	↓	JS	X	X		
-02	PCW-MW-F-061019	↓	1335	↓	JS	X	X		
-03	DUPE-061019	↓		↓	JS	X	X		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	6/10/19 1405	Rog Vogt AAL	6/10/19 1405
Rog Vogt AAL	6/11/19 1750	[illegible]	6/10/19 2[illegible]
[illegible]	6/11/19 0045	[illegible]	6/11/19 12:45
[illegible]	6/11/19 11:38	B[illegible]	6/11/19 11:38

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1947799
Client:	AKRF, Inc. 34 South Broadway Suite 401 White Plains, NY 10601
ATTN:	Patrick McHugh
Phone:	(914) 922-2387
Project Name:	PCW
Project Number:	180017
Report Date:	10/18/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1947799-01	PCW-MW-A-20191010	WATER	YONKERS, NY	10/10/19 10:35	10/11/19
L1947799-02	PCW-MW-B-20191010	WATER	YONKERS, NY	10/10/19 09:35	10/11/19
L1947799-03	PCW-MW-C-20191010	WATER	YONKERS, NY	10/10/19 12:30	10/11/19
L1947799-04	PCW-MW-D-20191010	WATER	YONKERS, NY	10/10/19 13:15	10/11/19
L1947799-05	PCW-MW-E-20191009	WATER	YONKERS, NY	10/09/19 14:10	10/11/19
L1947799-06	PCW-MW-F-20191011	WATER	YONKERS, NY	10/11/19 09:20	10/11/19
L1947799-07	PCW-MW-X-20191011	WATER	YONKERS, NY	10/11/19 10:00	10/11/19
L1947799-08	TRIPBLANK-20191011	WATER	YONKERS, NY	10/09/19 00:00	10/11/19

Project Name:	PCW	**Lab Number:**	L1947799
Project Number:	180017	**Report Date:**	10/18/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: PCW **Lab Number:** L1947799
Project Number: 180017 **Report Date:** 10/18/19

Case Narrative (continued)

Report Submission

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

Semivolatile Organics

The WG1297131-2 LCS recovery, associated with L1947799-01 through -04, -06, and -07, is below the acceptance criteria for benzoic acid (0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Total Metals

L1947799-01 through -05: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the high concentrations of target elements.

The WG1297157-3 MS recoveries for calcium (250%), magnesium (130%), potassium (130%) and sodium (600%), performed on L1947799-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1297157-3 MS recoveries, performed on L1947799-01, are outside the acceptance criteria for antimony (128%), iron (137%) and selenium (130%). A post digestion spike was performed and was within acceptance criteria.

Dissolved Metals

L1947799-01, -03, -04, and -05: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the high concentrations of target and non-target elements.

The WG1297002-3 MS recoveries for calcium (0%), magnesium (0%), potassium (20%) and sodium (0%), performed on L1947799-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 10/18/19

ORGANICS

VOLATILES

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-01
Client ID: PCW-MW-A-20191010
Sample Location: YONKERS, NY

Date Collected: 10/10/19 10:35
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/18/19 09:50
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	0.78	J	ug/l	2.5	0.70	1
1,2-Dichloroethane	0.13	J	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-01 Date Collected: 10/10/19 10:35

Client ID: PCW-MW-A-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.45	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-01 Date Collected: 10/10/19 10:35

Client ID: PCW-MW-A-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-02
Client ID: PCW-MW-B-20191010
Sample Location: YONKERS, NY
Date Collected: 10/10/19 09:35
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/16/19 22:55
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	1.1	J	ug/l	2.5	0.70	1
1,2-Dichloroethane	0.15	J	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-02 Date Collected: 10/10/19 09:35

Client ID: PCW-MW-B-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.36	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	1.8	J	ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-02 Date Collected: 10/10/19 09:35

Client ID: PCW-MW-B-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	95		70-130

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-03
Client ID: PCW-MW-C-20191010
Sample Location: YONKERS, NY
Date Collected: 10/10/19 12:30
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/16/19 23:18
Analyst: NLK

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

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-03 Date Collected: 10/10/19 12:30

Client ID: PCW-MW-C-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-03 Date Collected: 10/10/19 12:30

Client ID: PCW-MW-C-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	117		70-130

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-04
Client ID: PCW-MW-D-20191010
Sample Location: YONKERS, NY
Date Collected: 10/10/19 13:15
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/16/19 23:41
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	4.6		ug/l	2.5	0.70	1
1,2-Dichloroethane	0.18	J	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.94		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-04 Date Collected: 10/10/19 13:15

Client ID: PCW-MW-D-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.50		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	0.74	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	0.74	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	23		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	1.7	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	90		ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-04 Date Collected: 10/10/19 13:15

Client ID: PCW-MW-D-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	1.3	J	ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	96		70-130

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-05
Client ID: PCW-MW-E-20191009
Sample Location: YONKERS, NY
Date Collected: 10/09/19 14:10
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/18/19 10:13
Analyst: NLK

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

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-05 Date Collected: 10/09/19 14:10

Client ID: PCW-MW-E-20191009 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	16		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	3.8	J	ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-05 Date Collected: 10/09/19 14:10

Client ID: PCW-MW-E-20191009 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	102		70-130

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-06
Client ID: PCW-MW-F-20191011
Sample Location: YONKERS, NY
Date Collected: 10/11/19 09:20
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/17/19 00:28
Analyst: NLK

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

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-06 Date Collected: 10/11/19 09:20

Client ID: PCW-MW-F-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	14		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	12		ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-06 Date Collected: 10/11/19 09:20

Client ID: PCW-MW-F-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-07
Client ID: PCW-MW-X-20191011
Sample Location: YONKERS, NY
Date Collected: 10/11/19 10:00
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/17/19 00:51
Analyst: NLK

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

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-07 Date Collected: 10/11/19 10:00

Client ID: PCW-MW-X-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	9.4		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	14		ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-07 Date Collected: 10/11/19 10:00

Client ID: PCW-MW-X-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-08
Client ID: TRIPBLANK-20191011
Sample Location: YONKERS, NY
Date Collected: 10/09/19 00:00
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/17/19 01:14
Analyst: NLK

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

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-08 Date Collected: 10/09/19 00:00

Client ID: TRIPBLANK-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	1.4	J	ug/l	2.5	0.70	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-08 Date Collected: 10/09/19 00:00

Client ID: TRIPBLANK-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	101		70-130

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/16/19 20:59
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04,06-08 Batch: WG1297425-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/16/19 20:59
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04,06-08 Batch: WG1297425-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/16/19 20:59
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04,06-08 Batch: WG1297425-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	96		70-130

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/18/19 08:36
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,05 Batch: WG1297982-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/18/19 08:36
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,05 Batch: WG1297982-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/18/19 08:36
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,05 Batch: WG1297982-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,06-08 Batch: WG1297425-3 WG1297425-4								
Methylene chloride	74		93		70-130	**23**	Q	20
1,1-Dichloroethane	100		99		70-130	1		20
Chloroform	87		87		70-130	0		20
Carbon tetrachloride	85		86		63-132	1		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	87		87		63-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	88		88		70-130	0		20
Chlorobenzene	92		92		75-130	0		20
Trichlorofluoromethane	87		92		62-150	6		20
1,2-Dichloroethane	88		89		70-130	1		20
1,1,1-Trichloroethane	86		87		67-130	1		20
Bromodichloromethane	88		84		67-130	5		20
trans-1,3-Dichloropropene	83		82		70-130	1		20
cis-1,3-Dichloropropene	94		94		70-130	0		20
1,1-Dichloropropene	92		92		70-130	0		20
Bromoform	88		88		54-136	0		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
Benzene	98		97		70-130	1		20
Toluene	95		95		70-130	0		20
Ethylbenzene	94		93		70-130	1		20
Chloromethane	120		110		64-130	9		20
Bromomethane	65		70		39-139	7		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,06-08 Batch: WG1297425-3 WG1297425-4								
Vinyl chloride	120		120		55-140	0		20
Chloroethane	96		97		55-138	1		20
1,1-Dichloroethene	100		130		61-145	**26**	Q	20
trans-1,2-Dichloroethene	88		87		70-130	1		20
Trichloroethene	85		86		70-130	1		20
1,2-Dichlorobenzene	94		94		70-130	0		20
1,3-Dichlorobenzene	93		94		70-130	1		20
1,4-Dichlorobenzene	92		92		70-130	0		20
Methyl tert butyl ether	96		95		63-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	99		100		70-130	1		20
Dibromomethane	97		95		70-130	2		20
1,2,3-Trichloropropane	92		92		64-130	0		20
Acrylonitrile	130		130		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	82		88		36-147	7		20
Acetone	89		99		58-148	11		20
Carbon disulfide	110		**150**	Q	51-130	**31**	Q	20
2-Butanone	100		110		63-138	10		20
Vinyl acetate	96		95		70-130	1		20
4-Methyl-2-pentanone	120		120		59-130	0		20
2-Hexanone	100		98		57-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,06-08 Batch: WG1297425-3 WG1297425-4								
Bromochloromethane	97		97		70-130	0		20
2,2-Dichloropropane	92		90		63-133	2		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	99		99		70-130	0		20
1,1,1,2-Tetrachloroethane	90		90		64-130	0		20
Bromobenzene	92		93		70-130	1		20
n-Butylbenzene	100		99		53-136	1		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	96		98		70-130	2		20
o-Chlorotoluene	94		96		70-130	2		20
p-Chlorotoluene	94		95		70-130	1		20
1,2-Dibromo-3-chloropropane	100		99		41-144	1		20
Hexachlorobutadiene	86		86		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	110		110		70-130	0		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	99		96		70-130	3		20
1,2,4-Trichlorobenzene	93		93		70-130	0		20
1,3,5-Trimethylbenzene	97		98		64-130	1		20
1,2,4-Trimethylbenzene	98		100		70-130	2		20
1,4-Dioxane	108		108		56-162	0		20
p-Diethylbenzene	95		97		70-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,06-08 Batch: WG1297425-3 WG1297425-4								
p-Ethyltoluene	99		100		70-130	1		20
1,2,4,5-Tetramethylbenzene	98		98		70-130	0		20
Ethyl ether	100		110		59-134	10		20
trans-1,4-Dichloro-2-butene	**68**	Q	76		70-130	11		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		96		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	102		103		70-130
Dibromofluoromethane	97		96		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,05 Batch: WG1297982-3 WG1297982-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	99		98		63-130	1		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	120		110		62-150	9		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	93		92		70-130	1		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	120		120		67-130	0		20
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	120		110		64-130	9		20
Bromomethane	91		98		39-139	7		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,05 Batch: WG1297982-3 WG1297982-4								
Vinyl chloride	120		110		55-140	9		20
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	99		98		70-130	1		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	110		110		70-130	0		20
1,2,3-Trichloropropane	120		120		64-130	0		20
Acrylonitrile	**140**	Q	130		70-130	7		20
Styrene	110		110		70-130	0		20
Dichlorodifluoromethane	120		110		36-147	9		20
Acetone	**150**	Q	140		58-148	7		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	**140**	Q	130		63-138	7		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	120		120		59-130	0		20
2-Hexanone	120		120		57-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,05 Batch: WG1297982-3 WG1297982-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	100		110		63-133	10		20
1,2-Dibromoethane	110		110		70-130	0		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	98		99		70-130	1		20
n-Butylbenzene	120		120		53-136	0		20
sec-Butylbenzene	110		120		70-130	9		20
tert-Butylbenzene	110		110		70-130	0		20
o-Chlorotoluene	110		110		70-130	0		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	110		100		41-144	10		20
Hexachlorobutadiene	100		100		63-130	0		20
Isopropylbenzene	110		120		70-130	9		20
p-Isopropyltoluene	120		120		70-130	0		20
Naphthalene	130		130		70-130	0		20
n-Propylbenzene	120		120		69-130	0		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
1,4-Dioxane	126		122		56-162	3		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,05 Batch: WG1297982-3 WG1297982-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	110		110		70-130	0		20
Ethyl ether	120		120		59-134	0		20
trans-1,4-Dichloro-2-butene	89		84		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	113		111		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	104		105		70-130
Dibromofluoromethane	102		101		70-130

SEMIVOLATILES

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-01
Client ID: PCW-MW-A-20191010
Sample Location: YONKERS, NY

Date Collected: 10/10/19 10:35
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/18/19 02:29
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	3.1		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-01 Date Collected: 10/10/19 10:35

Client ID: PCW-MW-A-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	60		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-01
Client ID: PCW-MW-A-20191010
Sample Location: YONKERS, NY

Date Collected: 10/10/19 10:35
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/17/19 15:53
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.24	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-01 Date Collected: 10/10/19 10:35

Client ID: PCW-MW-A-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	63		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	100		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	95		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-02
Client ID: PCW-MW-B-20191010
Sample Location: YONKERS, NY

Date Collected: 10/10/19 09:35
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/18/19 01:36
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-02 Date Collected: 10/10/19 09:35

Client ID: PCW-MW-B-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	50		23-120
2-Fluorobiphenyl	51		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	51		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-02
Client ID: PCW-MW-B-20191010
Sample Location: YONKERS, NY

Date Collected: 10/10/19 09:35
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/17/19 16:08
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	2.1		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.20		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.27		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.11		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.05	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Acenaphthylene	0.08	J	ug/l	0.10	0.01	1
Anthracene	0.10		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.03	J	ug/l	0.10	0.01	1
Fluorene	0.16		ug/l	0.10	0.01	1
Phenanthrene	0.27		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.03	J	ug/l	0.10	0.01	1
Pyrene	0.15		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.21		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-02 Date Collected: 10/10/19 09:35

Client ID: PCW-MW-B-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	76		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-03
Client ID: PCW-MW-C-20191010
Sample Location: YONKERS, NY

Date Collected: 10/10/19 12:30
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/18/19 02:56
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-03 Date Collected: 10/10/19 12:30

Client ID: PCW-MW-C-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	61		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-03
Client ID: PCW-MW-C-20191010
Sample Location: YONKERS, NY

Date Collected: 10/10/19 12:30
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/17/19 16:24
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.47		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.06	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.07	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.08	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-03 Date Collected: 10/10/19 12:30

Client ID: PCW-MW-C-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	99		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	91		41-149

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-04
Client ID: PCW-MW-D-20191010
Sample Location: YONKERS, NY

Date Collected: 10/10/19 13:15
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/18/19 03:49
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	3.9		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-04 Date Collected: 10/10/19 13:15

Client ID: PCW-MW-D-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	12.		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	2.6	J	ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	53.		ug/l	5.0	0.57	1
2-Methylphenol	1.5	J	ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	4.2	J	ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	46.	J	ug/l	50	2.6	1
Benzyl Alcohol	28.		ug/l	2.0	0.59	1
Carbazole	18.		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	60		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-04
Client ID: PCW-MW-D-20191010
Sample Location: YONKERS, NY

Date Collected: 10/10/19 13:15
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/17/19 16:56
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	21		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	3.5		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	40		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.23		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.12		ug/l	0.10	0.01	1
Acenaphthylene	0.92		ug/l	0.10	0.01	1
Anthracene	4.2		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	8.1		ug/l	0.10	0.01	1
Phenanthrene	21		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	2.2		ug/l	0.10	0.02	1
2-Methylnaphthalene	14		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-04 Date Collected: 10/10/19 13:15

Client ID: PCW-MW-D-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	84		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-05
Client ID: PCW-MW-E-20191009
Sample Location: YONKERS, NY

Date Collected: 10/09/19 14:10
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/15/19 15:38
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 10/14/19 15:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.0	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-05 Date Collected: 10/09/19 14:10

Client ID: PCW-MW-E-20191009 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	64		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-05
Client ID: PCW-MW-E-20191009
Sample Location: YONKERS, NY

Date Collected: 10/09/19 14:10
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/15/19 15:37
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 10/14/19 15:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.13		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.09	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.18		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.05	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.04	J	ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.03	J	ug/l	0.10	0.01	1
Pyrene	0.11		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-05 Date Collected: 10/09/19 14:10

Client ID: PCW-MW-E-20191009 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		21-120
Phenol-d6	66		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	106		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	84		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-06
Client ID: PCW-MW-F-20191011
Sample Location: YONKERS, NY

Date Collected: 10/11/19 09:20
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/17/19 14:59
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 10/17/19 01:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-06 Date Collected: 10/11/19 09:20

Client ID: PCW-MW-F-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	17.		ug/l	5.0	0.57	1
2-Methylphenol	0.81	J	ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	2.5	J	ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	26.	J	ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	1.5	J	ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	70		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-06
Client ID: PCW-MW-F-20191011
Sample Location: YONKERS, NY

Date Collected: 10/11/19 09:20
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/17/19 22:41
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/17/19 01:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	2.4		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.43		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	4.8		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.08	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.04	J	ug/l	0.10	0.01	1
Acenaphthylene	0.11		ug/l	0.10	0.01	1
Anthracene	0.63		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.46		ug/l	0.10	0.01	1
Phenanthrene	0.07	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.34		ug/l	0.10	0.02	1
2-Methylnaphthalene	1.3		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-06 Date Collected: 10/11/19 09:20

Client ID: PCW-MW-F-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	95		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	94		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-07
Client ID: PCW-MW-X-20191011
Sample Location: YONKERS, NY

Date Collected: 10/11/19 10:00
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/17/19 15:24
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 10/17/19 01:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-07 Date Collected: 10/11/19 10:00

Client ID: PCW-MW-X-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	14.		ug/l	5.0	0.57	1
2-Methylphenol	0.63	J	ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	2.0	J	ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	20.	J	ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	1.2	J	ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	82		10-120
4-Terphenyl-d14	59		41-149

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-07
Client ID: PCW-MW-X-20191011
Sample Location: YONKERS, NY

Date Collected: 10/11/19 10:00
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/17/19 22:57
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/17/19 01:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.6		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.32		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	3.1		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.07	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Acenaphthylene	0.09	J	ug/l	0.10	0.01	1
Anthracene	0.52		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.32		ug/l	0.10	0.01	1
Phenanthrene	0.05	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.25		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.84		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-07 Date Collected: 10/11/19 10:00

Client ID: PCW-MW-X-20191011 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	79		41-149

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/14/19 14:56
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/14/19 00:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1295744-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/14/19 14:56
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/14/19 00:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1295744-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/14/19 14:56
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/14/19 00:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1295744-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		21-120
Phenol-d6	63		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	89		41-149

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/14/19 17:33
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 10/14/19 00:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 05 Batch: WG1295745-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/14/19 17:33
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 10/14/19 00:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 05 Batch: WG1295745-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	94		41-149

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/17/19 10:44
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06-07 Batch: WG1297131-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/17/19 10:44
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06-07 Batch: WG1297131-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/17/19 10:44
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06-07 Batch: WG1297131-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	71		41-149

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/17/19 12:58
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04,06-07 Batch: WG1297133-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/17/19 12:58
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 10/16/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04,06-07 Batch: WG1297133-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	98		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1295744-2 WG1295744-3								
Acenaphthene	68		92		37-111	30		30
1,2,4-Trichlorobenzene	68		86		39-98	23		30
Hexachlorobenzene	78		107		40-140	**31**	Q	30
Bis(2-chloroethyl)ether	62		81		40-140	27		30
2-Chloronaphthalene	70		93		40-140	28		30
1,2-Dichlorobenzene	65		81		40-140	22		30
1,3-Dichlorobenzene	63		78		40-140	21		30
1,4-Dichlorobenzene	62		79		36-97	24		30
3,3'-Dichlorobenzidine	64		84		40-140	27		30
2,4-Dinitrotoluene	78		109		48-143	**33**	Q	30
2,6-Dinitrotoluene	74		103		40-140	**33**	Q	30
Fluoranthene	75		108		40-140	**36**	Q	30
4-Chlorophenyl phenyl ether	74		100		40-140	30		30
4-Bromophenyl phenyl ether	77		108		40-140	**34**	Q	30
Bis(2-chloroisopropyl)ether	52		66		40-140	24		30
Bis(2-chloroethoxy)methane	63		82		40-140	26		30
Hexachlorobutadiene	74		98		40-140	28		30
Hexachlorocyclopentadiene	81		106		40-140	27		30
Hexachloroethane	65		82		40-140	23		30
Isophorone	63		87		40-140	**32**	Q	30
Naphthalene	67		87		40-140	26		30
Nitrobenzene	66		87		40-140	27		30
NDPA/DPA	75		102		40-140	**31**	Q	30

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1295744-2 WG1295744-3								
n-Nitrosodi-n-propylamine	67		91		29-132	30		30
Bis(2-ethylhexyl)phthalate	57		81		40-140	**35**	Q	30
Butyl benzyl phthalate	69		92		40-140	29		30
Di-n-butylphthalate	64		93		40-140	**37**	Q	30
Di-n-octylphthalate	60		82		40-140	**31**	Q	30
Diethyl phthalate	73		103		40-140	**34**	Q	30
Dimethyl phthalate	74		102		40-140	**32**	Q	30
Benzo(a)anthracene	75		103		40-140	**31**	Q	30
Benzo(a)pyrene	69		94		40-140	**31**	Q	30
Benzo(b)fluoranthene	81		112		40-140	**32**	Q	30
Benzo(k)fluoranthene	78		109		40-140	**33**	Q	30
Chrysene	71		97		40-140	**31**	Q	30
Acenaphthylene	73		99		45-123	30		30
Anthracene	73		101		40-140	**32**	Q	30
Benzo(ghi)perylene	83		116		40-140	**33**	Q	30
Fluorene	72		97		40-140	30		30
Phenanthrene	70		96		40-140	**31**	Q	30
Dibenzo(a,h)anthracene	78		109		40-140	**33**	Q	30
Indeno(1,2,3-cd)pyrene	70		98		40-140	**33**	Q	30
Pyrene	73		103		26-127	**34**	Q	30
Biphenyl	71		94		40-140	28		30
4-Chloroaniline	51		52		40-140	2		30
2-Nitroaniline	72		99		52-143	**32**	Q	30

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1295744-2 WG1295744-3								
3-Nitroaniline	57		75		25-145	27		30
4-Nitroaniline	63		90		51-143	**35**	Q	30
Dibenzofuran	70		95		40-140	30		30
2-Methylnaphthalene	71		92		40-140	26		30
1,2,4,5-Tetrachlorobenzene	73		98		2-134	29		30
Acetophenone	68		89		39-129	27		30
2,4,6-Trichlorophenol	73		104		30-130	**35**	Q	30
p-Chloro-m-cresol	76		**105**	Q	23-97	**32**	Q	30
2-Chlorophenol	66		87		27-123	27		30
2,4-Dichlorophenol	72		97		30-130	30		30
2,4-Dimethylphenol	66		90		30-130	**31**	Q	30
2-Nitrophenol	67		89		30-130	28		30
4-Nitrophenol	60		**87**	Q	10-80	**37**	Q	30
2,4-Dinitrophenol	75		109		20-130	**37**	Q	30
4,6-Dinitro-o-cresol	85		119		20-164	**33**	Q	30
Pentachlorophenol	65		**107**	Q	9-103	**49**	Q	30
Phenol	51		69		12-110	30		30
2-Methylphenol	64		87		30-130	30		30
3-Methylphenol/4-Methylphenol	70		91		30-130	26		30
2,4,5-Trichlorophenol	75		101		30-130	30		30
Benzoic Acid	57		71		10-164	22		30
Benzyl Alcohol	63		83		26-116	27		30
Carbazole	72		103		55-144	**35**	Q	30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1295744-2 WG1295744-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	61		81		21-120
Phenol-d6	53		72		10-120
Nitrobenzene-d5	57		75		23-120
2-Fluorobiphenyl	59		80		15-120
2,4,6-Tribromophenol	94		**133**	Q	10-120
4-Terphenyl-d14	63		88		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 05 Batch: WG1295745-2 WG1295745-3								
Acenaphthene	97		96		40-140	1		40
2-Chloronaphthalene	90		90		40-140	0		40
Fluoranthene	114		102		40-140	11		40
Hexachlorobutadiene	81		87		40-140	7		40
Naphthalene	84		87		40-140	4		40
Benzo(a)anthracene	113		102		40-140	10		40
Benzo(a)pyrene	119		108		40-140	10		40
Benzo(b)fluoranthene	120		111		40-140	8		40
Benzo(k)fluoranthene	123		111		40-140	10		40
Chrysene	119		110		40-140	8		40
Acenaphthylene	95		91		40-140	4		40
Anthracene	111		104		40-140	7		40
Benzo(ghi)perylene	119		111		40-140	7		40
Fluorene	102		97		40-140	5		40
Phenanthrene	108		100		40-140	8		40
Dibenzo(a,h)anthracene	134		114		40-140	16		40
Indeno(1,2,3-cd)pyrene	119		111		40-140	7		40
Pyrene	114		101		40-140	12		40
2-Methylnaphthalene	87		88		40-140	1		40
Pentachlorophenol	90		83		40-140	8		40
Hexachlorobenzene	104		101		40-140	3		40
Hexachloroethane	75		83		40-140	10		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 05 Batch: WG1295745-2 WG1295745-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	69		72		21-120
Phenol-d6	65		64		10-120
Nitrobenzene-d5	85		87		23-120
2-Fluorobiphenyl	99		88		15-120
2,4,6-Tribromophenol	102		93		10-120
4-Terphenyl-d14	103		89		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06-07 Batch: WG1297131-2 WG1297131-3								
Acenaphthene	70		59		37-111	17		30
1,2,4-Trichlorobenzene	65		60		39-98	8		30
Hexachlorobenzene	72		62		40-140	15		30
Bis(2-chloroethyl)ether	64		59		40-140	8		30
2-Chloronaphthalene	71		60		40-140	17		30
1,2-Dichlorobenzene	63		59		40-140	7		30
1,3-Dichlorobenzene	61		56		40-140	9		30
1,4-Dichlorobenzene	62		57		36-97	8		30
3,3'-Dichlorobenzidine	63		63		40-140	0		30
2,4-Dinitrotoluene	79		65		48-143	19		30
2,6-Dinitrotoluene	77		65		40-140	17		30
Fluoranthene	80		69		40-140	15		30
4-Chlorophenyl phenyl ether	73		62		40-140	16		30
4-Bromophenyl phenyl ether	73		64		40-140	13		30
Bis(2-chloroisopropyl)ether	57		51		40-140	11		30
Bis(2-chloroethoxy)methane	66		57		40-140	15		30
Hexachlorobutadiene	68		59		40-140	14		30
Hexachlorocyclopentadiene	75		64		40-140	16		30
Hexachloroethane	62		56		40-140	10		30
Isophorone	71		62		40-140	14		30
Naphthalene	68		59		40-140	14		30
Nitrobenzene	70		64		40-140	9		30
NDPA/DPA	77		64		40-140	18		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06-07 Batch: WG1297131-2 WG1297131-3								
n-Nitrosodi-n-propylamine	74		65		29-132	13		30
Bis(2-ethylhexyl)phthalate	64		53		40-140	19		30
Butyl benzyl phthalate	80		68		40-140	16		30
Di-n-butylphthalate	72		60		40-140	18		30
Di-n-octylphthalate	70		60		40-140	15		30
Diethyl phthalate	77		64		40-140	18		30
Dimethyl phthalate	76		66		40-140	14		30
Benzo(a)anthracene	81		68		40-140	17		30
Benzo(a)pyrene	74		63		40-140	16		30
Benzo(b)fluoranthene	84		74		40-140	13		30
Benzo(k)fluoranthene	87		71		40-140	20		30
Chrysene	72		62		40-140	15		30
Acenaphthylene	75		64		45-123	16		30
Anthracene	74		64		40-140	14		30
Benzo(ghi)perylene	86		72		40-140	18		30
Fluorene	72		63		40-140	13		30
Phenanthrene	70		60		40-140	15		30
Dibenzo(a,h)anthracene	81		68		40-140	17		30
Indeno(1,2,3-cd)pyrene	79		65		40-140	19		30
Pyrene	77		65		26-127	17		30
Biphenyl	72		60		40-140	18		30
4-Chloroaniline	65		51		40-140	24		30
2-Nitroaniline	82		69		52-143	17		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06-07 Batch: WG1297131-2 WG1297131-3								
3-Nitroaniline	63		60		25-145	5		30
4-Nitroaniline	74		64		51-143	14		30
Dibenzofuran	70		61		40-140	14		30
2-Methylnaphthalene	70		61		40-140	14		30
1,2,4,5-Tetrachlorobenzene	70		61		2-134	14		30
Acetophenone	71		64		39-129	10		30
2,4,6-Trichlorophenol	76		67		30-130	13		30
p-Chloro-m-cresol	84		72		23-97	15		30
2-Chlorophenol	67		61		27-123	9		30
2,4-Dichlorophenol	73		66		30-130	10		30
2,4-Dimethylphenol	70		64		30-130	9		30
2-Nitrophenol	71		62		30-130	14		30
4-Nitrophenol	63		58		10-80	8		30
2,4-Dinitrophenol	67		82		20-130	20		30
4,6-Dinitro-o-cresol	81		75		20-164	8		30
Pentachlorophenol	60		62		9-103	3		30
Phenol	49		45		12-110	9		30
2-Methylphenol	69		61		30-130	12		30
3-Methylphenol/4-Methylphenol	68		62		30-130	9		30
2,4,5-Trichlorophenol	75		63		30-130	17		30
Benzoic Acid	**0**	Q	62		10-164	NC		30
Benzyl Alcohol	71		64		26-116	10		30
Carbazole	77		67		55-144	14		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06-07 Batch: WG1297131-2 WG1297131-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59		57		21-120
Phenol-d6	49		46		10-120
Nitrobenzene-d5	62		54		23-120
2-Fluorobiphenyl	59		50		15-120
2,4,6-Tribromophenol	82		68		10-120
4-Terphenyl-d14	62		53		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04,06-07 Batch: WG1297133-2 WG1297133-3								
Acenaphthene	66		115		40-140	**54**	Q	40
2-Chloronaphthalene	67		118		40-140	**55**	Q	40
Fluoranthene	73		124		40-140	**52**	Q	40
Hexachlorobutadiene	71		118		40-140	**50**	Q	40
Naphthalene	63		108		40-140	**53**	Q	40
Benzo(a)anthracene	70		127		40-140	**58**	Q	40
Benzo(a)pyrene	72		128		40-140	**56**	Q	40
Benzo(b)fluoranthene	74		128		40-140	**53**	Q	40
Benzo(k)fluoranthene	75		132		40-140	**55**	Q	40
Chrysene	71		116		40-140	**48**	Q	40
Acenaphthylene	67		118		40-140	**55**	Q	40
Anthracene	70		122		40-140	**54**	Q	40
Benzo(ghi)perylene	80		136		40-140	**52**	Q	40
Fluorene	69		121		40-140	**55**	Q	40
Phenanthrene	68		115		40-140	**51**	Q	40
Dibenzo(a,h)anthracene	77		132		40-140	**53**	Q	40
Indeno(1,2,3-cd)pyrene	76		134		40-140	**55**	Q	40
Pyrene	73		124		40-140	**52**	Q	40
2-Methylnaphthalene	64		113		40-140	**55**	Q	40
Pentachlorophenol	58		**143**	Q	40-140	**85**	Q	40
Hexachlorobenzene	72		**148**	Q	40-140	**69**	Q	40
Hexachloroethane	61		106		40-140	**54**	Q	40

Lab Control Sample Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04,06-07 Batch: WG1297133-2 WG1297133-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	49		86		21-120
Phenol-d6	42		77		10-120
Nitrobenzene-d5	60		108		23-120
2-Fluorobiphenyl	66		114		15-120
2,4,6-Tribromophenol	64		116		10-120
4-Terphenyl-d14	69		113		41-149

METALS

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-01 Date Collected: 10/10/19 10:35

Client ID: PCW-MW-A-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0814	J	mg/l	0.100	0.0327	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Antimony, Total	0.01117	J	mg/l	0.04000	0.00429	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00445	J	mg/l	0.00500	0.00165	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Barium, Total	0.2070		mg/l	0.00500	0.00173	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00500	0.00107	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00200	0.00059	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Calcium, Total	321.		mg/l	1.00	0.394	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Chromium, Total	0.01426		mg/l	0.01000	0.00178	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00500	0.00163	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Copper, Total	0.01116		mg/l	0.01000	0.00384	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Iron, Total	0.284	J	mg/l	0.500	0.191	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.01000	0.00343	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Magnesium, Total	358.		mg/l	0.700	0.242	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Manganese, Total	0.00820	J	mg/l	0.01000	0.00440	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/16/19 12:12	10/16/19 18:36	EPA 7470A	1,7470A	AL
Nickel, Total	ND		mg/l	0.02000	0.00556	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Potassium, Total	123.		mg/l	1.00	0.309	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.0500	0.0173	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00400	0.00163	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Sodium, Total	3740		mg/l	1.00	0.293	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Thallium, Total	0.00300	J	mg/l	0.01000	0.00143	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.05000	0.01570	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.1000	0.03410	10	10/16/19 20:54	10/17/19 09:59	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.100	0.0327	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.04000	0.00429	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00323	J	mg/l	0.00500	0.00165	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.2445		mg/l	0.00500	0.00173	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00500	0.00107	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-01 Date Collected: 10/10/19 10:35

Client ID: PCW-MW-A-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00200	0.00059	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Calcium, Dissolved	322.		mg/l	1.00	0.394	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.01764		mg/l	0.01000	0.00178	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00500	0.00163	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.01102		mg/l	0.01000	0.00384	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.500	0.191	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.01000	0.00343	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	334.		mg/l	0.700	0.242	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.01000	0.00440	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	10/16/19 12:50	10/16/19 19:07	EPA 7470A	1,7470A	AL
Nickel, Dissolved	ND		mg/l	0.02000	0.00556	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Potassium, Dissolved	119.		mg/l	1.00	0.309	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.0500	0.0173	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00400	0.00163	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Sodium, Dissolved	3650		mg/l	1.00	0.293	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00500	0.00143	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.05000	0.01570	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.1000	0.03410	10	10/16/19 19:01	10/17/19 01:34	EPA 3005A	1,6020B	AM

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-02 Date Collected: 10/10/19 09:35

Client ID: PCW-MW-B-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0798	J	mg/l	0.100	0.0327	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Antimony, Total	0.00535	J	mg/l	0.04000	0.00429	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00212	J	mg/l	0.00500	0.00165	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Barium, Total	0.4218		mg/l	0.00500	0.00173	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00500	0.00107	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00200	0.00059	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Calcium, Total	239.		mg/l	1.00	0.394	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Chromium, Total	ND		mg/l	0.01000	0.00178	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00500	0.00163	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.01000	0.00384	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Iron, Total	0.500		mg/l	0.500	0.191	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.01000	0.00343	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Magnesium, Total	278.		mg/l	0.700	0.242	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Manganese, Total	0.3686		mg/l	0.01000	0.00440	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/16/19 12:12	10/16/19 18:38	EPA 7470A	1,7470A	AL
Nickel, Total	ND		mg/l	0.02000	0.00556	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Potassium, Total	89.8		mg/l	1.00	0.309	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.0500	0.0173	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00400	0.00163	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Sodium, Total	2670		mg/l	1.00	0.293	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Thallium, Total	0.00199	J	mg/l	0.01000	0.00143	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.05000	0.01570	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.1000	0.03410	10	10/16/19 20:54	10/17/19 10:04	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00769	J	mg/l	0.0100	0.00327	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00181		mg/l	0.00050	0.00016	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.4697		mg/l	0.00050	0.00017	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-02
Client ID: PCW-MW-B-20191010
Sample Location: YONKERS, NY
Date Collected: 10/10/19 09:35
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Calcium, Dissolved	174.		mg/l	0.100	0.0394	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00104		mg/l	0.00100	0.00017	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00024	J	mg/l	0.00050	0.00016	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00089	J	mg/l	0.00100	0.00038	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0958		mg/l	0.0500	0.0191	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	250.		mg/l	0.0700	0.0242	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.3258		mg/l	0.00100	0.00044	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	10/16/19 12:50	10/16/19 19:09	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00170	J	mg/l	0.00200	0.00055	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Potassium, Dissolved	73.5		mg/l	0.100	0.0309	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Sodium, Dissolved	2450		mg/l	0.100	0.0293	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	10/16/19 19:01	10/16/19 23:44	EPA 3005A	1,6020B	AM

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-03 Date Collected: 10/10/19 12:30

Client ID: PCW-MW-C-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0624	J	mg/l	0.100	0.0327	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.04000	0.00429	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00500	0.00165	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Barium, Total	0.1486		mg/l	0.00500	0.00173	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00500	0.00107	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00200	0.00059	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Calcium, Total	186.		mg/l	1.00	0.394	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Chromium, Total	ND		mg/l	0.01000	0.00178	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00500	0.00163	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Copper, Total	0.00558	J	mg/l	0.01000	0.00384	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Iron, Total	0.422	J	mg/l	0.500	0.191	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.01000	0.00343	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Magnesium, Total	424.		mg/l	0.700	0.242	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Manganese, Total	0.09031		mg/l	0.01000	0.00440	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/16/19 12:12	10/16/19 18:40	EPA 7470A	1,7470A	AL
Nickel, Total	ND		mg/l	0.02000	0.00556	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Potassium, Total	115.		mg/l	1.00	0.309	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.0500	0.0173	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00400	0.00163	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Sodium, Total	3770		mg/l	1.00	0.293	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Thallium, Total	0.00152	J	mg/l	0.01000	0.00143	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.05000	0.01570	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.1000	0.03410	10	10/16/19 20:54	10/17/19 10:08	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.100	0.0327	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.04000	0.00429	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00500	0.00165	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1699		mg/l	0.00500	0.00173	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00500	0.00107	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-03
Client ID: PCW-MW-C-20191010
Sample Location: YONKERS, NY
Date Collected: 10/10/19 12:30
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00200	0.00059	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Calcium, Dissolved	194.		mg/l	1.00	0.394	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00331	J	mg/l	0.01000	0.00178	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00500	0.00163	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00522	J	mg/l	0.01000	0.00384	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.500	0.191	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.01000	0.00343	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	404.		mg/l	0.700	0.242	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.08159		mg/l	0.01000	0.00440	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	10/16/19 12:50	10/16/19 19:14	EPA 7470A	1,7470A	AL
Nickel, Dissolved	ND		mg/l	0.02000	0.00556	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Potassium, Dissolved	120.		mg/l	1.00	0.309	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.0500	0.0173	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00400	0.00163	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Sodium, Dissolved	3700		mg/l	1.00	0.293	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00500	0.00143	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.05000	0.01570	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.1000	0.03410	10	10/16/19 19:01	10/17/19 00:28	EPA 3005A	1,6020B	AM

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-04 Date Collected: 10/10/19 13:15

Client ID: PCW-MW-D-20191010 Date Received: 10/11/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.293		mg/l	0.100	0.0327	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.04000	0.00429	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00428	J	mg/l	0.00500	0.00165	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Barium, Total	0.5402		mg/l	0.00500	0.00173	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00500	0.00107	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00200	0.00059	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Calcium, Total	644.		mg/l	1.00	0.394	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Chromium, Total	ND		mg/l	0.01000	0.00178	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00500	0.00163	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Copper, Total	0.00414	J	mg/l	0.01000	0.00384	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Iron, Total	0.212	J	mg/l	0.500	0.191	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.01000	0.00343	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Magnesium, Total	ND		mg/l	0.700	0.242	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Manganese, Total	ND		mg/l	0.01000	0.00440	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Mercury, Total	0.00016	J	mg/l	0.00020	0.00009	1	10/16/19 12:12	10/16/19 18:42	EPA 7470A	1,7470A	AL
Nickel, Total	0.02318		mg/l	0.02000	0.00556	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Potassium, Total	158.		mg/l	1.00	0.309	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.0500	0.0173	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00400	0.00163	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Sodium, Total	3230		mg/l	1.00	0.293	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.01000	0.00143	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.05000	0.01570	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.1000	0.03410	10	10/16/19 20:54	10/17/19 10:13	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.247		mg/l	0.100	0.0327	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.04000	0.00429	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00353	J	mg/l	0.00500	0.00165	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.5687		mg/l	0.00500	0.00173	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00500	0.00107	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-04
Client ID: PCW-MW-D-20191010
Sample Location: YONKERS, NY
Date Collected: 10/10/19 13:15
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00200	0.00059	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Calcium, Dissolved	653.		mg/l	1.00	0.394	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00250	J	mg/l	0.01000	0.00178	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00176	J	mg/l	0.00500	0.00163	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.01000	0.00384	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.500	0.191	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.01000	0.00343	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.700	0.242	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.01000	0.00440	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00015	J	mg/l	0.00020	0.00009	1	10/16/19 12:50	10/16/19 19:16	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.02453		mg/l	0.02000	0.00556	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Potassium, Dissolved	157.		mg/l	1.00	0.309	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.0500	0.0173	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00400	0.00163	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Sodium, Dissolved	3120		mg/l	1.00	0.293	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00500	0.00143	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.05000	0.01570	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.1000	0.03410	10	10/16/19 19:01	10/17/19 00:33	EPA 3005A	1,6020B	AM

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-05
Client ID: PCW-MW-E-20191009
Sample Location: YONKERS, NY
Date Collected: 10/09/19 14:10
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.414		mg/l	0.100	0.0327	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Antimony, Total	0.02716	J	mg/l	0.04000	0.00429	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00270	J	mg/l	0.00500	0.00165	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Barium, Total	0.06666		mg/l	0.00500	0.00173	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00500	0.00107	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00200	0.00059	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Calcium, Total	107.		mg/l	1.00	0.394	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Chromium, Total	0.00441	J	mg/l	0.01000	0.00178	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00500	0.00163	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Copper, Total	0.05970		mg/l	0.01000	0.00384	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Iron, Total	1.27		mg/l	0.500	0.191	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.01000	0.00343	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Magnesium, Total	223.		mg/l	0.700	0.242	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Manganese, Total	0.02350		mg/l	0.01000	0.00440	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/16/19 12:12	10/16/19 18:43	EPA 7470A	1,7470A	AL
Nickel, Total	ND		mg/l	0.02000	0.00556	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Potassium, Total	80.7		mg/l	1.00	0.309	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.0500	0.0173	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00400	0.00163	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Sodium, Total	2210		mg/l	1.00	0.293	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Thallium, Total	0.00709	J	mg/l	0.01000	0.00143	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.05000	0.01570	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.1000	0.03410	10	10/16/19 20:54	10/17/19 10:52	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0528	J	mg/l	0.100	0.0327	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.04000	0.00429	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00240	J	mg/l	0.00500	0.00165	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.06950		mg/l	0.00500	0.00173	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00500	0.00107	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-05
Client ID: PCW-MW-E-20191009
Sample Location: YONKERS, NY
Date Collected: 10/09/19 14:10
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00200	0.00059	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Calcium, Dissolved	103.		mg/l	1.00	0.394	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00660	J	mg/l	0.01000	0.00178	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00500	0.00163	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.04814		mg/l	0.01000	0.00384	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.500	0.191	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.01000	0.00343	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	206.		mg/l	0.700	0.242	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.01279		mg/l	0.01000	0.00440	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	10/16/19 12:50	10/16/19 19:18	EPA 7470A	1,7470A	AL
Nickel, Dissolved	ND		mg/l	0.02000	0.00556	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Potassium, Dissolved	77.8		mg/l	1.00	0.309	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.0500	0.0173	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00400	0.00163	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Sodium, Dissolved	2110		mg/l	1.00	0.293	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00500	0.00143	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.05000	0.01570	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.1000	0.03410	10	10/16/19 19:01	10/17/19 00:37	EPA 3005A	1,6020B	AM

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-06
Client ID: PCW-MW-F-20191011
Sample Location: YONKERS, NY
Date Collected: 10/11/19 09:20
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.331		mg/l	0.0100	0.00327	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Antimony, Total	0.00390	J	mg/l	0.00400	0.00042	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01849		mg/l	0.00050	0.00016	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Barium, Total	0.09572		mg/l	0.00050	0.00017	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Calcium, Total	67.8		mg/l	0.100	0.0394	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Chromium, Total	0.00115		mg/l	0.00100	0.00017	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00185		mg/l	0.00050	0.00016	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Copper, Total	0.00196		mg/l	0.00100	0.00038	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Iron, Total	3.71		mg/l	0.0500	0.0191	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Lead, Total	0.00372		mg/l	0.00100	0.00034	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Magnesium, Total	8.04		mg/l	0.0700	0.0242	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Manganese, Total	0.3782		mg/l	0.00100	0.00044	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Mercury, Total	0.00848		mg/l	0.00020	0.00009	1	10/16/19 12:12	10/16/19 18:45	EPA 7470A	1,7470A	AL
Nickel, Total	0.00344		mg/l	0.00200	0.00055	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Potassium, Total	27.4		mg/l	0.100	0.0309	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Sodium, Total	196.		mg/l	0.100	0.0293	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00490	J	mg/l	0.00500	0.00157	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Zinc, Total	0.00461	J	mg/l	0.01000	0.00341	1	10/16/19 20:54	10/17/19 12:00	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0654		mg/l	0.0100	0.00327	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00221	J	mg/l	0.00400	0.00042	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.01216		mg/l	0.00050	0.00016	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.09615		mg/l	0.00050	0.00017	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-06
Client ID: PCW-MW-F-20191011
Sample Location: YONKERS, NY
Date Collected: 10/11/19 09:20
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Calcium, Dissolved	74.7		mg/l	0.100	0.0394	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00039	J	mg/l	0.00100	0.00017	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00221		mg/l	0.00050	0.00016	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.363		mg/l	0.0500	0.0191	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	8.37		mg/l	0.0700	0.0242	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.3809		mg/l	0.00100	0.00044	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00164		mg/l	0.00020	0.00009	1	10/16/19 12:50	10/16/19 19:19	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00258		mg/l	0.00200	0.00055	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Potassium, Dissolved	28.0		mg/l	0.100	0.0309	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Sodium, Dissolved	198.		mg/l	0.100	0.0293	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.00229	J	mg/l	0.00500	0.00157	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	10/16/19 19:01	10/17/19 01:38	EPA 3005A	1,6020B	AM

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-07
Client ID: PCW-MW-X-20191011
Sample Location: YONKERS, NY
Date Collected: 10/11/19 10:00
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.414		mg/l	0.0100	0.00327	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Antimony, Total	0.00426		mg/l	0.00400	0.00042	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Arsenic, Total	0.02027		mg/l	0.00050	0.00016	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Barium, Total	0.08910		mg/l	0.00050	0.00017	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Calcium, Total	65.8		mg/l	0.100	0.0394	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Chromium, Total	0.00115		mg/l	0.00100	0.00017	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00209		mg/l	0.00050	0.00016	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Copper, Total	0.00191		mg/l	0.00100	0.00038	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Iron, Total	3.58		mg/l	0.0500	0.0191	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Lead, Total	0.00426		mg/l	0.00100	0.00034	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Magnesium, Total	7.56		mg/l	0.0700	0.0242	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Manganese, Total	0.3599		mg/l	0.00100	0.00044	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Mercury, Total	0.00944		mg/l	0.00020	0.00009	1	10/16/19 12:12	10/16/19 18:47	EPA 7470A	1,7470A	AL
Nickel, Total	0.00386		mg/l	0.00200	0.00055	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Potassium, Total	28.0		mg/l	0.100	0.0309	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Sodium, Total	200.		mg/l	0.100	0.0293	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00555		mg/l	0.00500	0.00157	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Zinc, Total	0.00483	J	mg/l	0.01000	0.00341	1	10/16/19 20:54	10/17/19 12:05	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.212		mg/l	0.0100	0.00327	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00287	J	mg/l	0.00400	0.00042	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.01645		mg/l	0.00050	0.00016	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.08943		mg/l	0.00050	0.00017	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM

Project Name: PCW
Project Number: 180017
Lab Number: L1947799
Report Date: 10/18/19

SAMPLE RESULTS

Lab ID: L1947799-07
Client ID: PCW-MW-X-20191011
Sample Location: YONKERS, NY
Date Collected: 10/11/19 10:00
Date Received: 10/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Calcium, Dissolved	66.9		mg/l	0.100	0.0394	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00058	J	mg/l	0.00100	0.00017	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00220		mg/l	0.00050	0.00016	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.486		mg/l	0.0500	0.0191	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00036	J	mg/l	0.00100	0.00034	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	6.85		mg/l	0.0700	0.0242	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.2981		mg/l	0.00100	0.00044	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00330		mg/l	0.00020	0.00009	1	10/16/19 12:50	10/16/19 19:21	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00351		mg/l	0.00200	0.00055	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Potassium, Dissolved	30.4		mg/l	0.100	0.0309	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Sodium, Dissolved	199.		mg/l	0.100	0.0293	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.00396	J	mg/l	0.00500	0.00157	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	10/16/19 19:01	10/17/19 01:43	EPA 3005A	1,6020B	AM

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1296906-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/16/19 12:12	10/16/19 18:11	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1296925-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	10/16/19 12:50	10/16/19 18:58	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1297002-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM

Project Name: PCW **Lab Number:** L1947799

Project Number: 180017 **Report Date:** 10/18/19

Method Blank Analysis
Batch Quality Control

Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Sodium, Dissolved	0.0460	J	mg/l	0.100	0.0293	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	10/16/19 19:01	10/16/19 23:12	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1297157-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Iron, Total	0.0207	J	mg/l	0.0500	0.0191	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Thallium, Total	0.00046	J	mg/l	0.00100	0.00014	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/16/19 20:54	10/17/19 09:37	1,6020B	AM

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1296906-2								
Mercury, Total	107		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1296925-2								
Mercury, Dissolved	104		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1297002-2					
Aluminum, Dissolved	96	-	80-120	-	
Antimony, Dissolved	87	-	80-120	-	
Arsenic, Dissolved	94	-	80-120	-	
Barium, Dissolved	100	-	80-120	-	
Beryllium, Dissolved	88	-	80-120	-	
Cadmium, Dissolved	97	-	80-120	-	
Calcium, Dissolved	86	-	80-120	-	
Chromium, Dissolved	94	-	80-120	-	
Cobalt, Dissolved	96	-	80-120	-	
Copper, Dissolved	91	-	80-120	-	
Iron, Dissolved	101	-	80-120	-	
Lead, Dissolved	111	-	80-120	-	
Magnesium, Dissolved	88	-	80-120	-	
Manganese, Dissolved	97	-	80-120	-	
Nickel, Dissolved	93	-	80-120	-	
Potassium, Dissolved	86	-	80-120	-	
Selenium, Dissolved	100	-	80-120	-	
Silver, Dissolved	97	-	80-120	-	
Sodium, Dissolved	88	-	80-120	-	
Thallium, Dissolved	111	-	80-120	-	
Vanadium, Dissolved	95	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1297002-2					
Zinc, Dissolved	95	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1297157-2					
Aluminum, Total	112	-	80-120	-	
Antimony, Total	86	-	80-120	-	
Arsenic, Total	111	-	80-120	-	
Barium, Total	111	-	80-120	-	
Beryllium, Total	108	-	80-120	-	
Cadmium, Total	112	-	80-120	-	
Calcium, Total	106	-	80-120	-	
Chromium, Total	107	-	80-120	-	
Cobalt, Total	106	-	80-120	-	
Copper, Total	102	-	80-120	-	
Iron, Total	116	-	80-120	-	
Lead, Total	112	-	80-120	-	
Magnesium, Total	106	-	80-120	-	
Manganese, Total	107	-	80-120	-	
Nickel, Total	107	-	80-120	-	
Potassium, Total	106	-	80-120	-	
Selenium, Total	113	-	80-120	-	
Silver, Total	105	-	80-120	-	
Sodium, Total	103	-	80-120	-	
Thallium, Total	117	-	80-120	-	
Vanadium, Total	109	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: PCW

Project Number: 180017

Lab Number: L1947799

Report Date: 10/18/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1297157-2					
Zinc, Total	113	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1296906-3 WG1296906-4 QC Sample: L1947913-02 Client ID: MS Sample												
Mercury, Total	0.00055	0.005	0.00554	100		0.00552	99		75-125	0		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1296925-3 QC Sample: L1947473-01 Client ID: MS Sample												
Mercury, Dissolved	ND	0.005	0.00486	97		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1297002-3 QC Sample: L1947799-01 Client ID: PCW-MW-A-20191010										
Aluminum, Dissolved	ND	2	1.82	91		-	-	75-125	-	20
Antimony, Dissolved	ND	0.5	0.4803	96		-	-	75-125	-	20
Arsenic, Dissolved	0.00323J	0.12	0.1268	106		-	-	75-125	-	20
Barium, Dissolved	0.2445	2	2.181	97		-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.04550	91		-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05284	104		-	-	75-125	-	20
Calcium, Dissolved	322.	10	310	**0**	Q	-	-	75-125	-	20
Chromium, Dissolved	0.01764	0.2	0.1914	87		-	-	75-125	-	20
Cobalt, Dissolved	ND	0.5	0.4599	92		-	-	75-125	-	20
Copper, Dissolved	0.01102	0.25	0.2289	87		-	-	75-125	-	20
Iron, Dissolved	ND	1	1.17	117		-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5504	108		-	-	75-125	-	20
Magnesium, Dissolved	334.	10	308	**0**	Q	-	-	75-125	-	20
Manganese, Dissolved	ND	0.5	0.4614	92		-	-	75-125	-	20
Nickel, Dissolved	ND	0.5	0.4354	87		-	-	75-125	-	20
Potassium, Dissolved	119.	10	121	**20**	Q	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.132	110		-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.04542	91		-	-	75-125	-	20
Sodium, Dissolved	3650	10	3410	**0**	Q	-	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1090	91		-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.4460	89		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1297002-3 QC Sample: L1947799-01 Client ID: PCW-MW-A-20191010									
Zinc, Dissolved	ND	0.5	0.5060	101	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1297157-3 QC Sample: L1947799-01 Client ID: PCW-MW-A-20191010										
Aluminum, Total	0.0814J	2	2.25	112		-	-	75-125	-	20
Antimony, Total	0.01117J	0.5	0.6416	**128**	Q	-	-	75-125	-	20
Arsenic, Total	0.00445J	0.12	0.1446	120		-	-	75-125	-	20
Barium, Total	0.2070	2	2.549	117		-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05497	110		-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.06056	119		-	-	75-125	-	20
Calcium, Total	321.	10	346	**250**	Q	-	-	75-125	-	20
Chromium, Total	0.01426	0.2	0.2294	108		-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.5205	104		-	-	75-125	-	20
Copper, Total	0.01116	0.25	0.2668	102		-	-	75-125	-	20
Iron, Total	0.284J	1	1.37	**137**	Q	-	-	75-125	-	20
Lead, Total	ND	0.51	0.5757	113		-	-	75-125	-	20
Magnesium, Total	358.	10	371	**130**	Q	-	-	75-125	-	20
Manganese, Total	0.00820J	0.5	0.5363	107		-	-	75-125	-	20
Nickel, Total	ND	0.5	0.5238	105		-	-	75-125	-	20
Potassium, Total	123.	10	136	**130**	Q	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.156	**130**	Q	-	-	75-125	-	20
Silver, Total	ND	0.05	0.05095	102		-	-	75-125	-	20
Sodium, Total	3740	10	3800	**600**	Q	-	-	75-125	-	20
Thallium, Total	0.00300J	0.12	0.1424	119		-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.5310	106		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1297157-3 QC Sample: L1947799-01 Client ID: PCW-MW-A-20191010									
Zinc, Total	ND	0.5	0.6136	123	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1296925-4 QC Sample: L1947473-01 Client ID: DUP Sample						
Mercury, Dissolved	ND	ND	mg/l	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1297002-4 QC Sample: L1947799-01 Client ID: PCW-MW-A-20191010					
Aluminum, Dissolved	ND	ND	mg/l	NC	20
Antimony, Dissolved	ND	0.02724J	mg/l	NC	20
Arsenic, Dissolved	0.00323J	0.00343J	mg/l	NC	20
Barium, Dissolved	0.2445	0.2412	mg/l	1	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	322.	315	mg/l	2	20
Chromium, Dissolved	0.01764	0.01574	mg/l	11	20
Cobalt, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	0.01102	0.01157	mg/l	5	20
Iron, Dissolved	ND	ND	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	334.	332	mg/l	1	20
Manganese, Dissolved	ND	ND	mg/l	NC	20
Nickel, Dissolved	ND	ND	mg/l	NC	20
Potassium, Dissolved	119.	117	mg/l	2	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	3650	3620	mg/l	1	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1297002-4 QC Sample: L1947799-01 Client ID: PCW-MW-A-20191010					
Thallium, Dissolved	ND	ND	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1297157-4 QC Sample: L1947799-01 Client ID: PCW-MW-A-20191010					
Aluminum, Total	0.0814J	0.0838J	mg/l	NC	20
Antimony, Total	0.01117J	0.02535J	mg/l	NC	20
Arsenic, Total	0.00445J	0.00386J	mg/l	NC	20
Barium, Total	0.2070	0.1966	mg/l	5	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	321.	315	mg/l	2	20
Chromium, Total	0.01426	0.01386	mg/l	3	20
Cobalt, Total	ND	ND	mg/l	NC	20
Copper, Total	0.01116	0.01100	mg/l	1	20
Iron, Total	0.284J	0.466J	mg/l	NC	20
Lead, Total	ND	ND	mg/l	NC	20
Magnesium, Total	358.	344	mg/l	4	20
Manganese, Total	0.00820J	0.00818J	mg/l	NC	20
Nickel, Total	ND	ND	mg/l	NC	20
Potassium, Total	123.	120	mg/l	2	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	3740	3660	mg/l	2	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1297157-4 QC Sample: L1947799-01 Client ID: PCW-MW-A-20191010					
Thallium, Total	0.00300J	0.00736J	mg/l	NC	20
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	ND	ND	mg/l	NC	20

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1947799-01A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-01B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-01C	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-01D	Plastic 250ml unpreserved	A	7	7	3.7	Y	Absent		-
L1947799-01E	Plastic 250ml HNO3 preserved	A	<2	<2	3.7	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),CA-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),HG-T(28),CD-6020T(180),AG-6020T(180),AL-6020T(180),MG-6020T(180),CO-6020T(180)
L1947799-01F	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-01G	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.7	Y	Absent		V-6020S(180),CU-6020S(180),SE-6020S(180),K-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),BA-6020S(180),AS-6020S(180),SB-6020S(180),AG-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)
L1947799-02A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-02B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-02C	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-02D	Plastic 250ml unpreserved	A	7	7	3.7	Y	Absent		-

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1947799-02E	Plastic 250ml HNO3 preserved	A	<2	<2	3.7	Y	Absent		BA-6020T(180),SE-6020T(180),TL-6020T(180),FE-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),HG-T(28),AL-6020T(180),AG-6020T(180),CD-6020T(180),MG-6020T(180),CO-6020T(180)
L1947799-02F	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-02G	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-02X	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.7	Y	Absent		K-6020S(180),V-6020S(180),CU-6020S(180),SE-6020S(180),MN-6020S(180),ZN-6020S(180),CO-6020S(180),MG-6020S(180),BE-6020S(180),FE-6020S(180),CR-6020S(180),CA-6020S(180),BA-6020S(180),PB-6020S(180),NA-6020S(180),NI-6020S(180),TL-6020S(180),SB-6020S(180),AS-6020S(180),AG-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1947799-03A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-03B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-03C	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-03D	Plastic 250ml unpreserved	A	7	7	3.7	Y	Absent		-
L1947799-03E	Plastic 250ml HNO3 preserved	A	<2	<2	3.7	Y	Absent		SE-6020T(180),TL-6020T(180),BA-6020T(180),FE-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),MG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),AG-6020T(180),CO-6020T(180)
L1947799-03F	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-03G	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

*Values in parentheses indicate holding time in days

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1947799-03X	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.7	Y	Absent		K-6020S(180),CU-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),CO-6020S(180),BE-6020S(180),ZN-6020S(180),MG-6020S(180),FE-6020S(180),CA-6020S(180),CR-6020S(180),BA-6020S(180),TL-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),AS-6020S(180),SB-6020S(180),AG-6020S(180),CD-6020S(180),HG-S(28),AL-6020S(180)
L1947799-04A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-04B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-04C	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-04D	Plastic 250ml unpreserved	A	7	7	3.7	Y	Absent		-
L1947799-04E	Plastic 250ml HNO3 preserved	A	<2	<2	3.7	Y	Absent		TL-6020T(180),BA-6020T(180),FE-6020T(180),SE-6020T(180),K-6020T(180),CR-6020T(180),CA-6020T(180),NI-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28),AL-6020T(180),MG-6020T(180),CO-6020T(180)
L1947799-04F	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-04G	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-04X	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.7	Y	Absent		K-6020S(180),V-6020S(180),CU-6020S(180),SE-6020S(180),MN-6020S(180),CO-6020S(180),MG-6020S(180),BE-6020S(180),ZN-6020S(180),CA-6020S(180),FE-6020S(180),CR-6020S(180),NI-6020S(180),BA-6020S(180),PB-6020S(180),TL-6020S(180),NA-6020S(180),SB-6020S(180),AG-6020S(180),AS-6020S(180),AL-6020S(180),HG-S(28),CD-6020S(180)
L1947799-05A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-05B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-05C	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-05D	Plastic 250ml unpreserved	A	7	7	3.7	Y	Absent		-

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1947799-05E	Plastic 250ml HNO3 preserved	A	<2	<2	3.7	Y	Absent		TL-6020T(180),SE-6020T(180),FE-6020T(180),BA-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),CA-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AL-6020T(180),HG-T(28),CD-6020T(180),AG-6020T(180),MG-6020T(180),CO-6020T(180)
L1947799-05F	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-05G	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-05X	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.7	Y	Absent		SE-6020S(180),CU-6020S(180),K-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),ZN-6020S(180),MG-6020S(180),CO-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),NI-6020S(180),NA-6020S(180),BA-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1947799-06A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-06B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-06C	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-06D	Plastic 250ml unpreserved	A	7	7	3.7	Y	Absent		-
L1947799-06E	Plastic 250ml HNO3 preserved	A	<2	<2	3.7	Y	Absent		BA-6020T(180),TL-6020T(180),FE-6020T(180),SE-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),CD-6020T(180),AL-6020T(180),HG-T(28),MG-6020T(180),AG-6020T(180),CO-6020T(180)
L1947799-06F	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-06G	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-06X	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.7	Y	Absent		SE-6020S(180),V-6020S(180),CU-6020S(180),K-6020S(180),MN-6020S(180),ZN-6020S(180),MG-6020S(180),BE-6020S(180),CO-6020S(180),FE-6020S(180),CA-6020S(180),CR-6020S(180),BA-6020S(180),NA-6020S(180),TL-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),SB-6020S(180),AS-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)

*Values in parentheses indicate holding time in days

Project Name: PCW
Project Number: 180017

Lab Number: L1947799
Report Date: 10/18/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1947799-07A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-07B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-07C	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-07D	Plastic 250ml unpreserved	A	7	7	3.7	Y	Absent		-
L1947799-07E	Plastic 250ml HNO3 preserved	A	<2	<2	3.7	Y	Absent		TL-6020T(180),BA-6020T(180),SE-6020T(180),FE-6020T(180),CA-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),AG-6020T(180),AL-6020T(180),CO-6020T(180)
L1947799-07F	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-07G	Amber 250ml unpreserved	A	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1947799-07X	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.7	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),CO-6020S(180),ZN-6020S(180),BE-6020S(180),MG-6020S(180),CA-6020S(180),FE-6020S(180),CR-6020S(180),PB-6020S(180),NA-6020S(180),TL-6020S(180),BA-6020S(180),NI-6020S(180),AG-6020S(180),SB-6020S(180),AS-6020S(180),CD-6020S(180),HG-S(28),AL-6020S(180)
L1947799-08A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L1947799-08B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	PCW	**Lab Number:**	L1947799
Project Number:	180017	**Report Date:**	10/18/19

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	PCW	**Lab Number:**	L1947799
Project Number:	180017	**Report Date:**	10/18/19

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

Terms

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

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	PCW	**Lab Number:**	L1947799
Project Number:	180017	**Report Date:**	10/18/19

REFERENCES

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

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 10/12/19

ALPHA Job #: L1947799

Client Information

Client: AKRF, Inc.
Address: 440 Park Ave NY NY
Phone: 907-378-8737
Fax:
Email: pmchugh@akrf.com

Project Information

Project Name: PCW
Project Location: Yonkers NY
Project #: 180017
(Use Project name as Project #) ☐
Project Manager: Pat McHugh
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☒ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☒ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☒ Lab to do
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC	SVOC	metals (filtered)	metals (unfiltered)	Sample Specific Comments
47799-01	PCW-MW-A-20191010	10/10/2019	1035	Ground water	SS	X	X	X	X	
-02	PCW-MW-B-20191010	↓	935		SS	X	X	X	X	
-03	PCW-MW-C-20191010		1130		SS	X	X	X	X	
-04	PCW-MW-D-20191010		1315		SS	X	X	X	X	
-05	PCW-MW-E-20191009	10/9/2019	1410		SS	X	X	X	X	
-06	PCW-MW-F-20191011	10/11/2019	920		SS	X	X	X	X	
-07	PCW-MW-X-20191011	↓	1000	↓	SS	X	X	X	X	
-08	Trip Blank-20191011	10/9/2019	—	water	BJ	X				
	~~PCW-FB-20191011~~	~~10/11/2019~~	~~1015~~	~~↓~~	~~SS~~	~~X~~	~~X~~	~~X~~	~~X~~	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V	A	O	O	
Preservative	B	A	A	C	

Relinquished By:	Date/Time	Received By:	Date/Time
	10/11/19 @ 1500		10-11-19 15:00
	10/11-19 16:40		10/11/19 2100
	10/12/19 0100		10/12/19 01000

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1950465
Client:	AKRF, Inc. 34 South Broadway Suite 401 White Plains, NY 10601
ATTN:	Patrick McHugh
Phone:	(914) 922-2387
Project Name:	AVB-PCW
Project Number:	180017
Report Date:	11/15/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: AVB-PCW
Project Number: 180017

Lab Number: L1950465
Report Date: 11/15/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1950465-01	PCW-MW-E-20191024	WATER	YONKERS, NY	10/24/19 10:05	10/25/19
L1950465-02	FIELD BLANK-20191024	WATER	YONKERS, NY	10/24/19 09:10	10/25/19

Project Name:	AVB-PCW	**Lab Number:**	L1950465
Project Number:	180017	**Report Date:**	11/15/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	AVB-PCW	**Lab Number:**	L1950465
Project Number:	180017	**Report Date:**	11/15/19

Case Narrative (continued)

Report Submission

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

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Susan E O'Neil Susan O' Neil

Title: Technical Director/Representative Date: 11/15/19

ORGANICS

SEMIVOLATILES

Project Name: AVB-PCW
Project Number: 180017
Lab Number: L1950465
Report Date: 11/15/19

SAMPLE RESULTS

Lab ID: L1950465-01
Client ID: PCW-MW-E-20191024
Sample Location: YONKERS, NY

Date Collected: 10/24/19 10:05
Date Received: 10/25/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/03/19 05:18
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 10/28/19 17:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	20000		ng/l	150	33.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	37		15-110

Project Name: AVB-PCW
Project Number: 180017
Lab Number: L1950465
Report Date: 11/15/19

SAMPLE RESULTS

Lab ID: L1950465-01
Client ID: PCW-MW-E-20191024
Sample Location: YONKERS, NY

Date Collected: 10/24/19 10:05
Date Received: 10/25/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 134,LCMSMS-ID
Analytical Date: 11/15/19 02:03
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 11/07/19 09:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.69		ng/l	1.88	0.383	1
Perfluoropentanoic Acid (PFPeA)	4.68		ng/l	1.88	0.372	1
Perfluorobutanesulfonic Acid (PFBS)	1.45	J	ng/l	1.88	0.224	1
Perfluorohexanoic Acid (PFHxA)	4.00		ng/l	1.88	0.308	1
Perfluoroheptanoic Acid (PFHpA)	2.08		ng/l	1.88	0.212	1
Perfluorohexanesulfonic Acid (PFHxS)	3.06		ng/l	1.88	0.353	1
Perfluorooctanoic Acid (PFOA)	5.33		ng/l	1.88	0.222	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.88	1.25	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.88	0.647	1
Perfluorononanoic Acid (PFNA)	0.774	J	ng/l	1.88	0.293	1
Perfluorooctanesulfonic Acid (PFOS)	6.71		ng/l	1.88	0.474	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.88	0.286	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.88	1.14	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.88	0.609	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.88	0.244	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.88	0.921	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.88	0.545	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.88	0.756	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.88	0.350	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.88	0.308	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.88	0.233	1
PFOA/PFOS, Total	12.0		ng/l	1.88	0.222	1

Project Name: AVB-PCW **Lab Number:** L1950465

Project Number: 180017 **Report Date:** 11/15/19

SAMPLE RESULTS

Lab ID: L1950465-01 Date Collected: 10/24/19 10:05

Client ID: PCW-MW-E-20191024 Date Received: 10/25/19

Sample Location: YONKERS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	103		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	75		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	105		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	64		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	191		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	113		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	119		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	103		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	39		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	105		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	82		33-143

Project Name: AVB-PCW
Project Number: 180017
Lab Number: L1950465
Report Date: 11/15/19

SAMPLE RESULTS

Lab ID: L1950465-02
Client ID: FIELD BLANK-20191024
Sample Location: YONKERS, NY

Date Collected: 10/24/19 09:10
Date Received: 10/25/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/03/19 05:40
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 10/28/19 17:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	156	35.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Project Name: AVB-PCW
Project Number: 180017

Lab Number: L1950465
Report Date: 11/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 11/02/19 23:01
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 10/28/19 17:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1301590-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	34		15-110

Project Name: AVB-PCW
Project Number: 180017

Lab Number: L1950465
Report Date: 11/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 11/14/19 22:28
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 11/07/19 09:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01 Batch: WG1305732-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	0.360	J	ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: AVB-PCW
Project Number: 180017

Lab Number: L1950465
Report Date: 11/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 11/14/19 22:28
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 11/07/19 09:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01 Batch: WG1305732-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	102		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	81		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	105		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	73		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	93		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	109		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	103		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	72		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	115		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	97		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	65		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	137		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	119		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	41		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	131		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	115		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	111		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVB-PCW

Project Number: 180017

Lab Number: L1950465

Report Date: 11/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-02		Batch: WG1301590-2 WG1301590-3					
1,4-Dioxane	111		112		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	36		37		15-110

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVB-PCW
Project Number: 180017

Lab Number: L1950465
Report Date: 11/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 Batch: WG1305732-2 WG1305732-3								
Perfluorobutanoic Acid (PFBA)	95		93		67-148	2		30
Perfluoropentanoic Acid (PFPeA)	101		98		63-161	3		30
Perfluorobutanesulfonic Acid (PFBS)	98		92		65-157	6		30
Perfluorohexanoic Acid (PFHxA)	98		94		69-168	4		30
Perfluoroheptanoic Acid (PFHpA)	95		94		58-159	1		30
Perfluorohexanesulfonic Acid (PFHxS)	94		91		69-177	3		30
Perfluorooctanoic Acid (PFOA)	101		96		63-159	5		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	108		105		49-187	3		30
Perfluoroheptanesulfonic Acid (PFHpS)	108		91		61-179	17		30
Perfluorononanoic Acid (PFNA)	97		93		68-171	4		30
Perfluorooctanesulfonic Acid (PFOS)	97		92		52-151	5		30
Perfluorodecanoic Acid (PFDA)	96		88		63-171	9		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	143		137		56-173	4		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	106		105		60-166	1		30
Perfluoroundecanoic Acid (PFUnA)	97		95		60-153	2		30
Perfluorodecanesulfonic Acid (PFDS)	94		99		38-156	5		30
Perfluorooctanesulfonamide (FOSA)	97		91		46-170	6		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	110		100		45-170	10		30
Perfluorododecanoic Acid (PFDoA)	100		96		67-153	4		30
Perfluorotridecanoic Acid (PFTrDA)	115		112		48-158	3		30
Perfluorotetradecanoic Acid (PFTA)	99		102		59-182	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVB-PCW

Project Number: 180017

Lab Number: L1950465

Report Date: 11/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 Batch: WG1305732-2 WG1305732-3

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	95		98		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	75		76		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96		105		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	68		72		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		88		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96		108		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90		97		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	68		76		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	104		108		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		97		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89		93		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	65		66		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	103		113		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	102		108		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	48		48		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	128		119		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	102		108		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	90		102		33-143

Project Name: AVB-PCW
Project Number: 180017

Lab Number: L1950465
Report Date: 11/15/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1950465-01A	Amber 250ml unpreserved	B	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1950465-01B	Amber 250ml unpreserved	B	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1950465-01C	2 Plastic/1 Plastic/1 H20 Plastic	A	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1950465-01D	2 Plastic/1 Plastic/1 H20 Plastic	A	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1950465-02A	Amber 250ml unpreserved	B	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1950465-02B	Amber 250ml unpreserved	B	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)

*Values in parentheses indicate holding time in days

Project Name:	AVB-PCW	**Lab Number:**	L1950465
Project Number:	180017	**Report Date:**	11/15/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVB-PCW	**Lab Number:**	L1950465
Project Number:	180017	**Report Date:**	11/15/19

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

Terms

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

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVB-PCW	**Lab Number:**	L1950465
Project Number:	180017	**Report Date:**	11/15/19

REFERENCES

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

134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL LABORATORIES

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 10/26/19

ALPHA Job #: L1950465

Client Information

Client: AKRF INC
Address: 440 PARK AVE S
NY NY
Phone:
Fax: pmchugh@akrf.com
Email:

Project Information

Project Name: AVB-PLW
Project Location: YONKERS NY
Project #: 190017
(Use Project name as Project #)
Project Manager:
ALPHAQuote #:

Turn-Around Time

Standard [X] Due Date:
Rush (only if pre approved) [ ] # of Days:

These samples have been previously analyzed by Alpha [ ]

Other project specific requirements/comments:

DIOXANE FB ON PLW CHAIN

Please specify Metals or TAL.

Deliverables

[ ] ASP-A [X] ASP-B
[ ] EQuIS (1 File) [X] EQuIS (4 File)
[ ] Other

Regulatory Requirement

[ ] NY TOGS [ ] NY Part 375
[ ] AWQ Standards [ ] NY CP-51
[ ] NY Restricted Use [ ] Other
[ ] NY Unrestricted Use
[ ] NYC Sewer Discharge

Billing Information

[X] Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
[ ] NJ [ ] NY
[ ] Other:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PFAS	1,4 DIOXANE	Total Bottle
950465-01	PLW-MW-E-20191024	10/24/19	1005	WATER	JJ	X	X	
-02	FIELDBLANK-20191024	10/24/19	9:10	WATER	JJ		X	

Sample Filtration
[ ] Done
[ ] Lab to do
Preservation
[ ] Lab to do
(Please Specify below)

Sample Specific Comments

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
	10/25/19 0950		10/25/19 950
	10/25/19 1355	T.S. AHL	10/25/19 1355
T.S.	10/25/19 2045		10/25/19 2045
	10/25/19 2148		10/26/19 0642
	10.26.19 642		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)